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Appendices

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Systematic review and economic modelling of the effectiveness and cost-effectiveness of non-surgical treatments for women with stress urinary incontinence

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Appendix 1

Example of the Patient Generated Index

Please complete the questionnaire to tell us how your life is currently affected by your urinary incontinence and its treatment and how you would like to see it improve

In this part we would like you to think of the 5 most important areas of your life affected by your urinary incontinence and its treatment and write these in the boxes below.

If you cannot think of 5 areas then just fill as many boxes as you want. Some examples are shown below.

Work; household tasks (e.g. shopping); social activities; feeling depressed/anxious; personal hygiene; affecting your sleep

Please score each area you listed in Part 1. The score should show how badly you were affected by your urinary incontinence over the *last month*. Give each area a score by circling the number.

In the same way, we would like you to rate "All other areas of your life affected by your urinary incontinence not listed above."
By this we mean all other aspects of life affected by your urinary incontinence and not included in the list you gave.

	As bad as could possibly be						**As good as could possibly be**
	Please circle one number on each line						
	0	**1**	**2**	**3**	**4**	**5**	**6**
	0	**1**	**2**	**3**	**4**	**5**	**6**
	0	**1**	**2**	**3**	**4**	**5**	**6**
	0	**1**	**2**	**3**	**4**	**5**	**6**
	0	**1**	**2**	**3**	**4**	**5**	**6**
All other areas of your life affected by your stress urinary incontinence	**0**	**1**	**2**	**3**	**4**	**5**	**6**

We want you to "spend" 10 points to show which areas of your life you feel are most important to your overall quality of life.

Spend more points on areas you feel are most important to you and less on areas that you feel are not so important. You don't have to spend points on an area. You can't spend more that 10 points in total.

Total number of points that you spend must add up to 10

Total = 10

Appendix 2
Search strategies

Search strategies for the systematic reviews of effectiveness

Cochrane Incontinence Group Specialised Register of trials

On the date that the Cochrane Incontinence Group Specialised Register was last searched for this review (20 March 2008), the Register of trials contained trials identified from:

- MEDLINE (covering January 1966 to week 4 January 2008), searched on 31 January 2008
- MEDLINE Extra for 30 January 2008, searched on 31 January 2008
- the Cochrane Central Register of Controlled Trials (CENTRAL) Issue 1, 2008 (searched on 13 March 2008)
- CINAHL (covering January 1982 to December 2000)
- hand searching relevant journals and conference proceedings.

For more details of how the Cochrane Incontinence Group Specialised Register of trials is produced, please see the Cochrane Incontinence Group Module.[109]

Search terms used (all searches were of the keyword field in REFERENCE MANAGER version 10)

PFMT/biofeedback

{topic.urine.incon*} AND ({design.rct*} OR {design.cct*}) AND ({intvent.phys.pfe*} OR {intvent.phys.biofeed*} OR {intvent.phys.physicaltraining.} OR {intvent.phys.physiotherapy.*})

Electrical stimulation

{topic.urine.incon*} AND ({design.rct*} OR {design.cct*}) AND ({intvent.phys.electstim*})

Vaginal cones

{topic.urine.incon*} AND ({design.rct*} OR {design.cct*}) AND (intvent.phys.cones*)

SRNI

{topic.urine.incon*} AND ({design.rct*} OR {design.cct*}) AND ({intvent.chem.SNRI.snri.} OR {intvent.chem.SNRI.duloxetine*} OR {relevant.review.sri.})

Lifestyles

{topic.urine.incon*} AND ({design.rct*} OR {design.cct*}) AND ({intvent.lifestyle*} OR {intvent.chem.diet*})

Behavioural (including bladder training)

{topic.urine.incon*} AND ({design.rct*} OR {design.cct*}) AND ({intvent.psych.behavrtrain*} OR {intvent.psych.behaviouralinterventions*} OR {intvent.psych.bladdrill*} OR {intvent.psych.behaviouralinterventions*} OR {intvent.psych.behaviouraltherapy*} OR {intvent.psych.behavrtrain*} OR {intvent.psych.enhancedtoilettraining.} OR {intvent.psych.motivation*} OR {intvent.psych.psychotherapy.})

Delivery of care

{topic.urine.incon*} AND ({design.rct*} OR {design.cct*}) AND {intvent.DeliveryOfCare*} OR {intvent.nurse*} OR {intvent.ed*})

CINAHL

CINAHL on OVID (years searched: January 1982 to Week 1 December 2007). Date of last search: 5 February 2008.

1. randomized controlled trials/
2. clinical trial.pt.
3. exp clinical trials/
4. placebos/
5. placebo$.tw.
6. random$.tw.
7. research design/
8. volunteer$.tw.
9. (clin$ adj25 trial$).tw.
10. ((singl$ or doubl$ or trebl$ or tripl$) adj25 (blind$ or mask$)).tw.
11. factorial.tw.
12. crossover.tw.
13. latin square.tw.
14. (balance$ adj2 block$).tw.
15. (animals not humans).sh.
16. random assignment/
17. exp clinical trials/

18. community trials/ or factorial design/ or solomon four-group design/ or quantitative studies/
19. crossover design/ or static group comparison/
20. exp clinical research/
21. or/1-14
22. or/16-20
23. 21 or 22
24. 23 not 15
25. toilet$.tw.
26. (incontinen$ or continen$).tw.
27. exp urinary incontinence/
28. incontinence pads/
29. urodynamics/
30. urinary sphincter, artificial/
31. urodynamic$.tw.
32. urinary catheterization/
33. exp bladder fistula/
34. toilet training/
35. cutaneous fistula/
36. vaginal fistula/
37. vesicovaginal fistula/
38. "pelvic floor"/
39. perineomet$.tw.
40. interferential.tw.
41. cystitis, interstitial/
42. nycturia.tw.
43. ((vesic$ or bladder or vagina$) adj5 (support$ or prosthes$)).tw.
44. (bladder adj5 (train$ or retrain$)).tw.
45. mmk.tw.
46. marshall marchetti krantz.tw.
47. burch.tw.
48. ((bladder or neck or vesic$) adj5 suspen$).tw.
49. colposuspension$.tw.
50. guittes.tw.
51. colporrhaph$.tw.
52. pereyra.tw.
53. urethrosuspension$.tw.
54. cystoplast$.tw.
55. urethropex$.tw.
56. lyodura$.tw.
57. colpoperineoplast$.tw.
58. urethrocervicopex$.tw.
59. stamey.tw.
60. interstitial cystitis.tw.
61. (fistula$ adj5 (bladder or vesic$ or bladder-vagina$ or urin$ or vagina$ or uretero-vagina$ or ureterovagina$ or urogenital or genitourin$)).tw.
62. raz.tw.
63. ((urin$ or bladder) adj5 sphincter$).tw.
64. ((bladder or detrusor or vesic$) adj5 (instability or stab$ or unstable or irritab$ or hyperreflexia or dys?ynerg$ or dyskinesi$ or irritat$)).tw.
65. (void$ adj5 (prompt$ or diar$)).tw.
66. urethral syndrome.tw.
67. (urethra$ adj2 sphincter$).tw.
68. (bladder adj2 neck).tw.
69. (urin$ adj2 leak$).tw.
70. urinary fistula/
71. dribbl$.tw.
72. diaper$.tw.
73. bladder, neurogenic/
74. (bladder adj1 ulcer$).tw.
75. (hunner adj1 ulcer$).tw.
76. (vesic$ adj1 (neck$ or cervi$)).tw.
77. cystostomy.tw.
78. cystostomy/
79. vesicostom$.tw.
80. cystostom$.tw.
81. colporraph$.tw.
82. (fistula$ adj1 (urethra$ or colovesic$ or cystocol$ or cystovagina$ or vagino$)).tw.
83. (sling$ adj1 procedure$).tw.
84. (pelvi$ adj5 rehab$).tw. (55)
85. ((bladder or detrusor or vesic$) adj2 (hyper$ or overactiv$)).tw.
86. (urin$ adj2 extravasat$).tw.
87. ((urin$ or bladder or urethra$) adj1 (prosthes$ or endoprosthes$)).tw.
88. (detrusor adj1 sphincter$).tw.
89. (spinal adj2 bladder$).tw.
90. (bladder$ adj2 (neuropath$ or neurogen$ neurolog$)).tw.
91. bodyworn$.tw.
92. underpad$.tw.
93. (nervous adj1 pollakisur$).tw.
94. *prostate/
95. *prostatectomy/
96. *prostatic hyperplasia/
97. *prostatic neoplasm/
98. *prostatic neoplasms/
99. *bladder neoplasms/
100. *urinary tract infections/
101. *prostatitis/
102. *prostatic diseases/
103. or/94-102
104. urotherapy.tw.
105. (void$ adj2 dysfunct$).tw.
106. incontinence/ or urinary incontinence/
107. "functional incontinence (nanda)"/ or "reflex incontinence (nanda)"/ or "stress incontinence (nanda)"/ or "total incontinence (nanda)"/
108. "INCONTINENCE/ or "STRESS INCONTINENCE (NANDA)"/ or "URINARY INCONTINENCE CARE (SABA CCC)"/ or INCONTINENCE AIDS/ or "REFLEX URINARY INCONTINENCE (SABA CCC)"/ or "URGE URINARY INCONTINENCE (SABA CCC)"/ or "STRESS URINARY INCONTINENCE (SABA

CCC)"/ or "URINARY INCONTINENCE CARE (IOWA NIC)"/ or URGE INCONTINENCE/ or "TOTAL URINARY INCONTINENCE (SABA CCC)"/ or "REFLEX INCONTINENCE (NANDA)"/ or URINARY INCONTINENCE/ or "URINARY INCONTINENCE AND FREQUENCY COMFORT QUESTIONNAIRE"/ or "URGE INCONTINENCE (NANDA)"/ or STRESS INCONTINENCE/ or "TOTAL INCONTINENCE (NANDA)"/

109. Continence Advisors/
110. "urinary continence: (iowa noc)"/
111. INCONTINENCE/ or "FUNCTIONAL INCONTINENCE (NANDA)"/ or "FUNCTIONAL URINARY INCONTINENCE (SABA CCC)"/
112. or/25-93
113. or/104-111
114. 112 or 113
115. 114 not 103
116. 115 and 24

Other terms tested on CINAHL but not included as they did not add any extra relevant hits were:

- *Condition terms* overactive bladder/, bladder, neurogenic/, urination disorders/, urinary retentio*n*/, bladder/, altered urinary eliminatio*n*/
- *Intervention terms* kegel exercises/, biofeedback/.

Key
/ = Subject heading term; $ = truncation symbol; .tw. = search in title and abstract field; adj*n* = word is within *n* words either side of this word; ex*p* = exploded subject heading search; ? = character may or may not be present; **Subject heading* = this subject heading is the major focus of the article.

CINAHL RCT filter
The only RCT filter on the INTERTASC site was from the Scottish Intercollegiate Guidelines Network (SIGN). As this filter was not sufficiently sensitive it was adapted to make it more sensitive.

CINAHL condition/intervention terms
The MEDLINE textwords from the Cochrane Incontinence Group strategy were supplemented with CINAHL Subject Headings (CINAHL's keyword system). Duplicates were removed within OVID and further duplicates were removed on import into REFERENCE MANAGER version 10.

EMBASE

EMBASE on OVID (years searched: January 1980 to Week 49 2007). Date of last search: 10 December 2007.

1. Randomized Controlled Trial/
2. controlled study/
3. clinical study/
4. major clinical study/
5. prospective study/
6. meta analysis/
7. exp clinical trial/
8. randomizatio*n*/
9. crossover procedure/ or double blind procedure/ or parallel desig*n*/ or single blind procedure/
10. Placebo/
11. latin square desig*n*/
12. exp comparative study/
13. follow up/
14. pilot study/
15. family study/ or feasibility study/ or pilot study/ or study/
16. placebo$.tw.
17. random$.tw.
18. (clin$ adj25 trial$).tw.
19. ((singl$ or doubl$ or trebl$ or tripl$) adj25 (blind$ or mask$)).tw.
20. factorial.tw.
21. crossover.tw.
22. latin square.tw.
23. (balance$ adj2 block$).tw.
24. or/1-23
25. (nonhuman not human).sh.
26. 24 not 25
27. factorial desig*n*/
28. parallel desig*n*/
29. triple blind procedure/
30. community trial/
31. intervention study/
32. experimental study/
33. prevention study/
34. quasi experimental study/
35. or/27-34
36. 24 or 35
37. 36 not 25
38. incontinence/ or mixed incontinence/ or stress incontinence/ or urge incontinence/ or urine incontinence/
39. continence/
40. (incontinen$ or continen$).tw.
41. or/38-40
42. *prostate/
43. *prostatectomy/
44. *prostatic hyperplasia/
45. *prostatic neoplasm/

46. *prostatic neoplasms/
47. *bladder neoplasms/
48. *urinary tract infections/
49. *prostatitis/
50. *prostatic diseases/
51. or/42-50
52. 41 not 51
53. 52 and 37
54. Pelvis Floor/
55. muscle training/ or pelvic floor muscle training/
56. exp feedback system/
57. muscle strength/
58. perineomet$.tw.
59. (pelvi$ adj5 rehab$).tw.
60. (behavio?rial$ adj5 therap$).tw.
61. behavior therapy/
62. biofeedback.tw.
63. kegel$.tw.
64. ((pelvi$ or muscle$) adj5 (train$ or exercis$ or educat$ or reeducat$ or rehab$)).tw.
65. ((behavio?r$ or cognit$ or exercis$) adj5 (therap$ or train$ or treat$ or strateg$ or interven$ or method$)).tw.
66. (urg$ adj5 suppress$).tw.
67. (frequenc$ adj5 strateg$).tw.
68. conservative treatment/
69. Electrostimulation Therapy/
70. (cone$ adj5 (weight$ or vagin$)).tw.
71. (pfmt or pfe or pfx).tw.
72. ((pevi$ or muscle$) adj5 (educat$ or reeducat$)).tw.
73. ((pelvi$ or muscle$) adj5 (therap$ or treat$)).tw.
74. physical therap$.tw.
75. physiotherap$.tw.
76. cone$.tw.
77. ((behavio?r$ or cognit$ or exercis$) adj3 (program$ or manag$)).tw.
78. ((conservative or educat$) adj5 (treat$ or therap$ or program$ or manag$)).tw.
79. (educat$ adj5 (program$ or strateg$ or interven$ or method$)).tw.
80. (bladder adj5 (train$ or retrain$ or drill or educat$ or reeducat$)).tw.
81. exercis$.tw.
82. (rehab$ adj3 therap$).tw.
83. myofeedback.tw.
84. ((pelvi$ or muscle$) adj5 (retrain$ or relax$)).tw.
85. (primary adj5 interven$).tw.
86. (nurs$ adj5 interven$).tw.
87. (non adj operative).tw.
88. ((pelvi$ or muscle$) adj5 retrain$).tw.
89. Electrostimulation/
90. (fluid$ adj5 (intake$ or manipulat$)).tw.
91. duloxetine/
92. 116539 59 4.rn.
93. 136434-34-9.rn.
94. or/54-93
95. 94 and 53

Key
/ = EMTREE term; $ = truncation symbol; .tw. = search in title and abstract field; adj*n* = word is within *n* words either side of this word; ex*p* = exploded EMTREE search; ? = character may or may not be present; **Subject heading* = this EMTREE term is the major focus of the article.

RCT filter
The RCT filter was one developed for the Cochrane Incontinence Group.

Condition/intervention terms
The MEDLINE textwords from the Cochrane Incontinence Group strategy were supplemented with EMTREE terms (EMBASE's keyword system). Duplicates were removed within OVID and further duplicates were removed on import into REFERENCE MANAGER version 10.

BIOSIS (on ISI Web of Knowledge)
Years searched: 1 January 1985 to 10 January 2008). Date of last search: 16 January 2008.

#1 TS=(incontinen* OR continen*)
DocType=All document types; LitType=Meeting Abstract OR Meeting Address OR Meeting Paper OR Meeting Poster OR Meeting Report OR Meeting Slide OR Meeting Summary; Language=All languages; Taxa Notes=All Taxa Notes; Database=BIOSIS Previews; Timespan=1985-2008

#2 TS=(placebo*)
DocType=All document types; LitType=All literature types; Language=All languages; Taxa Notes=All Taxa Notes; Database=BIOSIS Previews; Timespan=1985-2008

#3 TS=((singl* OR doubl* OR trebl* OR tripl*) SENT (blind* OR mask*))
DocType=All document types; LitType=All literature types; Language=All languages; Taxa Notes=All Taxa Notes; Database=BIOSIS Previews; Timespan=1985-2008

#4 TS=(clin* SENT trial*)
DocType=All document types; LitType=All literature types; Language=All languages; Taxa Notes=All Taxa Notes; Database=BIOSIS Previews; Timespan=1985-2008

#5 TS=(random*)
DocType=All document types; LitType=All literature types; Language=All languages; Taxa Notes=All Taxa Notes; Database=BIOSIS Previews; Timespan=1985-2008

#6 #2 OR #3 OR #4 OR #5
DocType=All document types; LitType=Meeting Abstract OR Meeting Address OR Meeting Paper OR Meeting Poster OR Meeting Report OR Meeting Slide OR Meeting Summary; Language=All languages; Taxa Notes=All Taxa Notes; Database=BIOSIS Previews; Timespan=1985-2008

#7 #1 AND #6
DocType=All document types; LitType=Meeting Abstract OR Meeting Address OR Meeting Paper OR Meeting Poster OR Meeting Report OR Meeting Slide OR Meeting Summary; Language=All languages; Taxa Notes=All Taxa Notes; Database=BIOSIS Previews; Timespan=1985-2008

Limited literature type to: meeting abstract, meeting address, meeting paper, meeting poster, meeting report, meeting slide or meeting summary.

Key
TS = topic, searches in title, subject fields and abstracts; SENT = words must appear in the same sentence; * = truncation symbol.

RCT filter
No INTERTASC filter was available. Therefore, the approach was based on one developed for an earlier HTA systematic review[229] and the Cochrane Stroke Group BIOSIS strategy.[230]

Condition/intervention terms
A very general search for all incontinence was performed. The first 300 abstracts of over 1000 were assessed and it was found that new and relevant hits were related to meetings. This tied in with the findings of Royle and Waugh.[231] Therefore, the BIOSIS searches were limited to literature types: meeting abstract, meeting address, meeting paper, meeting poster, meeting report, meeting slide or meeting summary.

Science Citation Index and Social Science Citation Index (on ISI Web of Knowledge)
Years searched: 1970 to 2 February 2008). Date of last search: 6 February 2008.

#1 TS=(incontinen* OR continen*)
DocType=All document types; Language=All languages;

#2 TS=(random*)
DocType=All document types; Language=All languages;

#3 TS=(placebo*)
DocType=All document types; Language=All languages;

#4 TS=(clin* SENT trial*)
DocType=All document types; Language=All languages;

#5 TS=((singl* OR doubl* OR trebl* OR tripl*) SENT (blind* OR mask*))
DocType=All document types; Language=All languages;

#6 (#5 OR #4 OR #3 OR #2)
DocType=All document types; Language=All languages;

#7 (#6 AND #1)
DocType=All document types; Language=All languages;

Key
TS = topic, searches in title, subject fields and abstracts; SENT = words must appear in the same sentence; * = truncation symbol.

Physiotherapy Evidence Database (PEDro)
Available at: www.pedro.fhs.usyd.edu.au/

Search date: 9 May 2008
- Problem = incontinence
- Method = clinical trial

Overall, 277 records were retrieved. The first 40 were assessed and nothing new was found so this search was curtailed.

National Research Register/ UKCRN Portfolio Database
Search date: 9 June 2008
- Topic = renal and urogenital
- Topic = all
- Title/acrononym = incontinence
- Title/acrononym = incontinent
- Title/acrononym = continence
- Title/acrononym = continent

Current Controlled Trials/metaRegister

All registers were searched (active and inactive) (includes clinical trials).

- Incontinent* (searched on 22 May 2008)
- Continen* NOT incontinent* (searched 28 May 2008)

Terms tested but not relevant:

- GSI NOT (continen* OR incontinent*)
- Leak* NOT (continen* OR incontinent*)
- Urin* NOT (continen* OR incontinent*)

ClinicalTrials.gov (Available at: http://clinicaltrials.gov/ct/gui)

Search date: 9 June 2008

- Incontinence OR incontinent
- (Continence OR continent) NOT (incontinence OR incontinent)

Eli Lily website – Lily Clinical Trials Registry

Available at: www.lillytrials.com/

Search date: 29 May 2008

- No search terms were used – listed all trials by therapeutic area = other
- Looked at all those listed under Disease = stress urinary incontinence

Search strategies for the economic evaluation

NHS Economic Evaluations Database (NHS EED)

Available from: www.york.ac.uk/inst/crd/.

- Searched on Centre for Reviews and Dissemination website, University of York.
- Search date: June 2008
- Search terms used: urinary incontinence, stress urinary incontinence

Search for quality of life literature

Further data were identified from the literature search performed for the effectiveness review and were supplemented by information from NHS EED and the Cost-Effectiveness Analysis (CEA) Registry at Tufts Medical Center.[218] This search was performed in June 2008.

Searching for TVT

Search to find any updates of included RCTs (search for authors) or studies including over 1000 participants that were included in the TVT HTA monograph or population registries included in the TVT HTA monograph.[80] This search was performed in order to try to find long-term follow-up or other information important for the economic modelling.

Using last names of authors of included RCTs in TVT report

Specialised Register Cochrane Incontinence Group search date: 17 June 2008

Tried all last names: cucinella g* OR adile b* OR gugliotta f* OR lo bue a* OR grifo s* OR caputo a* OR halaska m* OR koelbl h* OR petri e* OR danes l* OR voigt r* OR otcenasek m* OR martan a* OR pohanka m* OR masata j* OR han w* OR liapis a* OR bakas p* OR creatsas g* **in** Author

Databases on OVID searched on 18 June 2008

- MEDLINE (1996 to June week 1 2008) and In Process (17 June 2008)
- EMBASE (week 1 1996 to 2008 week 24)
- CAB Abstracts (January 1990 to May 2008)
- CINAHL (January 1982 to June week 2 2008)

1. cucinella g$
2. adile b$
3. gugliotta f$
4. lo bue a$
5. grifo s$
6. caputo a$
7. halaska m$
8. koelbl h$
9. petri e$
10. danes l$
11. voigt r$
12. otcenasek m$
13. martan a$
14. pohanka m$
15. masata j$
16. han w$
17. liapis a$
18. bakas p$
19. creatsas g$
20. or/1-5
21. or/6-19
22. (tension or TVT).tw.
23. (21 and 22) or 20

Databases on WoS

Search date: 18 June 2008.

- BIOSIS (January 1985 to 18 June 2008)
- WoS (January 1970 to 18 June 2008)
- ISI Proceedings (1970 to 18 June 2008)
- Web Citation Index (1936 to 2005)

Put in all the surnames above combined with OR and combined with (tension OR TVT) in title.

CENTRAL Issue 2, 2008
Searched on 18 June 2008.

- cucinella g* OR adile b* OR gugliotta f* OR lo bue a* OR grifo s* OR caputo a* OR halaska m* OR koelbl h* OR petri e* OR danes l* OR voigt r* OR otcenasek m* OR martan a* OR pohanka m* OR masata j* OR han w* OR liapis a* OR bakas p* OR creatsas g* **in** Author **and** tension OR tvt **in** Title, Abstract or Keywords **in** Cochrane Central Register of Controlled Trials"

Using last names of authors and country names of included population registries in TVT report[80]
Databases on OVID searched on 18 June 2008:

- MEDLINE (1996 to June week 1 2008) and In Process (17 June 2008)
- EMBASE (week 1 1996 to week 24 2008)
- CAB Abstracts (January 1990 to May 2008)
- CINAHL (January 1982 to June week 2 2008)

Databases on WoS searched on 18 June 2008:

- BIOSIS (January 1985 to 18 June 2008)
- WoS (January 1970 to 18 June 2008)
- ISI Proceedings (1970 to 18 June 2008)
- Web Citation Index (1936 to 2005)

Finnish population registry:

- Kuuva *N*$
- Nilsson c$ AND (tension or TVT)
- Finnish AND (tension or TVT)
- Finland AND (tension or TVT)

Austrian population registry (only the first two terms searched on WoS databases):

- Tamussino$
- Austrian urogynecology working group.au.
- Hanzal e$
- Riss p$
- Kolle d$
- Ralph g$

Appendix 3

Study eligibility form

Version 1, 06/09/2007

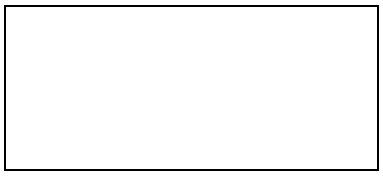
Non-surgical treatment for women with stress urinary incontinence (SUI)

Study eligibility form

Assessor initials: _____ **Date assessed: _____**

Study identifier

(surname of first author + year of publication)



Type of study

Q1. Is the study a randomised or quasi-randomised trial? (quasi-randomised = alternation, day of week, etc.)

Yes → Go to next question | Unclear | No → **Exclude**

Participants in the study

Q2. Are some or all of the participants in the study adult women with stress urinary incontinence, mixed urinary incontinence (with stress as predominant pattern), or undiagnosed or not-characterised urinary incontinence?

NB. For studies recruiting men and women, data must be reported separately for women.

Yes → Go to next question | Unclear | No → **Exclude**

Interventions in the study

Q3. Does the study involve at least one of the following interventions?

Lifestyle, pelvic floor muscle training ± biofeedback, vaginal cones, electrical stimulation (not nerve stimulation), electromagnetic stimulation, vaginal cones, behavioural therapy (e.g. bladder training), serotonin and nonrepinephrine reuptake inhibitors (SNRI), injectables, mechanical devices, containment/absorbent pads, catheters

Yes → Go to next question | Unclear | No → **Exclude**

Outcomes in the study

Q4. Does the study report one or more of the following outcomes?

Cure/improvement rates, quantification of symptoms, quality of life

Yes → **Include** | Unclear | No → **Exclude**

Final decision (subject to clarification of 'unclear' points)

Include **Unclear** **Exclude**

Write here if the study is relevant for updating Cochrane reviews ☞

Appendix 4

Data extraction form

Data extraction form: Non-surgical treatment for women with stress urinary incontinence (SUI)

Reviewer ID: | **Date:** | **Cochrane review:**

Study	
Study ID: **Country:** **Funding:** government / private / manufacturer / other (specify) **Additional information on study design** (e.g. type of trial such as cross-over design, method of randomisation and allocation concealment, single/multi-centred):	RCT ☐ Quasi-RCT ☐ Duration of study:

Participants
Criteria for inclusion:
Criteria for exclusion:

Intervention	
	Type of intervention
Intervention 1	
Intervention 2	
Intervention 3	
Comments:	

Participant characteristics			
	Intervention 1	**Intervention 2**	**Intervention 3**
Enrolled			
***N* completed trial**			

Lost to follow-up			
Age* (mean, SD)			
BMI			
Ethnicity			
Education			
Employment status			
Severity of symptoms (specify)			
***N* (%) prior incontinence surgery**			
Parity			
N* (%) postpartum (12 months of childbirth)			
N* (%) vaginal wall prolapse			
***N* (%) postmenopausal**			
Comments			

*If not reported in published Cochrane reviews, extract data from original trial reports.

Diagnosis of urinary incontinence			
	Intervention 1	**Intervention 2**	**Intervention 3**
Stress urinary incontinence (SUI)			
Urodynamic stress incontinence (USI)			
Mixed urinary incontinence (MUI)			
Undiagnosed or non-characterised incontinence			

Intervention characteristics			
	Intervention 1	**Intervention 2**	**Intervention 3**
Who delivered care and how often, e.g. monthly clinic visit with physiotherapist			
Group or individual care			
Duration of treatment			
Equipment used			
Treatment description PFMT: • Voluntary pelvic floor muscle contraction confirmed by?, e.g. palpation • Set/frequency, e.g. 10 VPFMC, 3 times a day • Supervision Electrical stimulation: • Setting, e.g. hospital, office, at home • Intensity: 1) level of electrical current and 2) duration/frequency of stimulation • Method of stimulation, e.g. surface, vaginal/anal, percutaneous • Set/frequency Vaginal cones: • Set/frequency, e.g. 15 minutes, 2 times per day • *N* of cones of different weights and the shape of the cones Drugs: • Dose			

Subjective outcomes – within first year of treatment			
	Intervention 1	**Intervention 2**	**Intervention 3**
Patient-perceived cure or improvement (*n*/*N*) • Specify			
Condition specific quality of life (e.g. Incontinence Quality of Life, Social Activity Index) • Specify			
General quality of life score (e.g. SF-36) • Specify			
Other (e.g. desire for further treatment, patient satisfaction)			

Note 1: Indicate where denominator is different from total *N*.
Note 2: Report data separately for pre-specified subgroups (if available), i.e. postpartum vs. other, SUI alone vs. other, presence or absence of a co-existing anterior vaginal wall prolapse.

Subjective outcomes – after first year of treatment			
Timing of evaluation: [ ] years after treatment	**Intervention 1**	**Intervention 2**	**Intervention 3**
Patient-perceived cure or improvement (*n*/*N*) • Specify			
Condition specific quality of life (e.g. Incontinence Quality of Life, Social Activity Index) • Specify			
General quality of life score (e.g. SF-36) • Specify			
Other (e.g. desire for further treatment, patient satisfaction)			

Objective outcomes – within first year of treatment			
	Intervention 1	**Intervention 2**	**Intervention 3**
N cured or improved (objective test) • Write definition and type of test			
Episodes of leakage in 24 hours			
Change in episodes of leakage in 24 hours			
N of pad changes in 24 hours			
Change in *N* of pad changes in 24 hours			
N of micturitions in 24 hours			
Change in *N* of micturitions in 24 hours			
Volume or weight of urine loss on pad test • Write type of test:			
Change in mean volume or weight of urine loss on pad test • Write type of test:			
Hospital length of stay (days)			
Other			

Objective outcomes – after first year of treatment			
Timing of evaluation: [ ] years after treatment	**Intervention 1**	**Intervention 2**	**Intervention 3**
N cured or improved (objective test) • Write definition and type of test			
Episodes of leakage in 24 hours			
Change in episodes of leakage in 24 hours			
N of pad changes in 24 hours			
Change in *N* of pad changes in 24 hours			
N of micturitions in 24 hours			
Change in *N* of micturitions in 24 hours			
Volume or weight of urine loss on pad test • Write type of test:			
Change in mean volume or weight of urine loss on pad test • Write type of test:			
Hospital length of stay (days)			
Other			

Intermediate/surrogate outcomes			
	Intervention 1	**Intervention 2**	**Intervention 3**
Treatment adherence			
Measure of pelvic floor muscle function (e.g. electromyography, vaginal squeeze pressure) • Specify			
Other (e.g. change in BMI, volume and type of fluid intake)			

Other long-term outcomes (more than 12 months)			
Timing of evaluation: [ ] years after treatment	**Intervention 1**	**Intervention 2**	**Intervention 3**
N having incontinence surgery			
Return of symptoms			
Other:			

Complications			
	Intervention 1	**Intervention 2**	**Intervention 3**
N experiencing adverse effects (total, any) • Write type of adverse events			
N experiencing adverse effects causing withdrawals from treatment (total, any) • Write type of adverse events:			

Additional information / other comments
Contact with author

Date: ……/……/…… **Signature: ……**

Appendix 5

Risk of bias assessment form

Non-surgical treatment for women with stress urinary incontinence (SUI)
Quality assessment checklist (Source: The Cochrane Incontinence Group[109])

Question	Judgement (Y = Yes, U = Unclear, N = No)			A description that explains how the judgement was reached
	Y	U	N	
Potential for selection bias at trial entry (quality of random allocation concealment) 1. Was allocation adequately concealed? • Yes (Adequate, A) = Good attempt at concealment; method should not allow disclosure of assignment (telephone randomisation, third party involvement in allocation procedure etc. • Unclear (B) = States concealment but no description given • No (Inadequate, C) = Definitely not concealed (open random numbers tables or quasi-randomised, e.g. day of week, date of birth, alternation) or an attempt at concealment but real chance of disclosure of assignment prior to formal entry (envelopes without third party involvement, random numbers table but procedures not described)				
Potential for bias around time of treatment or during outcome assessment (blinding) (performance and detection bias) 2.1. Were participants 'blind' to treatment status? • Yes (A) = Action taken to blind participants to treatment likely to be effective (e.g. placebo) • Unclear (B) = Blinding stated but no description given • No = Attempt at blinding participants to intervention but reason to think it may not have been successful (e.g. placebo smells different) (C), no mention of blinding (D), or not blinded (E)				
2.2. Were health care providers 'blind' to treatment status? (performance bias) • Yes (A), Unclear (B), No (C/D/E) as in 2.1				
2.3. Were outcome assessors 'blind' to treatment status? (detection bias) • Yes (A), Unclear (B), No (C/D/E) as in 2.1				
2.4. Were the groups treated identically other than for the named interventions? (performance bias)				
Potential for selection bias in analysis (Attrition bias) 3.1. Was there a description of withdrawals, dropouts and those lost to follow up? • Yes (A) = States numbers and reasons for withdrawals • Unclear (B) = States numbers of withdrawals only (no reason given) • No = States withdrawals but no number given (C) or not mentioned (D)				
3.2. Was the analysis on intention to treat (or is it possible to do so on available data)? i.e. A) Are results reported for everyone who entered the trial?				

Question	Judgement (Y = Yes, U = Unclear, N = No)			A description that explains how the judgement was reached
	Y	U	N	
B) Are participants analysed in the groups they were originally allocated to? If yes to both, an intention to treat has been performed.				
Appendix 1. Was the allocation sequence adequately generated? (RevMan 5, selection bias) • Yes = Adequate, e.g. random number table, use of computer random number generator, shuffling cards or envelopes • No = Inadequate, e.g. use of alternation, case record numbers, birth dates, date of admission • Unclear = Insufficient information to permit judgement of yes or no				

Appendix 6

References to studies included in this review

Note: * denotes the primary reference.

Aksac 2003[120,232]

Aksac B, Aki S, Karan A, Yalcin O, Isikoglu M, Eskiyurt N. Biofeedback and pelvic floor muscle exercises for the rehabilitation of stress urinary incontinence [abstract]. Proceedings of the International Continence Society (ICS), 32nd Annual Meeting, 28–30 August 2002, Heidelberg, Germany. p. 175.

*Aksac B, Aki S, Karan A, Yalcin O, Isikoglu M, Eskiyurt N. Biofeedback and pelvic floor exercises for the rehabilitation of urinary stress incontinence. *Gynecol Obstet Invest* 2003; **56**(1):23–7.

Arvonen 2001[178]

Arvonen T, Fianu-Jonasson A, Tyni-Lenne R. Effectiveness of two conservative modes of physical therapy in women with urinary stress incontinence. *Neurourol Urodyn* 2001; **20**(5):591–9.

Aukee 2002[146,233,234]

Aukee P, Immonen P, Pettinen J, Airaksinen O. A prospective randomised study comparing FemiScan home trainer and pelvic floor muscle training alone [abstract no. 205]. Proceedings of the International Continence Society (ICS), 30th Annual Meeting, 28–31 August 2000, Tampere, Finland.

*Aukee P, Immonen P, Penttinen J, Laippala P, Airaksinen O. Increase in pelvic floor muscle activity after 12 weeks' training: a randomized prospective pilot study. *Urology* 2002; **60**(6):1020–3.

Aukee P, Immonen P, Laaksonen DE, Laippala P, Penttinen J, Airaksinen O. The effect of home biofeedback training on stress incontinence. *Acta Obstet Gynecol Scand* 2004; **83**(10):973–7.

Berghmans 1996[147,235]

Berghmans LCM, Weil EHJ, Frederiks CMA, de Bie RA, Smeets LWH, van Waalwijk van Doorn ESC, *et al*. Efficacy of biofeedback for genuine stress incontinence [abstract no. 115]. Proceedings of the International Continence Society (ICS), 25th Annual Meeting, 17–20 October 1995, Sydney, Australia. pp. 44–5.

*Berghmans LC, Frederiks CM, de Bie RA, Weil EH, Smeets LW, van Waalwijk van Doorn ESC, *et al*. Efficacy of biofeedback, when included with pelvic floor muscle exercise treatment, for genuine stress incontinence. *Neurourol Urodyn* 1996; **15**(1):37–52.

Bernardes 2000[174]

Bernardes NO, Peres FR, Souza ELBL, Souza OL. [Methods of treatment of genuine stress incontinence: a comparative study between a pelvic floor exercise program and a pelvic floor electrical stimulation.] *Revista Brasileira de Gynecologia e Obstetricia* 2000; **22**(1):49–54.

Bidmead 2002[121,236]

*Bidmead J, Mantle J, Cardozo L, Hextall A, Boos K. Home electrical stimulation in addition to conventional pelvic floor exercises: a useful adjunct or expensive distraction [abstract]? *Neurourol Urodyn* 2002; **21**(4):372–3.

Parsons M, Mantle J, Cardozo L, Hextall A, Boos K, Bidmead J. A single blind, randomised, controlled trial of pelvic floor muscle training with home electrical stimulation in the treatment of urodynamic stress incontinence [abstract no. 296]. Proceedings of the Joint Meeting of the International Continence Society (ICS) (34th Annual Meeting) and the International UroGynecological Association (IUGA), 23–27 August 2004, Paris, France.

Blowman 1991[189]

Blowman C, Pickles C, Emery S, Creates V, Towell L, Blackburn *N*, *et al*. Prospective double blind controlled trial of intensive physiotherapy with and without stimulation of the pelvic floor in treatment of genuine stress incontinence. *Physiotherapy* 1991; **77**(10):661–4.

Bø 1990[159,207,208,237–246]

Bø K. Pelvic floor muscle exercise for the treatment of female stress urinary incontinence: methodological studies and clinical results. *Acta Obstet Gynecol Scand* 1991;**70**:637–9.

Bø K. Adherence to pelvic floor muscle exercise and long-term effect on stress urinary incontinence. A five-year follow-up study. *Scand J Med Sci Sports* 1995;**5**(1): 36–9.

Bø K. Pelvic floor muscle strength and response to pelvic floor muscle training for stress urinary incontinence. *Neurourol Urodyn* 2003;**22**(7):654–8.

Bø K, Kvarstein B. 15-year follow-up of a randomized controlled trial of pelvic floor muscle training to treat female urodynamic stress incontinence [abstract no. 658]. Proceedings of the Joint Meeting of the International Continence Society (ICS) (34th Annual Meeting) and the International UroGynecological Association (IUGA), 23–27 August 2004, Paris, France.

Bø K, Larsen S. Pelvic floor muscle exercise for the treatment of female stress urinary incontinence: classification and characterization of responders. *Neurourol Urodyn* 1992;**11**(5):497–507.

Bø K, Talseth T. Long-term effect of pelvic floor muscle exercise 5 years after cessation of organized training. *Obstet Gynecol* 1996;**87**(2):261–5.

Bø K, Hagen R, Jorgensen J, Kvarstein B, Larsen S. The effect of two different pelvic floor muscle exercise programs in treatment of urinary stress incontinence in women [abstract]. *Neurourol Urodyn* 1989;**8**(4):355–6.

Bø K, Hagen R, Kvarstein B, Larsen S. Female stress urinary incontinence and participation in different sports and social activities. *Scand J Sports Sci* 1989;**11**(3):117–21.

*Bø K, Hagen RH, Kvarstein B, Jorgensen J, Larsen S. Pelvic floor muscle exercise for the treatment of female stress urinary incontinence: III. Effects of two different degrees of pelvic floor muscle exercises. *Neurourol Urodyn* 1990;**9**(5):489–502.

Bø K, Larsen S, Kvarstein B, Hagen RH. Classification and characterization of responders to pelvic floor muscle exercise for female urinary incontinence [abstract]. *Neurourol Urodyn* 1990;**9**(4):395–7.

Bø K, Kvarstein B, Hagen RH. The effect of two different pelvic floor muscle exercise regimens in treatment of female stress urinary incontinence [abstract]. Proceedings of the American Urogynecology Society, 12th Annual Meeting, 23–26 October 1991, Newport Beach, California.

Bø K, Kvarstein B, Nygaard I. Lower urinary tract symptoms and pelvic floor muscle exercise adherence after 15 years. *Obstet Gynecol* 2005;**105**(5):999–1005.

Bø K, Kvarstein B, Nygaard I. Lower urinary tract symptoms 15 years after ending a randomised controlled trial of pelvic floor muscle training for urodynamic stress incontinence [abstract no. 355]. *Eur Urol Suppl* 2005;**4**(3):91.

Bø 1999[115,247–250]

Bø K, Talseth T. Single blinded randomized controlled trial on the effect of pelvic floor muscle strength training, electrical stimulation, cones or control on severe genuine stress incontinence [abstract]. *Neurourol Urodyn* 1998;**17**(4):421–2.

Bø K, Talseth T. Randomized controlled trial on the effect of pelvic floor muscle training on quality of life and sex-life in genuine stress incontinent women [abstract]. *Int Urogynecol J Pelvic Floor Dysfunct* 1999;**10**(Suppl. 1):83.

Bø K, Talseth T. Randomized controlled trial on the effect of pelvic floor muscle training on quality of life and sex-life in genuine stress incontinent women [abstract no. 175]. Proceedings of the International Continence Society (ICS), 29th Annual Meeting, 23–26 August 1999, Denver, Colorado, 1999. pp. 59–60.

*Bø K, Talseth T, Holme I. Single blind, randomised controlled trial of pelvic floor exercises, electrical stimulation, vaginal cones, and no treatment in management of genuine stress incontinence in women. *BMJ* 1999;**318**(7182):487–93.

Bø K, Talseth T, Vinsnes A. Randomized controlled trial on the effect of pelvic floor muscle training on quality of life and sexual problems in genuine stress incontinent women. *Acta Obstet Gynecol Scand* 2000;**79**(7):598–603.

Borello-France 2006[165]

Borello-France DF, Zyczynski HM, Downey PA, Rause CR, Wister JA. Effect of pelvic-floor muscle exercise position on continence and quality-of-life outcomes in women with stress urinary incontinence. *Phys Ther* 2006;**86**(7):974–86.

Bourcier 1994[196]

Bourcier A, Juras J. Randomised study comparing physiotherapy and pelvic floor rehabilitation [abstract]. Proceedings of the International Continence Society (ICS), 24th Annual Meeting, 30 August–2 September 1994, Prague, Czech Republic. p. 146.

Brubaker 1997[130,251]

Brubaker L, Benson JT, Bent A, Clark A. Transvaginal electrical stimulation is effective for treatment of detrusor overactivity [abstract]. *Neurourol Urodyn* 1996;**15**(4):282–3.

*Brubaker L, Benson JT, Bent A, Clark A, Shott S. Transvaginal electrical stimulation for female urinary incontinence. *Am J Obstet Gynecol* 1997;**177**(3):536–40.

Bump 2004[136]

Bump R, Benson JT, Brubaker L, Brostrom S, Hampel C, Jannelli M, *et al*. Biomechanical and electrophysiological effects of duloxetine in women with stress urinary incontinence [abstract no. 269]. Proceedings of the Joint Meeting of the International Continence Society (ICS) (34th Annual Meeting) and the International UroGynecological Association (IUGA), 23–27 August 2004, Paris, France.

Burns 1993[122,252–255]

Burns PA, Pranikoff K, Reis JS, Levy KJ. Effectiveness of biofeedback therapy for stress incontinent females [abstract]. *Neurourol Urodyn* 1988;**7**(3):280–2.

Burns P, Pranikoff K, Nochajski TJ, Levy KJ. Effectiveness of biofeedback therapy for stress incontinence [abstract no. 742]. *J Urol* 1989;**141**(4):355.

Burns PA, Pranikoff K, Nochajski T, Desotelle P, Harwood MK. Treatment of stress incontinence with pelvic floor exercises and biofeedback. *J Am Geriatr Soc* 1990;**38**(3):341–4.

Burns PA, Nochajski TH, Pranikoff K. Factors discriminating between genuine stress and mixed incontinence. *J Am Acad Nurse Pract* 1992;**4**(1):15–21.

Burns PA, Pranikoff K, Nochajski TH, Hadley EC, Levy KJ, Ory MG. A comparison of effectiveness of biofeedback and pelvic muscle exercise treatment of stress incontinence in older community-dwelling women. *J Gerontol* 1993;**48**(4):M167–74.

Burton 1993[173]

Burton G. Active vaginal cones therapy: a new form of treatment for genuine stress incontinence [abstract no. 134]. Proceedings of the International Continence Society (ICS), 23rd Annual Meeting, 8–11 September 1993, Rome, Italy.

Cammu 1998[181,256]

Cammu H, van Nylen M. Pelvic floor exercises (PFE) versus vaginal cones (VC) in the treatment of genuine stress incontinence [abstract no. 225). Proceedings of the International Continence Society (ICS), 26th Annual Meeting, 27–30 August 1996, Athens, Greece. p. 223.

*Cammu H, van Nylen M. Pelvic floor exercises versus vaginal weight cones in genuine stress incontinence. *Eur J Obstet Gynecol Reprod Biol* 1998;**77**(1):89–93.

Cardozo 2004[137,257,258]

Cardozo L, Drutz H, Baygani S, Bump R. Duloxetine response and onset of action in women with severe stress urinary incontinence (SUI) awaiting continence surgery [abstract no. 36). *Prog Urol* 2004;**14**(Suppl. 3):14.

*Cardozo L, Drutz HP, Baygani SK, Bump RC. Pharmacological treatment of women awaiting surgery for stress urinary incontinence. *Obstet Gynecol* 2004;**104**(3):511–19.

Drutz H, Cardozo L, Baygani S, Bump R. Duloxetine treatment of women with only urodynamic stress incontinence awaiting continence surgery [abstract]. *Neurourol Urodyn* 2003;**22**(5):523–4.

Castleden 1984[148]

Castleden CM, Duffin HM, Mitchell EP. The effect of physiotherapy on stress incontinence. *Age Ageing* 1984;**13**(4):235–7.

Castro-Diaz 2007[138]

Castro-Diaz D, Palma PC, Bouchard C, Haab F, Hampel C, Carone R, *et al*. Effect of dose escalation on the tolerability and efficacy of duloxetine in the treatment of women with stress urinary incontinence. *Int Urogynecol J Pelvic Floor Dysfunct* 2007;**18**(8):919–29.

Delneri 2000[186]

Delneri C, Di Benedetto P. Pelvic floor rehabilitation. A comparison of two methods of treatment: vaginal cones versus functional electrical stimulation. *Eura Medicophys* 2000;**36**(1):45–8.

Dmochowski 2003[139,259]

*Dmochowski RR, Miklos JR, Norton PA, Zinner NR, Yalcin I, Bump RC, *et al*. Duloxetine versus placebo for the treatment of North American women with stress urinary incontinence. *J Urol* 2003;**170**(4):1259–63.

Zinner N, Dmochowski R, Miklos J, Norton P, Yalcin I, Bump R. Duloxetine versus placebo in the treatment of stress urinary incontinence (SUI) [abstract]. *Neurourol Urodyn* 2002;**21**(4):383–4.

Dumoulin 2004[199,260–262]

Dumoulin C, Lemieux M, Bourbonnais D, Morin M. Conservative management of stress urinary incontinence: a single-blind, randomized controlled trial of pelvic floor rehabilitation with or without abdominal muscle rehabilitation compared to the absence of treatment [abstract]. *Neurourol Urodyn* 2003;**22**(5):543–4.

*Dumoulin C, Lemieux MC, Bourbonnais D, Gravel D, Bravo G, Morin M. Physiotherapy for persistent postnatal stress urinary incontinence: a randomized controlled trial. *Obstet Gynecol* 2004;**104**(3):504–10.

Dumoulin C, Morin M, Bourbonnais D, Lemieux M, Gravel D. Effect of adding deep abdominal muscle training to pelvic floor muscle training to treat stress urinary incontinence: a one-year follow up [abstract no. 662]. Proceedings of the Joint Meeting of the International Continence Society (ICS) (34th Annual Meeting) and the International UroGynecological Association (IUGA), 23–27 August 2004, Paris, France.

Dumoulin C, Morin M, Lemieux MC, Bourbonnais D, Bravo G, Gravel D. Efficacy of deep abdominal training when combined with pelvic floor muscle training for stress urinary incontinence: a single-blind randomized controlled trial [abstract no. 44]. *Prog Urol* 2004;**14**(Suppl. 3):16.

Edwards 2000[170]

Edwards GJ, Wines H, Barrington JW. A comparison between pelvic floor exercises and pelvic floor exercises and electrical therapy with respect to urethral pressure profiles [abstract no. IDP50]. *Int Urogynecol J Pelvic Floor Dysfunct* 2000;**11**(Suppl. 1):S89.

Fantl 1991[135,263–266]

Fantl JA, Wyman JF, Harkins SW, Taylor JR, *et al*. Bladder training in women with urinary incontinence [abstract]. *Neurourol Urodyn* 1988;**7**(3):276–7.

*Fantl JA, Wyman JF, McClish DK, Harkins SW, Elswick RK, Taylor JR, *et al*. Efficacy of bladder training

in older women with urinary incontinence. *JAMA* 1991;**265**(5):609–13.

McClish DK, Fantl JA, Wyman JF, Pisani G, Bump RC. Bladder training in older women with urinary incontinence: relationship between outcome and changes in urodynamic observations. *Obstet Gynecol* 1991;**77**(2):281–6.

Wyman JF, McClish DK, Ory MG, Fantl JA. Changes in quality of life following bladder training in older women with urinary incontinence [abstract]. *Neurourol Urodyn* 1992;**11**(4):426–7.

Wyman JF, Fantl JA, McClish DK, Harkins SW, Uebersax JS, Ory MG. Quality of life following bladder training in older women with urinary incontinence. *Int Urogynecol J Pelvic Floor Dysfunct* 1997;**8**(4):223–9.

Ferguson 1990[149]

Ferguson KL, McKey PL, Bishop KR, Kloen P, Verheul JB, Dougherty MC. Stress urinary incontinence: effect of pelvic muscle exercise. *Obstet Gynecol* 1990;**75**(4):671–5.

Gallo 1997[162]

Gallo ML, Staskin DR. Cues to action: pelvic floor muscle exercise compliance in women with stress urinary incontinence. *Neurourol Urodyn* 1997;**16**(3):167–77.

Ghoniem 2005[57,267]

*Ghoniem GM, Van Leeuwen JS, Elser DM, Freeman RM, Zhao YD, Yalcin I, *et al*. A randomized controlled trial of duloxetine alone, pelvic floor muscle training alone, combined treatment and no active treatment in women with stress urinary incontinence. *J Urol* 2005;**173**(5):1647–53.

Schagen van Leeuwen JH, Elser D, Freeman R, Ghoniem G, Zhao Y, Yalcin I, *et al*. Controlled trial of duloxetine alone, pelvic floor muscle training alone, combined treatment, and no treatment in women with stress urinary incontinence (SUI) [abstract]. *Eur Urol Suppl* 2004;**3**(2):52.

Glavind 1996[150,268]

Glavind K, Nohr S, Walter S. Randomized prospective trial on physiotherapy versus physiotherapy and biofeedback in treatment of genuine stress urinary incontinence [abstract]. *Neurourol Urodyn* 1995;**14**(5):457–9.

*Glavind K, Nohr SB, Walter S. Biofeedback and physiotherapy versus physiotherapy alone in the treatment of genuine stress urinary incontinence. *Int Urogynecol J Pelvic Floor Dysfunct* 1996;**7**:339–43.

Goode 2003[123]

Goode PS, Burgio KL, Locher JL, Roth DL, Umlauf MG, Richter HE, *et al*. Effect of behavioral training with or without pelvic floor electrical stimulation on stress incontinence in women: a randomized controlled trial. *JAMA* 2003;**290**(3):345–52.

Hahn 1991[175,269]

Hahn I, Naucler J, Sommer S, Fall M. Urodynamic assessment of pelvic floor training. *World J Urol* 1991;**9**(3):162–6.

*Hahn I, Sommar S, Fall M. A comparative study of pelvic floor training and electrical stimulation for the treatment of genuine female stress urinary incontinence. *Neurourol Urodyn* 1991;**10**(6):545–54.

Haig 1995[190]

Haig L, Mantle J, Versi E. Does interferential therapy (IFT) confer added benefit over a pelvic floor muscle exercise programme (PFMEP) for genuine stress incontinence (GSI)? [abstract no. 111]. Proceedings of the International Continence Society (ICS), 25th Annual Meeting 17–20 October 1995, Sydney, Australia. pp. 36–7.

Haken 1991[179]

Haken J, Benness C, Cardozo L, Cutner A. A randomised trial of vaginal cones and pelvic floor exercises in the management of genuine stress incontinence [abstract]. *Neurourol Urodyn* 1991;**10**(4):393–4.

Hay-Smith 2003[164,270]

*Hay-Smith EJC. *Pelvic floor muscle training for female stress urinary incontinence*. PhD thesis, University of Otago, Dunedin, New Zealand, 2003.

Hay-Smith EJC, Herbison GP, Wilson PD. Pelvic floor muscle training for women with symptoms of stress urinary incontinence: A randomised trial comparing strengthening and motor relearning approaches [abstract]. *Neurourol Urodyn* 2002;**21**(4):371–2.

Henalla 1989[124,271]

Henalla SM, Hutchins CJ, Castleden CM. Conservative management of urethral sphincter incompetence [abstract]. *Neurourol Urodyn* 1987;**6**(3):191–2.

*Henalla SM, Hutchins CJ, Robinson P, MacVicar J. Non-operative methods in the treatment of female genuine stress incontinence of urine. *J Obstet Gynaecol* 1989;**9**(3):222–5.

Henalla 1990[125]

Henalla SM, Millar DR, Wallace KJ. Surgical versus conservative management for post-menopausal genuine stress incontinence of urine [abstract]. *Neurourol Urodyn* 1990;**9**(4):436–7.

Hofbauer 1990[126,272]

*Hofbauer J, Preisinger F, Nurnberger N. [The value of physical therapy in genuine female stress incontinence.] [German] *Z Urol Nephrol* 1990;**83**(5):249–54.

Preisinger E, Hofbauer J, Nurnberger N, Sadil S, Schneider B. Possibilities of physiotherapy for urinary stress incontinence. *Z Phys Med Balneol Med Klimatol* 1990;**19**:75–9.

Jeyaseelan 2000[131,273]

Jeyaseelan SM, Haslam J, Roe B, Winstanley J, Oldham JA. The evaluation of a new pattern of electrical muscle stimulation as a treatment for genuine stress incontinence: a randomised, double-blind, controlled trial [abstract no. 522]. Proceedings of the International Continence Society (ICS), 29th Annual Meeting, 23–26 August 1999, Denver, Colorado. p. 74.

*Jeyaseelan SM, Haslam EJ, Winstanley J, Roe BH, Oldham JA. An evaluation of a new pattern of electrical stimulation as a treatment for urinary stress incontinence: a randomized, double-blind, controlled trial. *Clin Rehabil* 2000;**14**(6):631–40.

Johnson 2001[167,274]

Johnson VY. *Effects of a submaximal exercise protocol to recondition the circumvaginal musculature in women with genuine stress urinary incontinence*. PhD thesis, The University of Texas Health Science Center at San Antonio, San Antonio, Texas, 1997.

*Johnson VY. Effects of a submaximal exercise protocol to recondition the pelvic floor musculature. *Nurs Res* 2001;**50**(1):33–41.

Karagkounis 2007[194]

Karagkounis SC, Pantelis A, Parashou GC, Paplomata E, Madenis N, Chrisanthopoulos C, *et al*. Stress urinary incontinence: TVT OB system versus duloxetine-HCl. And the winner is? [abstract no. 5]. *Int Urogynecol J Pelvic Floor Dysfunct* 2007;**18**(Suppl. 1):3–4.

Kim 2007[118]

Kim H, Suzuki T, Yoshida Y, Yoshida H. Effectiveness of multidimensional exercises for the treatment of stress urinary incontinence in elderly community-dwelling Japanese women: A randomized, controlled, crossover trial. *J Am Geriatr Soc* 2007;**55**(12):1932–9.

Kinchen 2005[140]

Kinchen KS, Obenchain R, Swindle R. Impact of duloxetine on quality of life for women with symptoms of urinary incontinence. *Int Urogynecol J Pelvic Floor Dysfunct* 2005;**16**(5):337–44.

Klarskov 1986[184,275–278]

Klarskov P, Belving D, Bischoff N, Dorph S, Gerstenberg T, Hald T, *et al*. Pelvic floor exercise versus surgery for female urinary stress incontinence: preliminary results [abstract]. Proceedings of the International Continence Society (ICS), 14th Annual Meeting, 13–15 September 1984, Innsbruck, Austria. pp. 159–61.

*Klarskov P, Belving D, Bischoff N, Dorph S, Gerstenberg T, Okholm B, *et al*. Pelvic floor exercise versus surgery for female urinary stress incontinence. *Urol Int* 1986;**41**(2):129–32.

Klarskov P, Vedel Jepsen P, Dorph S. Reliability of voiding colpo-cysto-urethrography in female urinary stress incontinence before and after treatment. *Acta Radiol* 1988;**29**(6):685–8.

Klarskov P, Kroyer K, Kromann B, Maegaard E. Long term results of pelvic floor training and surgery for female genuine stress incontinence [abstract]. *Neurourol Urodyn* 1989;**8**(4):357–9.

Klarskov P, Nielson KK, Kromann-Andersen B, Maegaard E. Long term results of pelvic floor training and surgery to female genuine stress incontinence. *Int Urogynecol J* 1991;**2**:132–5.

Klingler 1995[151]

Klingler HC, Madersbacher S, Uher EM, Schmidbauer CP. Pelvic floor exercise and endotrainer for treatment of female stress urinary incontinence [abstract no. 122]. Proceedings of the International Continence Society (ICS), 25th Annual Meeting, 17–20 October 1995, Sydney, Australia. pp. 56–7.

Knight 1998[172,279]

*Knight S. Evaluation of neuromuscular electrical stimulation in the treatment of genuine stress incontinence. *Physiotherapy* 1998;**84**(2):61–71.

Laycock J, Knight S, Naylor D. Prospective, randomised, controlled clinical trial to compare acute and chronic electrical stimulation in combination therapy for GSI [abstract]. *Neurourol Urodyn* 1995;**14**(5):425–6.

Konstantinidou 2007[116,280]

Konstantinidou E, Apostolidis A, Kondelidis N, Tsimtsiou Z, Hatzichristou D, Ioannides E. Short-term efficacy of high-supervisory-intensity group pelvic floor training versus unsupervised, home training in female stress urinary incontinence: a randomised pilot study [abstract no. 678]. *Eur Urol Suppl* 2006;**5**(2):192.

*Konstantinidou E, Apostolidis A, Kondelidis N, Tsimtsiou Z, Hatzichristou D, Ioannides E. Short-term efficacy of group pelvic floor training under intensive supervision versus unsupervised home training for female stress urinary incontinence: a randomized pilot study. *Neurourol Urodyn* 2007;**26**(4):486–91.

Lagro-Janssen 1991[127,210,281]

Lagro-Janssen T, van Weel C. Long-term effect of treatment of female incontinence in general practice. *Br J Gen Pract* 1998;**48**(436):1735–8.

*Lagro-Janssen TL, Debruyne FM, Smits AJ, van Weel C. Controlled trial of pelvic floor exercises in the treatment of urinary stress incontinence in general practice. *Br J Gen Pract* 1991;**41**(352):445–9.

Lagro-Janssen ALM, Debruyne FMJ, Smits AJA, van Weel C. The effects of treatment of urinary incontinence in general practice. *Fam Pract* 1992;**9**(3):284–9.

Laycock 1988[176]

Laycock J. Interferential therapy in the treatment of genuine stress incontinence [abstract]. *Neurourol Urodyn* 1988;**7**(3):268–9.

Laycock 2001[152,282,283]

Laycock J, Brown J, Cusack C, Green S, Jerwood D, Mann K, *et al*. A multi-centre, prospective, randomised, controlled, group comparative study of the efficacy of vaginal cones and PFX [abstract]. *Int Urogynecol J Pelvic Floor Dysfunct* 1999;**10**(Suppl. 1):49.

Laycock J, Brown J, Cusack C, Green S, Jerwood D, Mann K, *et al*. A multi-centre, prospective, randomised, controlled, group comparative study of the efficacy of vaginal cones and PFX [abstract no. 47]. *Neurourol Urodyn* 1999;**18**(4):301–2.

*Laycock J, Brown J, Cusack C, Green S, Jerwood D, Mann K, *et al*. Pelvic floor reeducation for stress incontinence: comparing three methods. *Br J Community Nurs* 2001;**6**(5):230–44.

Laycock Trials 1 and 2 1993[132]

Laycock J, Jerwood D. Does pre-modulated interferential therapy cure genuine stress incontinence? *Physiotherapy* 1993;**79**(8):553–60.

Luber 1997[133]

Luber KM, Wolde-Tsadik G. Efficacy of functional electrical stimulation in treating genuine stress incontinence: a randomized clinical trial. *Neurourol Urodyn* 1997;**16**(6):543–51.

Mah 2006[141]

Mah SY, Lee KS, Choo MS, Seo JT, Lee JZ, Park WH, *et al*. Duloxetine versus placebo for the treatment of Korean women with stress predominant urinary incontinence. *Korean J Urol* 2006;**47**(5):527–35.

Manning 2005[142]

Manning M, Lange R, Jonas F, Meisel J, Kohoutek U, Willgerodt J, *et al*. Duloxetine versus placebo for the treatment of German women with stress urinary incontinence (SUI) [abstract no. 211]. Proceedings of the International Continence Society (ICS), 35th Annual Meeting, 28 August–2 September 2005, Montreal, Canada.

Mayne 1988[168]

Mayne CJ, Hilton P. A comparison of urethral electrical conductance and perineometry during a course of pelvic floor exercises for genuine stress incontinence [abstract no. 71]. *Neurourol Urodyn* 1988;**7**(3):264–5.

Millard 2004[143,284,285]

Millard RJ, Moore K, Rencken R. Duloxetine vs placebo in the treatment of stress urinary incontinence: a global phase III study [abstract]. *Aust NZ J Surg* 2003;**73**:A337.

Millard R, Moore K, Yalcin I, Bump R. Duloxetine vs placebo in the treatment of stress urinary incontinence: a global phase 3 study [abstract]. *Neurourol Urodyn* 2003;**22**(5):482–3.

*Millard RJ, Moore K, Rencken R, Yalcin I, Bump RC, Duloxetine UI Study Group. Duloxetine vs placebo in the treatment of stress urinary incontinence: a four-continent randomized clinical trial. *BJU Int* 2004;**93**(3):311–18.

Miller 1998[107]

Miller JM, Ashton-Miller JA, DeLancey JOL. A pelvic muscle precontraction can reduce cough-related urine loss in selected women with mild stress urinary incontinence. *J Am Geriatr Soc* 1998;**46**(7):870–4.

Mørkved 2002[153,286–288]

Mørkved S, Fjortoft T, Bø K. Is there any effect of adding biofeedback to pelvic floor muscle training? A randomised controlled trial [abstract]. *Int Urogynecol J Pelvic Floor Dysfunct* 2001;**12**(Suppl. 3):28.

*Mørkved S, Bø K, Fjortoft T. Effect of adding biofeedback to pelvic floor muscle training to treat urodynamic stress incontinence. *Obstet Gynecol* 2002;**100**(4):730–9.

Mørkved S, Bø K, Fjortoft T. Continence status one year after cessation of organised pelvic floor muscle training [abstract]. Proceedings of the International Continence Society (ICS), 33rd Annual Meeting, 5–9 October 2003, Florence Italy. pp. 260–1.

Mørkved S, Fjortoft T, Lindland M, Bø K. Continence status five years after cessation of organised pelvic floor muscle training [abstract no. 297]. Proceedings of the International Continence Society (ICS), 36th Annual Meeting, 27 November–1 December 2006, Christchurch, New Zealand.

Norton 2002[144,289–293]

Bump RC, Yalcin I, for the Duloxetine Urinary Incontinence Study Group. Pure and mixed stress urinary incontinence (UI) symptoms: comparing UI severity and treatment response [abstract]. *Int Urogynecol J Pelvic Floor Dysfunct* 2001;**12**(Suppl. 3):2.

Bump RC, Yalcin I. Mixed incontinence: duloxetine treatment response, urodynamic findings, and incontinence severity [abstract]. *Obstet Gynecol* 2002;**99**(Suppl. 4):5.

Bump RC, Norton PA, Zinner NR, Yalcin I, Duloxetine Urinary Incontinence Study Group. Mixed urinary incontinence symptoms: urodynamic findings, incontinence severity, and treatment response. *Obstet Gynecol* 2003;**102**(1):76–83.

Norton P, Zinner NR, Yalcin I, Bump RC, for the Duloxetine UI Study Group. Duloxetine versus placebo in the treatment of stress urinary incontinence [abstract]. *Neurourol Urodyn* 2001;**20**(4):532–4.

*Norton PA, Zinner NR, Yalcin I, Bump RC, Duloxetine Urinary Incontinence Study Group. Duloxetine versus placebo in the treatment of stress urinary incontinence. *Am J Obstet Gynecol* 2002;**187**(1):40–8.

Yalcin I, Viktrup L. Comparison of physician and patient assessments of incontinence severity and improvement. *Int Urogynecol J Pelvic Floor Dysfunct* 2007;**18**(11):1291–5.

Nygaard 1996[163]

Nygaard IE, Kreder KJ, Lepic MM, Fountain KA, Rhomberg AT. Efficacy of pelvic floor muscle exercises in women with stress, urge, and mixed urinary incontinence. *Am J Obstet Gynecol* 1996;**174**(1):120–5.

Oláh 1990[187,294]

Bridges N, Denning J, Oláh KS, Farrar DJ. A prospective trial comparing interferential therapy and treatment using cones in patients with symptoms of stress incontinence [abstract]. *Neurourol Urodyn* 1988;**7**(3):267–8.

*Oláh KS, Bridges N, Denning J, Farrar DJ. The conservative management of patients with symptoms of stress incontinence: a randomized, prospective study comparing weighted vaginal cones and interferential therapy. *Am J Obstet Gynecol* 1990;**162**(1):87–92.

Pages 2001[154]

Pages IH, Jahr S, Schaufele MK, Conradi E. Comparative analysis of biofeedback and physical therapy for treatment of urinary stress incontinence in women. *Am J Phys Med Rehabil* 2001;**80**(7):494–502.

Peattie 1988[180,295]

*Peattie AB, Plevnik S. Cones versus physiotherapy as conservative management of genuine stress incontinence [abstract no. 72]. *Neurourol Urodyn* 1988;**7**(3):265–6.

Peattie AB, Taylor B, Plevnik S, Stanton SL. Cones versus physiotherapy for conservative treatment of genuine stress incontinence [abstract no. 169]. Proceedings of the Silver Jubilee British Congress of Obstetrics and Gynaecology, 4–7 July 1989, London, UK.

Pieber 1995[192,296,297]

Pieber D, Zivkovic F, Tamussino K. [Pelvic floor exercises without or with vaginal cones in premenopausal women with mild to moderate stress incontinence]. [German] *Gynäkol Geburtshilfliche Rundsch* 1994;**34**(1):32–3.

Pieber D, Zivkovic F, Tamussino K, Ralph G. Pelvic floor exercise alone or with vaginal cones for the treatment of mild and moderate stress incontinence in premenopausal women: a randomised trial [abstract]. Proceedings of the International Continence Society (ICS), 24th Annual Meeting, 30 August–2 September 1994, Prague, Czech Republic. p. 162.

*Pieber D, Zivkovic F, Tamussino K, Ralph G, Lippitt G, Fauland B. Pelvic floor exercise alone or with vaginal cones for the treatment of mild to moderate stress urinary incontinence in premenopausal women. *Int Urogynecol J Pelvic Floor Dysfunct* 1995;**6**:14–17.

Pohl 2004[171]

Pohl K, Jundt K, Greulich T, Drinovac V, Peschers U. Biofeedback versus electrostimulation in treatment of female stress urinary incontinence [abstract no. 564). Proceedings of the Joint Meeting of the International Continence Society (ICS) (34th Annual Meeting) and the International UroGynecological Association (IUGA), 23–27 August 2004, Paris, France.

Ramsay 1990[128]

Ramsay IN, Thou M. A randomised, double blind, placebo controlled trial of pelvic floor exercises in the treatment of genuine stress incontinence [abstract]. *Neurourol Urodyn* 1990;**9**(4):398–9.

Sand 1995[134,298–300]

Sand PK, Richardson DA, Staskin DR, Swift SE, Appell RA, Whitmore KE, *et al*. Pelvic floor stimulation in the treatment of genuine stress incontinence: a multicentre placebo-controlled trial [abstract]. *Neurourol Urodyn* 1994;**13**(4):356–7.

Sand PK, Richardson DA, Staskin DR, Swift SE, Appell RA, Whitmore KE, *et al*. Pelvic floor stimulation in the treatment of genuine stress incontinence: a multicentre placebo controlled trial [abstract no. 27]. Proceedings of the American Urogynecology Society (AUGS), 15th Annual Meeting, 21–24 Sepember 1994, Toronto, Canada.

*Sand PK, Richardson DA, Staskin DR, Swift SE, Appell RA, Whitmore KE, *et al*. Pelvic floor electrical stimulation in the treatment of genuine stress incontinence: a multicenter, placebo-controlled trial. *Am J Obstet Gynecol* 1995;**173**(1):72–9.

Whitmore KE, Staskin DR, Grigoriev VE, Appell RA, Sand PK, Ostergaard DR. Pelvic floor stimulation in the treatment of genuine stress incontinence: a multicenter placebo controlled trial [abstract no. 1050]. *J Urol* 1995;**153**(Suppl. 4):491.

Savage 2005[166]
Savage AM. Is lumbopelvic stability training (using the Pilates model) an effective treatment strategy for women with stress urinary incontinence? A review of the literature and report of a pilot study. *J Assoc Chartered Physiother Womens Health* 2005;**97**:33–48.

Seo 2004[195]
Seo JT, Yoon H, Kim YH. A randomized prospective study comparing new vaginal cone and FES-Biofeedback. *Yonsei Med J* 2004;**45**(5):879–84.

Shepherd 1983[155,301]
*Shepherd A, Montgomery E, Anderson RS. A pilot study of a pelvic exerciser in women with stress urinary incontinence. *J Obstet Gynaecol* 1983;**3**(3):201–2.

Shepherd AM, Montgomery E, Anderson RS. Treatment of genuine stress incontinence with a new perineometer: a series of graded exercises. *Physiotherapy* 1983;**69**(4):113.

Sherburn 2007[182]
Sherburn M, Galea M, Bø K, Bird M, Carey M. Pelvic floor muscle training or bladder training to treat stress urinary incontinence in elderly women: a single blind randomised controlled trial [abstract no. 49]. *Neurourol Urodyn* 2007;**26**(5):665–6.

Smith 1996[177,302,303]
Aaronson PS, Loehner D, Bingham W, Smith JJ. Intravaginal electrical stimulation in the treatment of genuine stress urinary incontinence and detrusor instability: a controlled study [abstract]. *J Urol* 1995;**153**(Suppl. 4):491.

*Smith JJ, III. Intravaginal stimulation randomized trial. *J Urol* 1996;**155**(1):127–30.

Smith JJ, Loehner D, Bingham W. Intravaginal electrical stimulation in the treatment of GSUI and DI: a controlled study [abstract no. 25]. Proceedings of the American Urogynecology Society (AUGS), 15th Annual Meeting, 21–24 September 1994, Toronto, Canada.

Swithinbank 2005[119,304]
*Swithinbank L, Hashim H, Abrams P. The effect of fluid intake on urinary symptoms in women. *J Urol* 2005;**174**(1):187–9.

Swithinbank LV, Rogers CA, Yang Q, Shepherd AM, Abrams P. Does the amount and type of fluid intake effect urinary symptoms in women? [abstract no. 104]. *Neurourol Urodyn* 1999;**18**(4):371–2.

Tapp 1987[191]
Tapp AJS, Williams S, Hills B, Cardozo LD. The role of physiotherapy in the treatment of genuine stress incontinence [abstract]. Proceedings of the International Continence Society (ICS), 17th Annual Meeting, 2-5 September 1987, Bristol, UK. pp. 204–5.

Tapp 1989[185,305]
Tapp AJS, Hills B, Cardozo L. Pelvic floor physiotherapy compared with the Burch colposuspension in the treatment of genuine stress incontinence [abstract]. Proceedings of the Silver Jubilee British Congress of Obstetrics and Gynaecology, 4–7 July 1989, London, UK. p. 65.

*Tapp AJS, Hills B, Cardozo L. Randomised study comparing pelvic floor physiotherapy with the Burch colposuspension [abstract]. *Neurourol Urodyn* 1989;**8**(4):356–7.

Taylor 1986[156]
Taylor K, Henderson J. Effects of biofeedback and urinary stress incontinence in older women. *J Gerontol Nurs* 1986;**12**(9):25–30.

Terry 1996[193]
Terry PB, Whyte SM. Randomised trial comparing enhance with physiotherapy for the treatment of GSI [abstract]. Proceedings of the International Continence Society (ICS), 26th Annual Meeting, 27–30 August 1996, Athens, Greece. pp. 248–9.

van Kerrebroeck 2004[117,306]
van Kerrebroeck P, Abrams P, Lange R, Slack M, Wyndaele J, Yalcin I, *et al*. Duloxetine vs placebo in the treatment of stress urinary incontinence: Phase 3 results from Europe and Canada [abstract]. *Eur Urol Suppl* 2003;**2**(1):29.

*van Kerrebroeck P, Abrams P, Lange R, Slack M, Wyndaele JJ, Yalcin I, *et al*. Duloxetine versus placebo in the treatment of European and Canadian women with stress urinary incontinence. *BJOG* 2004;**111**(3):249–57.

Williams 2006[129,307–311]
Shaw C, Matthews RJ, Perry SI, Assassa RP, Williams K, McGrother C, *et al*. Validity and reliability of an interviewer-administered questionnaire to measure the severity of lower urinary tract symptoms of storage abnormality: the Leicester Urinary Symptom Questionnaire. *BJU Int* 2002;**90**(3):205–15.

Williams KS, Assassa RP, Smith N, Rippin C, Shaw C, Mayne C, *et al*. Good practice in continence care: development of nurse-led service. *Br J Nurs* 2002;**11**(8):548–59.

Williams K, Assassa RP, Cooper N, Turner D, Shaw C, Abrams K, *et al*. Randomised controlled trial of the clinical and cost effectiveness of existing continence services compared with a new nurse-led service [abstract]. *Neurourol Urodyn* 2003;**22**(5):440.

Williams KS, Assassa RP, Cooper NJ, Turner DA, Shaw C, Abrams KR, *et al*. Clinical and cost-effectiveness of a new nurse-led continence service: a randomised controlled trial. *Br J Gen Pract* 2005;**55**(518):696–703.

*Williams KS, Assassa RP, Gillies CL, Abrams KR, Turner DA, Shaw C, *et al*. A randomized controlled trial of the effectiveness of pelvic floor therapies for urodynamic stress and mixed incontinence. *BJU Int* 2006;**98**(5):1043–50.

Williams K, Coleby D, Abrams K, Shaw C, Assassa P, McGrother C. Randomised controlled trial of the clinical effectiveness of services for urinary symptoms: six year follow-up [abstract no. 45). *Neurourol Urodyn* 2007;**26**(5):660–1.

Wilson 1987[157,312]

Wilson PD, Al Samarrai T, Deakin M, Kolbe E, Brown ADG. The value of physiotherapy in female genuine stress incontinence [abstract]. Proceedings of the International Continence Society (ICS), 14th Annual Meeting, 13–15 September 1984, Innsbruck, Austria. pp. 156–8.

*Wilson PD, Al Samarrai T, Deakin M, Kolbe E, Brown AD. An objective assessment of physiotherapy for female genuine stress incontinence. *Br J Obstet Gynaecol* 1987;**94**(6):575–82.

Wilson 1998[197,313]

Wilson D, Herbison P, Borland M, Grant AM. A randomised controlled trial of physiotherapy treatment of postnatal urinary incontinence [abstract]. Proceedings of the British Congress of Obstetrics and Gynaecology, 26th Meeting, 7–10 July 1992, Manchester, UK. p. 162.

*Wilson PD, Herbison GP. A randomized controlled trial of pelvic floor muscle exercises to treat postnatal urinary incontinence. *Int Urogynecol J Pelvic Floor Dysfunct* 1998;**9**(5):257–64.

Wise 1993[188]

Wise BG, Haken J, Cardozo LD, Plevnik S. A comparative study of vaginal cone therapy, cones plus Kegel exercises, and maximal electrical stimulation in the treatment of female genuine stress incontinence [abstract no. 76]. *Neurourol Urodyn* 1993;**12**(4):436–7.

Woldringh 2007[198]

Woldringh C, van den WM, Albers-Heitner P, Nijeholt AA, Lagro-Janssen T. Pelvic floor muscle training is not effective in women with UI in pregnancy: a randomised controlled trial. *Int Urogynecol J Pelvic Floor Dysfunct* 2007;**18**(4):383–90.

Wong 1997a[158]

Wong KS, Fung BKY, Fung ESM, Fung LCW, Tang LCH. Randomized prospective study of the effectiveness of pelvic floor training using biofeedback in the treatment of genuine stress urinary incontinence in Chinese population [abstract]. Proceedings of the International Continence Society (ICS), 27th Annual Meeting, 23–26 September 1997, Yokohama, Japan. pp. 57–8.

Wong 1997b[160]

Wong KS, Fung BKY, Fung LCW, Ma S. Pelvic floor exercises in the treatment of stress urinary incontinence in Hong Kong Chinese women [abstract]. Proceedings of the International Continence Society (ICS), 27th Annual Meeting, 23–26 September 1997, Yokohama, Japan. pp. 62–3.

Wong 2001[169]

Wong KS, Fung KY, Fung SM, Fung CW, Tang CH. Biofeedback of pelvic floor muscles in the management of genuine stress incontinence in Chinese women. *Physiotherapy* 2001;**87**(12):644–8.

Wyman 1998[183,314–318]

Barber MD, Visco AG, Wyman JF, Fantl JA, Bump RC, Continence Program for Women Research Group. Sexual function in women with urinary incontinence and pelvic organ prolapse. *Obstet Gynecol* 2002;**99**(2):281–9.

Elser DM, Fantl JA, McClish DK. Comparison of "subjective" and "objective" measures of severity of urinary incontinence in women. Program for Women Research Group. *Neurourol Urodyn* 1995;**14**(4):311–16.

Elser DM, Wyman JF, McClish DK, Robinson D, Fantl JA, Bump RC. The effect of bladder training, pelvic floor muscle training, or combination training on urodynamic parameters in women with urinary incontinence. Continence Program for Women Research Group. *Neurourol Urodyn* 1999;**18**(5):427–36.

Theofrastous JP, Wyman JF, Bump RC, McClish DK, Elser DM, Bland DR, *et al*. Effects of pelvic floor muscle training on strength and predictors of response in the treatment of urinary incontinence. *Neurourol Urodyn* 2002;**21**(5):486–90.

*Wyman JF. Comparative efficacy of behavioral interventions in the management of female urinary incontinence. *Am J Obstet Gynecol* 1998;**179**(4):999–1007.

Wyman JF, McClish DK, Sale P, Earle B, Camp J. Long-term follow-up of behavioral interventions in incontinent women [abstract]. *Int Urogynecol J Pelvic Floor Dysfunct* 1999;**10**(Suppl. 1):33.

Zanetti 2007[161]

Zanetti MR, Castro RA, Rotta AL, Santos PD, Sartori M, Girao MJ. Impact of supervised physiotherapeutic pelvic floor exercises for treating female stress urinary incontinence. *Sao Paulo Med J* 2007;**125**(5):265–9.

Zinner 1998[145,319,320]

Yalcin I, DeBrota DJ, Thor KB. Incontinence severity index (ISI) in measuring efficacy of duloxetine in stress and mixed incontinent patients [abstract]. Proceedings of the International Continence Society (ICS), 28th Annual Meeting, 14–17 September 1998, Jerusalem, Israel. pp. 171–2.

Zinner N, Sarshik S, Yalcin I, Faries D, DeBrota D, Riedl P, *et al*. Evaluation of various efficacy measures from 140 stress and 146 mixed incontinence patients enrolled in a double-blind, placebo-controlled trial of duloxetine [abstract]. Proceedings of the International Continence Society (ICS), 28th Annual Meeting, 14–17 September 1998, Jerusalem, Israel. pp. 175–6.

*Zinner N, Sarshik S, Yalcin I, Faries D, Riedl P, Thor KB. Efficacy and safety of duloxetine in stress urinary incontinent patients: double-blind, placebo-controlled multiple dose study [abstract]. Proceedings of the International Continence Society (ICS), 28th Annual Meeting, 14–17 September 1998, Jerusalem, Israel. pp. 173–4.

Appendix 7

Examples of excluded studies with reasons for exclusion

	Study ID	Number of reports	Reasons for exclusion
1	Alewijnse 2003[321–323]	3	SUI 37%, MUI 31%, UUI 9%, unspecified UI 23%. No separate data for SUI. PFMT vs PFMT plus education (three versions). *N* = 132
2	Barroso 2002[324,325]	2	MUI and UUI over 70% of the sample. No separate data for SUI. ES vs sham ES. Includes one Portuguese publication
3	Borrie 1992[326–330]	5	Treatments tailored according to UI diagnosis. Nurse-led intervention vs NT. Includes both men and women. The related paper by Bowden (1992) reports data for women
4	Brown 2006[331]	1	Not all women had urinary incontinence at baseline. Data from 1987 overweight women at high risk for diabetes who were enrolled in the Diabetes Prevention Program (DPP) were analysed to determine whether an intensive lifestyle intervention with improved diet and increased physical activity or metformin therapy would be associated with lower prevalence of urinary incontinence compared with a standard lifestyle intervention alone. The three interventions included an intensive lifestyle intervention, metformin at 850 mg twice daily or placebo twice daily. All participants received standard lifestyle recommendations. Urinary incontinence was determined at the end-of-trial visit using a self-administered questionnaire
5	Burgio 1998[332–335]	4	UUI or urge-predominant MUI. Behavioural training vs oxybutynin
6	Burgio 2002[336,337]	2	UUI or urge-predominant MUI. Behavioural training vs behavioural training with BF vs self-administered behavioural training
7	de Gregorio 1993[338]	1	PFMT + BF + ES vs 'standard physiotherapy'. Comparator ('standard physiotherapy') not clearly described and unclear if it is intervention specified in review protocol. German publication. Women with USI
8	de Jong 2006[339]	1	PFMT vs PFMT + whole body vibration. Whole body vibration is not an intervention specified in review protocol. Women with SUI
9	Demain 2001[340]	1	Stress or urge UI. Proportions of SUI not reported. No separate data for SUI. Individual vs group sessions for PFMT + BT
10	Dougherty 1998[341,342]	2	SUI 18%, MUI 66%, UUI 15%. No separate data for SUI. Behavioural management (e.g. caffeine consumption, dietary change, BT and PFMT with BF) vs no treatment. Not all patients in the intervention arm received PFMT. *N* = 217
11	Foote 2000[343]	1	Treatments tailored according to diagnosis. Interventions led by nurse continence advisors (NCA) vs standard care by urogynaecologists (UG). Abstract only. Cost-effectiveness analysis. UG group = PFMT and BT, and given VC or anticholinergic SNRIs when clinically indicated. NCA group = all the treatments for the UG group, and in addition, ES and BF were also offered. *N* = 150.
12	Foote 2007[344]	1	Treatments tailored according to diagnosis: given PFMT, BF, BT and ES, and also given VC or anticholinergic SNRIs when clinically indicated. Nurse-led vs standard gynaecologist-led interventions. *N* = 145. USI, USI + DO or DO. No separate data for SUI
13	Galea 2006[345]	1	Type of UI unspecified. Elderly women with incontinence. PFMT with digital palpation vs PFMT + BF
14	Goode 2003[346]	1	Urge predominant. Behavioural vs SNRI therapy
15	Gorman 1995[347]	1	Type of UI unspecified. Comparison of PFMT not taught or supervised by a health professional (PFMT via PC software or booklet)

	Study ID	Number of reports	Reasons for exclusion
16	Hill 2007[348–350]	3	SUI, MUI or UUI. Proportions of SUI not reported. No separate data for SUI. Individual vs group sessions for PFMT + BT
17	Holtedahl 1998[351]	1	Treatment tailored according to symptoms. Estriol to all women unless they refused or were well estrogenised. All patients were instructed in PFMT. Patients with urge or mixed incontinence were also instructed in BT. For ES, patients with urge incontinence received maximal stimulation, whereas patients with stress incontinence used long-term stimulation. Immediate vs deferred treatment. SUI 57%, MUI 36%, UUI 7%
18	Hui 2006[352]	1	USI 21%, UUI 79%. No separate data for SUI. Video conference (PFMT, fluid management, BT) vs conventional management (PFMT, fluid management, BT)
19	Ishiko 2001[353]	1	PFMT vs PFMT + estriol tablet. Route of administration unclear. Women with SUI
20	Janssen 2001[354]	1	Treatment tailored according to symptoms. PFMT was taught to all but BT was taught to women who frequently voided. Group vs individual sessions. USI 58–61%, MUI 32%, UUI 7–10%
21	Jeyaseelan 2002[355]	1	The title refers to stress incontinence but unclear if predominant SUI constituted 50% or more. PFMT + BF vs ES. *N* = 16. *N* in each arm not reported. No usable data
22	Johnson 2000[356]	1	SUI 30%, MUI 50%, UUI 20%. No separate data for SUI. PFMT + BF vs PFMT. *N* randomised = 20
23	Kim 2001[357]	1	SUI or MUI. Proportions of SUI not reported. PFMT as part of the 'continence efficacy intervention programme'
24	Kincade 2007[358,359]	2	Type of UI not specified. Includes two phases. Phase 1 (*N* = 224): self-monitoring ('The Knack', caffeine consumption, fluid intake, voiding frequency, constipation) vs deferred treatment. Phase 2 (*N* = 301): PFMT vs PFMT + BF vs attentional control (non-incontinence-related health education)
25	Kirschner-Hermanns 1995[360]	1	The title refers to stress incontinence but unclear if predominant SUI constituted 50% or more. *N* = 43. Number in each arm not reported. Data presented as complete cohort. No usable data
26	Lee 2005[361]	1	< 50% SUI. No separate data for SUI. PFMT + BT vs deferred treatment
27	Liebergall-Wischnitzer 2005[362]	1	Female hospital employees with SUI or MUI. Proportions of SUI not reported. No separate data for SUI. PFMT vs the Paula method
28	Lin 2004[363]	1	MUI 100%. Dominant symptom (stress or urge) unclear. PFMT at home vs PFMT monitored by nurse
29	Lo 2003[364]	1	Stress or urge UI. Proportions of SUI not reported. No separate data for SUI. PFMT + ES vs PFMT
30	Lumley 2006[365,366]	2	No mention of specific UI treatment in this report. PRISM study. Primary care and community-based strategies for postnatal depression
31	McFall 2000[367–369]	3	Majority had MUI. Dominant symptom (stress or urge) unclear. Community-based educational intervention programme (PFMT, liquid intake, BT, etc.) vs deferred treatment
32	Moore 2003[370,371]	2	Treatment tailored according to symptoms. Nurse-led vs urogynaecologist-led interventions (PFMT, ES, BT). USI 63–67%, MUI 20–25%, DO 7–8%, sensory urgency 3–5%
33	Mulcahy 1996[372]	1	Included one male patient. Duloxetine vs placebo
34	Nieto Blanco 2007[373]	1	Treatment tailored according to symptoms. PFMT for SUI and MUI and BT for UUI. Systematised nursing care vs conventional care. SUI 60%, MUI 26%, UUI 14%. Spanish publication
35	O'Brien 1991[374–376]	3	Historical control? Participants were randomised to the treatment (PFMT) or control (deferred treatment) groups, and the control group was later added to the treatment group in data analysis. For those with symptoms of urge UI, BT was also offered. The study included both men and women. Some data were reported separately for women (SUI 55%, UUI 10%, MUI 31%, and other UI 4%)
36	Ocampo 2007[377]	1	33% (14/44) tested positive using stress test at baseline. No separate data for SUI. Group behavioural modification programme vs NT. *N* = 44

	Study ID	Number of reports	Reasons for exclusion
37	Prashar 1997[378–380]	3	SUI, MUI or UUI. Proportions of SUI not reported. No separate data for SUI. PFMT + plug vs plug. Data presented as complete cohort, not by group allocation
38	Prashar 1998[381,382]	2	USI and/or DI or sensory urgency. Proportions of USI not reported. *N* = 127. Treatment by nurse (PFMT, ES, anticholinergic therapy, BT) vs standard care by urogynaecologist (PFMT, anticholinergic therapy, BT). Treatments tailored based on diagnosis (e.g. DI received BT and SNRI, those with weak PF muscle received ES, etc.)
39	Sam 2004[383]	1	SUI or MUI. Proportions of SUI not reported. No separate data for SUI. PFMT + BF vs PFMT
40	Sherburn 2005[384]	1	Stress and/or urge UI. Proportions of SUI not reported. No separate data for SUI. PFMT vs PFMT + visual feedback from ultrasound
41	Sherman 1997[385]	1	USI or MUI. Proportions of SUI not reported. No separate data for SUI. *N* = 46. PFMT + BT with or without BF
42	Spruijt 2003[386]	1	SUI 17%, MUI 66%, UUI 17%. No separate data for SUI. Elderly women. PFMT vs ES
43	Subak 2002[387]	1	SUI 24%, MUI 37%, UUI 37%. No separate data for SUI. PFMT, BT vs deferred treatment
44	Subak 2005[388]	1	53% (25/47) are urge UI alone or urge-predominant MUI. No separate data for SUI. Weight loss vs deferred treatment
45	Sugaya 2003[389]	1	Comparison of PFMT not taught or supervised by professional health-care provider. Leaflet PFMT vs leaflet PFMT plus device that prompts women to perform PFMT with cartoon character. 61% SUI, 39% SUI with occasional UUI but did not have uninhibited bladder contractions on cystometry
46	Tsai 2002[390]	1	SUI 31%, MUI 51%, UUI 18%. No separate data for SUI. PFMT + BF vs PFMT
47	von der Heide 2003[391]	1	Physical therapy with entire body vibration vs physical therapy followed by entire body vibration. Entire body vibration is not treatment specified in review protocol
48	Wagg 2007[392]	1	1175 women with frequency, emptying, stress, urge, unspecified incontinence, strain on urination and nocturia. Proportions of SUI not reported. Structured help vs leaflet. Patients received one or more of the following: PFMT, BF, BT, VC, ES
49	Wang 1997[393]	1	Women with urge syndrome. Unclear if RCT for relevant intervention: participants in SNRI RCT were 'assigned' to either PFMT or BF. PFMT vs BF
50	Wells 1991[394]	1	PFMT vs phenylpropanolamine hydrochloride. SNRI subject to recall and will likely be banned? Not intervention specified in review protocol. USI or MUI
51	Wilson 1997[209,395–399]	6	Treatment tailored according to symptoms. In the intervention group, PFMT for all women but with addition of BT and caffeine restriction if symptoms of frequency or urgency. Compared with standard care. Pregnant women with UI. SUI 53%, MUI 32%, UUI 16%
52	Yoon 2003[400]	1	Type of UI not specified. BT vs PFMT + BF
Awaiting assessment			
53	Abel 1997[401]	1	Danish publication. ES vs Sham ES
54	Kim 2006[402]	1	Korean publication. Magnetic therapy followed by PFMT vs magnetic therapy followed by no treatment. Unclear if patients were randomised and if data were reported separately for PFMT. Awaiting author's reply
55	Smidt 1997[403]	1	Dutch publication. Physiotherapy vs physiotherapy + BF
56	Sung 2000[404,405]	2	Korean publication. PFMT vs ES + BF. Unclear if patients were randomised. Awaiting author's reply
	Total number of reports	**86**	

BF, biofeedback; BT, bladder training; DO, detrusor overactivity; ES, electrical stimulation; MUI, mixed urinary incontinence; NT, no treatment; PC, personal computer; PFMT, pelvic floor muscle training; SUI, stress urinary incontinence; USI, urodynamic stress incontinence; UI, urinary incontinence; UUI, urgency urinary incontinence.

Reference list for excluded studies

Alewijnse D, Mesters IEPE, Metsemakers JFM, van den Borne BHW. Program development for promoting adherence during and after exercise therapy for urinary incontinence. *Patient Educ Couns* 2002;**48**(2):147–60.

Alewijnse D, Mesters I, Metsemakers J, van den Borne B. Predictors of long-term adherence to pelvic floor muscle exercise therapy among women with urinary incontinence. *Health Educ Res* 2003;**18**(5):511–24.

Alewijnse D, Metsemakers JF, Mesters IE, van den Borne B. Effectiveness of pelvic floor muscle exercise therapy supplemented with a health education program to promote long-term adherence among women with urinary incontinence. *Neurourol Urodyn* 2003;**22**(4):284–95.

Barroso JCV, Ramos JGL. Estimulacao eletrica transvaginal no tratamento da incontinencia urinaria. *Revista Brasileira de Gynecologia e Obstetricia* 2002;**24**(10):685.

Barroso JC, Ramos JG, Martins-Costa S, Sanches PR, Muller AF. Transvaginal electrical stimulation in the treatment of urinary incontinence. *BJU Int* 2004;**93**(3):319–23.

Bawden ME, Kartha AS, Borrie MJ, Kerr PS, Durko NA, Haslam IF, *et al*. Treating women with stress incontinence in a multidisciplinary clinic: a randomized study [abstract no. 276]. Proceedings of the International Continence Society (ICS), 22nd Annual Meeting, 1–4 September 1992, Halifax, UK.

Borrie MJ, Bawden ME, Kartha AS, Kerr PS. A nurse/physician continence clinic triage approach for urinary incontinence: a 25 week randomized trial. *Neurourol Urodyn* 1992;**11**(4):364–5.

Borrie MJ, Bawden ME, Speechley M. Continence clinic randomized controlled trial using a nurse/physician triage approach: Two-year follow-up. *Clin Invest Med* 1995;**18**(Suppl. 4):B59.

Borrie MJ, Bawden M, Speechley M, Kloseck M. Interventions led by nurse continence advisers in the management of urinary incontinence: a randomized controlled trial. *CMAJ* 2002;**166**(10):1267–73.

Brown JS, Wing R, Barrett-Connor E, Nyberg LM, Kusek JW, Orchard TJ, *et al*. Lifestyle intervention is associated with lower prevalence of urinary incontinence: the Diabetes Prevention Program. *Diabetes Care* 2006;**29**(2):385–90.

Burgio KL, Locher JL, Goode PS, Hardin JM, McDowell BJ, Dombrowski M, *et al*. Behavioral vs SNRI treatment for urge urinary incontinence in older women. *JAMA* 1998;**280**(23):1995–2000.

Burgio KL, Locher JL, Goode PS. Combined behavioral and SNRI therapy for urge incontinence in older women. *J Am Geriatr Soc* 2000;**48**(4):370–4.

Burgio KL, Locher JL, Roth DL, Goode PS. Psychological improvements associated with behavioral and SNRI treatment of urge incontinence in older women. *J Gerontol B Psychol Sci Soc Sci* 2001;**56**(1):46–51.

Burgio KL, Goode PS, Locher JL, Umlauf MG, Roth DL, Richter HE, *et al*. Behavioral training with and without biofeedback in the treatment of urge incontinence in older women: a randomized controlled trial. *JAMA* 2002;**288**(18):2293–9.

Burgio KL, Goode PS, Locher JL, Richter HE, Roth DL, Wright KC, *et al*. Predictors of outcome in the behavioral treatment of urinary incontinence in women. *Obstet Gynecol* 2003;**102**(5):940–7.

De Gregorio G, Krahmann H, Bernhard A. The efficacy of pelvic floor reeducation. Randomized study. *Arch Gynecol Obstet* 1993;**254**(1–4):504–6.

de Jong JH, Van Kampen M, Biemans B. The effect of whole body vibration training on women with stress urinary incontinence [abstract no. 416]. Proceedings of the International Continence Society (ICS), 36th Annual Meeting, 27 November–1 December 2006, Christchurch, New Zealand.

Demain S, Fereday Smith J, Hiller L, Dziedzic K. Comparison of group and individual physiotherapy for female urinary incontinence in primary care. *Physiotherapy* 2001;**87**(5):235–42.

Dougherty MC, Dwyer JW, Pendergast JF, Tomlinson BU, Boyington AR, Vogel WB, *et al*. Community-based nursing: continence care for older rural women. *Nurs Outlook* 1998;**46**(5):233–44.

Dougherty MC, Dwyer JW, Pendergast JF, Boyington AR, Tomlinson BU, Coward RT, *et al*. A randomized trial of behavioral management for continence with older rural women. *Res Nurs Health* 2002;**25**(1):3–13.

Dowell CJ, Bryant CM, Moore KH, Prashar S. The efficacy and user friendliness of the urethral occlusive device [abstract]. Proceedings of the International Continence Society (ICS), 27th Annual Meeting, 23–26 September 1997, Yokohama, Japan. pp. 295–6.

Foote AJ, Moore KH. Qalys: an objective continence outcome measure to determine the cost effectiveness of conservative urogynaecological treatments [abstract no. 109]. *Neurourol Urodyn* 2000;**19**(4):518–19.

Foote AJ, Moore KH. The cost of urogynaecological treatments: which are more cost-effective? *Aust NZ J Obstet Gynaecol* 2007;**47**(3):240–6.

Galea M, Tisseverasinghe S, Sherburn M, Phillips B. Motor skill training of the pelvic floor muscles using visual versus tactile feedback [abstract no. 459]. Proceedings of the International Continence Society (ICS), 36th Annual Meeting, 27 November–1 December 2006, Christchurch, New Zealand.

Glazener CM, Herbison GP, Wilson PD, MacArthur C, Lang GD, Gee H, *et al*. Conservative management of persistent postnatal urinary and faecal incontinence: randomised controlled trial. *BMJ* 2001;**323**(7313):593–6.

Glazener CM, Herbison GP, Wilson PD, MacArthur C, Lang GD, Gee H, *et al*. Conservative management of persistent postnatal urinary and faecal incontinence: randomised controlled trial [extended electronic version]. *eBMJ* 2001;**323**:1–5.

Glazener CM, Herbison GP, MacArthur C, Grant A, Wilson PD. Randomised controlled trial of conservative management of postnatal urinary and faecal incontinence: six year follow up. *BMJ* 2005;**330**(7487):337–40.

Goode PS. Behavioral and SNRI therapy for urinary incontinence. *Urology* 2004;**63**(Suppl. 3A):58–64.

Goode PS, Burgio KL, Locher JL, Umlauf MG, Lloyd LK, Roth DL. Urodynamic changes associated with behavioral and SNRI treatment of urge incontinence in older women. *J Am Geriatr Soc* 2002;**50**(5):808–16.

Gorman R. Expert system for management of urinary incontinence in women. *Proc Annu Symp Comput Appl Med Care* 1995;**5**:27–31.

Hill LA, Fereday-Smith J, Credgington C, Woodward AF, Knight JC, Williams AJ, *et al*. Bladders behaving badly: a randomized controlled trial of group versus individual interventions in the management of female urinary incontinence. *J Assoc Chartered Physiother Womens Health* 2007;**101**:30–6.

Holtedahl K, Verelst M, Schiefloe A. A population based, randomized, controlled trial of conservative treatment for urinary incontinence in women. *Acta Obstet Gynecol Scand* 1998;**77**(6):671–7.

Hui E, Lee PS, Woo J. Management of urinary incontinence in older women using videoconferencing versus conventional management: a randomized controlled trial. *J Telemed Telecare* 2006;**12**(7):343–7.

Ishiko O, Hirai K, Sumi T, Tatsuta I, Ogita S. Hormone replacement therapy plus pelvic floor muscle exercise for postmenopausal stress incontinence. A randomized, controlled trial. *J Reprod Med* 2001;**46**(3):213–20.

Janssen CCM, Lagro-Janssen ALM, Felling AJA. The effects of physiotherapy for female urinary incontinence: Individual compared with group treatment. *BJU Int* 2001;**87**(3):201-6.

Jeyaseelan S, Haslam J, Oldham J. Can the effects of pelvic floor muscle exercises be enhanced with a new pattern of electrical stimulation in women with stress incontinence? Pilot data [abstract no. 135]. Proceedings of the International Continence Society (ICS), 32nd Annual Meeting, 28–30 August 2002, Heidelberg, Germany. pp. 66–7.

Johnson JL, King Baker T. Biofeedback versus verbal instruction for pelvic floor training in the treatment of urinary incontinence. *J Womens Health Phys Ther* 2000;**24**(3):7–13.

Kartha AS, Borrie MJ, Bawden ME, Kerr PS. The impact of treatment on quality of life in a randomized clinical study of incontinent adults [abstract no. 287). Proceedings of the International Continence Society (ICS), 22nd Annual Meeting, 1–4 September 1992, Halifax, UK.

Kim J. Continence efficacy intervention program for community residing women with stress urinary incontinence in Japan. *Public Health Nurs* 2001;**18**(1):64–72.

Kincade JE, Dougherty MC, Carlson JR, Hunter GS, Busby-Whitehead J. Randomized clinical trial of efficacy of self-monitoring techniques to treat urinary incontinence in women. *Neurourol Urodyn* 2007;**26**(4):507–11.

Kincade JE, Dougherty MC, Carlson JR, Wells EC, Hunter GS, Busby-Whitehead J. Factors related to urinary incontinence in community-dwelling women. *Urol Nurs* 2007;**27**(4):307–17.

Kirschner-Hermanns R, Niehaus S, Schafer W, Jakse G. Pelvic floor re-education in female stress-incontinence I. and II. follow-up results (mean 43 months) [abstract no. 216]. Proceedings of the International Continence Society (ICS), 25th Annual Meeting, 17–20 October 1995, Sydney, Australia. pp. 230-1.

Lee C, Johnson C, Chiarelli P. Women's waterworks: evaluating an early intervention for incontinence among adult women. *Aust NZ Continence J* 2005;**11**(1):11–16.

Liebergall-Wischnitzer M, Hochner-Celnikier D, Lavy Y, Manor O, Arbel R, Paltiel O. Paula method of circular muscle exercises for urinary stress incontinence: a clinical trial. *Int Urogynecol J Pelvic Floor Dysfunct* 2005;**16**(5):345–51.

Lin TL, Chen YC, Hu SW, Chen GD. Nursing intervention to enforce the efficacy of home practice of pelvic floor muscle exercise in mixed incontinence [abstract no. 294]. Proceedings of the Joint Meeting of the International Continence Society (ICS) (34th Annual Meeting) and the International UroGynecological Association (IUGA), 23–27 August 2004, Paris, France.

Lo SK, Naidu J, Cao Y. Additive effect of interferential therapy over pelvic poor exercise alone in the treatment of female urinary stress and urge incontinence: a randomized controlled trial. *Hong Kong Physiother J* 2003;**21**:37–42.

Lumley J, Small R, Brown S, Watson L, Gunn J, Mitchell C, *et al*. PRISM (Program of Resources, Information and Support for Mothers) Protocol for a community-randomised trial [ISRCTN03464021]. *BMC Public Health* 2003;**3**(1):36.

Lumley J, Watson L, Small R, Brown S, Mitchell C, Gunn J. PRISM (Program of Resources, Information and Support for Mothers): a community-randomised trial to reduce depression and improve women's physical health six months after birth [ISRCTN03464021]. *BMC Public Health* 2006;**6**(37).

McFall SL, Yerkes AM, Belzer JA, Cowan LD. Urinary incontinence and quality of life in older women: a community demonstration in Oklahoma. *Fam Community Health* 1994;**17**(1):64–75.

McFall SL, Yerkes AM, Cowan LD. Outcomes of a small group educational intervention for urinary incontinence: episodes of incontinence and other urinary symptoms. *J Aging Health* 2000;**12**(2):250–67.

McFall SL, Yerkes AM, Cowan LD. Outcomes of a small group educational intervention for urinary incontinence: health-related quality of life. *J Aging Health* 2000;**12**(3):301–17.

Moore KH, Simons A, Dowell C, Bryant C, Prashar S. Efficacy and user acceptability of the urethral occlusive device in women with urinary incontinence. *J Urol* 1999;**162**(2):464–8.

Moore KH, O'Sullivan RJ, Simons A, Prashar S, Anderson P, Louey M. Randomised controlled trial of nurse continence advisor therapy compared with standard urogynaecology regimen for conservative incontinence treatment: efficacy, costs and two year follow up. *BJOG* 2003;**110**(7):649–57.

Mulcahy JJ, Laddu AR, Faries DE, DeBrota DJ, Kirkemo AK, Rudy DC, *et al*. Efficacy and safety of duloxetine in stress incontinence patients [abstract]. *Neurourol Urodyn* 1996;**15**(4):395–6.

Nieto Blanco E, Moriano Bejar P, Serrano Molina L, Davila Alvarez V, Perez Llorente M. [Efficiency of a nursing clinical trial on the treatment of female urinary incontinence.] [Spanish] *Actas Urol Esp* 2007;**31**(5):493–501.

O'Brien J, Austin M, Sethi P, O'Boyle P. Urinary incontinence: prevalence, need for treatment, and effectiveness of intervention by nurse. *BMJ* 1991;**303**(6813):1308–12.

O'Brien J, Long H. Urinary incontinence: long term effectiveness of nursing intervention in primary care. *BMJ* 1995;**311**(7014):1208.

O'Brien J. Evaluating primary care interventions for incontinence. *Nurs Stand* 1996;**10**(23):40–3.

O'Sullivan R, Anderson P, Louey M, Prashar S, Simons A, Bower W, *et al*. Long term results of a randomised controlled trial of the nurse continence advisor versus the urogynaecologist in conservative therapy [abstract no. 212]. Proceedings of the International Continence Society (ICS), 30th Annual Meeting, 28–31 August 2000, Tampere, Finland.

O'Sullivan R, Simons A, Prashar S, Anderson P, Louey M, Moore KH. Is objective cure of mild undifferentiated incontinence more readily achieved than that of moderate incontinence? Costs and 2-year outcome. *Int Urogynecol J Pelvic Floor Dysfunct* 2003;**14**(3):193–8.

Ocampo MS, Diokno AC, Ibrahim IA, Karl CR, Lajiness MJ, Hall SA. Group session teaching of behavioral modification program (BMP) for urinary incontinence (UI): A randomized, controlled trial among incontinent women [abstract no. 1348]. *J Urol* 2007;**177**(4 Suppl.):444.

Pepper J, Lamb SE, Doughty G, Fereday Smith J. Group treatment: an acceptable and effective method of physiotherapy for bladder problems. *J Assoc Chartered Physiother Womens Health* 2003;**93**:15–18.

Pepper J, Lamb SE, Fereday Smith J, Doughty G. Female urinary incontinence: women's preferences for group or individual treatment [abstract no.: poster 31]. Proceedings of the Chartered Society for Physiotherapy Annual Congress, 17–19 October 2003, Birmingham, UK. p. 63.

Prashar S, Moore K, Bryant C, Dowell C. The urethral occlusive device for the treatment of urinary incontinence: changes in quality of life [abstract]. *Int Urogynecol J Pelvic Floor Dysfunct* 1997;**8**(1):S130.

Prashar S, Moore K, Anderson P, Louey M, Cragg S, Simons AM, *et al*. A randomized controlled trial of nurse continence advisor management versus urogynaecology management of conservative continence therapy: benefits and costs [abstract]. *Neurourol Urodyn* 1998;**17**(4):423–4.

Rennie AM, Wilson D, Glazener C, Gee H, Lang G, MacArthur C. A multicentre randomised trial of treatment of postnatal incontinence [abstract]. Proceedings of the International Confederation of Midwives, 24th Triennial Congress, 26–31 May 1996, Oslo, Norway. p. 8.

Sam C, Umek W, Uorfler D, Hanzal E. Outpatient pelvic floor exercises versus home biofeedback (PELVEXT) [abstract no. 557]. Proceedings of the Joint Meeting of the International Continence Society (ICS) (34th Annual

Meeting) and the International UroGynecological Association (IUGA), 23–27 August 2004, Paris, France.

Sherburn M, Tisseverasinghe S, Phillips B, Galea MP. Ultrasound visual feedback may be as effective as digital vaginal palpation for pelvic floor muscle training [abstract no. 613]. Proceedings of the International Continence Society (ICS), 35th Annual Meeting, 28 August–2 September 2005, Montreal, Canada.

Sherman RA, Davis GD, Wong MF. Behavioral treatment of exercise-induced urinary incontinence among female soldiers. *Mil Med* 1997;**162**(10):690–4.

Spruijt J, Vierhout M, Verstraeten R, Janssens J, Burger C. Vaginal electrical stimulation of the pelvic floor: a randomized feasibility study in urinary incontinent elderly women. *Acta Obstet Gynecol Scand* 2003;**82**(11):1043–8.

Subak LL, Quesenberry CP, Posner SF, Cattolica E, Soghikian K. The effect of behavioral therapy on urinary incontinence: a randomized controlled trial. *Obstet Gynecol* 2002;**100**(1):72–8.

Subak LL, Whitcomb E, Shen H, Saxton J, Vittinghoff E, Brown JS. Weight loss: a novel and effective treatment for urinary incontinence. *J Urol* 2005;**174**(1):190–5.

Sugaya K, Owan T, Hatano T, Nishijima S, Miyazato M, Mukouyama H, *et al*. Device to promote pelvic floor muscle training for stress incontinence. *Int J Urol* 2003;**10**(8):416–22.

Tsai C, Engberg S. Is biofeedback-assisted pelvic floor muscle training (PFMT) more effective than verbal instruction in teaching pelvic floor muscle utilization and continence control? … a randomised prospective study [abstract no. 138]. Proceedings of the International Continence Society (ICS), 32nd Annual Meeting, 28–30 August 2002, Heidelberg, Germany. pp. 68–70.

von der Heide S, Emons G, Hilgers R, Viereck V. Effect on muscles of mechanical vibrations produced by the Galileo 2000 in combination with physical therapy in treating female stress urinary incontinence [abstract]. Proceedings of the International Continence Society (ICS), 33rd Annual Meeting, 5–9 October 2003, Florence Italy. pp. 192–3.

Wagg AR, Barron D, Kirby M, Stott D, Corlett K. A randomised partially controlled trial to assess the impact of self-help vs structured help from a continence nurse specialist in women with undiagnosed urinary problems in primary care. *Int J Clin Pract* 2007;**61**(11):1863–73.

Wang AC, Liang CC. Bladder sphincter biofeedback as treatment of detrusor instability in women who failed to respond to oxybutynin chloride: a preliminary results [abstract]. Proceedings of the International Continence Society (ICS), 27th Annual Meeting, 23–26 September 1997, Yokohama, Japan. pp. 162–3.

Wells TJ, Brink CA, Diokno AC, Wolfe R, Gillis GL. Pelvic muscle exercise for stress urinary incontinence in elderly women. *J Am Geriatr Soc* 1991;**39**(8):785–91.

Wilson PD, Herbison GP, Glazener CMA, Lang G, Gee H, MacArthur C. Postnatal incontinence: a multi centre, randomised controlled trial of conservative treatment [abstract]. *Neurourol Urodyn* 1997;**16**(5):349–50.

Wilson PD, Glazener C, McGee M, Herbison P, MacArthur C, Grant A. Randomised controlled trial of conservative management of postnatal urinary and faecal incontinence: long term follow-up study [abstract]. *Neurourol Urodyn* 2002;**21**(4):370.

Yoon HS, Song HH, Ro YJ. A comparison of effectiveness of bladder training and pelvic muscle exercise on female urinary incontinence. *Int J Nurs Stud* 2003;**40**(1):45–50.

Appendix 8

List of identified ongoing and unpublished trials

Project lead	Identifiers	Start date	End date	Location	Sample size	Description of intervention	Status of project
Eli Lilly	FIJ-MC-SBBT	April 2003	February 2005	Unknown	Unclear	Duloxetine 80 mg day as 40 mg b.i.d. vs placebo	Unpublished
Eli Lilly	FIJ-EW-SBCC	January 2003	June 2006	Unknown	Unclear	Duloxetine 80 mg day as 40 mg b.i.d. vs placebo	Unpublished
Eli Lilly	FIJ-BI-SBCM	October 2005	January 2007	Unknown	Unclear	Duloxetine 40 mg as 20 mg b.i.d. to 80 mg taken as 40 mg b.i.d. vs placebo	Unpublished
Pfizer	NCT00138749	November 2004	August 2006	Unknown	402	Reboxetine vs placebo	Unpublished
Pfizer	NCT00141128	December 2005	Unknown	Denmark	40	Reboxetine vs placebo	Unpublished
Harvey	NCT00247286	September 2001	October 2006	Canada	36	VC vs PFMT + BF	Unpublished
McGrother	ISRCTN28188933	1999	2001	UK	432	Topical estrogen ring vs placebo	Unpublished
Whelpton	ISRCTN59388318	2003	2006	UK	40	PFMT + BF vs PFMT	Unpublished
Moran	ISRCTN37726767	November 2003	February 2006	UK	100	PFMT + BF vs PFMT	Unpublished
Elton	ISRCTN15411586	October 2005	November 2005	UK	1430	Survey with self-lead questions vs no self-lead	Unpublished
Bolderstone	N0128081147	July 2000	June 2003	UK	250	PFMT + ES vs PFMT	Unpublished
Crothers	N0411063811	February 2001	January 2002	UK	Unclear	Cueing device to enhance patient compliance to PFMT vs no cue	Unpublished
Watson	NCT00323245	March 2006	September 2008	Canada	48	Conservative management of UI for osteoporosis patients	Ongoing
Weber/Meikle	NCT00270998	June 2005	December 2008	USA	450	PFMT + pessary vs PFMT vs pessary	Ongoing
Culligan	NCT00549458	April 2006	March 2008	USA	60	Pilates vs PFMT	Ongoing

FIJ, identifier by manufacturer; ISRCTN, International Standard Randomised Controlled Trial Number Register identifier; N0, National Research Register serial number; NCT, ClinicalTrials.gov identifiers.

Appendix 9

Assessment of risk of bias in included studies

	Author	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8a	Q8b
1	Aksac 2003[120]	U	*N*	U	U	U	Y	*N*	U	U
2	Arvonen 2001[178]	U	U	*N*	*N*	*N*	Y	Y	*N*	Y
3	Aukee 2002[146]	Y	U	U	U	U	Y	Y	Y	Y
4	Berghmans 1996[147]	U	*N*	*N*	*N*	Y	Y	Y	Y	Y
5	Bernardes 2000[174]	U	U	U	U	U	Y	*N*	U	U
6	Bidmead 002[121]	U	U	U	U	Y	Y	U	U	Y
7	Blowman 1991[189]	U	U	Y	Y	Y	Y	Y	*N*	Y
8	Bø 1990[115]	U	U	U	U	U	Y	Y	*N*	Y
9	Bø 1999[115]	Y	Y	*N*	*N*	Y	Y	Y	*N*	Y
10	Borello-France 2006[165]	Y	U	U	*N*	U	Y	U	U	Y
11	Bourcier 1994[196]	U	U	U	U	U	Y	U	*N*	Y
12	Brubaker 1997[130]	Y	U	Y	*N*	Y	Y	U	*N*	Y
13	Bump 2004[136]	U	U	Y	U	U	Y	*N*	U	U
14	Burns 1993[122]	U	U	*N*	*N*	Y	Y	U	*N*	Y
15	Burton 1993[173]	U	U	U	U	U	Y	*N*	U	Y
16	Cammu 1998[181]	Y	Y	U	U	U	*N*	Y	Y	Y
17	Cardozo 2004[137]	Y	Y	Y	U	U	Y	Y	*N*	Y
18	Castleden 1984[148]	U	U	U	U	U	Y	*N*	U	Y
19	Castro-Diaz 2007[138]	U	U	Y	U	U	Y	Y	*N*	Y
20	Delneri 2000[186]	U	U	U	U	U	Y	*N*	U	Y
21	Dmochowski 2003[139]	Y	Y	Y	U	U	Y	Y	*N*	Y
22	Dumoulin 2004[199]	Y	Y	*N*	*N*	Y	Y	Y	*N*	Y
23	Edwards 2000[170]	U	U	U	U	U	Y	*N*	U	U
24	Fantl 1991[135]	U	U	U	U	U	Y	U	*N*	Y
25	Ferguson 1990[149]	U	U	U	U	U	Y	*N*	Y	Y
26	Gallo 1997[162]	*N*	*N*	U	U	U	Y	U	*N*	Y
27	Ghoniem 2005[57]	Y	Y	Y	Y[a]	*N*	Y	Y	*N*	Y
28	Glavind 1996[150]	U	*N*	U	U	U	Y	U	*N*	Y
29	Goode 2003[123]	Y	U	U	U	U	Y	Y	Y	Y
30	Hahn 1991[175]	U	U	*N*	U	U	Y	Y	Y	Y
31	Haig 1995[190]	*N*	*N*	U	U	U	Y	U	*N*	Y
32	Haken 1991[179]	U	U	U	*N*	U	Y	U	U	Y

	Author	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8a	Q8b
33	Hay-Smith 2003[164]	Y	Y	*N*	*N*	Y	Y	Y	*N*	Y
34	Henalla 1989[124]	U	U	U	U	U	Y	*N*	*N*	Y
35	Henalla 1990[125]	U	U	U	U	U	Y	*N*	Y	Y
36	Hofbauer 1990[126]	U	U	U	U	U	Y	*N*	Y	Y
37	Jeyaseelan 2000[131]	Y	U	Y	U	Y	Y	Y	*N*	Y
38	Johnson 2001[167]	Y	U	U	*N*	U	Y	Y	*N*	Y
39	Karagkounis 2007[194]	U	U	U	U	U	Y	*N*	U	Y
40	Kim 2007[118]	Y	U	U	U	U	Y	Y	*N*	Y
41	Kinchen 2005[140]	Y	Y	Y	Y	U	*N*	Y	*N*	Y
42	Klarskov 1986[184]	U	U	U	U	U	Y	U	Y	Y
43	Klingler 1995[151]	U	U	U	U	U	Y	*N*	Y	Y
44	Knight 1998[172]	Y	*N*	U	U	U	Y	U	U	Y
45	Konstantinidou 2007[116]	*N*	*N*	U	*N*	*N*	Y	Y	*N*	Y
46	Lagro-Janssen 1991[127]	*N*	*N*	U	U	Y	Y	Y	Y	Y
47	Laycock 1988[176]	U	U	U	U	U	Y	U	*N*	Y
48	Laycock Trial 1 1993[132]	U	U	*N*	*N*	*N*	Y	U	*N*	Y
49	Laycock Trial 2 1993[132]	U	U	Y	*N*	*N*	Y	U	*N*	Y
50	Laycock 2001[152]	Y	U	U	U	U	Y	U	*N*	Y
51	Luber 1997[133]	U	Y	Y	Y	Y	Y	Y	*N*	Y
52	Mah 2006[141]	Y	Y	Y	U	U	Y	U	*N*	Y
53	Manning 2005[142]	U	U	Y	U	U	Y	U	U	Y
54	Mayne 1988[168]	U	U	U	U	U	Y	U	*N*	Y
55	Millard 2004[143]	Y	Y	Y	U	U	Y	Y	*N*	Y
56	Miller 1998[107]	U	U	U	*N*	U	Y	U	U	Y
57	Mørkved 2002[153]	U	Y	*N*	*N*	Y	Y	Y	U	Y
58	Norton 2002[144]	Y	Y	Y	Y	U	Y	U	*N*	Y
59	Nygaard 1996[163]	Y	U	U	U	Y	Y	U	Y	U
60	Oláh 1990[187]	U	U	U	U	U	Y	Y	*N*	Y
61	Pages 2001[154]	Y	U	U	U	U	Y	U	*N*	Y
62	Peattie 1988[180]	U	U	U	U	U	Y	U	*N*	Y
63	Pieber 1995[192]	Y	U	U	U	U	Y	U	Y	Y
64	Pohl 2004[171]	U	U	U	U	U	Y	*N*	U	U
65	Ramsay 1990[128]	U	U	Y	*N*	Y	Y	Y	Y	Y

	Author	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8a	Q8b
66	Sand 1995[134]	U	U	Y	U	Y	Y	Y	U	Y
67	Savage 2005[166]	U	U	U	U	Y	Y	Y	*N*	Y
68	Seo 2004[195]	U	U	U	U	U	Y	*N*	U	U
69	Shepherd 1983[155]	U	U	U	U	U	Y	U	Y	U
70	Sherburn 2007[182]	Y	Y	*N*	*N*	Y	Y	*N*	Y	Y
71	Smith 1996[177]	U	U	U	U	U	Y	*N*	Y	Y
72	Swithinbank 2005[119]	U	U	*N*	U	U	Y	U	*N*	U
73	Tapp 1987[191]	U	U	U	U	U	Y	U	Y	Y
74	Tapp 1989[185]	U	U	U	U	U	Y	U	*N*	Y
75	Taylor 1986[156]	U	U	U	U	U	Y	Y	*N*	U
76	Terry 1996[193]	U	U	U	U	U	Y	U	U	U
77	van Kerrebroeck 2004[117]	Y	Y	Y	U	U	Y	Y	*N*	Y
78	Williams 2006[129]	Y	Y	*N*	*N*	U	Y	U	*N*	Y
79	Wilson 1987[157]	*N*	*N*	U	U	U	Y	*N*	U	Y
80	Wilson 1998[197]	Y	U	U	U	U	Y	Y	*N*	Y
81	Wise 1993[188]	U	U	U	U	U	Y	U	*N*	Y
82	Woldringh 2007[198]	Y	U	U	U	U	Y	Y	*N*	Y
83	Wong 1997a[158]	U	U	U	U	U	Y	*N*	U	Y
84	Wong 1997b[160]	U	U	U	U	U	Y	*N*	U	U
85	Wong 2001[169]	Y	U	U	U	U	Y	*N*	U	U
86	Wyman 1998[183]	U	*N*	*N*	Y	*N*	Y	Y	*N*	Y
87	Zanetti 2007[161]	Y	U	U	*N*	U	Y	*N*	U	Y
88	Zinner 1998[145]	U	U	Y	U	U	Y	U	*N*	Y
		88	88	88	88	88	88	88	88	88
Totals per category										
Y		30	16	19	6	17	86	33	18	75
U		53	62	56	63	65	0	33	24	13
N		5	10	13	19	6	2	22	46	0
Totals per category (%)										
Y		34.1	18.2	21.6	6.8	19.3	97.7	37.5	20.5	85.2
U		60.2	70.5	63.6	71.6	73.9	0.0	37.5	27.3	14.8
N		5.7	11.4	14.8	21.6	6.8	2.3	25.0	52.3	0.0

N, no; U, uncertain; Y, yes.
a Health professionals blinded for SNRIs (active or placebo), but not for PFMT (active or imitation PFMT).

Appendix 10

Characteristics of included studies: summary of efficacy and adverse events

Studies of non-pregnant women

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Aksac 2003[120] *Study design/method*: 3-arm RCT, parallel design. Single centre, Turkey *Duration of study*: 8 weeks	*Inclusion criteria*: Women with USI *Exclusion criteria*: Not reported *N randomised*: 50 *N lost to follow-up*: Not reported *Type of incontinence*: USI. Type of USI (0/1/2): I: 7/8/5, II: 4/9/7, III: 3/5/2, $p > 0.05$ *Age* (years, mean, SD): I: 52.5 (7.9), II: 51.6 (5.8), III: 54.7 (7.8), $p > 0.05$ *Severity of incontinence*: see type of SUI above *Other*: Body weight, parity, % postmenopausal 100%	1. PFMT taught via digital palpation, $N = 20$ 2. PFMT taught via BF, $N = 20$ 3. No treatment, $N = 10$ *PFMT + digital palpation*: Voluntary pelvic floor muscle contraction (VPFMC) taught via digital palpation technique. Relaxation of abdominal and buttock muscles. Set: 10 VPFMC, with 5-second hold and 10-second rest. Progressed at 2 weeks to 10-second hold and 20-second rest. Sets per day: 3. Duration of training: 8 weeks. Supervision: Weekly clinic visits *PFMT + BF*: VPFMC taught via biofeedback (Myomed-932, vaginal probe); unclear if home or clinic based. Set: 20 minutes consisting of 40 VPFMC with 10 seconds hold and 20 seconds rest. Repeat 3 times per week for 8 weeks. Supervision: Weekly clinic visits with a therapist *Control subjects*: No exercises *Additional information*: All women were postmenopausal and on hormone replacement therapy (estradiol hemihydrate 2 mg/day and norethisterone acetate 1 mg/day)	**Objective** *Cure* (≤ 1 g on 1-hour pad test): I: 15/20, II: 16/20, III: 0/10 *Improvement* (≥ 50% reduction in pad weight; not including 'cure'): I: 5/20, II: 4/20, III: 2/10 *Episodes of leakage* (4-point ordinal scale, 1–4, median, SD): I: before 2.3 (0.7), after 3.5 (0.5), $p < 0.001$, II: before 2.3 (0.6), after 3.6 (0.4), $p < 0.001$, III: before 2.1 (0.9), after 2.4 (0.9), $p > 0.05$ Note: Ordinal scale. 1 = once a day, 2 = more than once a week, 3 = less than once a week, 4 = once a month *1-hour pad test* (g, median, SD): I: before 19.9 (2.5), after 2.1 (0.4), $p < 0.001$, II: before 20.5 (1.7), after 1.2 (0.2), $p < 0.001$, III: before 29.1 (3.2), after 28.2 (3.7), $p > 0.05$ **Surrogate outcomes** *Vaginal squeeze pressure* (cmH_2O, median, SD): I: before 20.3 (6.2), after 37.5 (8.7), $p < 0.001$, II: before 19.1 (4.8), after 50.0 (11.5), $p < 0.001$, III: before 18.7 (4.9), after 20.0 (3.9), $p > 0.05$ *Digital palpation score* (6-point ordinal scale, 0-5, median, SD): I: before 3.5 (0.5), after 4.8 (0.4), $p < 0.001$, II: before 3.3 (0.4), after 4.9 (0.2), $p < 0.001$, III: before 3.3 (0.4), after 3.3 (0.6), $p > 0.05$	**Quality of life** *Social Activity Index* (visual analogue scale, median, SD): I: before 4.5 (0.3), after 7.5 (1.2), $p < 0.001$, II: before 3.5 (0.4), after 8.1 (0.8), $p < 0.001$, III: before 3.6 (0.7), after 3.6 (0.6), $p > 0.05$; groups I and II better than group III after treatment ($p < 0.001$)

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Arvonen 2001[178] *Study design/method*: 2-arm RCT. Single centre, Sweden *Duration of study*: 4 months	*Inclusion criteria*: Women with symptoms of stress incontinence, age under 65, and an understanding of spoken Swedish *Exclusion criteria*: Pregnancy, cysto/rectocoele, prolapse, urinary tract infection, altered vaginal tissue, and medication affecting the functioning of the urinary tract or kidneys *N randomised*: 40 *N lost to follow-up*: I: 2/20, II: 1/20 *Type of incontinence*: SUI *Age (years, median, range)*: I: 49 (32–64), II: 47 (28–65), NS *Pad test* (short provocation test with a standard 300-ml in bladder – g, median, range): I: 30 (2–170), II: 20 (3–80) *Pelvic floor muscle strength* (vaginal palpation; score range 0–5, median, range): I: 3 (1–4), II: 3 (1–3), NS *Other*: BMI, parity	I. VC (balls), *N* = 18 II. PFMT, *N* = 19 (*N* in analysis) *Vaginal balls*: Starting with a ball (Vagitrim, Ipex Medical AB, Stockholm) weighing 65 g, 10 maximum VPFMC 20 seconds' hold, 20 seconds' rest, 2 times a day. In addition, sub-maximum VPFMC was performed by retaining the 50-g ball while moving (e.g. walking, housekeeping and doing gymnastics) once a day for 15 minutes. After 2 months the balls were replaced by ones weighing 100 g for maximum squeeze and 80 g for submaximal squeeze. Three clinic visits with physiotherapist and nurse over 4 months *PFMT*: Set: 10 maximum VPFMC while sitting, 5 seconds' hold, 5 seconds' rest, with a short break after 5 squeezes. Repeated while standing. Sets per day: 2. In addition, 15 submaximum VPFMC with 3 seconds' hold, 3 seconds' rest, once a day, and one static 2-minute sub-maximum PFM squeeze, once a day. Duration of training: 4 months. Supervision: 3 clinic visits with physiotherapist and nurse over 4 month *Additional information*: Two women who suffered from asthma encountered difficulties in using the balls because of hard coughing	**Objective** *No leakage (0 g on pad test) (short provocation test with a standard 300 ml in bladder)*: I: 9/18, II: 5/19 *1- to 10-g leakage pad test* (short provocation test with a standard 300-ml in bladder): I: 4/18, II: 7/19 *Pad test* (short provocation test with a standard 300 ml in bladder; g, median, range): I: 1 (0–100), II: 5 (0–90), $p = 0.03$ **Surrogate outcomes** *Pelvic floor muscle strength* (vaginal palpation; score range 0–5, 0 = no contraction, 5 = very strong pressure with a strong lift for 6–7 seconds; median, range): I: 4 (1–5), II: 3 (1–5), NS Women in the vaginal ball group 'were not able to keep the ball inside without dropping it several times during a single set of maximum squeezes' (p. 597) **Adverse events** *N experiencing adverse events*: I: 0/20, II: 0/20 *Adverse events*: I: 'no feeling of pain while using the ball was reported' (p. 597), II: 0/20 *Discontinued treatment because of adverse events*: I: 0/20, II: 0/20	**Subjective** *Subjective self-rated experience of improvement (4-point scale) – 'Good (fully recovered)'*: I: 4/18, II: 0/19 Note: 'Good (fully recovered)' vs improved, unchanged or worse *Subjective self-rated experience of improvement (4-point scale) – 'Good (fully recovered)' or 'Improved'*: I: 11/18, II: 11/19 Note: 'Good (fully recovered)' or improved vs unchanged or worse *Patient satisfaction*: PFMT 'was considered satisfactory because it could be performed as part of other activities' (p. 597)

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Aukee 2002[146] *Study design/method*: 2-arm RCT. Single centre, Finland *Duration of study*: 12 weeks and 1-year follow-up	*Inclusion criteria*: Women aged 21–70 with USI, without previous incontinence operations, maximal urethral closure pressure over 20 cmH_2O and cough leak point pressure over 90 cmH_2O *Exclusion criteria*: Genital protrusion beyond the vaginal hymen, inability to understand instructions for home training, pregnancy, severe diseases such as malignancies in the abdominal region, multiple sclerosis and diabetes mellitus requiring insulin *N randomised*: 30 for 12 week data (Aukee 2002[146]); 35 for 1 year data (Aukee 2004[234]) *N lost to follow-up*: 0/30 *Type of incontinence*: USI *Age* (years, mean, range): I: 15, 51.8 (35 to 61), II: 15, 50.8 (31 to 69) *Leakage index score* (mean, SD, range): I: 15, 45.5 ± 10.1, II: 15, 38.5 ± 11.0, $p = 0.003$ *24-hour pad test* (g, mean, SD). I: 15, 28.1 ± 29.4, II: 15, 47.1 ± 34.6, $p < 0.001$ *Pelvic floor muscle activity while supine* (μV): I: 15, 15.3 ± 4.4, II: 15, 17.8 ± 6.8 *Pelvic floor muscle activity while standing* (μV): I: 15, 13.5 ± 4.7, II: 15, 14.7 ± 7.2 *Other*: BMI, parity (vaginal deliveries), *N* of postmenopausal women	I. PFMT + BF, *N* = 15 II. PFMT, *N* = 15 (*N* in analysis) *PFMT + BF*: All women were taught PFMT by the same physiotherapist, using electromyography (EMG) BF treatment in five office visits during a 12-week period. After 12 weeks, patients advised to continue training themselves. At the first visit, patients familiarised with location of levator ani muscle and pelvic anatomy. Home PFMT = verbal and written instructions to practice 20 minutes per day, five times per week over 12 weeks. BF = individual EMG-assisted home BF device (FemiScan, Mega-Electronics, Kuopio, Finland) with a vaginal prove and headphones. The device emits a voice signal if the contraction is too weak. At each session, the home-training devices were downloaded and the registered data were checked *PFMT*: All women were taught PFMT by the same physiotherapist in five office visits during a 12-week period. Home PFMT = verbal and written instructions to practice 20 minutes per day, five times per week over 12 weeks. After 12 weeks, patients were advised to continue training themselves	**Objective** *24-hour pad test at 12 weeks* (g, mean, SD): I: 15, 19.0 ± 19.7, II: 15, 22.5 ± 19.6 Note: Baseline values were significantly lower for BF group; no between-group difference after adjustment ($p = 0.907$) **Surrogate outcomes** *Adherence at 12 weeks* (*N* of training sessions recorded by BF device, mean, range): I: 68 (9–130), II: NA *Adherence at 12 weeks* (*N* of days exercised without the device, daily log written down by women, average, range) I: 47.5 (6–93), II: 56.2 (21–87) *Pelvic floor muscle activity while supine at 12 weeks* (μV, mean, SD): I: 25.8 (10.0), II: 20.1 (8.6) *Pelvic floor muscle activity while standing at 12 weeks* (μV, mean, SD): I: 21.4 (10.3), II: 20.9 (8.6) *Pelvic floor muscle activity while supine at 1 year* (patients not receiving surgery only; μV, mean, SD): I: 11, 23.8 ± 8.55, II: 10, 24.65 ± 9.08 **Long term (1 year)** *N having surgery or awaiting surgery at 1 year*: I: 5/16, II: 9/19 **Adverse events** *N experiencing adverse events at 12 weeks*: I: 4/15, II: 3/15 indicated pain while training. Of which 3/7 premenopausal *Discontinuation due to adverse events at 12 weeks*: I: 2/15, II: 0/15. The two patients in the BF group undertook PFMT only instead and were analysed on an intent-to treat basis. They were both post-menopausal and found the vaginal probe to be uncomfortable	**Quality of life** *Leakage Index (Bø 1994) at 12 weeks* (13 types of physical exertions that trigger urinary leakage with decrease in values reflecting improvement; score, mean, SD): I: 15, 34.9 ± 10.4, II: 15, 38.1 ± 10.5 Note: Baseline values were significantly higher for BF group; no between-group difference after adjustment ($p = 0.068$) *Satisfaction with PFMT at 1 year*: *% considering PFMT effective*: 23/35 (67%), group breakdown not available *% considering biofeedback PFMT harmful*: 0/35

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Berghmans 1996[147] *Study design/method*: 2-arm RCT. Stratified by severity of leakage and source of referral. Two sites in the Netherlands *Duration of study*: 4 weeks	*Inclusion criteria*: Women aged 18–70 years old, with either mild or moderate forms of stress incontinence. Some with urodynamically proven genuine stress incontinence (GSI) and others with clinical history suggestive of GSI. Able to fill out forms and willing to participate *Exclusion criteria*: Medication for lower urinary tract problems, pudendal nerve lesion, urinary tract infection, non-compliance in diagnostic phase, previous urological or gynaecological surgery, <6 weeks postnatal, concomitant treatment for stress incontinence, severe stress incontinence, psychological disorders, vaginitis, pacemaker, hip prosthesis, unable to understand Dutch *N randomised*: 40 *N lost to follow-up*: 0/40 *Type of incontinence*: USI or SUI (mild/moderate): I: 11/9, II: 11/9 Note: Mild = grade 1: <20 g/48 hours; moderate = grade 2: 20–100 g/48 hours (Mulder and Vierhout 1990) *Age* (years, mean, SD): I: 50.4 ± 10.5, II: 46.4 ± 12.1 *48-hour pad test* (g, mean SD) I: 29.0 ± 31.7, II: 26.6 ± 24.5 *Episodes of leakage in 24 hours* (mean, SD) I: 3.0 ± 3.4, II: 2.0 ± 2.1 *N of pad changes in 24 hours* (mean, SD): I: 2.6 (1.2), II: 2.4 (1.8) *Symptom scores*: I: 23.8 ± 6.9, II: 22.1 ± 4.6 *Incontinence assessment*: (*N* finding their daily activities altered:) I: 12/20, II: 12/20 *N finding their social consequences altered*: I: 11/20, II: 9/20;	I. PFMT, *N* = 20 II. PFMT + BF, *N* = 20 (*N* in analysis) *PFMT*: Clinic visits three times per week for 4 weeks with 25- to 35-minutes per visit. Explanation of pelvic anatomy, function of PFM and bladder. PFMT = 4 sets of 10 VPFMC (5 quick, 5 sustained, 3–30 seconds) progressed by 10 per set until 30 per set. Exercise in supine, side, standing and crawling positions. 'The Knack' (VPFMC with cough, stair climbing, lifting, jumping) also included. Digital palpation performed weekly by physiotherapist using PERFECT Assessment Scheme (Laycock 1992) and received home exercise programme to practice three times per day *PFMT + BF*: PFMT as above with addition of BF from vaginal probe (electromyographic) giving both visual and acoustic signals (Myaction 12, Uniphy BV)	**Objective** *Cure based on 48-hour pad test*: I: 3/20, II: 5/20 *Cure or improvement based on 48-hour pad test*: I: 17/20, II: 19/20 *Episodes of leakage in 24 hours* (mean, SD): I: 1.4 ± 3.5, II: 0.8 ± 1.3 *48-hour pad test* (g, mean, SD): I: 12.5 ± 12.0, II: 12.2 ± 15.4 **Adverse events** Discontinued treatment because of adverse events: none	**Quality of life** *Symptom questionnaire score* (a modification of the standardised PRAFAB score) (Mulder and Vierhout 1990), range 5–50 with higher scores meaning more serious problems; mean, SD): I: 13.1 ± 8.6, II: 11.1 ± 5.9

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
	N finding self-worth altered: I: 11/20, II: 14/20 *Other*: Mean body weight, % prior incontinence surgery, micturitions per day			
Bernardes 2000[174] *Study design/method*: 2-arm RCT. Portugal – Portuguese publication *Duration of study*: 10 days	*Inclusion criteria*: Women with USI (grade 1, 2 or 3 of pelvic muscle strength according to criteria by Oritz 1994); no surgical treatment for stress UI; no use of hormonal therapy *Exclusion criteria*: Pregnancy, current use of intrauterine device, use of pacemaker, urological disease, orthopaedic diseases of shoulder, stress UI grade >3 of pelvic muscle strength, no compliance to protocol, previous physiotherapy for stress UI *N randomised*: 14 *N lost to follow-up*: Not reported *Type of incontinence*: USI *Age* (years, median, range): I: 44.1 (31–59), II: 53.3 (45–64), NS *Severity of incontinence* (light loss/ moderate loss): I: 3 light, 4 moderate; II: 2 light, 5 moderate *Pelvic floor muscle strength grade*: I: grade 0, 4/7; grade 1, 2/7; grade 3, 1/7; II: grade 0, 6/7; grade 1, 1/7; grade 3. 0/7 *Other*: Weight, parity (% multiparous)	I. PFMT, *N*=7 II. ES, *N*=7 (*N* in analysis) *PFMT*: In the first 'experimental' session women did six types of exercises, including two for abdominal, two for pelvic floor muscles and two for gluteus and pelvic floor muscles to see how they adapted to the programme. This was followed by 10 consecutive sessions (by the same physical therapist), involving three sets of six exercises as above, 10 times each. Daily home exercise included micturition control and perineal reinforcement. Women were evaluated at the first consultation and after the 10-day treatment *ES*: Dualpex (Quark Medical products) with perineal intrauterine electrode. Frequency 30 Hz, pulse 1 millisecond, sustained for 6 seconds and relaxed for 12 seconds. Contraction 10–30 mA. Treatment for 20 minutes. 10 consecutive sessions. Individualised intensity, progressing to 60 Hz. Two evaluation sessions before and after the 10-day treatment *Additional information*: 21 women were eligible, of whom seven did not comply with the protocol (especially urodynamic testing), as many of them were from lower social classes and could not afford treatments/tests	**Surrogate outcomes** *Pelvic floor muscle strength* (*N* who had strength grade 2?): I: 4/7, II: 7/7	**Subjective** *Patient perception* (no symptom or no loss of urine): I: 5/7, II: 2/7 *Patient perception* (light loss of urine, i.e. when sneezing, strong cough or weight-lifting): I: 2/7, II: 4/7 *Patient perception* (moderate loss of urine, i.e. during cough, laughter or daily activity): I: 0/7, II: 1/7

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Bidmead 2002[121] (abstract only) *Study design/method*: 4-arm RCT, parallel design. Single centre, UK *Duration of study*: 14 weeks	*Inclusion criteria*: Women who had a new diagnosis of USI or had no treatment in previous 6 months *Exclusion criteria*: Not reported *N randomised*: 173 (recruited over 4 years) *N lost to follow-up*: 44/173 (I: 10, II: 15, III: 12, IV: 7); Authors reported 'no statistical differences between women withdrawing and completing or between withdrawals across the treatment groups' *Type of incontinence*: USI *Age* (years, mean, SD): I: 46.2 (8.5), II: 50.4 (11.5), III: 51.5 (9.7), IV: 47.5 (11.5) *Pad weight* (standardised pad test, g, mean, SD): I: 12.0 (3.3), II: 10.0 (1.6), III: 10.0 (2.6), IV: 8.0 (4.9)	I. PFMT, *N* = 40 II. PFMT + ES, *N* = 82 III. PFMT + sham ES, *N* = 42 IV. No treatment, *N* = 20 (*N* in analysis) *PFMT*: 'Conventional' PFMT supervised by physiotherapist. Set: NR. Sets per day: NR. Duration of training: 14 weeks. Supervision: five clinic visits in 14 weeks (weeks 1, 3, 6, 10 and 14). Also given individually tailored lifestyle advice *PFMT + ES*: PFMT, lifestyle advice and clinic visits as above. ES = Uromax stimulator with a periform intravaginal electrode. At home *PFMT + sham ES*: PFMT, lifestyle advice and clinic visits as above. Sham ES = manufactured to be identical to the active device *Control subjects*: Deferred treatment and then crossover to PFMT + ES group with reassessment *Additional information*: Total *N* = 184, 11 more than randomised (*N* = 173); some of the control patients crossed over to group II? Awaiting author's reply. Data extracted from Parsons (2004)[236]	**Objective** *Pad weight change* (fixed volume pad test with half-hour exercise programme, g, mean change, SE): I: 40, –9.62 (3.37), II: 82, –5.74 (1.91), III: 42, –2.01 (2.15), IV: 20, +3.65 (1.71) **Surrogate outcomes** *Adherence – PFMT* (excellent/good): I: 30/40, II: 65/88, III: 33/42 *Adherence – ES* (excellent/good): I: NA, II: 40/88, III: 19/42 Note: Excellent = performed daily; good = performed more than three times a week; poor = less often; unrecorded = not recorded or withdrawn. Based on patients' diaries	**Quality of life** *King's Health Questionnaire* (mean score increase, Wilcoxon signed-rank test): Significant subjective improvement across most domains, for the PFMT + ES group and the PFMT group, but this was not mirrored by the PFMT + sham ES group. See table in paper for details

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Blowman 1991[189] *Study design/method*: 2-arm RCT *Duration of study*: ?4–6 weeks treatment + follow-up at 6 months	*Inclusion criteria*: Women having USI without significant prolapse *Exclusion criteria*: Not reported *N randomised*: 14 *N lost to follow-up*: I: 0/7, II: 1/7, due to poor compliance judged from the electric stimulator *Type of incontinence*: USI *Age* (years, median, range): I: 45.0 (33–68), II: 42.5 (38–64) *Episodes of leakage per week* (median, range): I: 5 (1–14), II: 12.5 (1–31) *N of micturition per week* (median, range): I: 51 (36–63), II: 61.5 (53–84) *Other*: Height, weight, % prior incontinence surgery, parity	I. PFMT + ES, *N* = 7 II. PFMT + sham ES, *N* = 6 (*N* in analysis) *PFMT*: Correct VPFMC taught by an obstetric physiotherapist with visual feedback using a perineometer. Set: Home exercise (1) five VPFMC, hold for five counts, increasing hold time to 10 counts. (2) 10 quick VPFMC, progressing to 20 and increasing speed and *N* of contractions. (3) Tighten the pelvic floor muscle in five small steps and then relax in five steps; repeat five times. Sets per day: 4 times a day. Duration of training: ?4 weeks. Self-test to be done 1 month after exercise starts (squatting, jumping, etc.). If not dry, continue exercise. Supervision: Fortnightly visits to the hospital with the same physiotherapist. *ES*: Neurotrophic stimulation, a method of neuromuscular electrical (NME) stimulation. Home stimulator, 60 minutes per day for 4 weeks, with the cathode placed over perineal area and buttocks. Frequency 10 Hz, 4-second hold, 4-second relax, pulse width 80 microseconds. Further therapy using a higher frequency of 35 Hz (all other parameters as before) given for 15 minutes a day over 2 weeks. Patients told to turn up the amplitude control until they just became aware of some electrical sensation. The stimulation sensation was minimal, not enough to cause a pelvic floor contraction and comfortable enough to be ignored for the duration of treatment. The stimulator had the facility to check the patients' compliance, i.e. the *N* of times and the *N* of hours they used the stimulator. This was checked every fortnight	**Objective** *Cure at 4–6 weeks* (leakage episodes reduced to zero, no accidents per week): I: 6/7, II: 1/6 *Episodes of leakage per week at 4–6 weeks* (1-week continence chart, median, range): I: 7, 0 (0–1), II: 6, 6 (0–21), $p < 0.05$ *N of micturition per week at 4–6 weeks* (1-week continence chart, median, range): I: 7, 41 (37–56), II: 6, 51, (44–57) **Surrogate outcomes** *Adherence*: See 'lost to follow-up' *Maximum perineometer reading at 4-6 weeks* (range 0–16, median, range): I: 7, 12 (5–16), II: 6, 9 (5–15) *Maximum perineometer reading for 10 seconds hold at 4–6 weeks* (scale 0–16, median, range): I: 7, 5 (2–16), II: 6, 5 (3–13) *Return of symptoms at 6 months* (no change since end of study/ deteriorated/no reply on questionnaire): I: 4/2/1, II: 3/1/2 **Adverse events** *N experiencing adverse events at 4–6 weeks*: I: 0/7, II: 0/7. On direct questioning none of the patients reported any discomfort or side effects from the ES *Discontinued treatment because of adverse events at 4–6 weeks*: I: 0/7, II: 0/7	**Subjective** *N requiring further treatment*: I: 0/7, II: 4/6, i.e. better for group I (active ES)

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Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
		Sham ES: Told to set the amplitude control to 3 *Additional information*: Apparent error in table 2 (wrong rows)		
Bø 1990[159] *Study design/method*: 2-arm RCT. Stratified by degree of leakage. Single centre, Norway *Duration of study*: Treatment 6 months. Follow-up 5 years (intensive PFMT group only) and at 15 years (both groups)	*Inclusion criteria*: Women with USI *Exclusion criteria*: Detrusor instability or infection *N randomised*: 57 *N lost to follow-up*: I: 3/26, II: 2/31 *Type of incontinence*: USI *Age (years, mean, range)*: I: 23, 44.9 (24–64), II: 29, 45.9 (35–63), NS *90-second pad test (g, mean, 95% CI)*: I: 23, 27.0 (8.8 to 45.1), II: 29, 29.5 (14.5 to 44.0) *Social Activity Index* (sum score, mean, 95% CI): I: 23, 7.7 (7.1 to 8.3), II: 29, 7.8 (7.2 to 8.4) *Urinary Leakage Index* (mean, 95% CI): I: 23, 3.0 (2.8 to 3.3), II: 29, 3.1 (2.9 to 3.3) *Maximal pelvic floor muscle strength* (cmH_2O, mean, 95% CI, range): I: 23, 7.0 (4–10), II: 29, 7.9 (5.5–10.3), NS *Other*: BMI, % prior incontinence surgery, parity (mean *N* of children), % postmenopausal	I. PFMT, intensive exercise, *N* = 23 II. PFMT, home exercise only, *N* = 29 (*N* in analysis) *PFMT, intensive exercise*: Education, home PFMT and monthly clinic visits as below, with addition of a special PFMT exercise course, training with instructor in groups 45 minutes once a week for 6 months. Course included sets of 8–12 VPFMC (as hard as possible) with 6- to 8-second holds in standing, sitting, lying, and kneeling with legs apart. 3–4 fast contractions added after held contraction *PFMT, home exercise only*: Individual instruction in pelvic anatomy and correct VPFMC with physiotherapist. Home PFMT 6 months, with monthly clinic visit for measurement of pelvic floor muscle strength using a vaginal balloon catheter connected to a pressure transducer. PFMT = 8–12 strong contractions per set, 3 times a day. Frequency of exercise was notified in a training diary	**Objective** *90-second pad test at 6 months* (g, mean, 95% CI): I: 23, 7.1 (0.8 to 13.4), II: 29, 23.0 (9 to 35.0); data for group II obtained from graph **Surrogate outcomes** *Adherence at 6 months*: 'The attendance rate for both groups to the home exercise programme and for the IE (intensive exercise) group to the weekly group exercise was close to 100%' *Adherence at 5 years* (PFMT at least once a week): I: 16/23, II: not reported *Adherence at 15 years* (PFMT at least once a week): I: 8/21, II: 5/26, $p = 0.20$; of those who exercised, the mean (SD) number of VPFMC per set was 12 (9.7), and the mean (SD) reported holding time was 9 (6.6) seconds *Maximal pelvic floor muscle strength at 6 months* (cmH_2O, mean, 95% CI): I: 23, 22.5 (17.7, 27.3), II: 29, 15.3 (12.0, 18.6) **Long term (15 years)** *N having incontinence surgery*: Within the first 5 years after treatment, I: 3/21, II: 9/26; 5–15 years after treatment, I: 8/21, II: 4/26 **Adverse events** *N experiencing adverse events*: At 15 years of those that underwent surgery (I: 11/21, II: 13/26) 21% reported Adverse events, bladder emptying being the most common complaint	**Subjective** *Patients' own assessment at 6 months* (continent/almost continent/some improvement/unchanged/worse): I: 2/12/8/1/0, II: 0/5/14/10/0 **Quality of life** *Social Activity Index at 6 months* (sum score, mean, 95% CI): I: 23, 9.3 (9.0, 9.6), II: 29, 8.2 (7.4, 8.9) Note: Women's perceived problems in participation in 9 different social situations registered on a 10-cm visual analogue scale (0 = impossible to take part, 10 = no problem in taking part). The nine social situations include: at work; while dancing; at the cinema, theatre, etc.; while hiking; in group exercise; other social situations (e.g. parties); in connection with sexual activity; attending educational courses; and on a bus/train, etc. *Urinary Leakage Index at 6 months* (mean, 95% CI): I: 23, 1.9 (1.6 to 2.2), II: 29, 2.6 (2.2 to 3.0); 95% CI obtained from graph Note: The degree of stress urinary incontinence during sneezing, coughing, laughing, walking, walking downhill, running, jumping and lifting on a 5-point scale (5 = always, 1 = never). The mean was calculated as an overall index **15 years' follow-up (questionnaire)** *Severity Index (Sandvik et al. 1993; 2000*[13]*) at 15 years* (dry/slight/ moderate/ severe/very severe): I: 6/4/9/1/0, II: 4/4/10/6/1, $p = 0.34$

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
				Urinary Leakage Index at 15 years (median, range): I: 21, 1.9 (1.0, 2.6), II: 26, 1.9 (1.0, 4.7), $p = 0.14$ *International Consultation on Incontinence Questionnaire – Urinary Incontinence Short Form (ICIQ-UI SF) at 15 years* (*N* of women with score 0–1 taken to mean no interference on everyday life): I: 8/21, II: 14/26, $p = 0.53$ Note: International Consultation of Incontinence Questionnaire Urinary Incontinence Short Form; 10-point scale (0 = not at all, 10 = a great deal) *Stress urinary incontinence last month during physical activity* (self-report at 15 years): All respondents, I: 8/21, II: 8/26, $p = 0.80$, non-operated women only, I: 5/10, II: 4/13 *Stress urinary incontinence last month during coughing or sneezing* (self-report at 15 years): All respondents, I: 11/21, II: 13/26, $p = 1.0$, non-operated women only, I: 8/10, II: 7/13 *Self-reported pad use at 15 years*: 'Never or only during physical activity', I: 12/21, II: 9/26, $p = 0.15$; 'always', I: 3/21, II: 7/26, $p = 0.47$

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
				Satisfaction at 15 years ('satisfied or almost satisfied today'): all respondents, I: 17/21, II: 19/26, $p = 0.21$; non-operated women only, I: 8/10, II: 10/13, *p*-value not reported ***Subgroup analysis*** At 6 months, the 'responders' to intensive PFMT (group I) were significantly older, had a longer history of SUI symptoms, a higher BMI score, stronger pelvic floor muscles, and a lower resting maximum urethral pressure (MUP) before treatment than the 'borderline responders' Participants in group I were classified as 'responders' (15/23), 'borderline responders' (8/23) and 'non-responders' (0/23), using a cumulative score of the five parameters including improvement on pad test, improvement by the social activity index, etc. At 15 years, no differences were found in urinary symptoms (pad use, leakage during 'physical activity' and 'coughing or sneezing'), satisfaction or training adherence between operated and non-operated women. Operated women were more likely to report severe incontinence and interference with daily life than non-operated women

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Bø 1999[115] *Study design/method*: 4-arm RCT, stratified by severity of leakage on pad test. Five centres, Norway *Duration of study*: 6 months	*Inclusion criteria*: Women with USI, waiting for surgery or recruited through advertising, >4-g leakage on pad test with standardised bladder volume *Exclusion criteria*: other types of incontinence, DO on urodynamics, residual urine >50 ml, maximum uroflow <15 ml/second, previous surgery for USI, neurological or psychiatric disease, ongoing urinary tract infection, other disease that could interfere with participation, use of concomitant treatments during trial, inability to understand instructions given in Norwegian *N randomised*: 122 *N lost to follow-up*: I: 4/29, II: 7/32, III: 2/29, IV: 2/32 *Type of incontinence*: USI *Age* (years, mean, SD): 49.6 (10.0), II: 47.2 (10.1), III: 49.2 (10.6), IV: 51.7 (8.8) *Episodes of leakage in 3 days* (mean, SD): I: 2.0 (1.8), II: 2.3 (2.0), III: 2.7 (2.4), IV: 2.9 (2.9) *Leakage Index* (mean, SD): I: 2.8 (0.6), II: 2.7 (0.5), III: 3.0 (0.6), IV: 3.0 (0.7) *Social Activity Index* (mean, SD): I: 8.7 (1.2), II: 8.2 (1.2), III: 8.3 (1.1), IV: 8.1 (2.3) *Fixed volume stress pad test* (60 seconds, g, mean, SD): I: 38.6 (34.7), II: 56.0 (53.7), III: 48.4 (51.2), IV: 51.4 (48.2) *Pad test* (24 hours, g, mean, SD): I: 14.5 (15.2), II: 20.9 (15.5), III: 52.3 (158.3), IV: 42.5 (116.1) *The Norwegian version of the Quality of Life Scale* (QoL-*N*, mean, SEM): I: 25, 85.3 (1.6), IV: 30, 82.3 (2.6) *Other*: BMI, parity, % postmenopausal	I. PFMT, *N* = 25 II. ES, *N* = 25 III. VC, *N* = 27 IV. Control subjects, *N* = 30 (*N* in analysis) *All participants* (including controls): Explanation of anatomy, physiology, and continence mechanism by physiotherapist. Correct pelvic floor muscle contractions taught and confirmed by vaginal palpation *PFMT*: Correct VPFMC taught by physiotherapist and confirmed by palpation. Set: 8–12 high-intensity (close to maximal) VPFMC, with 6- to 8-second hold and 3–4 fast contractions added at the end of each hold, 6-second rest between contractions. Body position: included lying, kneeling, sitting, standing; all with legs apart. Women used preferred position. Audiotape of home training programme. A training diary was kept. Sets per day: three. Duration of training: 6 months. Supervision: Weekly 45-minute exercise class to music, with PFMT in a variety of body positions, and back, abdominal, buttock and thigh muscle exercises. Monthly clinic visit with physiotherapist *ES*: Maximum intermittent vaginal stimulation with MS106 Twin (Vitacon AS), 50-Hz, pulse width 0.2 ms, current 0–120 mA, 30 minutes every day. Treatment adherence electronically monitored and recorded. Monthly clinic visit with physiotherapist *VC*: 20 minutes per day. Mabella cones. Three cylindrical weights: 20, 40 and 70 g. Adherence noted in a training diary. Monthly clinic visit with physiotherapist	**Objective** *N cured* (≤2-g leakage on pad test with standardised bladder volume): I: 11/25, II: 7/25, III: 4/27, IV: 2/30 *Episodes of leakage in 3 days* (diary, mean change, 95% CI): I: –1.2 (–2.0 to –0.4), II: –0.7 (–1.5 to 1.1), III: 0.8 (–1.2 to 2.8), IV: 0.3 (–0.5 to 1.1) *Stress pad test (fixed volume, 60 second)* (g, mean change, 95% CI): I: –30.2 (–43.3 to 16.9), II: –7.4 (–20.9, 6.1), III: –14.7 (–27.6 to –1.8), IV: –12.7 (–27.2 to 1.8) *24-hour pad test (at home)* (g, mean change, 95% CI): I: –6.6 (–12.1 to –1.1), II: –0.5 (–8.9 to 7.9), III: –22.0 (–55.7 to 11.7), IV: –7.1 (–20.2 to 6.0) **Surrogate outcomes** *Treatment adherence* (training diary or electronic record) (%, SE): I: 93 (1.5), II: 75 (2.8), III: 78 (4.4), IV: not reported *Vaginal squeeze pressure* (cm water, mean, 95% CI): I: 19.2 (15.3 to 23.1), II: 18.6 (13.3 to 23.9), III: 15.4 (11.1 to 19.7), IV: 16.4 (12.8 to 20.0) Note: Data for I–III from text, IV imputed from figure **Adverse events** *Adverse events*: I: 0/29, II: 10/32, III: 18/29, IV: 0/32 *Adverse events*: smarting (tenderness, bleeding, discomfort), abdominal pain, vaginitis, motivation problem, difficulty in using equipment *Discontinued medication because of adverse events*: I: 1/29, II: 7/32, III: 1/29, IV: 0/32	**Subjective** *Self-rated cure/improvement*: I: Continent 2, Almost continent 10, Improved 11, Unchanged 2, Worse 0, Total 25 II: Continent 1, Almost continent 2, Improved 13, Unchanged 7, Worse 2, Total 25 III: Continent 0, Almost continent 5, Improved 12, Unchanged 10, Worse 0, Total 27 IV: Continent 0, Almost continent 1, Improved 0, Unchanged 26, Worse 3, Total 30 *N reporting 'unproblematic'*: I: 14/25, II: 3/25, III: 2/27, IV: 1/30 *Note*: Recorded on a 5-point scale: unproblematic, minimal problem, moderate problem, problematic, very problematic *Leakage Index* (5-point scale, 5 = always, 1 = never; mean change, 95% CI): I: –0.9 (–1.1 to –0.7), II: –0.2 (–0.4 to 0.0), III: –0.3 (–0.5 to 0.1), IV: 0.1 (–0.1 to 0.3) **Quality of life** *Social Activity Index* (10-cm analogue scale, 0 = impossible to participate, 10 = no problem taking part; mean change, 95% CI): I: 25, 0.6 (0.2 to 1.0), II: 25, 0.6 (0.2 to 1.0), III: 27, 0.1 (–0.3 to 0.5), IV: 30, –0.2 (–0.8 to 0.4) *Bristol Female Lower Urinary Tract Symptoms* (B-FLUTS, 'a little/somewhat/a lot' *or* 'a bit of a problem/quite a problem/a serious problem'): • problems because of avoiding places and situations: I: 7/25, IV: 10/30, $p < 0.54$ [*sic*] • problems with interference with social life: I: 1/25, IV: 12/30, $p < 0.01$

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
		Control subjects: No clinic visits. Offered instruction in use of the Continence Guard (14 accepted) *Additional information*: Not reported		• problem with interference with physical activity: I: 11/25, IV: 24/30, $p < 0.01$ • overall interference with life: I: 14/25, IV: 25/30, $p < 0.1$ • unsatisfied if had to spend rest of life as now: I: 1/25, IV: 11/30, $p < 0.1$ • sex life spoilt by urinary symptoms: I: 4/25, IV: 15/30, $p = 0.03$ • problem with sex life being spoilt: I: 3/25, IV: 15/30, $p = 0.02$ • problem with painful intercourse: I: 3/25, IV: 10/30, $p = 0.1$ • urinary incontinence with intercourse: I: 3/25, IV: 13/30, $p = 0.02$ Note: Lifestyle questions (28–31, 33) and sex life questions (21–24) only *The Norwegian version of the Quality of Life Scale* (QoLS-*N*, mean, SEM): I: 90.1 (1.9), IV: 85.2 (2.2) Note: The higher the score, the better the quality of life *N* desiring further treatment: I: 4/25, II: 19/25, III: 23/27, IV: 28/30 Note: No desire = more satisfied

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Borello-France 2006[165] *Study design/method*: 2-arm RCT, USA *Duration of study*: 9–12 weeks (randomisation at week 3)	*Inclusion criteria*: Women aged 38–70, not pregnant, ambulatory, symptoms of SUI occurring at least once a week, no symptoms of urgency or urge UI *Exclusion criteria*: Prior treatments for SUI (including surgery), been taught or prescribed PFMT by a health-care professional, having a pacemaker, using an intrauterine device, or having a medical history of pelvic cancer, severe endometriosis or neurological or metabolic disorders likely to impair bladder or sphincter function, any episodes of urge UI recorded on bladder diary, vaginal wall prolapse beyond the vaginal introitus, inability to demonstrate a palpable pelvic floor muscle contraction, sensory loss below the L4 dermatome, atrophic vaginitis or skin breakdown around the perineum, lumbosacral or pelvic pain or dysfunction that would interfere with PFMT, or the inability to tolerate the supine position, demonstrated urodynamic detrusor instability or an abdominal leak pressure of less than 60 cm of H_2O *N randomised*: 44 *N lost to follow-up*: I: 5/22, II: 3/22 *Type of incontinence* (SUI/USI): I: 10/12, II: 8/14, $p = 0.54$ *Age* (years, mean, SD, range): I: 51.7 (8.9) (39–68), II: 53.6 (8.1) (39–68), $p = 0.42$ *Episodes of leakage per week* (mean, SD, range): I: 6.9 (7.0) (1.0–28.0), II: 7.2 (5.5) (1.0–21.0), $p = 0.86$ *Pad test* (g, mean, SD, range): I: 4.0 (5.2) (0.0–18.6), II: 11.7 (27.7) (0.0–120.5), $p = 0.22$	I. PFMT in supine position, $N = 22$ II. PFMT in supine and upright position, $N = 22$ *PFMT in supine position + BF*: Education of pelvic floor muscle anatomy and physiology. Teaching of 3-second maximum contractions and 12-second contractions before randomisation at week 3. Correct VPFMC taught using a Pathway Dual-Channel Surface Biofeedback System, interfaced with Synergy Plus Software (both Prometheus Group, Dover, NH) providing EMG feedback. BF was used during each clinic visit. PFMT at home include 20 VPFMC (two sets of 10) with 3-second hold and 10 VPFMC (one set) with 12-second hold, twice a day, progressing to 60 VPFMC (three sets of 20) with 3-second hold and 30 VPFMC (three sets of 10) with 12-second hold, twice a day. Duration of training: 9–12 weeks. If subjects were continent (no episodes of urine loss recorded on the bladder diaries) for 2 consecutive weeks by session 9 (week 9) then they were scheduled for the postintervention examination. Others continued until they recorded continence for 2 consecutive weeks or completed the 12-week intervention. Supervision: clinic sessions conducted with physiotherapist at 1-week intervals. Randomisation at the third visit. After randomisation, participants continued PFMT in the supine position and were also taught 'the stress strategies' to contract pelvic floor muscle in anticipation of a cough, sneeze, etc. *PFMT in supine and upright position + BF*: PFMT (in supine position) and education as above up to	**Objective** *Prevalence of USI after treatment*: I: 9/22, II: 9/22 Note: The prevalence of USI at baseline = I: 12/22, II: 14/22 *Change in episodes of leakage per week* (7-day bladder diary, mean, SD, range): I: –4.0 (4.7) (–4.0 to 18.0), II: –5.4 (4.8) (0.0 to 16.0), $p = 0.30$ *Change in pad test* [modified 1-hour pad test by ICS (Abrams 1998) with full bladder and provocative manoeuvres] (g, change in mean weight, SD, range): I: –3.9 (3.8) (–2.7 to 11.4), II: –5.1 (3.9) (–7.1 to 102.0), $p = 0.29$ **Surrogate outcomes** *Adherence – all participants, including dropouts* (*N* of visits attended, range): I: 8.4 (2.8) (2.0–12.0), II: 8.9 (3.0) (1.0–12.0), $p = 0.53$ *Adherence – completers only, excluding dropouts* (*N* of visits attended, range): I: 9.88 (1.11) (9.0–12.0), II: 10.16 (1.01) (9.0–12.0), $p = 0.42$ Means for prescribed number of VPFMC did not differ between those who completed the trial and all participants including dropouts *Change in Brink score* (pelvic floor muscle strength, mean, SD, range): I: 2.0 (1.7) (0.0–5.0), II: 2.2 (1.9) (0.0–6.0) $p = 0.75$	**Quality of life** *Incontinence Impact Questionnaire* (change in score, mean, SD, range): I: 27.6 (32.7) (0.0–135.0), II: 24.7 (31.0) (–22.3 to 85.5), $p = 0.62$ Note: As the value increases, quality of life improves

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
	IIQ score (mean, SD, range): I: 54.9 (54.6) (0.0–208.0), II: 54.4 (53.8) (0.0–187.0), $p = 0.99$ *Brink score* (mean, SD, range): I: 8.6 (2.2) (5–12), II: 8.4 (2.4) (3–13), $p = 0.89$ *Other*: Parity – median 2, % postmenopausal – 57%	randomisation at the third visit. After randomisation, participants performed one set each of the 3-second and 12-second VPFMC in the supine, sitting and standing positions. Also taught 'the stress strategies' to contract pelvic floor muscle in anticipation of a cough, sneeze, etc. Duration of training and supervision as above *Additional information*: Authors note that a large difference in baseline pad test results (although not statistically significant) 'caused us to adjust for baseline urine loss on the pad test in subsequent bladder diary and pad test analysis' (p. 980)	Note: The Brink scale considers three muscle function dimensions: muscle contraction duration, squeeze pressure felt around the examiner's fingers, and vertical displacement of the examiner's fingers at the pelvic floor muscles contract. The 3 subscale scores are summed to obtain a composite score ranging from 3 to 12. Increases in values indicate improvement	
Bourcier 1994[196] (abstract only) *Study design/method*: 2-arm RCT *Duration of study*: 2–3 months treatment + follow-up at 6 months	*Inclusion criteria*: Women with USI *Exclusion criteria*: Not reported *N randomised*: 102 *N lost to follow-up*: I: 12/50, II: 6/52 *Type of incontinence*: USI *Age* (years, mean): 38 *Pad test* (not specified, g, average): I: 19.5, II: 27.0 *Pelvic floor muscle strength and endurance* (not specified, μg, average): I: 25, II: 27	I. PFMT + VC, $N = 38$ II. ES + BF (+ PFMT), $N = 46$ (N in analysis) *PFMT + VC*: 20 maximal VPFMC three times per day for 3 months. Use of unspecified cones twice daily and different exercise with instructor ('intensive exercises') for 30 minutes once a week. After assessment at 3 months encouraged to continue the home treatment *ES + BF (+ PFMT)*: Treated over 6 weeks by 12 30-minute sessions, including 20 minutes of short-term maximal functional electrical stimulation (parameters unspecified) and 10 minutes of EMG/pressure biofeedback. Presumably BF of VPFMC, although this is not stated. After assessment at 3 months attended clinic weekly for 2 months *Additional information*: Not relevant for direct head-to-head comparisons; data were therefore extracted for primary outcomes only	**Objective** *Pad test* (not specified) at 6 months (gram, average): I: 11.5, not significant improvement, II: 7.1, significant improvement	**Subjective** *'Continent after treatment' at 6 months*: I: 16/38, II: 31/46

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Brubaker 1997[130] *Study design/method*: 2-arm RCT. Four sites, USA *Duration of study*: 8 weeks	*Inclusion criteria*: Women with USI or detrusor overactivity *Exclusion criteria*: Urinary incontinence other than USI, detrusor overactivity or mixed incontinence; age < 25 years, leakage episodes ≤ 3 times per week, inadequate genitourinary estrogen (minimum 3 months replacement), inadequate cognitive ability (investigator judgement), infected urine, anatomic defect that precluded use of device, postvoid residual > 100 ml, implanted electric device, genitourinary surgery ≤ 6 months previously, medication alteration ≤ 3 months previously, anticipated geographic relation during study *N randomised*: 148 *N lost to follow-up*: 27/148 *Type of incontinence* (SUI/MUI/DO): I: SUI 28 (46%), MUI 19 (31%), DO 14 (23%)), II: SUI 32 (53%), MUI 14 (23%), DO 14 (23%) *Age* (years, mean, SD): I: 56.0 (11.9), II: 57.7 (12.4) *Grade of anterior vagina or cystocoele prolapse* (grade 1–4): I: 1.1 (0.9), II: 1.0 (0.8) *Other*: Weight, % prior incontinence surgery, % genitourinary surgery, *N* of vaginal delivery, previous treatment for incontinence	I. ES, *N* = 61 II. Sham ES, *N* = 60 (*N* in analysis) *Both groups*: The consent form was worded to remove expectations regarding sensory input. Telephone contact by nurse at 2nd and 6th weeks. An office visit at 4 weeks *ES*: Transvaginal (InCare Microgyn II), frequency 20 Hz, 2-second/4-second work–rest cycle, pulse width 0.1 microseconds. The bipolar square wave could be delivered over a range of 0–100 mA. Patients instructed to stimulate to the maximum tolerable motor response, 20 minutes twice daily for 8 weeks. Stimulator stores time and amperage during use. Telephone contact by nurse at second and sixth weeks and an office visit at 4 weeks. The consent form was worded to remove expectations regarding sensory input *Sham ES*: Same parameters, externally identical device but with no electrical energy supply. Telephone contact by nurse at second and sixth weeks and an office visit at 4 weeks. The consent form was worded to remove expectations regarding sensory input *Additional information*: Withdrawal rates varied by site (6–37%) and the difference was statistically significant ($p = 0.0008$). The site with the highest dropout rate serves a broad geographic area and travel inconvenience was frequently cited as a reason for dropping out Authors note that 'interpretation of urinary diary was not possible because of large amounts of incomplete patient data'	**Objective** *N cured* (negative urodynamic diagnosis of stress incontinence): USI and MUI patients only, I: 5/46, II: 3/44 *Episodes of leakage in 24 hours at 6 weeks* (mean, SD): all patients, I: 61, 2.4 (3.1), II: 60, 2.2 (2.7), $p = 0.75$ *N of micturition in 24 hours at 6 weeks*: all patients, I: 61, 9.3 (6.8), II: 60, 9.5 (2.8), $p = 0.049$ **Surrogate outcomes** *Mean subject compliance (?degree of compliance) at 8 weeks* (%): all patients, I: 78.8 (20.5), II: 83.7 (14.7)	**Subjective** *Adequate subjective improvement* (not defined): all patients, I: 21/61, II: 10/60, $p = 0.027$ **Quality of life** *Condition-specific quality of life* (test specific to this study, not validated, no detail): No statistically significant differences between groups

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Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Bump 2004[136] (abstract only) *Study design/method*: 2-arm RCT. Multicentre (8 study sites across Europe and the US) *Duration of study*: 4 weeks	*Inclusion criteria*: Women aged 22–73 with USI and normal bladder compliance *Exclusion criteria*: Detrusor overactivity *N randomised*: 65 *N lost to follow-up*: unclear *Type of incontinence*: USI *Age* (years, range): 22–73	I. Duloxetine 80 mg (taken as 40 mg b.i.d.), *N* = 34 II. Placebo, *N* = 31 (*N* randomised) *Additional information*: Participants self-administered duloxetine or placebo for 4 weeks and then all participants were allowed to take duloxetine in an open-label extension to the study	**Objective** *Change in episodes of leakage*: 'Duloxetine was significantly superior to placebo' *Decreases in N of pads used*: 'Duloxetine was significantly superior to placebo' *N of micturition* (increases in the time between voids): 'Duloxetine was significantly superior to placebo'	**Quality of life** *Patient-perceived measured with a global rating scale* (no further details regarding the scale): 'Duloxetine was significantly superior to placebo'
Burns 1993[122] *Study design/method*: 3-arm RCT, parallel design. Block randomisation. Method of allocation concealment not stated. Single centre, USA *Duration of study*: 8-week treatment, with 3- and 6-month follow-ups post intervention	*Inclusion criteria*: Women aged ≥ 55 years with USI or MUI, minimum of three leakage episodes per week, demonstrates leakage with stress manoeuvres during physical examination, mentally competent (Mini-Mental Status Exam score ≥ 23), non-depressed (Center for Epidemiological Studies Depression scale) absence of glycosuria or pyuria, postvoid residual < 50 ml, maximum uroflow > 15 ml/second *Exclusion criteria*: Not reported *N randomised*: 135 (data reported for 123 who completed study) *N lost to follow-up*: 10/135 (no reasons given) and 2/135 excluded from analysis (no urinary diary). Group not specified *Type of incontinence* (USI/MUI): I: 36/4, II: 40/3, III: 36/4 *Age* (years, mean, SD): I: 63 (6), II: 63 (6), III: 63 (5) *Episodes of leakage per week* (mean, SD): I: 13 (12), II: 18 (15), III: 18 (18) *Severity of incontinence* (mild/moderate/severe): I: 13/9/8, II: 10/19/14, III: 14/14/12; see Outcome section for definition	I. PFMT + BF, *N* = 40 II. PFMT, *N* = 43 III. No treatment, *N* = 40 (*N* in analysis) *PFMT*: Coached by a nurse. Set: 10 VPFMC with 3-second hold ('quick'), and 10 VPFMC with 10-second hold ('sustained'). Beginning with four sets of 20 (10 quick and 10 sustained) and progressed by 10 per set over 4 weeks to daily maximum of 200. Videotape (12 minutes) describing exercise protocol and booklet explaining anatomy, PFMT, and completion of exercise and urinary diaries. Sets per day: four. Duration of training: 8 weeks. Supervision: 25–35 minutes weekly clinic visits with nurse. Weekly, 3- and 6-month telephone reminder calls for appointments and weekly exercise reminder cards mailed between visits *PFMT+BF*: PFMT programme and supervision (including reminder phone calls and cards) as above. Visual BF from vaginal probe attached to a computerised EMG provided during clinic visits with nurse	**Objective** *N of patients improved in episode of leakage per week at 8 weeks* (by symptom severity): Improvement (%) ≤ 0–49 / 50–99 / 100 (dry) PFMT + BF: 13 / 18 / 9 Mild: 5 / 3 / 5 Moderate: 7 / 9 / 3 Severe: 1 / 6 / 1 PFMT: 17 / 19 / 7 Mild: 1 / 3 / 6 Moderate: 9 / 9 / 1 Severe: 7 / 7 / 0 None: 33 / 6 / 1 Mild: 12 / 2 / 0 Moderate: 12 / 1 / 1 Severe: 9 / 3 / 0 Note: Improvement = (*N* of leakage episodes per week preintervention – *N* episodes post intervention) ÷ *N* episodes preintervention × 100; *Symptom severity*: mild = ≤ 7 leakage episodes per week, moderate = 8–21 episodes per week, severe = ≥ 22 leakage episodes per week	**Subgroup analysis** Subgroup analysis by incontinence severity in Burns (1993),[122] table 2 Time course of response to treatment from week 1 through week 8 to 3- and 6-month follow-ups in Burns (1993),[122] figure 1 (for groups I and II) and figure 2 (by incontinence severity, treatment groups not specified)

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
	Vaginal electromyography (mean of five quick contractions, microvolts): I: 40, 3.5 (3.0), II: 38, 2.9 (3.2), III: 40, 3.4 (3.9) *Vaginal electromyography* (mean of five sustained contractions, microvolts): I: 35, 2.0 (1.5), II: 33, 1.7 (1.6), III: 34, 1.8 (1.5) Percentage cystocoele: I: 31/40, II: 28/43, III: 33/40 *Other*: Ethnicity 98% white, education/employment status: 57% middle class, % prior incontinence surgery, % estrogen therapy	*Control subjects*: 8 weeks without treatment, diary or contact with study personnel *Additional information*: The 'mild' symptom group had a significant worsening of their symptoms across their follow-up period, while the 'moderate' and 'severe' groups maintained stable rates of improvements through 6 months of follow-up (treatment group not specified)	*Average % improvement at 8 weeks*: I: 61%, II: 54%, III: 6% *Episodes of leakage per week at 8 weeks* (24-hour diary, mean, SD): I: 5 (6), II: 8 (10), III: 17 (19) **Surrogate outcomes** *Vaginal electromyography* (mean of 5 quick contractions, microvolts, SD): I: 40, 6.0 (5.1), II: 38, 3.0 (3.4), III: 40, 3.5 (4.4) *Vaginal electromyography* (mean of five sustained contractions, microvolts): I: 35, 4.0 (3.1), II: 33, 1.8 (2.0), III: 34, 2.0 (1.8) Significant correlations between percentage of improvement in incontinent episodes and increases in electromyography performance on both quick ($r=0.26$, $p<0.005$) and sustained ($r=0.22$, $p<0.03$) pelvic muscle contractions	
Burton 1993[173] (abstract only) *Study design/method*: 2-arm RCT, Australia *Duration of study*: NR	*Inclusion criteria*: Women with USI *Exclusion criteria*: Not reported *N randomised*: 61 *N lost to follow-up*: NR *Type of incontinence*: USI *Leakage Activity Index* (Bø 1991,[237] mean): I: 2.2, II: 2.4 *Visual Analogue Symptom Score* (no further details, range 0–10, mean): I: 5.6, II: 5.0	I. Passive VC, *N*=31 II. Active VC, *N*=30 (*N* randomised) *Passive VC* (i.e. normal cone): 15 minutes twice a day in a static position. Unspecified cones *Active VC*: 15 minutes twice a day while doing standardised activities that previously made them incontinent. Unspecified cones	**Objective** *No leakage after coughing* (videocystourethrography): I: 18/31, II: 21/30 *40-minute pad test* (ml, mean): I: 4.1, *p*-value for pre-post test not reported, II: 2.0, $p<0.05$ (pre-post)	**Quality of life** *Leakage Activity Index* (Bø 1991,[237] 5-point scales on 13 activities that could normally trigger incontinence in women with USI; mean): I: 1.0, $p<0.05$ (pre-post), II: 0.5 $p<0.01$ (pre-post) Note: Lower scores=better *Visual Analogue Symptom Score* (no further details, range 0–10, mean): I: 2.1, $p<0.05$ (pre-post), II: 0.7, $p<0.01$ (pre-post) Note: Lower scores=better *General quality of life* (Psychological Adjustment to Illness Scale, or PAIS, Derogatis *et al.* 1983): 'a better result' for active cones than for passive cones; poor print quality graph so actual scores could not be extracted

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Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Cammu 1998[181] *Study design/method*: 2-arm parallel RCT. Single centre, Belgium *Duration of study*: 12 weeks	*Inclusion criteria*: Ambulatory, mentally and physically fit white women with 'troublesome' USI, had a vaginal capacity permitting the use of BF or VC *Exclusion criteria*: postpartum, genital prolapse, pathology needing surgery, detrusor overactivity, outflow obstruction, intrinsic sphincter deficiency *N randomised*: 60 *N lost to follow-up*: I: 0/30, II: 14/30 *Type of incontinence*: USI *Age* (years, mean, SD): I: 55.9 (9.5), II: 56.3 (11.4), II-trtd: 56.4 (9.2) *Episodes of leakage per week* (mean, SD): I: 14.4 (10.0), II: 13.6 (12.0), II-trtd: 13.9 (18.0) *N of pad changes per week* (mean, SD): I: 13.4 (8.0), II: 15.8 (14.0), II-trtd: 15.1 (16.0) *Perineometer squeezing* capacity – *fast* (μV, mean, SD): I: 7.2 (4.4), II: 6.1 (3.5), II-trtd: 7.8 (4.3) *Perineometer squeezing capacity – slow* (μV, mean, SD): I: 7.1 (4.1), II: 6.4 (3.6), II-trtd: 8.2 (4.5) *'Severity of incontinence' on visual analogue scale* (11-point, 0-10, no further details; mean, SD): I: 4.7 (1.7), II: 5.2 (1.7), II-trtd:, 4.0 (1.7) *'Psychological distress' on visual analogue scale* (11-point, 0-10, no further details; mean, SD): I: 5.4 (2.4), II: 6.0 (2.1), II-trtd: 5.3 (2.5) *Other*: BMI/ethnicity, parity	I. PFMT + BF, *N* = 30 II. VC, *N* = 30 (only 16/30 treated; see below) (*N* in analysis) Note: Data reported separately for 16/30 really treated with VC (II-trtd). See Additional information *PFMT + BF*: Correct VPFMC taught by vaginal palpation. Education on pelvic anatomy and purpose of treatment. PFMT = 10 brief forceful contractions, 10 sustained 10 sec contractions. Progress by increasing number of sets. 'The patients also instructed to voluntarily contract the pelvic floor prior to a sudden intra-abdominal pressure rise' (= The Knack?). BF = Vaginal probe with surface EMG giving visual BF, and abdominal wall electrode, at clinic visits only. A weekly 30-minute private session with physiotherapist *VC*: Individual training, vaginal palpation and education as in the PFMT + BF group above. VC = Femina cones, five conical weights, 20–70 g. 15 minutes twice a day at home (except during menstruation) with heaviest cone that could be retained with VPFMC in standing. Progress by increasing the passive and the active cone weight. Clinic visits fortnightly for 12 weeks. The physiotherapist sessions served mainly to assess whether the cones were correctly used. No BF used Note: The 'passive' cone = the heaviest weight that could be retained in place for 1 minute without VPFMC. The 'active' cone = the heaviest cone retained with VPFMC	**Objective** *Cure (negative stress test)*: I: 12/30, II: 12/30, II-trtd: 7/16 *Episodes of leakage per week* (1-week diary, mean, SD): I: 30, 5.6 (5.5), II: 30, 8.7 (13.0), II-trtd: 16, 8.3 (15.0) *N of pad changes in 24 hours* (1-week diary, mean, SD): I: *30*, 6.0 (5.6), II: *30*, 8.8 (13.0), II-trtd: 16, 8.6 (15.0) **Surrogate outcomes** *Perineometer squeezing capacity – fast* (μV, mean, SD): I: 30, 10.7 (5.9), II: 30, 9.0 (4.1), II-trtd: 16, 10.3 (4.1) *Perineometer squeezing capacity – slow* (μV, mean, SD): I: 30, 11.4 (6.2), II: 30, 9.7 (5.4), II-trtd: 16, 10.9 (4.6) Also, the women who used cones showed a 39% improvement in the passive (from a mean of 36–50 g) and a 29% improvement in the active cone weight (from a mean of 48–62 g) *N having incontinence surgery after treatment*: I: 5/30, II: 9/30, II-trtd: 4/16 **Adverse events** *N experiencing adverse events*: I: 0/30, II: 14/30 *Adverse events*: unpleasant feeling (*N* = 5), time consuming (*N* = 3), inability to introduce the cone when too nervous or when in a hurry (*N* = 2), interference with menstrual cycle (*N* = 2), a certain cone held in the morning could not be held any longer in the evening (muscle fatigue) (*N* = 2) *Discontinued treatment because of adverse events*: I: 0/30, II: 14/30	**Subjective** *Cured or improved to a significant degree*: I: 16/30, II: 17/30, II-trtd: 8/16 **Quality of life** *'Severity of incontinence' on visual analogue scale* (visual analogue scale, range 0-10, no further details; mean, SD): I: 30, 2.6 (2.1), II: 30, 2.9 (2.4), II-trtd: 16, 2.3 (2.0) Note: lower score = better (less severe) *'Psychological distress' on visual analogue scale* (visual analogue scale, range 0-10, no further details; mean, SD): I: 30, 2.1 (2.1), II: 30, 3.4 (3.3), II-trtd: 16, 2.6 (2.8) Note: lower score = better (less distress) *N desiring further treatment*: None of the patients wanted to use the cones after the completion of the study period of 12 months. Reasons: unpleasant feeling (*N* = 4), time consuming (*N* = 4), muscle fatigue (*N* = 3), positive about the use of cones but did not buy a set for continuous long-term home practice (*N* = 5) ***Subgroup analysis*** Non-compliance with VC significantly correlated with BMI (esp. obesity). Logistic regression, $p = 0.0228$, OR 1.54 (1.06–2.22). Menopause, estrogen status, age, parity, duration of symptoms, degree of incontinence, severity of symptoms and vaginal squeeze capacity were of no importance in the non-compliance with cones (p. 90)

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
		Additional information: After the first visit 14/30 women in the cones group withdrew and received PFMT but stayed in the VC group. Data reported separately for 16/30 really treated with VC (II-trtd). Authors reported no statistically significant difference between group I versus II and I versus II-trtd		
Cardozo 2004[137] *Study design/method*: 2-arm RCT. Multicentre (Australia, Canada, the Netherlands, UK) *Duration of study*: 8 weeks	*Inclusion*: Women aged 18–75 years, USI, ≥ 14-week incontinence episode frequency (IEF), scheduled for continence surgery *Exclusion*: Not specified *N randomised*: 109 *N lost to follow-up*: I: 20/55, II: 12/54 *Type of incontinence*: USI (severe) *Age* (years, mean, SD): I: 54.5 (9.7), II: 52.4 (10.4), range 33–75 years *N of leakage episodes per week* (mean, SD): I: 24.7 (27.6), II: 21.2 (18.2) *PGI-S* (Patient Global Impression of Severity; moderate or severely abnormal urinary tract function): I: 49/55, II: 48/54 *I-QoL* (Incontinence Quality of Life, normalised to a scale of 0–100, with 0 representing the worst possible and 100 representing the best possible condition-specific quality of life, mean, SD): I: 53.6 (21.9), II: 53.0 (22.5) *Other*: BMI, ethnicity, % patients on hormone replacement therapy, % prior incontinence surgery	I: Duloxetine, 40 mg twice daily for 4 weeks, then escalating to 60 mg twice daily for 4 weeks, *N* = 55 (54) II: Placebo, *N* = 54 (52) (*N* randomised; and *N* in 'ITT' analysis in brackets with women with at least one postrandomisation measure)	**Objective measures** *Cure or improvement* (*N* of 'responders' with at least 50% decrease in leakage episodes): I: 29/46, II: 7/52 *Decrease in N of leakage episodes per week* (*N* episodes, median): I: 46, 7.1, II: 52, 2.9, $p < 0.001$ *Decrease in N of episodes of leakage per week* (median %): I: *46*, 59.8%, II: *52*, 26.9%, $p < 0.001$ (no data to extract exact numbers) *Decrease in N of leakage episodes per week at 1–4 weeks* (duloxetine 80 mg per day): I: 46, 54.7%, II: 52, 26.3%, $p < 0.002$ (no data to extract exact numbers) *Decrease in N of leakage episodes per week at 5–8 weeks* (duloxetine 120 mg per day): I: 46, 64%, II: 52, 28.6%, $p < 0.001$ (no data to extract exact numbers) *Reduction in N of pad changes* (median %): I: *46*, 34.5%, II: 52, 4.8%, $p = 0.008$ **Adverse events** *Adverse events (any)*: I: 43/46 (92.7%), II: 37/52 (72.2%); Increasing the dose from 80 mg to 120 mg daily neither increased efficacy nor side effects *Adverse events that occurred in more than 10% of subjects*: Nausea, constipation, headache, dry mouth, fatigue, dizziness, insomnia, somnolence and vomiting	**Subjective** *PGI-I ('very much better' and 'much better')*: I: 17/51, II: 4/52 *PGI-I ('a little better' and 'no change')*: I: 31/51, II: 42/52 *PGI-I ('a little worse', 'much worse', and 'very much worse')*: I: 3/51, II: 6/52 **Quality of life** *I-QoL* (total score mean change, SD): I: *52*, 10.6 (19.1), II: *52*, 2.4 (9.4), $p = 0.003$ *N desiring further treatment*: 20% of women with USI were somewhat or not very much keen on continence surgery being on duloxetine compared with 0% of those in the placebo arm **Subgroup analysis** Intrinsic sphincter deficiency status, baseline severity of symptoms

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
			Serious adverse events: 'Serious adverse events, cardiovascular events and laboratory abnormalities were rare and not significantly different with duloxetine compared with placebo' (p. 516). *Discontinued medication because of adverse events*: I: 18/55 (32.7%), II: 3/54 (5.5%)	
Castleden 1984[148] *Study design/method*: Crossover trial in which 'the order of treatment was randomised'. Single centre, England *Duration of study*: 4 weeks (each treatment period lasted 2 weeks)	*Inclusion criteria*: Women with easily demonstrable SUI *Exclusion criteria*: Not reported *N randomised*: 19 *N lost to follow-up*: not reported *Type of incontinence*: SUI *Age* (years, mean, range): 55 (23–85) *Duration of symptoms* (years): 9 (0.25–32)	I. PFMT + BF, *N* = 19 II. PFMT, *N* = 19 (*N* in analysis) *PFMT + BF*: 4–5 VPFMC per hour and midstream urine stop on every occasion. With use of portable perineometer (Kingsdown Medical, UK) with visual BF at least once per day for 2 weeks. Supervised by a physiotherapist *PFMT*: As above but without perineometer		**Subjective** *Improvement in symptom* (mean change in visual analogue scale score, ranging from 'completely dry' to 'wet all the time') (mean change, range): I: 23.9 (0 to 79), II: 6.7 (–32 to 26), no significant difference between treatments Note: Greater value reflects greater improvement

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Castro-Diaz 2007[138] *Study design/method*: 2-arm RCT, 64 study centres in 8 countries (Brazil, Canada, France, Germany, Italy, Mexico, Puerto Rico, Spain) *Duration of study*: 8 weeks (+2-week placebo lead-in after a further 2-week screening and no-SNRI lead-in)	*Inclusion criteria*: Women aged 18 with symptoms of predominant SUI (≥7 SUI episodes per week, and at least twice as many SUI episodes as UUI episodes). Patients also had presence of SUI confirmed within 6 months of study entry, and an average daytime voiding interval of >2 hours, nocturnal voiding interval of ≤2/day and positive cough stress test result *Exclusion criteria*: Continence surgery within 6 months or pharmacological treatment for symptoms of overactive bladder within 14 days of visit 1, pelvic organ prolapse beyond the hymen and previous participation in a Duloxetine trial *N randomised*: 516 *N lost to follow-up*: I: 15/120, II: 33/136, III: 26/127, IV: 15/133 *Type of incontinence*: Predominant symptoms of SUI (MUI) *Age* (years, mean, SD): I: 52.7 ± 9.2, II: 53.3 ± 11.8, III: 52.3 ± 10.4, IV: 53.5 ± 10.6 *Other*: BMI, % postmenopausal	I. Placebo *N* = 120 (112) II. Duloxetine 40mg b.i.d. (twice daily) (i.e. 80 mg/day) *N* = 136 (109) III. Duloxetine 40 mg q.d. (daily) for 2 weeks, escalating to 40mg b.i.d. for 6 weeks, *N* = 127 (112) IV. Duloxetine 20 mg b.i.d. for 2 weeks, escalating to 40 mg b.i.d. for 6 weeks, *N* = 133 (123) V: Pooled data for duloxetine (groups II–IV), *N* = 396 (344) (*N* randomised; and *N* in 'ITT' analysis in brackets with women with at least one postrandomisation measure) *Additional information:* Study recruited 'type 3' population; data were therefore extracted for primary outcomes only Study contained additional discontinuation phase after 8 weeks for those randomised to SNRI arms, who were then rerandomised to placebo, 40 mg q.d. or 20 mg b.i.d. for 2 weeks before all receiving placebos for a further 2 weeks. Only data before rerandomisation are extracted	**Adverse events** *N experiencing any adverse events* (first 4 weeks, i.e. all patients had at least 2 weeks, with escalated dose of 40 mg b.i.d.): I: 53/120, II: 87/136, III: 76/127, IV: 69/133 *Adverse events* (that occurred in 2 patients in first 4 weeks): nausea, dry mouth, constipation, somnolence, dizziness, insomnia, fatigue, headache, diarrhoea *Discontinued treatment because of adverse events* (in first 4 weeks): I: 7/120, II: 22/136, III: 15/127, IV: 10/133	**Subjective** *Patient Global Impression – Improvement* (PGI-I): • 'very much better', I: 8/112, V: 55/344 • 'much better', I: 28/112, V: 100/344 • 'a little better', I: 31/112, V:115/344 • 'no change', I: 36/112, V: 56/344 • 'a little worse', I: 7/112, V: 11/344 • 'much worse', I: 0/112, V: 3/344 • 'very much worse', I: 2/112, V: 4/344 Overall 'Significantly more duloxetine-treated patients rated their response to treatment in one of the three "better" categories than did the placebo-treated patients' ($p < 0.01$) **Quality of life** *Mean change in total I-QoL score*: I: 112, 5.7, II: 109, 15.4, $p < 0.001$, III: 112, 12.2, $p = 0.006$, IV: 123, 11.5, $p = 0.004$, V: 344, 12.9, $p < 0.001$; *p*-value versus placebo; no significant difference among the three duloxetine groups (II–IV) *Mean change in ICIQ-SF score*: I: 112, –1.7, V: 344, –2.8, $p = 0.004$

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Delneri 2000[186] *Study design/method*: 2-arm parallel RCT, Italy *Duration of study*: The VC treatment lasted 4 weeks and the ES lasted 16 days	*Inclusion criteria*: Women with USI *Exclusion criteria*: Detrusor overactivity, inversion of perineal command, absent contraction of pubococcygeal (PC) muscle, neurological diseases, patients' unwillingness to collaborate *N randomised*: 20 *N lost to follow-up*: NR. 2/10 in the VC group refused to undergo follow-up urethral pressure profile *Type of incontinence*: USI *Age* (years, mean, SD, range): I: 49.5 (14.5) (29–81), II: 41.5 (7.4) (31–54) *Other*: BMI, ethnicity, education, employment status, % prior incontinence surgery, Parity, % postmenopausal	I. ES, *N* = 10 II. VC, *N* = 10 (*N* in analysis) *ES*: Functional electrical stimulation in the rehab centre. Lie in the dorsal position. Transvaginal sensors dampened before insertion. 12 consecutive sessions (excluding Saturday and Sunday), each of 30 minutes: 15 minutes at 20 Hz and the other 15 minutes at 50 Hz. Pulse duration 4 seconds, with 8-second recovery *VC*: Taught in the rehabilitation centre and then practised at home for 25–35 minutes per day for 4 weeks. Femcon cones, five conical weights from 20–70 g	**Objective** *Pad test* (not defined) (g, mean): I: 9.5, II: 9.5, NS	**Quality of life** *Subjective rating of the overall discomfort caused by incontinence* (visual analogue scale, no further detail; mean): I: 5, II: 5, NS

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Dmochowski 2003[139] *Study design/method*: two-arm RCT. Multicentre: 55 study centres in USA and Canada *Duration of study*: 12 weeks (+2-week no-SNRI lead-in and 2-week placebo lead-in prior to randomisation)	*Inclusion criteria*: Women aged 18 with predominant SUI symptoms (i.e. 'bothersome' SUI persisting for ≥3 months), and a weekly stress incontinence episodes of ≥7 with micturition frequency of <8 per day and <3 per night; bladder capacity of ≥400 ml and a positive cough stress test and stress pad test *Exclusion criteria*: Predominant symptoms of urge incontinence, pregnancy, unable to tolerate retrograde bladder filling to 400 ml or had a first sensation of bladder filling at <100 ml, antidepressant medication *N randomised*: 683 *N lost to follow-up*: I: 107/344, II: 44/339, $p<0.001$; 'The difference was primarily attributable to a higher rate of duloxetine early discontinuation related to side effects' *Type of incontinence*: Predominant symptoms of SUI (MUI) *Age* (years, mean, SD): I: 52.3 ± 10.4, II: 53.3 ± 11.5, overall range (22 to 84) *Episodes of leakage in 1 week* (mean, SD, range): I: 18.2 ± 14.3 (14.3 to 87.0), II: 19.0 ± 14.6 (0 to 103.0), 'extreme outliers substantially distorted the mean' *PGI-I* (moderately/severe abnormal bladder function on PGI-S): I: 235/344 (68.4%), II: 226/339 (66.8%) *Mean I-QOL score* (mean, SD): I: 62.0 ± 20.2, II: 64.3 ± 17.7 *Other*: BMI, ethnicity, median stress pad test (g), % prior incontinence surgery, % with prior pelvic floor training	I. Duloxetine 80 mg as 40 mg b.i.d. (twice daily), *N* = 344 II. Placebo, *N* = 339 (*N* randomised) *Additional information*: The study recruited 'type 3' population; data were therefore extracted for primary outcomes only Dichotomous data calculated from percentage in paper, using the *N* of women included in the 'ITT' analysis with at least one postrandomisation measure; diary data, I = 286, II = 322; subjective data, I = 334, II = 332 Two 7-day diaries completed before randomisation. Three diaries completed after randomisation, each for the week prior to a visit at the clinic	**Objective** *Cure* (no incontinence episodes at the last 7-day diary): I: 30/286 (10.5%), II: 19/322 (5.9%), $p<0.05$ *Cure or improvement* (50–100% reduction in IEF/week): I: 147/286 (51.4%), II: 108/322 (33.5%), $p<0.001$ **Adverse events** *N experiencing adverse events (any)*: I: 255/344 (74%), II: 170/339 (50%) *Adverse events* (significantly more common with duloxetine and occurring in ≥5% of subjects on duloxetine): Nausea, fatigue, insomnia, dry mouth, constipation, somnolence, dizziness, headache, diarrhoea *Discontinued treatment because of adverse events*: I: 83/344 (24.1%), II: 14/339 (4.1%), due to nausea, fatigue, insomnia, somnolence, dizziness, blurred vision	**Subjective** *PGI-I* (rating condition as improved): I: 207/334 (62.0%), II: 131/332 (39.6%) **Quality of life** *Change in I-QoL score* (mean, SD): I: 334, 11.1 (14.8), II: 332, 6.8 (13.8), $p<0.001$

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Edwards 2000[170] (abstract only) *Study design/method*: 2-arm RCT, UK *Duration of study*: 12 weeks	*Inclusion criteria*: Premenopausal women with USI and no previous pelvic surgery *Exclusion criteria*: Not reported *N randomised*: 20? *N lost to follow-up*: Not reported *Type of incontinence*: USI *Age* (years): 46 (32–51)	I. PFMT + BF, *N* = 10? II. PFMT + ES, *N* = 10? (*N* in analysis) *PFMT + BF*: No details given *PFMT + ES*: No details given	**Objective** Objective cure (not defined): 50% (10/20), no significant difference between two groups	

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Fantl 1991[135] *Study design/method*: 2-arm RCT, USA *Duration of study*: 6 weeks	*Inclusion criteria*: Women aged ≥55 years with USI or DI, living independently in the community, at least one episode of urine loss per week, mentally intact (Mini-Mental State Examination score >23) and functionally capable of independent or assisted toileting *Exclusion criteria*: USI or DI, metabolic decompensation (e.g. uncontrolled diabetes), lower urinary tract infection, urinary obstruction, diverticulum, fistula, reversible cause of urinary incontinence (e.g. faecal impaction, direct SNRI effect), permanent indwelling catheter *N randomised*: 131 *N lost to follow-up*: I: 5/65, II: 3/66 *Type of incontinence*: I: USI 45 (75%), USI and DI 8 (13%), DI 7 (12%), II: USI 44 (70%), USI and DI 12 (19%), DI 7 (11%) *Age* (years, mean, SD): I: 60, 66±8, II: 63, 68±9 *Episodes of leakage per week* (mean, SD): all women I: 60, 21±20, II: 63, 22±20; women with USI only, I: 45, 23±22, II: 43, 22±20 *Number of micturitions per week* (diurnal): all women, I: 60, 64±28, II: 63, 59±26; women with USI only, I: 45, 61±21, II: 43, 58±20 *Pad test* (g, mean, SD): all women, I: 60, 37±62, II: 63, 39±82; women with USI only, I: 45, 24±46, II: 43, 21±63 *Incontinence Impact Score*: all women, I: 60, 0.51±0.41, II: 63, 0.49±0.55 *Other*: Ethnicity (% white), education (% >high school), income (% >US$20,000 p.a), % prior incontinence surgery, parity, % postmenopausal (% using estrogen supplementation)	I. Bladder training, *N*=60 II. No treatment, *N*=63 (*N* in analysis) *Bladder training*: Weekly clinic visits of 15–20 minutes over 6 weeks. Bladder training consisted of patient education and a schedule of voluntary micturition. Patient education was audiovisual programme plus verbal and written instruction on how to adapt this to everyday lifestyle. Neurological control over the urinary tract was emphasised. Voiding schedule (for waking hours only) was self-implemented and involved micturitions scheduled for every 30–60 minutes and progressively increased by 30 minutes each week (if tolerated and a decrease in incontinence episodes had been shown), with the goal of 2.5- to 3-hour intervals between voids. Patients were instructed to 'go to the toilet and empty your bladder as completely as you can' regardless of desire to void. No fluid modifications were used. Each patient kept daily treatment logs *Control group*: No further contact and asked to return in 6 weeks	**Objective** *Cure* (100% reduction in the number of incontinent episodes on 7-day diary): all women, I: 7/60, II: 2/63 *Cured or improved* (50–100% reduction in the number of incontinent episodes on 7-day diary): all women, I: 45/60, II: 15/63 *Episodes of leakage per week* (7-day diary, mean, SD): all women, I: 60, 9±11, II: 63, 19±17; women with USI only, I: 45, 10±12, II: 43, 19±19 *N of micturition per week* (7-day diary, mean, SD): all women, I: 60, 52±14, II: 63, 57±27; women with USI only, I: 45, 51±11, II: 43, 56±20 *Pad test* (g, mean, SD): all women, I: 60, 17±36, II: 63, 47±87; women with USI only, I: 45, 10±21, II: 43, 29±74	**Quality of life** *Incontinence Impact Questionnaire Score* (composite score, range 0–3 with low scores reflecting higher quality of life; mean, SD): all women, I: 39, 0.25±0.29, II: 39, 0.50±0.59 Additional IIQ subscale and VAS data available in Wyman (1997) alongside data (for the treatment group only) by diagnosis at 6 weeks and correlation data for both the IIQ and CES Depression Scale with pad weight and IEF/week **Subgroup analysis** Leakage episodes per week, pad test and *N* of micturitions per week also presented by age group (55–64, 65–74, 75+), and by baseline severity (1–10 episodes, 11–26 episodes, 26+ episodes)

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Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Ferguson 1990[149] *Study design/method*: 2-arm RCT. Single centre, USA *Duration of study*: 6 weeks (with follow-up between 12 and 24 months after completion of study)	*Inclusion criteria*: Women with USI, stable cystometrogram and negative stress urethral pressure profile *Exclusion criteria*: Postmenopausal, previous urological surgery, taking medications that affect the bladder or skeletal muscle function, or complained of urgency, frequency or nocturia *N randomised*: 20 *N lost to follow-up*: Not reported *Type of incontinence*: USI *Age* (years, mean, SD): I: 37.1 ± 6.4, II: 35.8 ± 4.6 *24-hour pad test* (g, an, SD): I: 10, 10.6 ± 8.6, II: 10, 14.9 ± 15.9 *30-minute pad test* (g, mean, SD): I: 7, 4.8 ± 5.5, II: 7, 10.3 ± 8.1 *Cystocoele* (grade1/2/3): I: 8/2/0, II: 8/2/0 *Rectocoele* (mild/moderate/ severe): I: 6/4/0, II: 6/4/0 *Other*: Parity	I. PFMT with IVRD (intravaginal resistance device), *N* = 10. II. PFMT without IVRD, *N* = 10 (*N* in analysis) *PFMT with IVRD*: Correct VPFMC taught by intense counselling and feedback on correct performance. Daily home exercise undertaken with intravaginal balloon in situ and with audiotape. Duration of training: 6 weeks. Supervision: clinic visits every 2 weeks, where maximal intravaginal pressure tested during five maximum VPFMC followed by three sustained VPFMC. Participants maintained a daily record of PFMT exercise and was contacted weekly by telephone to document adherence *PFMT without IVRD*: As above with audiotape but without intravaginal balloon in situ *Additional information:* Participants contacted by letter or phone 12–24 months after completing the study. Results of follow-up reported as a cohort and not by group allocation	**Objective** *24-hour pad test at 6 weeks* (g mean, SD): I: 10, 5.6 ± 4.7, II: 10, 5.8 ± 5.6 *Change in-24 hour pad test from baseline to 6 weeks* (g, mean, SD): I: 10, –5.1 ± 8.1, II: 10, –9.1 ± 13.6 *30-minute pad test at 6 weeks* (g, mean, SD): I: 7, 1.4 ± 1.7, II: 7, 3.4 ± 4.7 *Change in 30-minute Pad Test from baseline to 6 weeks* (g, mean, SD): I: 7, –3.4 ± 4.0, II: 7, –6.9 ± 7.4 **Surrogate outcomes** *Maximum intravaginal pressure at 6 weeks* (planimeter, H_2O, mean, SD): I: 10, 33.4 ± 15.1, II: 10, 46.5 ± 20.7 *Pelvic muscle pressure area at 6 weeks* (endurance; H_2O, seconds, SD, mean): I: 10, 234.4 ± 124.0, II: 10, 328.5 ± 139.7 **Long term (12–24 months)** *Adherence (continuing PFMT) at 12–24 months after completion of the study (self-report)*: 9/19, data not available by group allocation *N having incontinence surgery by 12–24 months after completion of the study (self-report):* 3/19, data not available by group allocation *Return of symptoms by 12–24 months after completion of the study (self-report)*: 2/19 (following discontinuation of PFMT exercises), data not available by group allocation	**Subjective** *Major improvement at 12–24 months post intervention* (without surgery): 3/19 (of these 1/3 continuing PFMT) *Moderate improvement at 12–24 months post intervention* (without surgery): 2/19 (of these 1/2 continuing PFMT) *Mild improvement at 12–24 months post intervention* (without surgery): 6/19 (of these 5/6 continuing PFMT) *Unchanged at 12–24 months post intervention* (without surgery): 5/19 (of these 1/5 continuing PFMT) *Improved after surgery at 12–24 months post intervention*: 3/19 (of these 1/3 continuing PFMT) Data not available by group allocation

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Gallo 1997[162] *Study design/method*: 2-arm (quasi-) RCT. Single centre, USA. *Duration of study*: Approximately 4–6 weeks	*Inclusion criteria*: Women aged 20–80 with a history of self-reported stress UI and the diagnosis of USI. Desire for conservative treatment, ability to complete questionnaire, willingness to participate. Note: Some patients described knowledge or performance of PFMT in the past but were not excluded *Exclusion criteria*: Pregnancy, psychological disorders that would make it difficult to follow PFMT instructions *N randomised*: 86 *N lost to follow-up*: I: 9/43, II: 2/43 *Type of incontinence*: USI *Age* (years, mean, range): 60 (29–80) among 75 women who completed the study 'No significant differences' between groups in age, ethnicity and education	I. PFMT, no tape, *N* = 34 II. PFMT with audiotape, *N* = 41 (*N* in analysis) *PFMT*: 45-minute individual training with nurse, including education. Correct VPFMC taught using a biofeedback computer. Instruction sheet and verbal encouragement to perform PFMT at home for 10 minutes twice a day, with suggestions of potential exercise times based on the individual's lifestyle *PFMT with audiotape*: PFMT and education as above with addition of audiocassette for use twice a day. Cassette contained 25 consecutive VPFMC with 10-second hold and 10-second rest counted aloud over 10 minutes. If the patient had a car, the nurse suggested use of tape on the way out of the drive way in the morning and returning home *Additional information*: The study aimed to assess patient compliance to PFMT. It did not correlate exercise compliance with improved muscle strength or incontinence that is assumed to have occurred	**Surrogate outcomes** *Adherence*: Study-specific questionnaire (questions below are 'research questions' and may not be identical with the actual survey questions): 1. Do females with SUI perform pelvic exercise on a routine basis (participants defined 'routine basis' independently and responded accordingly)? *N* of participants responding YES: I: 22/34, II: 41/41, $p < 0.0001$ 2. How many females with SUI performed pelvic floor exercises twice a day, as instructed? I: 4/34, II: 34/41, $p < 0.001$ 3. How many minutes per day pelvic floor exercises did the individual perform? I: 5.4 minutes, II: 15.8 minutes, $p = 0.0001$ 4. How many seconds did the patient hold each pelvic floor exercise contraction? I: 5.2 seconds, II: 9.9 seconds, $p < 0.0011$ 5. What prompted the patient to perform pelvic floor exercise? I: 21/34 (62%) provided no answer, II: 21/41 (51%) cited tape as a reminder 6. Does the use of an audiocassette tape enhance patient compliance to perform pelvic floor exercises in SUI women? *N* of participants performing *PFMT*: I: 4/34 twice a day, 30/34 other, II: 34/41 twice a day, 7/41 other, $p = 0.0000$	

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Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Ghoniem 2005[57] *Study design/method*: RCT, 2×2 design. 16 centres, in the Netherlands, UK, USA *Duration of study*: 12 weeks	*Inclusion criteria*: Women aged 18–75 years with moderate to severe stress UI (≥2 stress leakage episodes per day) *and either* a positive cough stress test and normal voiding frequencies (<8 per day) at entry (*N* = 165) OR no detrusor overactivity within 6 months of enrolment (*N* = 36) *Exclusion criteria*: Advanced pelvic organ prolapse, active or recurrent urinary tract infections, continence surgery within 1 year, current device or pharmaceutical incontinence treatment, prior hip fracture or replacement, or any prior formal PFMT with a continence nurse or physical therapist *N randomised*: 201 *N lost to follow-up*: I: 16/52, II: 9/47, III: 19/52, IV: 9/50 *Type of incontinence*: USI (36/201) or SUI (165/201) *Age* (years, mean, range): I: 54 (31–75), II: 51 (29–68), III: 53 (34–70), IV: 54 (36–75), NS *Episodes of leakage per week* (median, range): I: 19.4 (10.0–70.5), II: 18.9 (10.3–299.4), III: 18.3 (6.4–78.5), IV: 22.0 (13.0–140.9) *Median pad changes per week*: I: 9.7 (0–53.5), II: 9.8 (0–43.1), III: 8.1 (0–44.0), VI: 8.6 (0–45.9) *I-QOL score* (mean, SD): I: 61.6 (22.3), II: 64.9 (17.1), III: 59.8 (20.6), VI: 61.4 (22.2) *Pelvic floor muscle grade* (9-point scale, mean, SD): I: 5.2 (1.7), II: not done, III: not done, IV: 5.2 (1.7) *Other*: BMI, ethnicity, % prior incontinence surgery (> 1 year)	I. Duloxetine 80 mg + PFMT ('combined treatment'), *N* = 52 II. Placebo SNRI + imitation PFMT ('no active treatment'), *N* = 47 III. Duloxetine 80 mg + imitation PFMT ('duloxetine only'), *N* = 52 IV. Placebo SNRI + PFMT ('PFMT only'), *N* = 50 (*N* randomised) *PFMT*: Verbal instructions and manual feedback by qualified instructors. Correct VPFMC confirmed by the examiner during a digital pelvic examination. Written instruction to perform 'strength training' and 'skill training ("The Knack")' for 12 weeks. Strength training = three sets of 10 long VPFMC with 6–8 seconds hold, and two sets of 10 rapid VPFMC with 1–2 seconds hold, 4 days weekly. Patients given a training log at every visit to record the *N* of VPFMC performed. Skill training = 'The Knack', as in Miller *et al.* 1998,[107] i.e. to do VPFMC with events that cause leakage; 30 minutes' instruction and feedback initially, and then 15-minute reinstruction and manual feedback at 4 and 8 weeks *Imitation PFMT*: Comprising hip abductor muscle contraction for 6–8 seconds with feet crossed at the ankles. The therapist confirmed the abductor contraction without dominant contractions of abdominal muscles. Three sets of long and two sets of rapid contractions, 4 times weekly. No recommendation for 'skill training' was given *Additional information*: The study was powered significantly to compare 'combined treatment' with 'no treatment'	**Objective** *N of IEF 'responders'* (≥50% decrease in IEF): I: 27/44, II: 11/44, III: 26/46, IV: 12/46 *Episodes of leakage per week* (pooled paper diaries completed at each visit, median % decrease): I: 44, 57.4%, II: 44, 28.9%, III: 46, 56.5%, IV: 46, 34.7% *N of pad changes per week* (median % decrease): I: 44, 45.7%, II: 44, 10.5%, III: 46, 35.3%, IV: 46, 24.8% **Surrogate outcomes** *Adherence (medication) at 12 weeks* (% of prescribed doses taken): I: 93%, II: 92%, III: 93%, IV: 93%, no significant difference between groups *Adherence (PFMT) at 12 weeks* (% of prescribed contractions performed): I: 86%, II: 89%, III: 76%, IV: 88%, no significant difference between groups *Pelvic floor muscle grade* (9-point scale, mean increase, SD): I: 1.34 (1.28), $p < 0.001$, II: NA, III: NA, IV: 1.41 (1.93), $p < 0.001$; endpoint mean muscle grade for imitation PFMT groups II/III = 4.7 and 5.3 (groups not specified) **Adverse events** *N experiencing adverse events that were significantly more common with duloxetine than with placebo*: duloxetine: 85/104, placebo: 58/97 *Adverse events that were significantly more common with duloxetine than with placebo*: nausea, dizziness, dry mouth, constipation, insomnia, somnolence, aesthesia	**Subjective** *PGI-I* ('very much better', 'much better' or 'a little better'): I: 36/51, II: 19/45, III: 27/50, IV: 32/49 **Quality of life** *I-QoL* (mean score increase): I: 51, 13.1%, II: 45, 4.8%, III: 50, 8.3%, IV: 49, 7.8%

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
			Serious adverse events: I patient in duloxetine group experienced rectal bleeding not attributed to the study SNRI; laboratory and vital sign data indicated no clinically relevant safety issues for duloxetine compared with placebo *Discontinued treatment because of adverse events*: I: 12/52, II: 4/47, III: 16/52, IV: 4/50	
Glavind 1996[150] *Study design/method*: 2-arm RCT. Single centre, Denmark *Duration of study*: 4 weeks treatment, plus follow-up at 3 months and questionnaire at 2–3 (median 2.5) years	*Inclusion criteria*: Women with USI, with normal cystometrograms, leaking urine while coughing and jumping *Exclusion criteria*: Detrusor instability, previous surgery for urinary incontinence *N randomised*: 40 *N lost to follow-up*: I: 1/20, II: 5/20 *Type of incontinence*: USI *Age* (years, median, 95% CI): 45 (40-48) *Pad test result* (g, median, 95% CI): I: 9 (5 to 22) II:12.8 (9 to 44)	I. PFMT + BF, *N* = 19 II. PFMT, *N* = 15 (*N* in analysis) *PFMT + BF*: Standard procedure of physiotherapy 2–3 times per patient with individual instruction from physiotherapist, receiving verbal instruction in exercises and presentation of anatomical charts of the pelvic floor muscles. Instructed to perform the same exercises at home at least three times a day, and as often as possible. In addition, four clinic visits (1 × 30-minute session per week for 4 weeks) for visual BF (the recording of the vaginal EMG) from a vaginal surface electrode (Dantec 21L20, Skovlunde, Denmark) and rectal catheter. Patient continuously observed vaginal EMG during 10 VPFMCs sustained for 5–10 seconds in supine, standing and sitting positions (i.e. 30 VPFMCs in total) *PFMT*: As above but without BF. 2–3 clinic visits over 4 weeks and daily home exercise programme. PFMT = at least three times a day at home *Additional information*: Patients in the PFMT + BF group received more instruction than the control (PFMT only) group	**Objective** *Cured after 3 months* (< 2 g on 1-hour pad test with a bladder volume of 3/4 of cystometric capacity): I: 11/19, II: 3/15 *1-hour pad test after 1 month* (with a bladder volume of 3/4 of cystometric capacity) (g, median, 95% CI): I: 2.5 (1 to 10), II: 19.0 (0 to 51) *1-hour pad test after 3 months* (with a bladder volume of 3/4 of cystometric capacity) (g, median, 95% CI): I: 0.8 (0 to 4), II: 10 (2 to 27) *Adherence* (*N* doing PFMT regularly 2–3 years after treatment) I: 17/19, II: 7/14	**Subjective** *Cure at 2–3 years post treatment* (*N* considering themselves still cured): I: 5/19, II: 0/14 *Improvement at 2–3 years post treatment* (*N* considering themselves improved compared with before treatment): I: 8/19, II: 4/14 *Acceptance of condition 2–3 years post treatment* (those feeling they could accept their present degree of incontinence) I: 14/19, II: 7/14

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Goode 2003[123] *Study design/method*: 3-arm RCT. Stratified randomisation by types and severity of incontinence and race (black or white). USA *Duration of study*: 8 weeks	*Inclusion criteria*: Community-dwelling women aged ≥ 40 years, with predominantly stress urinary incontinence demonstrated during urodynamic testing, ambulatory; average at least two incontinence episodes per week and persisting for at least 3 months *Exclusion criteria*: Continual leakage, post void residual urine volume greater than 150 ml, severe uterine prolapse (past the vaginal introitus), decompensated congestive heart failure, haemoglobin A_{1C} ≥ 9, or impaired mental status *N randomised*: 200 *N lost to follow-up*: I: 12/66, II: 8/67, III: 25/67, difference in attrition rates, $p = 0.001$ *Type of incontinence* (USI/MUI with stress as the predominant pattern): I: 19/47, II: 23/44, III: 25/42 *Age* (years, mean, SD): I: 57.7 (10.0), II: 54.9 (9.4), III: 55.9 (10.0), $p > 0.10$ *Episodes of leakage per week* (mild (< 5)/ moderate (5–10)/severe (> 10)]: I: 13/20/33, II: 15/17/35, III: 17/18/32, $p > 0.10$ *Episodes of leakage per week* (mean, SD): I: 66, 15.1 (13.7), II: 67, 15.6 (13.1), III: 67, 14.8 (13.9) *% vaginal wall prolapse*: Cyctocoele 2° or 3°: I: 23/66, II: 27/67, III: 27/67; rectocoele 2° or 3°: I: 11/66, II: 10/67, III: 11/67; uterine prolapse: I: 5/66, II: 2/67, III: 4/67; bladder neck hypermobility: I: 32/66, II: 28/67, III: 26/67, $p > 0.10$ *Other*: Ethnicity, education (high school graduate), % prior incontinence surgery, parity	I. Behavioural training, $N = 66$ II. Behavioural training + ES, $N = 67$ III. Self-administered behavioural programme, $N = 67$ (N in analysis) *Behavioural training*: (1) Anorectal BF to teach correct pelvic floor muscle contraction at visit 1. (2) Verbal and written instructions for three sessions of PFMT at home daily. Set: 15 VPFMC, 2–4 seconds hold, 2–4 seconds rest, progressing to maximum 10 seconds hold, 10 seconds rest. One set each lying, sitting and standing. Once daily, practice interruption or slowing of the urinary stream during voiding. Duration of training: 8 weeks. (3) Bladder control strategies, comprising 'stress strategies' to contract pelvic floor muscles during any activity that usually result in leakage (e.g. coughing, sneezing) and 'urge strategies' to contract pelvic floor muscles repeatedly to diminish urgency instead of rushing to the toilet. (4) Self-monitoring with bladder diaries. Four clinical visits at 2-week intervals. Behavioural training was implemented by female nurse practitioners who were specially trained by the behavioural psychologist (KL Burgio) and physician principal investigator (PS Goode) *Behavioural training plus ES*: Include all of the components of behavioural training with the addition of home ES. Four clinical visits at 2-week intervals. ES = Home unit (Hollister InCare). Vaginal probe, biphasic pulses (frequency of 20 Hz), pulse width of 1 milliseconds, and pulse train to rest period of 1:1	**Objective** *Cure* (100 reduction in frequency of incontinence by 2-week bladder diary, data from figure): I: 11/66, II: 10/67, III: 10/67 *Cure or improvement* (≥ 50% reduction in frequency of incontinence by 2-week bladder diary, data from figure): I: 53/66, II: 57/67, III: 37/67 **Adverse events** *N experiencing adverse events*: I: 0/66, II: 4/67, III: 0/67 *Adverse events*: vaginal irritation *Discontinued treatment because of adverse events*: I: 0/66, II: 0/67, III: 0/67	**Subjective** *Patient perception of treatment outcome* ('much better' or 'better'): I: 45/47, II: 45/47, III: 32/40 **Quality of life** *Incontinence Impact Questionnaire* (total score): Overall, improved from 93.1 to 57.6 over time. No significant group effects or group by time interactions *Hopkins Symptom Checklist 90-R*: No significant changes *SF-36*: No significant changes

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
		Current intensity adjusted to maximum tolerable level up to 100 mA. Simultaneous with each muscle contraction induced by ES, patients performed VPFMC. 15 minutes every other day. On alternate days, perform three sessions of PFMT (as in the behavioural training group *Self-administered behavioural training*: Given a booklet including the entire behavioural programme but completely self-administered. Given an appointment for a return visit at 8 weeks *Additional information*: The study recruited 'type 3' population; data were therefore extracted for primary outcomes only		
Hahn 1991[175] *Study design/method*: 2-arm RCT. Single centre, Sweden. *Duration of study*: 6 months treatment, and follow-up at 1 and 4 years	*Inclusion criteria*: Women previously not operated upon with USI, consecutively referred for surgery *Exclusion criteria*: Neurological pathology, detrusor instability *N randomised*: 20 *N lost to follow-up*: none at 6 months *Type of incontinence*: USI *Age* (years, mean): 47.2 years (range 34–64); no difference between groups *Urine loss at pad test* (g, mean, SEM): I: 66.5 (14.38), II: 55.6 (21.21), no difference between groups *Parity*: No difference between groups	I. PFMT, *N* = 10 II. ES, *N* = 10 (*N* in analysis) *PFMT*: Given instruction in pelvic floor anatomy and physiology Correct VPFMC taught by vaginal autopalpation. Set: (1) submaximal contraction with 2-second hold; 2) 5–10 maximum contractions with 5-second hold; also 'The Knack' (VPFMC with provocation such as cough); (3) submaximal contraction with 30- to 40-second hold. Exercises were performed in the supine, sitting and standing positions. Sets per day: 6–8 times. Duration of training: 6 months. Supervision: Individual training with physiotherapist weekly for 4 weeks, then monthly for 5 months	**Objective** *N cured after treatment* (essentially dry < 2 g weight increase at pad test (Sutherst *et al.* 1981), modified to more provocative effects): I: 1/10, II: 4/10 *Pad test after treatment* (Sutherst *et al.* 1981): I: significant improvement, $p < 0.01$, II: significant improvement, $p < 0.05$; no significant differences in the rates of improvement between the two groups, $p < 0.10$ **Surrogate outcomes** *Urodynamic vaginal pressure recordings after treatment* (maximal pressure during squeezing, cmH_2O): I: before 15.88, after 14.59, NS, II: before 16.97, after 16.96, NS *Urodynamic vaginal pressure recordings after treatment* (sustained pressure response to squeezing, cmH_2O): I: before 0.3, after 0.3, NS, II: before 0.2, after 0.33, NS	**Subjective** *Subjective ratings after treatment* (cured/insignificant symptoms/ improved/unchanged/worse): I: 1/5/4/0/0, II: 1/4/3/2/0 *Subjective ratings at 4 years* (after crossover) (those who did not have surgery only): improved: 1/14, unchanged: 8/14, recurrence of symptoms: 5/14 *Other*: Individual patients' data (volume of urine loss) reported in figure 2

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
		ES: IFT vaginal probe, intermittent stimulation with alternating pulses at a repetition frequency of 10, 20 and 50 Hz. Home device (Contelle), 6–8 hours per night for 6 months *Additional information*: Patients not cured by the first treatment (after 6 months) were offered the other one ($N = 13$), then evaluated at 1 year and 4 years (groups combined)	**Long term** *N having incontinence surgery* (Burch colposuspension) at 4 years (after crossover): 5/19, four owing to inadequate primary effect of conservative treatment, one because of recurrence of symptoms *Pad test at 4 years* (after cross over) among 14/19 not operated upon: 4/14 further improved, 8/14 unchanged, 2/14 some degree of recurrence of SUI *Adherence at 4 years* (after crossover): 5/14 training regularly, 6/14 training now and then, 3/14 no training	
Haig 1995[190] (abstract only) *Study design/method*: Quasi-RCT, consecutive allocation. Single centre, UK, pilot study *Duration of study*: 3 months	*Inclusion criteria*: Women with USI *Exclusion criteria*: Not reported *N randomised*: 58 *N lost to follow-up*: I: 12/20, II: 9/20, III: 7/18 *Type of incontinence*: USI *Age* (years, mean, SD): I: 55 (7.2), II: 51 (7.5), III: 51 (7.5) *N of micturition in 48 hours* (mean, SD): I: 8, 18.5 (7.7), II: 11, 15.6 (4.2), III: 11, 19.4 (7.8) *48-hour pad test* (g, mean, SD): I: 8, 15.7 (75.9), II: 11, 33.5 (38.9), III: 11, 87.6 (11.3) *Perceived severity of leakage* (visual analogue scale, not defined): I: 8, 3.3 (2.6), II: 11, 3.6 (1.9), III: 11, 4.3 (2.0) *Quality of life*: Perceived effect on life (visual analogue scale, not defined): I: 8, before 4.3 (2.6), after 2.0 (1.6), II: 11, before 3.2 (1.8), after 1.0 (0.7), $p = 0.00078$, III: 11, before 4.6 (2.4), after 2.5 (2.6), $p = 0.021$ Disparity of pretreatment severity of leakage between groups (see *N* of micturition and 48-hour pad test)	I. PFMT, $N = 8$ II. PFMT + ES, $N = 11$ III. PFMT + Sham ES, $N = 11$ (*N* in analysis) *PFMT*: Correct VPFMC taught by: physiotherapist. Continence-promoting advice given (no further detail). Patients attended five times in the first month, 12 times in the second month and three times in the third month. At each visit, PFMT performed in sitting and standing position in the first and third months, and in four positions (sitting, standing, lying and kneeling) at the second month. 'Fast' and 'hold' contractions in sitting and standing at home three times daily *PFMT + ES*: PFMT as above. During the second attendances received 20 minutes of active interferential therapy (IFT) at 10–40 Hz using vaginal electrodes in addition to PFMT *PFMT + sham ES*: PFMT as above. 20 minutes of placebo IFT using vaginal electrodes during the second month's attendances in addition to PFMT	**Objective** *N of micturition in 48 hours* (mean, SD): I: 8, 13.1 (3.3), $p = 0.033$ (pre-post), II: 11, 13.3 (2.2), $p = 0.006$ (pre-post), III: 11, 15.5 (6.8), $p = 0.0005$ (pre-post) *48-hour pad test* (g, mean, SD): I: 8, 12.2 (9.4), $p = 0.25$ (pre-post), II: 11, 10.6 (6.2), $p = 0.027$ (pre-post), III: 11, 38.7 (49.4), $p = 0.014$ (pre-post)	**Subjective** *Perceived severity of leakage* (visual analogue scale, not defined, reduction in score reflects improvement; mean, SD): I: 8, 2.2 (2.2), $p = 0.033$ (pre-post), II: 11, 1.8 (1.3), $p = 0.006$ (pre-post), III: 11, 2.2 (1.8), $p = 0.0005$ (pre-post) **Quality of life** *Perceived effect on life* (visual analogue scale, not defined, mean, SD): I: 8, 2.0 (1.6), $p = 0.013$ (pre-post), II: 11, 1.0 (0.7), $p = 0.00078$ (pre-post), III: 11, 2.5 (2.6), $p = 0.021$ (pre-post)

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Haken 1991[179] (abstract only) *Study design/method*: 2-arm RCT. Single centre, England *Duration of study*: 10 weeks	*Inclusion criteria*: Women with USI *Exclusion criteria*: Not reported *N randomised*: 64 *N lost to follow-up*: I: 3/33, II: 8/31 *Type of incontinence*: USI *Age* (years, mean): 48 years	I. PFMT, *N* = 30 II. VC, *N* = 23 (*N* in analysis) *PFMT*: Individual training with continence advisor. Three clinic visits. Education in appropriate anatomy and physiology. PFMT = 5 VPFMC 10 times per day *VC*: Individual training with continence advisor. Three clinic visits. Education in appropriate anatomy and physiology. Hold cone for 15 minutes twice a day, increasing the cone weight when successful on two consecutive occasions. Femina cones [five conical weights (?)]	**Objective** *Improvement* (on 40-minute pad test, with standardised bladder volume, ICS Proceedings 1988): I: 19/30, II: 17/23 **Adverse events** *Adverse events*: 'Difficulty remembering to use the technique was a significant feature in the (PFMT) group which was not apparent in those using cones. Causes of withdrawal in the cones group were predominantly aesthetic dislike of the technique and difficulties associated with vaginal prolapse'	**Subjective** *Subjective assessment on visual analogue scale*: Significant improvement in both groups ($p < 0.05$) but no between-group difference *Patient satisfaction*: Difficulty remembering to use the technique' apparent in the PFMT group but not in those using VC
Hay-Smith 2003[164] *Study design/method*: 2-arm RCT. Single centre, New Zealand *Duration of study*: 20 weeks	*Inclusion criteria*: Community-dwelling women with symptoms of SUI with ≥ 2 leakage episodes per week *Exclusion criteria*: Reversible causes of incontinence (e.g. SNRI side effects), uncontrolled metabolic conditions (e.g. diabetes), clinical history and/or uroflowmetry indicated voiding difficulty, active urinary tract infection, pelvic organ prolapse below the hymenal ring, unable to perform a correct VPFMC after instruction, use of concomitant therapies for incontinence, less than 16 years of age, inability to read, write or verbally communicate in English *N randomised*: 128 *N lost to follow-up*: I: 4/64 (2/4 had follow-up data and were included in analysis), II: 3/64 *Type of incontinence*: SUI or MUI with stress as predominant pattern (confirmed by author) *Age* (years, mean, SD): I: 48.9 (13.1), II: 48.7 (13.2)	I. Motor learning, *N* = 62 II. PFMT with motor learning, *N* = 61 (*N* in analysis) *Motor learning*: Correct VPFMC taught by: physiotherapist using vaginal palpation. Individualised, progressive, training programme. Also given a leaflet on PFMT and an insert outlining 'The Knack'. Duration of training: 20 weeks. Supervision: four physiotherapy visits and three phone calls to progress the programme and maintain motivation *PFMT with motor learning*: Received all the teaching and recommendations as above. In addition, women received individualised, progressive PFMT strength training. Women were advised to complete a set of contractions, three times a day, every day (or a minimum 3 days a week) and that each contraction should be performed with maximal effort. Training progressed by one contraction, or one second per hold, each week until a set comprised 12 contractions, with each contraction held for 8 seconds	**Objective** *Improvement* (decrease by more than 4 g on 24-hour pad test): I: 18/47, II: 15/48 **Adverse events** *N experiencing adverse events*: None reported	**Subjective** *Self-reported change in leakage* (cure/much better/somewhat better/no change/somewhat worse/much worse): I: 4/25/19/14/0/0, II: 1/24/27/8/1/0 **Quality of life** *King's Health Questionnaire* (mean, SD): (1) General health perception: I: 55, 18.2 (17.7), II: 60, 17.1 (19.3), $p = 0.751$ (2) Incontinence impact: I: 55, 38.8 (27.8), II: 60, 49.4 (24.9), $p = 0.032$ (3) Role limitation: I: 52, 20.5 (27.7), II: 57, 27.2 (23.7), $p = 0.178$ (4) Physical limitation: I: 51, 22.6 (22.8), II: 57, 31.3 (22.5), $p = 0.048$ (5) Social limitation: I: 51, 10.5 (21.3), II: 56, 11.8 (18.6), $p = 0.728$ (6) Personal relationships: I: 40, 14.6 (24.8), II: 40, 13.8 (23.2), $p = 0.877$ (7) Emotions: I: 51, 20.0 (24.1), II: 58, 26.1 (28.0), $p = 0.236$ (8) Sleep/energy: I: 51, 32.0 (19.7), II: 54, 28.4 (19.6), $p = 0.346$

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
	Episodes of leakage in 24 hours (mean, SD): I: *63*, 1.7 (1.7), II: *62*, 1.9 (2.2) *Pelvic floor muscle grade* (grades 1 or 2/ grade 3/grades 4 or 5): I: 30/15/18, II: 28/25/6 *Other*: BMI, ethnicity, % prior incontinence surgery, parity, % postmenopausal	*Both groups*: Advice on lifestyle was given where appropriate. Women voiding more than seven times during waking hours were given advice on frequency strategies. Women with urgency were advised on common urge suppression techniques. A timed voiding programme was not used *Additional information*: The study recruited 'type 3' population; data were therefore extracted for primary outcomes only Author confirmed that some women had MUI but 'only women whose predominant symptom was SUI (leakage with cough, sneeze, exercise or other exertion) were eligible for inclusion'		
Henalla 1990[125] (abstract only) *Study design/method*: 3-arm RCT, parallel design. Single centre, UK *Duration of study*: 6 weeks	*Inclusion criteria*: Postmenopausal women with USI *Exclusion criteria*: No further criteria stated *N randomised*: 26 *N lost to follow-up*: None? *Type of incontinence*: USI *Age* (years): Mean 54 (range 49–64) *% vaginal prolapse*: See surgery *Other*: % postmenopausal 100%	I. Estrogen cream, *N* = 11 II. PFMT, *N* = 8 III. No treatment, *N* = 7 IV. Surgery (secondary treatment), *N* = 22 (I: 11, II: 4, III: 7) *Estrogen*: Vaginal cream (Premarin) 2 g per night *PFMT*: No detail given *Surgery*: All failures (< 50% reduction from baseline pad test) were subjected to surgical repair by the abdominal or vaginal route depending on the absence or presence of associated genital prolapse. Further assessment was carried out 6 weeks following surgery	**Objective** *N cured or improved at 3 months* (perineal pad weighing test, not defined): I: 0/11, II: 4/8, III: 0/7, IV: 21/22 Note: 'Failure' defined as < 50%reduction in pad weight from baseline	

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Hofbauer 1990[126] *Study design/method*: 4-arm RCT, parallel design. Single centre, Austria. German publication *Duration of study*: ?6 weeks treatment and further follow-up at 6 months. Assessment immediately after treatment and at 6 months	*Inclusion criteria*: Women with USI *Exclusion criteria*: Urge incontinence *N randomised*: 43 *N lost to follow-up*: None? *Type of incontinence*: USI (grade 1/2/3): I: 0/9/2, II: 3/4/4, III: 2/3/6, IV: 4/4/2 Note: Grading according to Ingelmann-Sundberg (1952) *Age* (years, mean): I: 62.9, II: 51.0, III: 59.7, IV: 59.8, overall mean 57.5 (SD 12), (30–88) *Other*: Prior incontinence surgery: 16/43	I. PFMT + ES, *N* = 11 II. PFMT, *N* = 11 III. ES, *N* = 11 IV. Sham ES, *N* = 10 (*N* in analysis) PFMT + ES: PFMT and ES as below *PFMT*: Exercise programme including PFMT, abdominal and hip adductor exercise, twice a week for 20 minutes with therapist, and daily home programme *ES*: Three times per week, 10 minutes per treatment, 6 weeks. Vaginal and perineal (active) and lumbar (inactive) electrodes. Faradic. Output increased to noticeable contraction and patient added voluntary effort *Sham ES*: ES as above but current so low that no effect was expected	**Objective** *N having incontinence surgery*: Patients who were unsuccessful in treatment had surgery (number not stated) **Adverse events** *Adverse events*: None reported	**Subjective** *Cure* (?symptom scale, at ?6weeks or ?6 months): I: 3/11, II: 6/11, III: 1/11, IV: 0/10 *Cure or improvement* (?symptom scale, at ?6weeks or ?6 months): I: 7/11, II: 7/11, III: 3/11, IV: 0/10 Note: Authors state that results were similar immediately after treatment and at 6 months

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Jeyaseelan 2000[131] *Study design/method*: 2-arm RCT. Three centres, UK *Duration of study*: 8 weeks	*Inclusion criteria*: Women with USI, no neurological conditions *Exclusion criteria*: Previous ES for stress incontinence, prolapse, pregnancy, pacemakers and cardiomyopathy, abnormal urological/gynaecological findings, urinary tract/vaginal infection, recent pelvic floor surgery (within 6 months) *N randomised*: 27 *N lost to follow-up*: I: 2/14, II: 1/13 (Three withdrawals because treatment regimen too demanding) *Type of incontinence*: USI *Episodes of leakage per week* (median, range): I: 4.5 (0–9), II: 2 (0–8), $p > 0.05$ *1-hour pad test* (g, median, range): I: 11 (0–35.4), II: 4.6 (0–43) *Incontinence Impact Questionnaire* (score range 0–100, mean, SD): I: 32.55 (18.02), II: 39.22 (18.38) *Urogenital Distress Inventory* (score range 0–100, mean, SD): I: 46.27 (16.27), II: 41.58 (15.44)	I. ES, $N = 12$ II. Sham ES, $N = 12$ (N in analysis) *ES*: Portable stimulator (PSI, Dynamic Medical Instruments). Patterned Neuromuscular Stimulation. Background low frequency (target slow twitch fibres) and intermediate frequency with an initial doublet (target fast twitch fibres), vaginal probe, 1 hour per day for 8 weeks (except when menstruating). Patients asked to keep stimulation diary *Sham ES*: One 250 microsecond/minute for 1 hour. This method of stimulation has been proven to have no physical effect on muscle *Additional information* Data pertaining to the frequency/volume charts (7-day) not presented (not published) due to incomplete data	**Objective** *Change in episodes of leakage per week* (median, range): I: 0 (–5 to 4), NS, II: –2 (–4 to 0), NS *Change in 1-hour pad test* (g, median, range): I: 0.5 (–33 to 71), NS, II: 0.1 (–15 to 61), NS **Surrogate outcomes** *Adherence* (patient's stimulation diary): I: 71–98%, II: 64–100% *Change in pelvic floor muscle strength* (perineometer, cmH_2O, mean, SD): I: 3.1 (12.5), II: 1.0 (5.3), NS *Change in pelvic floor muscle endurance* (perineometer, cmH_2O, mean, SD): I: 4.8 (13.9), II: –2.0 (5.3), NS *Change in pelvic floor muscle strength* (digital assessment, scale 0–15, median, range): I: 1 (–1 to 5), $p < 0.01$, II: 1 (–2 to 4), NS *Adverse events* Discontinued treatment because of adverse events: treatment regimen too demanding, I: 2/14, II: 1/13	**Quality of life** *Incontinence Impact Questionnaire* (score range 0–100, mean change, SD): I: –4.1 (16.4), II: –9.1 (17.1), NS *Urogenital Distress Inventory* (score range 0–100, 0 = not bothered by incontinence, 100 = greatly bothered by incontinence) (mean change, SD): I: –11.8 (15.9), II: –3.3 (8.3), $p = 0.01$ *SF-36*: No significant difference between groups

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Johnson 2001[167] *Study design/method*: 2-arm RCT. Single centre, USA *Duration of study*: Treatment for 6 weeks	*Inclusion criteria*: Women diagnosed with USI and self-report of two or more incontinent episodes per day for the previous 3 months, English-speaking, non-pregnant, free of bladder or vaginal infection, not currently taking medications for treatment of USI, showed adequate estrogenisation of the vaginal mucosa, had no urethral collagen injection therapy, and had no history of neuromuscular disease, radical pelvic/perineal surgical intervention or other serious physical or psychological problems *Exclusion criteria*: *N randomised*: 37 (*N* in each arm not reported) *N lost to follow-up*: 5/37 *Type of incontinence*: USI *Age* (years, mean, SD): I: 16, 51.00 (10.21), II: 16, 49.50 (11.09) *Leakage episodes per day* (mean, SD): I: 16, 4.04 (3.32) (1.86–13.00), II: 16, 3.18 (1.85) (2.00–8.50) *10-hour weighted pad test* (g, mean, SD): I: 16, 16.04 (27.26) (2.14–111.42), II: 16, 9.85 (13.98) (1.76–55.69) *Pelvic floor muscle endurance* (mean, SD): I: 16, 5.69 (3.42) (2.00, 12.00), II: 16, 5.94 (3.62) (2.00, 15.00) *Pelvic floor muscle sustained contraction* (mean, SD): I: *16*, 2.35 (2.92) (0.00–9.20), II: *16*, 3.60 (3.99) (0.00–10.00) *Pelvic floor muscle mean maximal contraction* (mean, SD): I: 16, 4.88 (6.88) (0.00–28.00), II: 16, 8.00 (6.72) (1.00–20.00)	I. PFMT with submaximal voluntary contraction + BF, *N* = 16 II. PFMT with near maximal voluntary contraction + BF, *N* = 16 (*N* in analysis) *PFMT with submaximal voluntary contraction + BF*: InCare Contimed II (InCare Medical, Libertyville, IL) home biofeedback device was used with the vaginally inserted pressure probe tubing before daily tests of mean maximal contractions (MMC) strength and during exercise sessions. InCare Perineal Reduction System (PRS8900) was used in pre- and post-training tests for measuring MMC strength of the pelvic floor muscles and endurance testing. Participants used diagrams that indicated precalculated goal intensity, based on a daily test of MMC effort. In pretesting and post-testing, surface electrodes were placed abdominally to determine inappropriate muscle recruitment, and perianally to temporarily correlate electromyographic muscle response to pressure readings. Correct VPFMC confirmed by the investigator using biofeedback and surface EMG electrodes at first visit. Participants were given written and oral instructions to perform PFMT at specified intensity (60% of MMC force), duration (15 minutes) and repetition (three times a day for 6 weeks) using the biofeedback device. Exercise information was recorded by the devices and downloaded for analysis	**Objective** *Cure* (no episodes of urine loss on daily diary during the 8th week of the study, i.e. 1 week immediately after treatment phase): I: 4/16, II: 6/16 *Episodes of leakage in 24 hours* (daily diary for 8 weeks, mean, SD): I: 1.15 (2.55) (0.00–10.00), II: 0.79 (1.65) (0.00–6.57) Note: Daily diaries were recorded during the 6 weeks of treatment and 1 week before and after *10-hour pad test* (g, mean, SD): I: 3.41 (4.79) (0.41–20.32), II: 3.84 (5.29) (0.12– 21.29) **Surrogate outcomes** *Pelvic floor muscle endurance* (*N* of contractions completed prior to fatigue, mean, SD): I: 16, 17.25 (8.80) (10.00–37.00), II: 16, 12.00 (6.12) (2.00–23.00) *Pelvic floor muscle sustained contraction* (seconds, mean, SD): I: 16, 9.06 (2.20) (1.40–10.30), II: 16, 9.63 (1.51) (4.70–11.30) *Pelvic floor muscle mean maximal contraction* (cmH_2O, mean, SD): I: 16, 19.19 (10.37) (7.00–42.00), II: 16, 18.38 (14.30) (2.00–62.00) *EMG amplitude* (microvolts): I: 16, 4.44 (1.99) (1.00–8.00), II: 16, 3.69 (2.52) (1.00–10.00)	

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
		PFMT with near maximal voluntary contraction + BF: PFMT and devise use as above. Participants were given written and oral instructions to perform PFMT at specified intensity (90% of MMC force), duration (10 minutes) and repetition (three times a day for 6 weeks) using the biofeedback device		
Karagkounis 2007[194] (abstract only) *Study design/method*: 2-arm RCT, Greece *Duration of study*: > 2 weeks? (unclear)	*EMG amplitude* (microvolts): I: 16, 2.00 (1.27) (1.00–5.00), II: 16, 1.94 (0.77) (1.00–3.00) *Inclusion criteria*: Women aged 44–68 with stress urinary incontinence (clinical and urodynamic diagnosis) *Exclusion criteria*: Not reported *N randomised*: 197 *N lost to follow-up*: Not reported *Type of incontinence*: USI *Age* (years, average, range): 58.7 (44–68)	I. PFMT + SNRI, *N* = 98 II. Surgery, *N* = 99 (*N* randomised) *PFMT + SNRI*: Duloxetine–HCL 40 mg twice a day, with simultaneous PFMT (no further detail) *Surgery*: The TVT obturator system under local or regional anaesthesia followed by 2-day hospitalisation *Additional information*: Not relevant for direct head-to-head comparisons; data were therefore extracted for primary outcomes only	*Hospital length of stay*: I: not reported, II: 2 days **Adverse events** *N experiencing adverse events*: I: 4/98, II: 0/99 *Adverse events*: Nausea, headaches, insomnia	**Subjective** *Cure or improvement*; (based on the survey): I: 55% symptom relief in 78/98 (80%), and then 90/98 (92%) 'in the following 2 weeks of treatment', II: 99/99 cured **Quality of life** *Incontinence Quality of Life*: I: 'without a lifetime cure achievement', II: 'total lifetime symptom relief' (perfect score in IQoL questionnaire) *Cost*: I: €378/US$480 for a 6-month period (€2/US$2.67 per day), no absence from daily activities was advised, II: €910/US$1156, encouraged to return to daytime activities after 1 month

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Kim 2007[118] *Study design/method*: 2-arm RCT. Single centre, Japan *Duration of study*: 3 months (and 1-year follow-up after crossover)	*Inclusion criteria*: Community-dwelling Japanese women aged 70 and older with symptoms of SUI *Exclusion criteria*: Urine leakage occurring less than once per month; mixed or urge UI *N randomised*: 70 *N lost to follow-up*: I: 2/35, II: 3/35. Those who attended 15 or more of the 24 exercise sessions were considered to have completed the intervention *Type of incontinence*: SUI *Age* (years, mean, SD): I: 76.6 (5.0), II: 76.6 (3.8), $p = 0.96$ *Frequency of leakage* (daily/1 every 2 days/1–2 per week/1–3 per month): I: 11/2/9/13, II: 7/4/6/18, $p = 0.40$ Frequency score of urine leakage: I: 3.4 (1.3), II: 3.0 (1.3), $p = 0.14$ *Other*: BMI	I. PFMT + fitness exercise, $N = 33$ II. No treatment, $N = 32$ (N in analysis) *PFMT + fitness exercise*: 60-minute group sessions two times per week for 12 weeks. Taught the structure of the pelvic floor muscle. PFMT = 10 fast VPFMC with 3 seconds hold, and 10 sustained VPFMC with 6–8 seconds hold, in sitting, lying and standing. Fitness exercise = body awareness, breathing, relaxation, and strength training of the thigh, abdominal and back muscles were performed between PFMT exercise positions, with additional training including bending the knees, tilting the pelvis backwards and forwards, lifting the buttocks on the back with the knee bent, raising one leg while lying on the back, and others; also used two kinds of training balls (21 cm and 45- to 55-cm in diameter); the ball exercises included sitting on the ball, rolling the ball and pelvis forwards and backwards, moving from side to side while squeezing the thighs and others	**Surrogate outcomes** *Adherence*: In group I, 10/35 (29%) attended all 24 sessions and 23/35 (66%) attended more than 20 sessions In group I there were significant increases over time ($p < 0.05$) in adductor muscle strength and maximum walking speed (?or usual walking speed – table and text do not match), and also a significant decrease ($p < 0.05$) in body weight and BMI. No significant changes were observed in group II	**Subjective** *Cured of urine leakage*: I: 18/33, II: 3/32 Note: In terms of urine leakage episodes based on an interview asking if woman has experienced urine leakage and, if yes, the frequency of the leakage using the 6-point scale. *Frequency score of urine leakage* (point, mean, SD): I: 1.5 (1.8), II: 2.4 (1.4) Note: Based on the International Consultation on Incontinence Questionnaire (ICIQ, Avery *et al.* 2004); 0 = no urine leakage, 1 = less than once a month, 2 = 1–3 times per month, 3 = 1–2 times per week, 4 = once every two days, 5 = every day. ***Subgroup analysis*** Factors associated with 'cure' at 3 months – those with a 'decreased' BMI ($p = 0.03$) and 'increased' (?maximum) walking speed ($P = 0.04$) were significantly more likely to be cured than those with 'increased' or 'unchanged' BMI or 'decreased' or 'unchanged' walking speed. No difference was found in proportion of cured subjects with improved adductor muscle strength

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
		Control subjects: Instructed to lead a normal life and to refrain from special exercises aiming to increase muscle strength (not only pelvic floor muscles) or walking speed to decrease BMI, or to improve their dietary habits *Additional information*: The control group was crossed over to the treatment group after 3 months. After 3 months, both groups were followed for 1 year. Only data from the first 3 months were extracted The study authors judged that the 3-day diary underestimated the frequency of 'mild' (not 'severe') urine leakage and hence tended to overestimate the effect of intervention. For this reason the authors decided not to use 3-day diary data and instead use the 6-point scale		

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Kinchen 2005[140] *Study design/method*: 2-arm RCT. Multicentre, 24 sites, USA *Duration of study*: 36 weeks (plus 1 week prerandomisation)	*Inclusion criteria*: Ambulatory women aged ≥ 18, with ≥ 1 IEF/week with SUI symptoms that have been going on for ≥ 3 months *Exclusion criteria*: Pregnant/ breastfeeding women, urinary tract infection, previous participation in a duloxetine trial, arrhythmias, poorly controlled/uncontrolled hypertension, liver disease, seizure disorders or unstable cardiac conditions *N randomised*: 451 *N lost to follow-up*: I: 62/224, II: 50/227 *Type of incontinence*: SUI: I: SUI 36/224 (16%), stress predominant MUI 156/224 (70%), 'balanced' UI 11/224 (5%), UUI 21/224 (9%), II: SUI 36/227 (16%), stress predominant MUI 155/227 (68%), 'balanced' UI 15/227 (7%), UUI 21/227 (9%) *Age* (years, mean, SD): I: 52.7 ± 13.0 , II: 53.5 ± 13.0 *Frequency of stress incontinence episodes per week* (> 5 stress episodes/5-13/≥ 14): I: 67/72/85, II: 68/87/72 *Episodes of leakage per week* (median): I: 7.5, II: 7 *I-QoL* (average score): I: 210, 61.5, II: 218, 60.2 *Other*: Ethnicity, prior incontinence surgery, PFMT use, genital prolapse on straining	I. Duloxetine 80 mg as 40mg b.i.d. (twice daily), *N* = 224 (210) II. Placebo, *N* = 227 (218) [*N* randomised; and *N* in 'ITT' analysis in brackets with women with at least one postrandomisation measure (last outcome measure carried forward)] *Additional information*: The study recruited 'type 3' population; data were therefore extracted for primary outcomes only This is a naturalistic study – '… at any point after randomization, subjects could choose to remain on study SNRI as randomized, reduce study SNRI dosing in any way, remain on study SNRI with augmentation by other treatments, or suspend study SNRI and receive other treatments. Subjects on placebo were not allowed to be switched to duloxetine, nor were duloxetine subjects ever switched to placebo …. Regardless of whether subjects continued to take the study medication, all subjects were to be followed up according to the protocol. However, subjects who chose to have surgery for urinary incontinence symptoms were discontinued from the study [*N* not reported]' Women reported planned use of another intervention including weight reduction, PFMT, estrogen, anticholinergics, pseudoephedrine (phenylpropanolamine), smoking cessation, bladder retraining, 'devices' and biofeedback. Almost half of women reported actual use of estrogen products, and 11% reported use of anticholinergic medications. 40.4% performed PFMT inconsistently and 15.4% performed PFMT consistently	**Surrogate outcomes** *Adherence* (*N* still on study SNRI at end visit): I: 85/224 (37.9%), II: 122/227 (53.7%) **Adverse events** *N experiencing at least one adverse event*: I: 198/224, II: 159/227 *Adverse events* (for which there are statistically significant differences between groups): nausea; fatigue; insomnia; dizziness; headache; somnolence; dry mouth; constipation; diarrhoea; vomiting; increased sweating; decreased appetite; anxiety; tremor; decreased libido; lethargy; nightmare; fungal infection *Serious adverse events*: I: 8/224 (16 SAEs), none of which was considered to be related to study SNRI, II: 7/227 (eight SAEs), of which two SAEs were considered to be related to study SNRI *Discontinued treatment because of adverse events*: I: 20/224, II: 5/227	**Subjective** *PGI-I ('better') at 9 months*: I: 103/210 (49.1%), II: 90/218 (41.5%) *PGI-I ('better') at 3 months*: I: 148/208 (71%), II: 111/218 (51%) **Quality of life** *Change in I-QoL at 3 months*: I: 208, 13.0, II: 218, 10.4, $p = 0.07$ *Change in I-QoL at 9 months*: I: 210, 13.8, II: 218, 12.1, $p = 0.26$

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Klarskov 1986[184] *Study design/method*: 2-arm RCT. Single centre, Denmark *Duration of study*: 4 months treatment + follow-up at 12 months and median 6 (4–8) years	*Inclusion criteria*: women with USI, no previous surgery or systematic PFMT or UUI *Exclusion criteria*: Surgery was indicated for reasons other than urinary incontinence (e.g. prolapse operation, hysterectomy), patients expected to be unable to follow the training instructions for mental reasons *N randomised*: 50 *N lost to follow-up*: Not reported *Type of incontinence*: USI *Age* (years, median, range): 48 (31–66) *Episodes of leakage in 3 days* (3-day voiding and incontinence chart, median, range): I: 24, 6 (0–31), II: 26, 6 (0–39) *% vaginal wall prolapse*: *Bladder base insufficiency*: I: 13/24, II: 16/26 *Posterior bladder descent*: I: 9/24 , II: 7/26 *Combined suspension defect*: I: 2/24, II: 3/26	I. PFMT = 24 II. Surgery, *N* = 26 (*N* in analysis) *PFMT*: Weekly lessons (median 5, range 2–13) with physiotherapist to small groups of patients (2–6), including (a) pelvic floor anatomy, (b) muscle awareness training (but no objective measurement was carried out to ensure correct squeezing technique), and (c) instruction for home exercise programme of two lying, one sitting and one standing. The four exercises were done five times each and four times daily. During the 4-month treatment period practices of 'increasing intensity' were used, and the patients were also taught correct lifting technique *Surgery*: Surgery chosen on basis of cystometry, including Burch colposuspension for anterior suspension defect, vaginal repair for posterior bladder descent, or combined procedure *Additional information*: At the follow-up examinations (4 and 12 months), patients dissatisfied with the outcome of the treatment were given alternative treatment (PFMT→surgery, surgery→PFMT)	**Objective** *Cured (no leakage on 3-day chart) at 1 year (*excluding those who received alternative treatment after 4 months): I: 6/10, II: 19/20 *Cured (no leakage on 3-day chart) at median 6 years* (excluding those who received alternative treatment after 4 months): I: 5/10, II: 11/20 *Episodes of leakage in 3 days at 4 months* (3-day voiding and incontinence chart, median, range): I: 24, 2 (0–20), II: 26, 0 (0–14), significantly larger reduction for surgery, $p < 0.01$ Note: Data by prolapse type also reported *N of micturition in 3 days at 4 months* (3-day voiding and incontinence chart, median, range): I: 24, 20 (11–40), II: 26, 19 (12–29) *Standardised 60-minute pad test (Klarskov and Hald 1984) at 4 months*: Better for the operated patients than for the PFMT patients, $p < 0.0005$ Note: Individual data also reported **Surrogate outcomes** *Adherence to PFMT at 4–8 years* (group not specified): At least once a week 59%, occasionally 28%, never use PFMT 14% **Long term** *N having alternative treatment by 12 months*: I: 14/24 given surgery, II: 7/26 given PFMT	**Subjective** *Patient-perceived cure at 4 months*: I: 3/24, II: 16/26 *Patient-perceived cure or improvement at 4 months*: I: 17/24, II: 23/26 *Patient-perceived improvement at median 6 years* (excluding those who received alternative treatment after 4 months): I: 1/10, II: 3/20 *Patient satisfaction at 4 months*: 15/24, II: 19/26 *Patients remained satisfied with initial treatment at 12 months*: I: 10/24 (satisfied with PFMT), II: 19/26 (satisfied with surgery) *Patient perceived cure or improvement at 4 months by type of prolapse*: Note: I/II–1, bladder base insufficiency; I/II–2, posterior bladder descent; I/II–3, combined bladder suspension defect

	I–I	I–2	I–3	II–I	II–2	II–3
Cured	3	0	0	13	2	1
Improved	8	5	1	1	4	2
Other	2	4	1	2	1	0
Total	13	9	2	16	7	3

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
			N having incontinence surgery at median 6 years: I: 0/24, II: NA **Adverse events** *N experiencing adverse events at 1 year*: Four following surgery (group not specified) *Adverse events at 1 year*: Urge incontinence, retropubic pain, persistent pelvic pain, persistent dyspareunia; no patient developed persistent bacteriuria *Adverse events at 4–8 years*: Three patients who had surgery (group not specified) had persistent pelvic pain and dyspareuria *Discontinued treatment because of adverse events*: Not reported	
Klingler 1995[151] (abstract only) *Study design/method*: 2-arm RCT. Single centre, Australia *Duration of study*: 3 months	*Inclusion criteria*: Women with clinical diagnosis of SUI *Exclusion criteria*: Not reported *N randomised*: 41 *N lost to follow-up*: None? *Type of incontinence*: SUI *Age* (years, mean): I: 51.8, II: 53 *N not using continence pads*: I: 3/20, II: 2/21 *N of pad changes per day* (?mean, range): I: 1.2 (1–4), II: 2.4 (0-7) *Pad test* (g, ?mean, range): I: 8.7 (1–35), II: 12 (1–70)	I. PFMT + BF + ?IVRD ('Endotrainer'), *N* = 20 II. PFMT, *N* = 21 (*N* in analysis) *PFMT + BF (IVRD?)*: PFMT as below with addition of audiovisual biofeedback from the 'Endotrainer' device, which is an 'intermittent gas-filled balloon placed in the vagina which has to be compressed by the patient' *PFMT*: 'Classic' PFMT. In-depth instruction followed by 9-week programme. Clinic visits (30 minutes each) with physiotherapist twice a week for the first 3 weeks, then 3 weeks home programme, followed by additional 3 weeks training with physiotherapists (and presumably further 3 weeks of home programme?). Patients were evaluated at 3 months	**Objective** *Cure* (*N* not using continence pads): I: 14/20, II: 15/21 *N of pad changes in 24 hours* (?mean, range): I: 0.1 (0–2), II: 0.6 (0–6) *Pad test* (not defined; g, ?mean, range): I: 1.2 (0–22), II: 2.9 (0–19)	**Subjective** *'Subjective improvement'*: I: 19/20, II: 21/21

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Knight 1998[172] *Study design/method*: 3-arm RCT. Single centre, England *Duration of study*: 6 months + follow-up at 12 months	*Inclusion criteria*: Women aged 16–75 with USI, sterile urine, English speaking *Exclusion criteria*: Urinary tract infection, unstable bladder, unable to perform VPFMC, pregnant, breastfeeding, pelvic malignancy, cardiac pacemaker, neurological condition, diabetes, hormone replacement therapy started within previous 3 months *N randomised*: 70 *N lost to follow-up*: I: 3/21, II: 6/25, III: 4/24 at 6 months; further 3 in group I, and 3 in group II by 12 months *Type of incontinence*: USI *Age* (years, range): (24–68), no difference between groups *Urine loss on pad test* (at 75% of the max cystometric capacity) (g, median, range): I: 18, 13.1 (2.1–75.2), II: 19, 9.8 (2.3–115.2), III: 20, 20.8 (2.0–103.4) *Other*: BMI, NS (no data), % smokers, % prior pelvic surgery, parity, NS (no data), % postmenopausal, NS (no data)	I. PFMT + BF, *N* = 18 II. PFMT + BF + low intensity home ES, *N* = 19 III. PFMT+BF + maximal clinic ES, *N* = 20 (*N* in analysis) *PFMT*: Correct VPFMC taught by: physiotherapist with vaginal palpation. Set: individually tailored programme with progression to 10 sustained 10-second contractions, followed by 10 fast contractions. Sets per day: six. Duration of training: 6 months. Supervision: clinic visits weekly for 1 month, then fortnightly for 5 months *BF*: Air-filled vaginal probe (PRS900, InCare) with visual BF at clinic visits. Home BF with air-filled vaginal probe (PFX, Cardio Design) for visual BF *PFMT+BF + low-intensity home ES*: PFMT + BF as above. ES = overnight at low intensity at home for 6 months (not during menstruation). Vaginal electrode, 10 Hz trains with 35 Hz bursts, pulse width 200 microseconds, duty cycle 5 seconds on, 5 seconds off (DMI Ltd) *PFMT+BF + acute maximal clinic ES*: PFMT + BF as above. ES = 16 30-minute of maximal electrical stimulation (VSI, Neen HealthCare). Vaginal electrode, 35 Hz, pulse width 250 microseconds, duty cycle 5 seconds on, 5 seconds off. VPFMC performed with the stimulation In 7–12 months, all women were instructed to perform their final PFMT programme once a day and use home BF (pelvic floor exerciser) once a week. Any patient who had undergone pelvic surgery, become pregnant or started hormone replacement therapy was excluded from follow-up	**Objective** *Cured or greatly improved at 6 months* (cure = dry or urine loss of < 2 g; greatly improved = 75% or more reduction in urine loss at repeat pad test): I: 13/18, II: 10/19, III: 16/20 Note: pad test at 75% of the maximal cystometric capacity *Cured or greatly improved at 12 months* (cure = dry or urine loss of < 2 g; greatly improved = 75% or more reduction in urine loss at repeat pad test): I: 10/14, II: 12/15, III: 17/20 Note 1: groups II and III had PFMT + BF + ES at 1–6 month but had only PFMT+BF at 7–12 months Note 2: Pad test at 75% of the maximal cystometric capacity *Episodes of leakage in 24 hours at 6 months*: 7-day chart incomplete and therefore not analysed *Urine loss on pad test at 6 months* (at 75% of the maximal cystometric capacity, g, median, range): I: 18, 0.8 (0.0–88.1), $p = 0.0012$ (pre-post), II: 19, 2.9 (0.0–50.9), $p = 0.0062$ (pre-post), III: 20, 1.5 (0.0–28.1), $p = 0.0003$ (pre-post) *% change in urine loss on pad test at 6 months* (median, range): I: 18, 90.7% (–17.1 to 100.0), II: 19, 76.5% (–580.3 to 100.0), III: 20, 91.3% (–72.4 to 100.0), no significant between-group difference *% change in urine loss on pad test at 12 months* (median, range): I: 15, 100% (–8.1 to 100.0), II: 16, 97.5% (–415.1, 100.0), III: 20, 100.0 (–67.5 to 100.0) **Surrogate outcomes** *Adherence (subjective) at 6 months*: I: 90% (highest among the 3 groups), II: 72.5% (lowest among the 3 groups), III: NR	**Subjective** *Cure or great improvement at 6 months*: I: 10/18, II: 9/19, III: 16/20 *Cure or great improvement at 12 months*: I: 9/14, II: 7/15, III: 17/20 Note: groups II and III had PFMT + BF + ES at 1–6 months but had only PFMT+BF at 7–12 months ***Subgroup analysis*** The clinic group demonstrated a positive correlation between subjective and pad test outcome ($p = 0.02$) and also had a positive correlation with the duration of incontinence symptoms; women with a longer history of incontinence demonstrated greater improvement In both the home and clinic groups, subjects with initially weaker pelvic floor muscle strength demonstrated a greater improvement than those with stronger muscles

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
			% change in perineometer at 6 months (maximum pressure, cmH_2O, % median change, range): I: *18*, 40.8 (–19.6, 132.1), II: 19, 32.7 (–8.3, 368.6), III: 20, 64.3 (–55.9, 705.7) *% change in perineometer at 12 months* (maximum pressure, cmH_2O, median %, range): I: 15, 53.2 (–22.9 to 137.0), II: 16, 47.1 (–17.2 to 381.4), III: 20, 44.4 (–43.2 to 433.3)	
Konstantinidou 2007[116] *Study design/method*: 2-arm quasi-RCT. Single centre, Greece. Pilot study *Duration of study*: 12 weeks	*Inclusion criteria*: 'Treatment naive' female patients with a clinical and urodynamic diagnosis of SUI; age over 18 years, clinical diagnosis of SUI for more than 3 months, ≥7 incontinent episodes per week, daytime frequency of less than eight micturition episodes, nocturia of less than three episodes, positive stress test (urine leakage with coughing and with a bladder capacity of 400 ml), positive pad test, and a score of 3 or 4 in the Oxford scale (pelvic floor muscle strength, etc.) *Exclusion criteria*: Symptoms of urgency and urge incontinence, presence of any degree of pelvic organ prolapse, pregnancy, comorbidities from or affecting the lower urinary tract such as diabetes mellitus, neurological disease, psychiatric illness, use of medication affecting micturition, history of surgical or pharmaceutical treatment of SUI, and chronic debilitating disease, such as renal failure *N randomised*: 30 *N lost to follow-up*: I: 5/15, II: 3/15 *Type of incontinence*: USI *Age* (years, mean, SD): 47.8 (7.5) (34, 60)	I. PFMT, no group sessions, *N* = 10 II. PFMT with group sessions, *N* = 12 (*N* in analysis) *PFMT, no group sessions:* Participants received, in group, instructions for home PFMT, including 1-hour demonstration programme, followed by a supervised session for accurate first application of the programme. Home PFMT = three sets of fast contractions and 3–4 sets of slow contractions daily in lying, sitting and standing positions. Exercises were individualised according to the strength and endurance of the pelvic floor muscles. Supervision: followed up individually in hospital every 4 weeks. Participants were also submitted to vaginal assessment of the pelvic floor muscles on a monthly basis, and their training programme was readjusted according to their progress *PFMT, with group sessions*: PFMT and monthly hospital visits and assessment as above. In addition, participants attended a common weekly session in a group of five, and were given written instructions for the rest of the week	**Objective** *N of women reporting underwear wetting*: I: 3/10, II: 0/12, $p = 0.046$ *Cure by negative pad test* (pad weight < 2 g over 24 hours; women who repeated test at 12 weeks only): I: 0/4, II: 4/6 *Episodes of leakage per week* (7-day diary, mean, SD): I: 12.5 (7.0), II: 2.9 (2.8), $p = 0.002$ *N of pad changes in 24 hours* (7-day diary, mean, SD): I: 2.4 (1.3), II: 0.8 (0.1), $p = 0.006$ *N of micturitions in 24 hours* (7-day diary, mean, SD): I: 7.3 (0.7), II: 6.9 (0.7), $p = 0.343$ **Surrogate outcomes** *Pelvic floor muscle strength*: Oxford scale (5-grade scale, mean, SD, range): I: 3.1 (0.3) (3–4), II: 3.6 (0.5) (3–4), $p = 0.059$ *Endurance* (mean, SD, range): I: 4.2 (1.6) (3–8), II: 6.3 (1.5) (4–9), $p = 0.006$ *Repetitions* (mean, SD, range): I: 4.0 (0.5) (3–7), II: 6.5 (1.2) (5–8), $p = 0.001$ *Fast contractions* (mean, SD, range): I: 8.0 (3.3) (5–15), II: 11.7 (2.6) (8–15), $p = 0.004$	**Subjective** *Patient Global Impression of Improvement* ('Has your condition improved over the past 4 weeks?' – YES): I: 2/10, II: 12/12 **Quality of life** *Quality-of life index (7-point scale, mean, SD)*: I: 3.6 (1.5), II: 1.7 (0.8), $p = 0.000$ Note: 'How would you feel if you had to spend the rest of your life with the same urinary problem?' 0 = delighted, 6 = disappointed. The lowest scores were reflective of a better quality of life

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
	Episodes of leakage per week (mean, SD): I: 14.8 (6.1) (3–25), II: 12.2 (4.8) (7–21), $p = 0.161$ *N of pad changes in 24 hours*: I: 2.5 (0.9) (1–4), II: 2.0 (1.0) (1–4), $p = 0.172$ *N of micturition in 24 hours*: I: 7.6 (0.9) (6, 9), II: 7.2 (0.7) (6, 8), $p = 0.201$ *N of women reporting underwear wetting*: I: 4/15, II: 8/15 *Quality-of-life index score*: I: 4.9 (0.6) (4–6), II: 4.6 (1.0) (3–6), $p = 0.345$ The two groups were 'comparable' for age, height, weight, parity and birthweight		*Hold with cough, weak* (*N* of women): I: 7/10, II: 4/12 *Hold with cough, moderate* (*N* of women): I: 2/10, II: 7/12 *Hold with cough, strong* (*N* of women): I: 1/10, II: 1/12	
Lagro-Janssen 1991[127] *Study design/method*: 2-arm quasi-RCT; consecutive assignment, stratified by severity of incontinence. Multicentre (13 general practitioners in the Netherlands) *Duration of study*: 3 months	*Inclusion criteria*: Women aged 20–65 years reporting ≥ 2 leakage episodes per month *Exclusion criteria*: Previous incontinence surgery, neurological causes of incontinence, diabetes, urinary tract infection, temporary cause of incontinence (e.g. pregnancy) *N randomised*: 66 *N lost to follow-up*: None *Type of incontinence*: USI *Age* (years, mean, SD): I: 46.1 (10.1), II: 44.6 (8.2) *Severity of symptoms* (GP assessment, mild/moderate/severe): I: 4/17/12, II: 2/20/11 *Episodes of leakage per week* (mean, 95% CI): I: 17.3 (12.5–22.1), II: 23.1 (18.1–28.4) *% vaginal wall prolapse or cystocoele: I:* 11/33, II: 12/33 *Other*: Parity	I. PFMT, *N* = 33 II. No treatment, *N* = 33 *PFMT*: Advice about incontinence pads from practice assistant. Correct VPFMC taught by GP and confirmed by palpation. Set: 10 VPFMC (as tightly as possible), with 6 seconds' hold. Sets per day: 5–10. Duration of training: 3 months. Supervision: none *Control subjects*: Advice about incontinence pads only. Offered treatment after 3 months *Additional information:* Post-treatment evaluation for a larger sample, including USI (PFMT), urge UI (bladder training) and mixed UI (BT and PFMT) at 3 months, 12 months and 5 years, reported in separate reports	**Objective** *Severity of incontinence* (GP assessment, dry/mild/moderate/severe): I: 7/13/12/1, II: 0/1/21/11 Note: Based on GP assessment scores regarding frequency and amount of urine loss, use of protective pads or garments, and restrictions in daily activities owing to incontinence *Episodes of leakage per week* (7-day bladder chart, mean, 95% CI): I: 4.8 (2.8 to 6.8), II: 25.3 (19.9 to 30.7), $p < 0.01$ **Surrogate outcomes** *Adherence* (judged by patients, 'excellent or good'/ 'reasonable or poor'/ 'no exercise'): I: 20/9/4, II: NA **Adverse events** *N experiencing adverse events*: I: 4/33, II: 0/33 *Adverse events*: pain, uncomfortable feeling during exercise *Discontinued treatment because of adverse events*: I: 0/33, II: 0/33	**Subjective** *Subjective assessment of incontinence* ('cure' or 'improved'): I: 28/33, II: 0/33 **Quality of life** *Subjective assessment of psychological impact* ('cured' or 'improved'): I: 23/33, II: 0/33 *Subjective assessment of restrictions in activities* ('cured' or 'improved'): I: 24/33, II: 2/33 *N desiring further treatment*: 'The majority of the patients in both groups (80%) were satisfied with treatment' (p. 448) *Further analysis*: Most important factor influencing treatment outcome was compliance, and not age, parity, severity of incontinence, the duration of incontinence or the presence of cystocoele or vaginal prolapse (p. 448)

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Laycock 1988[176] (abstract only) *Study design/method*: 2-arm RCT. Single centre, England *Duration of study*: 4–8 weeks treatment and follow-up questionnaire at 3 months	*Inclusion criteria*: Women with USI. *Exclusion criteria*: None stated *N randomised*: 36 *N lost to follow-up*: I: 5/16, II: 2/20 *Type of incontinence*: USI *Age* (years, range): 44 (30–74)	I. PFMT, *N* = 11 II. ES, *N* = 18 (*N* in analysis) *PFMT*: Weekly clinic visit for 6-8 weeks and daily home exercise programme. *ES*: Interferential therapy (Endomed 433, Enraf Nonius), 10–50 Hz. Average 11 (range 7–13) half-hour sessions, 2–3 times a week for 4–6 weeks	**Objective** *Pad test* (not defined) (g, mean reduction, range): I: 36.33 (7.7–72.4), $p = 0.01$, II: 30.55 (3.0–78.0), $p = 0.01$	**Subjective** *Subjective improvement post-treatment* (much improved/some improvement/other): I: 6/2/3, II: 9/7/2 At 3 months, most patients maintained their level of improvement
Laycock 2001[152] *Study design/method*: 3-arm parallel RCT.Five sites in Australia, New Zealand, Ireland and the UK (2 sites) *Duration of study*: 3 months	*Inclusion criteria*: Women aged 20–64 years with symptoms of stress incontinence; those without clinically significant abnormalities (except incontinence) *Exclusion criteria*: Pregnant or planning pregnancy; medication for bladder symptomology or medication likely to affect the lower urinary tract; hormone replacement therapy for < 3 months; neurological conditions; moderate/severe symptoms of urge incontinence; present or previous participation in research for incontinence; moderate/severe genital prolapse; urinary tract infections *N randomised*: 101 *N lost to follow-up*: I: 4/20, II: 18/40, III: 11/41; significant difference between the centres but no significant difference between the groups *Type of incontinence*: SUI *Episodes of leakage in 24 hours* (mean): I: 1.71, II: 2.04, III: 2.00 *Baseline characteristics*: 'no significant difference between the groups in any of the variables' (no further details)	I. PFMT, *N* = 16 II. PFMT+BF, *N* = 22 III. VC, *N* = 30 (*N* in analysis) *PFMT*: Patients received written instruction of individual PFMT regimen, determined after digital vaginal assessment. Individually assessed number of fast and slow contractions lying, sitting and standing for 10 minutes each day. Treatment continued during menstruation. Six clinic visits *PFMT + BF*: BF using the PFX (Cardio Design), which is a modified Kegel Perineometer, designed for home use. Patients received written instructions on correct use of the PFX and participant's technique was checked at each clinic visit. PFMT = Individual regimen (prescribed after digital assessment) of fast and slow contraction, lying and standing, for 10 minutes per day. Increase the number over the 3-month period. Treatment discontinued during menstruation. Six clinic visits	**Objective** *Reduction in episodes of leakage in 24 hours* (mean, SD): I: 16, 1.13 (1.42), II: 22, 1.20 (1.29), III: 30, 1.00 (1.04), NS *Reduction in N of pad changes in 24 hours* (bladder diary, mean, 95% confidence bounds ±): I: 16, 1.88 (1.15), II: 22, 2.27 (1.49), III: 30, 2.9 (1.51), NS **Surrogate outcomes** *Compliance score* (estimated from exercise diary): I: 16, 81.3%, II: 22, 78.8%, III: 30, 77.0%, NS *Increase in pelvic floor muscle strength* (maximal muscle contraction, cmH_2O, mean, 95% confidence bounds ±): I: 16, 7.13 (4.99), II: 22, 11.00 (6.28), III: 30, 9.30 (4.58), NS	**Subjective** *Reduction in subjective assessment score* (10-cm visual analogue scale; 0 = no symptoms, 10 = the worst possible symptoms, mean, 95% confidence bounds ±): I: 16, 1.84 (0.68), II: 22, 2.35 (1.33), III: 30, 1.69 (0.71), NS **Quality of life** *King's Health Questionnaire* (score range 0–48, mean change ('improvement in QoL'), 95% confidence bounds ±): I: 16, 8.13 (4.44), II: 22, 6.14 (2.59), III: 30, 7.03 (2.77), NS Note: Data taken from the abstracts published in 1999. It is not clear if mean change is an increase or reduction in King's Health Questionnaire scores relative to the baseline. In the 2001 paper all three groups show an increase in King's Health Questionnaire scores from the baseline which is interpreted by author as improvement, even although a higher score in the King's Health Questionnaire indicates a greater impairment of quality of life

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
		VC: Patients received written instructions. Two Aquaflex cones (SSL-International) with unstated number of different weights. Weight added according to ability to retain cone. Treatment discontinued during menstruation. 10 minutes per day. Six clinic visits *Additional information*: This trial is reported in two abstracts published in 1999 (Laycock 1999) and a full-text paper published in 2001(Laycock 2001). Data reported in 1999 and 2001 do not match. The outcome data were extracted from the 1999 abstracts, as we judged them to be more complete than the 2001 paper in terms of reporting a greater number of outcomes as well as standard deviations		

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Laycock Trial 1 1993[132] *Study design/method*: 2-arm RCT, parallel design. Single centre, England *Duration of study*: 8 weeks (?) treatment with follow-up questionnaire at 2 years (mean 27.8 months)	*Inclusion criteria*: Women with USI *Exclusion criteria*: Previous physiotherapy for USI, pregnant, neurological dysfunction, present or previous pelvic malignancy, cardiac pacemaker *N randomised*: 46 *N lost to follow-up*: I: 0/23, II: 6/23 *Type of incontinence*: USI *Age* (years, mean, SD): I: 41.8 (29–59), II: 39.5 (28–53) *Other*: parity, no difference between groups in the number of pelvic operations, urological history, parity and obesity	I. ES, *N* = 23 II. PFMT + BF + VC, *N* = 17 (*N* in analysis) *ES*: Interferential therapy (Endomed 433, Enraf Nonius), bipolar technique (external electrodes on perineal body and inferior to symphysis pubis), 10 minutes at 1 Hz, 10 minutes at 10–40 Hz and 10 minutes at 40 Hz, maximal acceptable current intensity. Average of 10 treatment sessions (the first treatment lasted 15 minutes and subsequent treatments lasted 30 minutes). Patients agreed not to perform PFMT during study *PFMT+BF+VC*: Correct VPFMC taught individually by physiotherapist with vaginal palpation. Set: Patient specific regimes progressing to five maximum VPFMC of individualised duration every hour of the day. Duration of training: 8 weeks? Supervision: Weekly clinic visit for 2 weeks, then every 10 days for average 6 weeks. Treatment incorporating digital BF was given at each session. Cones supplied at second visit; use cones for 10 minutes, twice per day (except during menstruation) *Additional information*: Not relevant for direct head-to-head comparisons; data were therefore extracted for primary outcomes only After the treatment period, patients in both groups were instructed to practice daily PFMT as a lifelong habit	**Objective** *Cured* (< 0.5 g increase in urine loss based on standard pad test (Sutherst *et al.* 1981): I: 1/23, II: 3/17 Note: Patients with urine loss < 2 g pre-treatment are not included in the number cured (*N* = 3 for group I, *N* = 1 for group II) *Cured (as above) or improved* (> 30% decrease in urine loss based on standard pad test (Sutherst *et al.* 1981): I: 10/23, II: 10/17 **Long term** (Questionnaire at mean 27.8 months) *Response rate*: I: 15/23, II: 4/17; At least 30% of those 'improved' or 'cured' at end of treatment maintained their improvement. All subjects claimed to practice regular *PFMT*: for group I, 1 subject reported exercising daily, 6 nearly every day, and 8 once per week	**Subjective** *Cured*: I: 1/23, II: 2/16 *Cured or improved*: I: 14/23, II: 7/16

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Laycock Trial 2 1993[132] *Study design/method*: 2-arm RCT, parallel design. Single centre, England *Duration of study*: 8–12 weeks (?) with follow-up questionnaire at mean 16.2 months	*Inclusion criteria*: Identical to Laycock 1993, Trial 1 *Exclusion criteria*: Identical to Laycock 1993, Trial 1 *N randomised*: 30 *N lost to follow-up*: I: 0/15, II: 4/15 *Type of incontinence*: USI *Age* (years, mean, SD): I: 43.7 (25–62), II: 46.2 (16–66) *Other*: Parity, no difference between groups in parity, BMI and major pelvic surgery	I. ES, *N* = 15 II. Sham ES, *N* = 11 (*N* in analysis) *ES*: As in Laycock 1993, Trial 1. Patients told to expect a 'pins-and-needles' sensation under electrodes. Patients agreed not to perform PFMT during study *Sham ES*: Machine (Endomed 433) modified by supplier to appear to be working but no current. Patients told to expect no sensation under electrodes. Up to 10 treatment sessions, each lasting 30 minutes. Patients agreed not to perform PFMT during study *Additional information*: All patients allocated to group II (sham ES) received PFMT + VC immediately after the trial and assessment period	**Objective** *Cured* (< 0.5 g increase in urine loss based on standard pad test, Sutherst *et al.* 1981): I: 2/15, II: 0/11 Note: Patients with urine loss < 2 g pretreatment are not included in the number cured (*N* = 2 for group I, *N* = 2 for group II) *Cured (as above) or improved* (> 30% decrease in urine loss based on standard pad test, Sutherst *et al.* 1981): I: 11/15, II: 5/11 Note: Patients with urine loss < 2 g pretreatment are not included in the number cured or improved (*N* = 2 for group I, *N* = 2 for group II) *Episodes of leakage* (7-day frequency/volume chart): No significant change in either group ($p > 0.05$) *N of micturition per day* (7-day frequency/volume chart ; baseline to post-treatment; unclear if mean or median): I: 9.0 to 7.0, $p = 0.0039$, II: 8.9 to 7.9, $p = 0.0549$ *Standard pad test* (Sutherst *et al.* 1981 with modification, average % decrease): I: 56.8%, $p = 0.0066$, II: 21.4%, $p = 0.0429$, significant different between groups **Surrogate outcomes** *Change in pelvic floor contractility* (perineometer, mmHg, average increase): I: 5.4, $p = 0.0166$, II: 0.9, $p = 0.5000$ **Long term** (Questionnaire at mean 16.2 months) *Response rate*: I: 13/15; No questionnaire sent to group II. 20% of those self-classified as 'improved' or 'cured' at end of treatment sustained their improvement. Two subjects reported exercising (PFMT?) daily, five nearly every day, four once per week and two less than once per week	**Subjective** *Cured* (subjective assessment): I: 0/15, II: 0/11 *Cured or improved* (subjective assessment): I: 5/15, II: 3/11 *Perceived severity of incontinence* (10-cm visual analogue scale, 0 = no incontinent, 10 = the most severe incontinence imaginable): I: 21.6% decrease (1 = improvement), $p = 0.0219$, II: 10.3% decrease, $p = 0.1932$ *Perceived severity of incontinence* (10-cm visual analogue scale; cured/ improved/ no change/worse): I: 0/11/0/4, II: 0/6/1/4 Note: Any decrease from baseline classified as improvement *Subjective assessment of frequency of urine loss* (6-point scale, 0 = never, 5 = virtually daily): I: significant decrease, $p = 0.0216$), II: non-significant decrease, $p = 0.0899$ *Subjective assessment of severity of symptom* (5-point scale, 0 = no loss, 4 = sufficient to wet the floor): I: significant decrease, $p = 0.0216$, II: non-significant decrease, $p = 0.1587$

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Luber 1997[133] *Study design/method*: 2-arm RCT. Single centre, USA *Duration of study*: 3 months	*Inclusion criteria*: Women with USI, had failed an attempt or chose not to pursue PFMT, the ability to adequately retain the vaginal probe and to cooperate with the study protocol *Exclusion criteria*: Pelvic organ prolapse of grade II or greater, detrusor instability, postvoid residual urine > 100 ml, extra urethral incontinence, history of vaginal intraepithelial neoplasia, urinary tract infection, a fixed immobile urethra, intrinsic sphincteric deficiency *N randomised*: 54 *N lost to follow-up*: I: 6/26, II: 4/28 *Type of incontinence*: USI *Age* (years, mean): I: 54.1 (*N* = 20), II: 53.6 (*N* = 24), $p > 0.05$ *Episodes of leakage in 24 hours* (?median, range): I: 20, 2.8 (1–9), II: 24, 2.7 (1–12), NS *Other*: Ethnicity, % prior incontinence surgery, Parity, % postmenopausal, prior *PFMT*: I: 18/20, II: 16/24	I. ES, *N* = 20 II. Sham ES, *N* = 24 (*N* in analysis) *ES*: 15 minutes twice a day for 12 weeks. Home device (Hollister, Evanson), pulse width 2 milliseconds, a work schedule of 2 milliseconds, followed by a 4-second rest, frequency 50 Hz, and an adjustable power setting ranging from 10 to 100 mA. Compliance measured by an internal memory system of the stimulator. All patients were informed that they may or may not appreciate sensation during stimulation sessions. Contacted every 2 weeks by physical therapy and nursing personnel *Sham ES*: Same parameter but no sensation. Patients issued vaginal probes in which the wiring from the unit to the probe was covertly discontinuous. All patients were informed that they may or may not appreciate sensation during stimulation sessions. Contacted every 2 weeks by physical therapy and nursing personnel *Additional information*: Statistically underpowered: 'The study was discontinued after interim analysis revealed that after enrolment of 54 patients, no difference was observed in the outcomes between the two groups' (Luber 1997[133]: 546) Placebo effect: 'It could be that the benefit ... is the result of the probe acting much like a vaginal cone' (Luber 1997: 548)	**Objective** *Cure* (stress test negative): I: 3/20, II: 3/24, $p = 1.000$ *Episodes of leakage in 24 hours* (24-hour voiding diaries, ?median, range): I: 20, 2.4 (0–9), II: 24, 2.4 (0–11), NS pre-post or between groups Note: Table heading in reverse order in table 3 for no obvious reason, i.e. control on the left and treatment on the right, whereas in other tables control is on the right **Surrogate outcomes** *Adherence*: Average 82% (no details given) **Adverse events** *N experiencing adverse events*: No complications related to device use, i.e. no vaginal bleeding, vaginal erosions, urinary tract infections, worsening of urinary incontinence, electrical accidents, or discomfort that persisted after device removal *Discontinued treatment because of adverse events*: Discomfort: I: 3/26, II: 2/28; discouragement I: 2/26, 2/28	**Subjective** *Cure* (questionnaire scale 5, resolution of symptom): I: 2/20, II: 4/24, $p = 1.000$ *Improvement* (questionnaire scale 3–4, moderate improvement): I: 3/20, II: 3/24, $p = 0.785$ *Convenience of device use* (questionnaire scale 0–5, with 5 representing the most desirable outcome, ?median, range): I: 3.4 (1–5), II: 3.2 (1–5) *Comfort of device use* (questionnaire scale 0–5, with 5 representing the most desirable outcome, ?median, range): I: 3.9 (1–5), II: 4.1 (1–5) *Subgroup analysis*: 'Those who responded to treatment (cure/improved) were found to be similar to non-respondents with regard to age, parity, prior hysterectomy, prior anti-incontinence surgery, prior PFMT and menopausal status'

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Mah 2006[141] *Study design/method*: 2-arm RCT. Multicentred, seven centres in Korea *Duration of study*: 8 weeks (+2-week no-SNRI screening period before, and a 2-week no-SNRI period after)	*Inclusion criteria*: Non-pregnant women aged ≥20 years, with predominant symptoms of SUI of ≥3 months' duration, with one incontinent episode per day, a daytime voiding frequency of ≤8 voids, nocturnal frequency of ≤2 voids daily, and no predominant urge symptoms. Positive cough stress test with visual urine leakage *Exclusion criteria*: Those taking concomitant medications (including continence promoting SNRIs, antidepressants, SNRIs for obesity, including appetite suppressants and diet pills – and illicit SNRIs). Those unable to tolerate bladder filling at 100 ml/minute to 400 ml. Those experiencing first sensation of bladder filling at < 100 ml, or no sensation at all throughout filling *N randomised*: 121 *N lost to follow-up*: I: 14/60, II: 24/61 *Type of incontinence*: Predominant symptoms of SUI (MUI) *Age* (years, mean, SD): I: 48.52 ± 8.05, II: 50.67 ± 9.01 *Other*: BMI, % prior incontinence surgery	I. Placebo, *N* = 60 II. Duloxetine 80 mg (40 mg twice daily), *N* = 61 (*N* randomised) *Additional information*: The study recruited 'type 3' population; data were therefore extracted for primary outcomes only Dichotomous data were calculated from percentage given in paper Denominators were assumed to be *N* of women with baseline and at least one postrandomisation measurement: I = 53 and II = 45 for diary data (table 2) and I = 57 and II = 56 for subjective data (table 3a)	**Objective** *Cure or improvement* (IEF responders with ≥50% reduction in IEF/week based on weekly diary): I: 19/53, II: 23/45, $p = 0.128$ **Adverse events** *N experiencing adverse events*: I: 19/60, II: 50/61, $p < 0.001$ *Adverse events* (that occurred in 5% of the women randomised to the duloxetine group or they occurred significantly more often with duloxetine than with placebo): Nausea ($p < 0.001$), dizziness ($p < 0.001$), anorexia ($p < 0.001$), fatigue ($p < 0.001$), lethargy ($p = 0.003$), abdominal discomfort ($p = 0.032$), somnolence (NS at 0.05 level), constipation ($p = 0.027$), headache ($p = 0.999$), dry mouth ($p = 0.439$) *Discontinued treatment because of adverse events*: I: 5/60, II: 21/61 $p = 0.001$	**Subjective** *Improvement* ('very much better', 'much better' or 'a little better' on Patient Global Impression of Improvement, or PGI-I): I: 33/57, II: 35/56 **Quality of life** *Mean I-QoL score*: I: 57, before 51.52, after 60.23, II: 56, before 48.64, after 63.41 Note: Data based on participants with diary data available *Mean change in I-QoL score*: I: 57, 8.71, II: 56, 14.77, $p = 0.066$

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Manning 2005[142] (abstract only) *Study design/method*: 2-arm RCT, Germany *Duration of study*: 6 weeks	*Inclusion criteria*: Women aged between 28 and 86 years with predominant SUI. SUI was diagnosed by either urodynamic studies within the previous 12 months, or using a simple question from a short 2-question instrument (the S/UIQ). ≥7 episodes of urinary incontinence per week, with at least twice as many being SUI episodes as UUI by S/UIQ *Exclusion criteria*: Not specified *N randomised*: 617 *N lost to follow-up*: Unclear *Type of incontinence*: Predominant symptoms of SUI (MUI)	I. Duloxetine (unspecified dose), *N* = 306 II. Placebo, *N* = 311 (*N* randomised) *Additional information*: The study recruited 'type 3' population; data were therefore extracted for primary outcomes only Data reported as % and *N* of observations not reported Denominator assumed to be the same as *N* randomised	**Adverse events** *Adverse events*: Nausea was the most common adverse event and the most common symptom leading to discontinuation of duloxetine in 7.5% (23/306) of all participants *Discontinued treatment because of adverse events*: I: 53/306 (17.3%), II: 9/311 (2.9%), $p < 0.001$	**Subjective** *Patient Global Impression – Improvement (PGI-I)* (from graph): all 'better' responses, I: 196/306, II: 137/311, 'no change', I: 98/306, II: 159/311, all 'worse' responses, I: 12/306, II: 15/311 When compared with placebo, duloxetine showed significant improvements in quality of life using PGI-I instrument ($p < 0.001$) **Quality of life** *Mean change in King's Health Questionnaire score*: I: 306, –9.2, II: 311, –2.6, $p < 0.0001$ Note: Scores for each subscale available in table 2
Mayne 1988[168] (abstract only) *Study design/method*: 2-arm RCT, UK *Duration of study*: 4 months	*Inclusion criteria*: Women with USI *Exclusion criteria*: Not specified *N randomised*: 34 *N lost to follow-up*: 7 *Type of incontinence*: USI *Age* (years, mean): I: 45 (*N* = 13), II: 56 (*N* = 14)	I. PFMT with perineometer, *N* = 13 II. PFMT with urethral electrical conductance, *N* = 14 (*N* in analysis) *PFMT with perineometer*: Participants instructed on how to exercise their pelvic floor muscles and were seen weekly at the clinic for 1 month, then monthly for a further 3 months to check exercises are being performed correctly. At each clinic visit patients' progress was monitored using perineometry and the results conveyed visually *PFMT with urethral electrical conductance*: PFMT and supervision as above. At each clinic visit, patients' progress was monitored using a urethral electrical conductance test (Plevnik *et al.* 1985) and the results conveyed visually	**Objective** *Cured* (short exercise perineal pad test; vs improved, no change, worse): I: 2/13, II: 2/14 *Cured or improved* (short exercise perineal pad test; vs no change or worse): I: 7/13, II: 7/14	

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Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Millard 2004[143] *Study design/method*: 2-arm RCT. Multicentre; 38 centres in Poland (31%), South Africa (25%), Australia (17%), Brazil (9%), Argentina (5%), Finland (3%) and Spain (?%) *Duration of study*: 12 weeks, plus prerandomisation 2-week screening process, 2-week no-SNRI lead-in and 2-week placebo lead-in	*Inclusion criteria*: Women aged ≥ 18 years with predominant SUI symptoms of ≥ 3 months duration, ≥ 7 incontinence episodes/week, diurnal frequency of < 9 per day, nocturnal frequency of < 3 per night. Positive cough stress and positive stress pad test (with > 2-g leakage) *Exclusion criteria*: Predominant symptoms of urge incontinence, unable to tolerate filling bladder to 400 ml or experienced first sensation of bladder filling at < 100 ml, or no sensation at any time during bladder filling *N randomised*: 458 *Lost to follow-up*: I: 57/227 (25%), II: 18/231 (8%) *Type of incontinence*: Predominant symptoms of SUI (MUI) *Age* (years, mean, range): I: 53.7 (29–79), II: 52.6 (27–77) *Episodes of leakage per week* (mean, SD): I: 18.5 ± 15.1, II: 18.3 ± 15.5 *PGI-S* (bladder function classed as 'moderate' or 'severely' abnormal): 165/227 (72.7%), II: 169/231 (73.1%) *I-QoL score* (mean, SD): I: 58.9 ± 23.5, II: 58.3 ± 22.8 *Other*: BMI, ethnicity (% Caucasian), % prior incontinence surgery, % currently using PFMT	I. Duloxetine 80 mg taken as 40 mg b.i.d. (twice daily), *N* = 227 II. Placebo, *N* = 231 (*N* randomised) *Additional information*: The study recruited 'type 3' population; data were therefore extracted for primary outcomes only Dichotomous data calculated from percentage in paper, using the *N* of women included in the 'ITT' analysis with at least one postrandomisation measure; 88% (200/227) in the duloxetine and 99% (229/231) in the placebo group completed at least one diary after randomisation, while 97% (220/227) in the duloxetine and 99% (229/231) in the placebo group completed at least one I-QoL questionnaire Diary data collected in daily diaries collected for 1 week prior to each visit (and 2 prior to randomisation – one of which was completed during the no-SNRI lead-in and the other during the placebo lead-in) High placebo response rate in this study was deemed attributable by the authors to the differences (depending on country) of previous experience/knowledge of SUI prevention methods (e.g. PFMT)	**Objective** *Cure* (no incontinent episodes at last visit; 7-day diary): I: 14/200 (7.1%), II: 14/229 (6.1%), NS *Cure or improvement* (50–100% reduction in incontinence episodes; 7-day diary): I: 119/200 (59.5%), II: 99/229 (43.2%), $p < 0.001$ **Surrogate outcomes** *Adherence* (average % of treatment doses ingested): I: 86%, II: 94%, $p < 0.001$ **Adverse events** *N experiencing adverse events*: I: 173/227 (76.2%), II: 137/231 (59.3%), $p < 0.001$ *Adverse events* (significantly more common with and occurring in ≥ 5% of subjects with duloxetine): *Nausea*, headache, *insomnia*, constipation, dry mouth, *dizziness*, fatigue, somnolence, anorexia, vomiting, increased sweating, *anxiety* Note: Adverse events written in italics caused discontinuation among > 1% of participants on duloxetine *Discontinued treatment because of adverse events*: I: 39/227 (17.2%), II: 4/231 (1.7%), $p < 0.001$	**Subjective** *PGI-I* ('very much better', 'much better' or 'a little better'): I: 162/220 (73.6%), II: 147/229 (64.2%) **Quality of life** *I-QoL score* (mean, SD): I: 220, 69.2 (23.8), II: 229, 64.7 (24.9) *Change in I-QoL score* (mean, SD): I: 220, 10.3 (16.0), II: 229, 6.4 (17.0), $p = 0.007$ *Subgroup analysis*: Change in IEF for those with severe incontinence (> 14 IEF/week at baseline)

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Miller 1998[107] *Study design/method*: 2-arm RCT, parallel design. Single centre, USA *Duration of study*: 1 week	*Inclusion criteria*: Community-dwelling women aged 60 years and older with self-reported symptoms of (mild-to-moderate) SUI and with leakage occurring at least weekly and up to five times per day, direct visualisation of urine loss on cough with 100 ml or more voided after stress test *Exclusion criteria*: Systemic neuromuscular disease, previous bladder surgery, active urinary tract infection, delayed leakage after cough (assumed DI) (*N* = 2), more than moderate leakage (that saturated a paper towel and/or pooled on the floor) when coughing in the standing posture (*N* = 2), inability to demonstrate any VPFMC despite detailed instruction during the pelvic examination (*N* = 3), prolapse below hymenal ring (*N* = 2) *N randomised*: 27 *N lost to follow-up*: None *Type of incontinence*: SUI *Age* (years, mean, SD): 68.4 (5.5) (60–84), no significant difference between groups *Episodes of leakage in 24 hours* (mean, SD): 1.4 (1.4) (0–5), no significant difference between groups *% vaginal wall prolapse*: none *Other*: % prior incontinence surgery – none, parity 84% parous, no significant difference between groups	I. PFMT, *N* = 13 II. No treatment, *N* = 14 *PFMT* ('The Knack'): Education on basic physiology and function of pelvic floor muscles. Correct VPFMC taught by digital palpation. At the first clinic visit taught 'The Knack', i.e. a single, intentionally timed VPFMC (rather than repetitive exercise) prior to hard cough maintained throughout cough until abdominal wall relaxed. Duration of training: practice at home for 1 week *Additional information*: Individual data (paper towel test, digital palpation score, voided volume) reported in table 2, though group not specified; within-subjects comparisons reported Control subjects cross over to treatment group at 1 month	**Objective** *Paper towel test, mild cough* (wet area, cm^2, mean, SD): I (with 'The Knack'): 13, 0.4 (1.04), II (without 'The Knack'): 10, 21.2 (44.8) *Paper towel test, deep cough* (wet area, cm^2, mean, SD): I (with 'The Knack'): 13, 5.4 (15.3), II (without 'The Knack'): 10, 26.8 (46.7) *Paper towel test, mild cough* (wet area, cm^2, mean, SD): I (without 'The Knack'): 13, 23.0 (44.6) *Paper towel test, deep cough* (wet area, cm^2, mean, SD): I (without 'The Knack'): 13, 32.7 (33.9) Note: wet area 1 cm^2 is equivalent to 0.039 ml	

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Mørkved 2002[153] *Study design/method*: 2-arm RCT, Norway *Duration of study*: 6 months	*Inclusion criteria*: Women with symptoms of SUI and >2 g of leakage as measured by pad test with standardised bladder volume, ability to understand Norwegian instructions *Exclusion criteria*: Involuntary detrusor contractions on cystometry, abnormal bladder function (residual urine >50 ml), previous surgery for stress incontinence, neurological or psychiatric disease, urinary tract infection or other diseases that might affect participation, pregnancy, use of concomitant treatments during the trial period *N randomised*: 103 *N lost to follow-up*: I: 5/53, II: 4/50 *Type of incontinence*: I: USI 36 (75%), MUI 12 (25%), II: USI 34 (74%), MUI 12 (26%) *Age* (years, mean, SD): I: 48, 47.8 ± 8.2, II: 46, 45.4 ± 8.1 *Stress pad test*: All women (g, mean, SD), I: *48*, 25.7 ± 24.2, II: 46, 29.0 ± 34.5; women with USI only (g, mean, 95% CI), I: 36, 25.9 (17.1 to 34.8), II: *34*, 27.6 (15.0 to 40.2) *48-hour pad test*: All women (g, mean, SD), I: 48, 39.8 ± 36.6, II: 46, 44.6 ± 33.9; women with USI only (g, mean, 95% CI), I: 36, 41.2 (28.2 to 54.1), II: 34, 46.3 (33.6 to 59.0) *Leakage index*: All women (mean, SD), I: 2.8 ± 0.7, II: *46*, 2.8 ± 0.5; women with USI only (mean, 95% CI), I: 36, 2.7 (2.5 to 3.0), II: 34, 2.7 (2.5 to 2.8) *Social Activity Index*: All women (mean, SD), I: 48, 9.1 ± 0.9, II: 46, 9.2 ± 0.6; women with USI only (mean, 95% CI), I: 9.2 (8.9 to 9.5), II: 9.3 (9.1 to 9.5)	I. PFMT + BF, *N* = 48 II. PFMT, *N* = 46 (*N* in analysis) *PFMT + BF*: Individual training sessions with physical therapist once per week during the first 2 months and every second week during the next 4 months. Instructed in pelvic floor anatomy. Correct VPFMC taught by physical therapist using vaginal palpation. At each clinic visit three sets of 10 VPFMC with 6–8 seconds hold, following each contraction with 3–4 fast contractions. Also encouraged to perform three sets of 10 high-intensity (close to maximum) VPFMC per day at home. BF = a home training device (BF-106, Vitacon, Norway) with a vaginal pressure probe, used in training both at home and at clinic with physiotherapist. The contractions were measured and stored in the apparatus *PFMT*: As above, without biofeedback *Additional information*: Participants were followed up for 1–5 years but data were presented as cohort and not by group allocation	**Objective** *Cure* (<2-g leakage) on stress pad test with standardised bladder volume at 6 months (defined by author as objective cure): All women, I: 28/48, II: 21/46; women with USI only, I: 25/36, II: 17/34 *Cure on 48-hour pad test* (<2-g leakage) at 6 months: All women, I: 31/48, 26/46; women with USI only, I: 24/36, II: 22/34 *Stress pad test with standardised bladder volume at 6 months* (g, mean, 95% CI): All women, I: 6.1 (3.1 to 9.1), II: 10.6 (4.7 to 16.4); women with USI only, I: 5.5 (2.1 to 9.0), II: 9.9 (2.8 to 17.0) *Mean change in leakage on stress pad test with standardised bladder volume at 6 months* (g, mean, 95% CI): All women, I: 19.6 (14.4 to 24.8), II: 18.5 (12.2 to 24.7); women with USI only, I: 20.4 (13.9 to 26.9), II: 17.7 (10.1 to 25.3) *48-hour pad test at 6 months* (g, mean, 95% CI): All women, I: 6.5 (2.4-10.6), II: 6.0 (3.3 to 8.8); women with USI only, I: 7.0 (1.7 to 12.4), II: 3.8 (1.4 to 6.2) *Mean change in leakage 48-hour pad test at 6 months* (g, mean, 95% CI): All women, I: 34.1 (25.5 to 42.8), II: 38.6 (29.1 to 48.0); women with USI only, I: 33.0 (22.5 to 43.5), II: 42.5 (30.3 to 54.7) **Surrogate outcomes** *Adherence at 6 months*: I: 88.9% (43/48), II: 85.3% (39/46) were 'training their pelvic floor muscles more than three times per week' *Pelvic floor muscle strength at 6 months* (cmH_2O, mean, 95% CI): All women, I: 25.9 (21.8 to 29.9), II: 25.4 (21.2 to 29.6); women with USI only, I: 26.6 (21.6 to 31.6), II: 25.9 (20.5 to 30.9)	**Subjective** *Subjective assessment of severity*: All women, 'Unproblematic' (defined by author as subjective cure), I: 19/48, II: 14/46, 'minor problem' I: 17/48, II: 18/46, 'moderate problem' I: 8/48, II: 5/46, 'problematic' I: 3/48, II: 6/46, 'very problematic' I: 1/48, II: 3/46 *Women with USI only*: 'Unproblematic' (defined by author as subjective cure) I: 16/36, II: 10/34, 'minor problem' I: 12/36, II: 17/34, 'moderate problem' I: 5/36, II: 4/34, 'problematic' I: 2/36, II: 2/34, 'very problematic' I: 1/36, II: 1/34 **Quality of life** *Social Activity Index at 6 months* (mean score, 95% CI): All women, I: 9.5 (9.3 to 9.7), II: 9.4 (9.2 to 9.7); women with USI only, I: 9.6 (9.4 to 9.8), II: 9.5 (9.3 to 9.8) Note: Social Activity Index = 10-cm visual analogue scale on 9 social settings in which women may have problems with participation; 0 = impossible to participate, 10 = no problem to participate *Mean change in Social Activity Index at 6 months* (mean, 95% CI): All women, I: 0.4 (–0.1 to 0.6), II: 0.3 (0.0 to 0.5); women with USI only, I: 0.4 (0.1 to 0.6), II: 0.4 (0.2 to 0.7) *Leakage Index at 6 months* (mean score, 95% CI): All women, I: 1.9 (1.7 to 2.1), II: 1.9 (1.7 to 2.1); women with USI only, I: 1.8 (1.6 to 2.0), II: 1.8 (1.6 to 2.0) Note: Leakage Index = 5-point scale, 1 = never, 5 = always), containing 13 types of physical activities known to trigger urinary leakage *Change in Leakage Index at 6 months* (mean, 95% CI): All women, I: 0.9 (0.7 to 1.0), II: 0.9 (0.7 to 1.1); women with USI only, I: 1.0 (0.7 to 1.2), II: 0.9 (0.6 to 1.1)

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	PFM strength: All women (cmH_2O, mean, SD), I: 48, 13.6 ± 9.8, II: *46*, 14.4 ± 7.8; women with USI only (cmH_2O, mean, 95% CI), I: 36, 14.0 (10.3–17.6), II: 34, 14.5 (11.7–17.2) *Other*: BMI, Parity, *N* (%) postmenopausal, *N* (%) using estrogen		**Long term** *N wanting surgery at end of 6-month treatment period*: I: 2/48, II: 3/46 **Adverse events** *N experiencing adverse events*: I: 7/48 found use of apparatus 'unpleasant', II: 3/46 found PFMT itself 'unpleasant'. 'However, they all followed the training protocol in spite of this' *Discontinued treatment because of adverse events during 6 months*: I: 1/53 (because she 'disliked the equipment'), II: 0/50; in addition there were 4 dropouts in each group not due to adverse events but to changes in work situation, family causes, death or disease in the family or moving to other parts of the country	*Satisfaction with treatment at 6 months*: Would recommend treatment to others, I: 100% (48/48), II: 100% (46/46), % satisfied/very satisfied with the treatment, I: 80% (38/48), II: 71% (33/46); reported improvement with the treatment, I: 97% (47/48), II: 93% (43/46); reported condition unchanged, I: 3% (1/48), II: 7% (3/46), unsatisfied with treatment, I: 0% (0/48), II: 0% (0/46)
Norton 2002[144] *Study design/method*: RCT (double-blind, placebo controlled). Multicentre (48 sites), USA *Duration of study*: 12 weeks (plus 2 weeks no-SNRI lead-in and 2-week placebo lead-in)	*Inclusion criteria*: Female outpatients aged between 18 and 65 years with clinical diagnosis of predominant SUI for ≥ 3 months, with ≥ 4 incontinent episodes/week, micturition frequency of ≤7 (day) and ≤ 2 (night), positive cough stress test and stress pad test *Exclusion criteria*: Predominant urge symptoms, previous continence/prolapse surgery, unable to tolerate bladder infusion filling at 100 ml/minute, those with first sensation of bladder filling at < 100 ml or those with no sensation at any time during the filling *N randomised*: 553 *N lost to follow-up*: Unclear *Type of incontinence*: I: SUI 87/138 (63%), MUI 51/138 (37%), II: SUI 90/137 (66%), MUI 47/137 (34%), III: SUI 104/140 (74%), MUI 36/140 (26%), IV: SUI 101/138 (73%), MUI 37/138 (27%)	I. Duloxetine 20 mg/day, *N* = 138 (132) II. Duloxetine 40 mg/day (taken as 20 mg b.i.d.), *N* = 137 (129) III. Duloxetine 80 mg/day (taken as 40 mg b.i.d.), *N* = 140 (130) IV. Placebo, *N* = 138 (132) (*N* randomised; and *N* in 'ITT' analysis in brackets with women with at least one postrandomisation measure) *Additional information*: Diary data collected daily for 1 week, in the week prior to each clinic visit	**Objective** *Cure rates*: Based on *N* of incontinent episodes in 24 hours at last diary: I: 21/128, II: 30/123, III: 23/123, IV: 20/132; *Based on negative cough stress test at 400 ml*: I: 11/112, II: 25/112, III: 18/114, IV: 15/118 *Negative stress pad test* (2 g at 1 hour): I: 36/110, II: 48/111, III: 44/113, IV: 42/114 *Reduction in episodes of leakage in 24 hours* (median % reduction at last visit): I: 132, 44%, II: 129, 59%, III: 130, 58%, IV: 132, 40% *Reduction in number of voids in 24 hours*: I: 132, 0.8, II: 129, 1.0, III: 130, 0.8, IV: 132, 0.5 *Median % change in 1-hour stress pad test*: I: 132, –11% (–100 to 3240%), II: 129, –43% (–100 to 5800%), III: 130, –29% (–100 to –12333%), IV: 132, –30% (–100 to 2175%)	**Subjective** *PGI-I (N rating incontinence as 'very much better'/'much better')*: I: 41/132, II: 48/129, III: 57/130, IV: 36/132 **Quality of life** *Mean change in I-QoL score*: I: 132, 5.3, II: 129, 7.8, III: 130, 9.3, IV: 132, 5.8 ***Subgroup analysis*** I-QoL and IEF results for women with more severe SUI (baseline IEF of ≥ 14)

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	Age (years, mean, SD): I: 49.4 ± 7.3, II: 49.4 ± 8.0, III: 49.3 ± 8.8, IV: 50.2 ± 8.9. *Episodes of leakage in 24 hours* (mean, SD): I: 1.6 ± 1.3, II: 1.7 ± 1.6, III: 1.9 ± 1.6, IV: 1.6 ± 1.1 *N of micturition in 24 hours* (mean, SD): I: 9.2 (2.6), II: 10.0 (2.6), III: 9.8 (2.5), IV: 9.4 (2.5) *Other*: BMI, ethnicity (% white), height (cm), weight (kg)		**Surrogate outcomes** *Adherence* (ingested ≥ 80% of medication and did not miss > 4 consecutive doses): I–III: 324/415 (78%), IV: 115/138 (83%); figures calculated from % given in paper **Adverse events** *N experiencing at least one adverse event*: I: 86/138 (62%), II: 93/137 (68%), III: 102/140 (73%), IV: 84/138 (61%); figures calculated from % given in paper *Adverse events* (that occurred in 5% of subjects in any treatment arm): Nausea, headache, diarrhoea, constipation, dry mouth, dizziness, insomnia, sinusitis, fatigue, nasopharyngitis Also menorrhagia and somnolence listed among adverse events causing discontinuation of treatment 'Five subjects had adverse events that required hospitalisation (one event before randomisation, one event while ingesting duloxetine 20 mg per day, two events while ingesting duloxetine 40 mg per day, and one event while ingesting duloxetine 80 mg per day); only one of these events (rash) was felt to be related to the study SNRI' (p. 44) *Discontinued treatment because of adverse events*: I: 13/138 (9%), II: 17/137 (12%), III: 21/140 (15%), IV: 7/138 (5%)	

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Nygaard 1996[163] *Study design/method*: 2-arm RCT. Multicentred, two sites, USA *Duration of study*: 12 weeks' treatment. Follow-up at 9 months after beginning treatment	*Inclusion criteria*: Non-pregnant women >21 years old who were seen for treatment of incontinence in two tertiary gynaecological and urological incontinence clinics over a 1-year period *Exclusion criteria*: Genital prolapse past the vaginal introitus, parturition within the preceding 6 months, and deafness *N randomised*: 71 *N lost to follow-up*: 16/71 (6 USI, 3 DO, 7 MUI). All dropouts stated that they were unimproved at the time they discontinued the study *Type of incontinence* (USI/DO/MUI): 37/17/17 *Age* (years, mean, SD, range): 53 (13) (25–81) *Cystorethrocoele*: 53/71 *Rectocoele*: 27/71 *Enterocoelic–uterine prolapse*: 11/71 *Other*: Weight, education, % prior incontinence surgery, parity	I. PFMT, no tape II. PFMT with audiotape (number not reported) *PFMT*: Visual aids to teach the location of the levator ani muscles and the pelvic anatomy. Correct VPFMC taught using vaginal palpation. PFMT for 5 minutes, twice a day at home, with VPFMC held to count of 4, progressing to count of 8. Participants were told that improvement was not anticipated for 6–8 weeks. Three clinic visits and three telephone calls over 3 months *PFMT with audiotape*: PFMT and education as above with the addition of audiotape. Tape contained 270 minutes of music and verbal instructions to guide women through 3 months of PFMT *Additional information*: Published data presented by diagnosis, not group allocation. Withdrawals included in data analysis using baseline values In all three diagnostic groups (USI, DO, MUI) the number of incontinent episodes per day decreased significantly, and muscle strength increased significantly	**Objective** *Improvement or cure by 3-day diary at 3 months* (based on the *N* of incontinence episodes): All women, 50–74% improvement 31/71, 75–99% improvement 20/71, 100% improvement (cure) 9/71. Data by group allocation not reported *Improvement or cure by 1-hour pad test at 3 months* (based on pad weight, g): 50–74% improvement 22/71, 75–99% improvement 18/71, 100% improvement (cure) 0/71. Data by group allocation not reported *Episodes of leakage in 24 hours at 3 months* (3-day diary, mean, SD): Women with USI only, *N* = 37, Before 2.6 (1.8), after 1.7 (1.6). No between-group difference post treatment *N of pad changes per day* (day time) at 3 months (means, SD): Before 1.8 (1.4), after 1.5 (1.4), USI patients only, *N* = 37. *N of micturition per day* (daytime) at 3 months (means, SD): Before 6.8 (3.0), after 5.9 (2.7), USI patients only, *N* = 37 *1-hour pad test at 3 months* (g, mean, SD): Before 16.8 (37.9), after 8.6 (13.9), USI patients only, *N* = 37 No between-group difference post treatment **Surrogate outcomes** *Pelvic floor muscle strength at 3 months* (digital method described by Sampselle *et al.* 1989): Before 4.2 (1.6), after 5.5 (1.8), USI patients only, *N* = 37. No between-group difference post treatment *N having incontinence surgery at 9 months*: 10/37, USI patients only	**Quality of life** *Leakage index score at 3 months* (stress score, mean, SD): Before 2.1 (0.6), after 1.8 (0.7). USI patients only, *N* = 37. No difference between groups post treatment. Note: Leakage Index modified from that described by Bø (1994). 5-point scale (0 = never, 4 = always) listing 11 activities known to trigger stress incontinence and nine activities that may trigger urge incontinence *Satisfied with PFMT at 9 months*: 12 of the 37 USI participants described their improvement as good and did not want any further therapy of any sort for incontinence

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Oláh 1990[187] *Study design/method*: 2-arm parallel design, UK *Duration of study*: 4 weeks treatment plus 6 months follow-up	*Inclusion criteria*: Women with symptoms of incontinence (predominantly stress incontinence) referred to an outpatient department of physiotherapy *Exclusion criteria*: Patients who had treatment with PFMT in the last 6 months *N randomised*: 69 *N lost to follow-up*: I: 6/36 (17%) by the end treatment, further two after 6 months, II: 9/33 (27%) by the end of treatment, further five after 6 months *Type of incontinence*: Predominant symptoms of SUI (MUI) *Age* (years, mean, SD): I: 30, 47.9 (13.0), II: 24, 43.2 (8.9) *Severity of symptoms* (urine lost <2 ml/2–10 ml/ 10–50 ml/>50 ml; unclear if pad test or continence chart): I: 9/3/11/7, II: 9/5/4/6 *Standard 1-hour pad test* (ICS 1987) (gram, mean, SD): I: 30, 32.2 (49.1), II: 24, 27.7 (38.8) *Weekly leakage* (continence chart, g, mean, SD): I: 30, 19.3 (22.6), II: 24, 22.0 (31.4) *Pelvic floor muscle strength* (active cone weight, g, mean, SD): I: 30, 40.7 (22.9), II: 24, 47.1 (20.7) Note: Active cone weight = the weight of the heaviest cone that the patient could voluntarily retain *Pelvic floor muscle strength* (passive cone weight, g, mean, SD): I: 30, 30.7 (22.1), II: 24, 37.5 (22.3) Note: Passive cone weight = the weight of the heaviest cone that could be retained in the vagina for 1 minute while ambulatory without voluntary holding	I. ES (+PFMT), *N* = 30 II. VC (+PFMT), *N* = 24 (*N* in analysis) *ES*: Interferential therapy at a clinic three times per week for 4 weeks. Patient semirecumbent position with four vacuum electrodes, two on the abdomen and two on the inside of the thighs. Frequency 0- to 100-Hz sweeps, maximum tolerable intensity and each treatment was for 15 minutes. All participants were taught PFMT, with no further details about this *VC*: Clinic visit once per week for 4 weeks for supervision. Hold the heaviest cones possible for 15 minutes two times per day. Progress to the next heaviest cone when successful on two consecutive occasions. Femina cones. Nine conical weights, 20–100 g. All participants were taught PFMT, with no further details about this *Additional information*: The study recruited 'type 3' population; data were therefore extracted for primary outcomes only 4/36 in the ES arm and 5/33 in the VC arm excluded from the trial because of a failure to tolerate the cone (see Adverse events)	**Objective** *Cure (no leakage on continence chart) after treatment*: I: 10/30, II: 10/24 Note: Chart starting a week before treatment and continuing throughout the course of therapy *Cure (no leakage on continence chart) after 6 months*: I: 12/30, II: 12/24 *Improvement in weekly urinary leakage after treatment* (continence chart; including cure): I: 18/30, II: 20/24 Note: Unclear if reduction in frequency or amount of urinary leakage *Improvement in weekly urinary leakage after 6 months* (continence chart; including cure): I: 18/30, II: 20/24 Note: Unclear if reduction in frequency or amount of urinary leakage *Improvement on standard 1-hour pad test after treatment*: I: 23/30, II: 12/24 *Improvement on standard 1-hour pad test after 6 months*: I: 22/30, II: 14/24 **Adverse events** *N experiencing adverse events*: NR (other than below) *Discontinued treatment because of failure to tolerate cones at start of trial*: I: 4/36, II: 5/33 (3/36 in group I and 4/33 group II had vagina too narrow and the cone 'wedged'; 1/33 in group II had irregular bleeding preventing cone use; 1/36 in group I had discomfort during cone use because of excessive scar tissue in vagina)	**Subjective** *Cured after treatment*: I: 4/30, II: 4/24 *Cured after 6 months*: I: 12/30, II: 10/24 *Improved after treatment* (not including cure): I: 23/30, II: 15/24 *Improved after 6 months* (not including cure): I: 15/30, II: 7/24 *Other*: Time spent by physiotherapist with each patient (mean , SD, range): ES = 184.9 (13.4) (177–230) minutes, VS = 36.3 (12.3) (20–60) minutes

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
	Other: Weight (kg), % over ideal weight by 20%, % prior incontinence surgery, parity		*Adverse events during follow-up period* (after end of treatment): I: 0/36, II: 2/33 (one developed a psychiatric disorder and considered unfit for assessment, 1 died of an unrelated cause) Note: Cones were used to assess pelvic floor muscle strength in *both* groups	
Pages 2001[154] *Study design/method*: 2-arm RCT. Single centre, Germany *Duration of study*: Approximately 3 months, including 4 weeks supervised training plus unsupervised home programme for 2 months	*Inclusion criteria*: Women with mild to moderate SUI *Exclusion criteria*: Co-existing medical illnesses, especially neurological problems, taking medications that would influence normal bladder control and functioning *N randomised*: 51 *N lost to follow-up*: I: 0/27, II: 11/24 (excluded 'after randomisation because they had evidence of cystitis, genital prolapse, or gynaecological haemorrhage on physical examination or they decided to withdraw after randomisation. BF is contraindicated in these conditions'.); no further dropouts *Type of incontinence*: SUI *Age* (years, average, range): 51.1 (27–80) *BMI* (% >25): 23.5%	I. PFMT, *N* = 27 II. PFMT + BF, *N* = 13 (*N* in analysis) *PFMT with group sessions*: One 90-minute introductory session for education on anatomy and incontinence. This was followed by group therapy with physical therapist (60 minutes each), five times a week, with 10 patients per group, over 4 weeks, totalling 20 sessions. Before each therapy session, each participant was instructed in finding a position that allows contraction of pelvic floor muscles without contracting adjacent muscles. Then, the patients performed PFMT in various positions and under various daily situations, such as stair climbing, singing, hiking and power walking. Home PFMT = 100 VPRMC per day during typical daily situations and specific PFMT in a supine position for 10 minutes twice a day. Additional exercises for the trunk, buttocks, abdominal muscles and respiratory exercise were taught. For aerobic conditioning and assistance in weight reduction, patients went twice a week to a warm water pool for 30 minutes.	**Objective** *N of micturitions in 24 hours after 4 weeks of supervised treatment* (diary throughout study period, mean, SD, range): I: 5.2 ± 1.3 (3.0–8.0), II: 5.5 ± 1.0 (4.0–7.0) *N of micturitions in 24 hours at 3 months* (diary throughout study period, mean, SD, range): I: 5.4 ± 1.4 (3.0–8.2), II: 5.8 ± 1.1 (4.5–8.0) **Surrogate outcomes** *Average contraction pressure at 4 weeks* (measured with the BF apparatus, cmH_2O, median, SD): I: 16 (10), II: 50 (14), $p < 0.05$ *Average contraction pressure at 3 months* (measured with the BF apparatus, cmH_2O, median, SD): I: 17 (14), II: 43 (16) , $p < 0.05$ **Adverse events** *N experiencing adverse events*: I: 0/27, II: 0/13	**Subjective** *Cure after 4 weeks' treatment* (no incontinence episodes and symptoms; patient questionnaire): I: 6/27 (22%), II: 9/13 (69%) *Cured (as above) or improved after 4 weeks treatment* (at least 50% decrease in incontinence episodes and symptoms; patient questionnaire): I: 26/27 (96%), II: 13/13 (100%) *Cure at 3-month follow-up* (no incontinence episodes and symptoms; patient questionnaire): I: 8/27 (28%), II: 8/13 (62%) *Cured (as above) or improved at 3-month follow up* (at least 50% decrease in incontinence episodes and symptoms; patient questionnaire): I: 26/27 (96%), II: 13/13 (100%)

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
		Other aerobic sports were recommended. The patients were encouraged to lose weight and to develop better eating habits. Individual counselling was undertaken when felt necessary. After 4 weeks of supervised training, patients continued PFMT at home, with 4 training units with 10 VPFMC each, five times a week. BF was used for measurement purposes only at 4 weeks and 3 months *PFMT with clinic-based individual BF sessions*: A general 90-minute introductory group session similar to above. One 30-minute individual session to introduce BF (Gemini 2000™, Wilest, Berlin, Germany). No additional group sessions, educational sessions or lifestyle counselling were offered afterward. Patients then received individual therapy with physical therapist for 15 minutes, five times a week for 4 weeks. Each session consisted of 4 training units with 10 VPFMC each. After 4 weeks of supervised training, patients continued PFMT without BF at home, with 4 training units with 10 VPFMC each, 5 times a week *Additional information*: Patient-perceived cure and improvement data (provided as %) presented in the table do not match their description in text (abstract, results, discussion). Author was contacted and confirmed that the data in text were correct and the correct data were supplied		

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Peattie 1988[180] (abstract only) *Study design/method*: 2-arm parallel RCT. Single centre, England *Duration of study*: 4 weeks	*Inclusion criteria*: Premenopausal women with USI awaiting surgery *Exclusion criteria*: Not reported *N randomised*: 37 in the abstract published in 1988 (Peattie 1988[180]) 44 in the Cochrane review (Hay-Smith 2001[224]) – see Additional information *N lost to follow-up*: I: 6/22, II: 5/22 *Type of incontinence*: USI	I. PFMT, *N* = 16 II. VC, *N* = 17 (*N* in analysis) *PFMT*: Training with physiotherapist. Three clinic visits of 1 hour, 30 minutes and 15 minutes, respectively. Education on the anatomical relationship and means of exercising the pelvic floor muscles. Daily home exercise programme of 50 VPFMC per day for 4 weeks *VC*: Hold cone for 15 minutes two times per day. Weekly telephone call. Femina cones. Nine conical weights, 20–100 g *Additional information*: Abstract publication was of a continuing trial, with some participants awaiting assessment. More complete information was provided by the author for inclusion in the Cochrane review (Hay-Smith 2001[224])	**Objective** *Improvement on pad test*: I: 9/16, II: 12/17 *Extended pad test (no detail)*: significant reduction in both groups, no between-group difference (at the time of reporting in 1988) **Surrogate outcomes** *Adherence*: I: 6/22 did PFMT only on alternate days or less often, 5/22 poor compliance and withdrew, II: 19/22 used cones at least once a day, 3/22 poor compliance and withdrew *N having incontinence surgery after treatment (at the time of reporting in 1988)*: I: 4/9, II: 5/15	**Subjective** *Subjective improvement*: I: 10/16, II: 12/17

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Pieber 1995[192] *Study design/method*: 2-arm parallel RCT. No attempt at blinding assessment. Single centre, Austria *Duration of study*: 3 months	*Inclusion criteria*: Premenopausal women referred to urodynamic unit, had grade 1 or grade 2 SUI according to Ingelman-Sundberg *Exclusion criteria*: Grade 3 SUI, previous incontinence surgery, pelvic relaxation greater than grade 2, or detrusor instability *N randomised*: 46 *N lost to follow-up at 6 weeks*: I: 9/25 (35%), II: 8/21 (38%); further 2 from group I at 12 weeks *Type of incontinence*: USI (mild to moderate) *Age* (years, mean, SD): I: 44.3 (5.7), *N* = 16?, II: 41.7 (6.4), *N* = 13? *Other*: Weight, parity	I. PFMT, *N* = 25 II. PFMT + VC, *N* = 21 (*N* in analysis) *PFMT*: Correct VPFMC taught by: physiotherapist using vaginal palpation. Perineal sonography during examination to show pelvic floor muscle contraction. Education in anatomy of pelvic floor muscle and bladder. PFMT = individualised programme with aim of 100 VPFMC during the day and 'The Knack' (VPFMC with increased intra-abdominal pressure and lifting). Duration of training: 12 weeks Supervision: Clinic visits at intervals of 2–4 weeks for 12 weeks *PFMT + VC*: PFMT and education as above with the addition of holding heaviest cone possible for 15 minutes per day. Five conical weights, 20–70 g. Instructed to use the next heaviest cone when comfortable with the last one. Clinic visits at intervals of 2–4 weeks for 12 weeks	**Surrogate outcomes** *Pelvic floor muscle strength*: I: NR; II: Except for 2 women, who increased their cone weight, all women stayed with the cone they started *N having incontinence surgery at 3 months* (during study period): I: 0/25, II: 0/21 **Adverse events** *Adverse events*: None reported	**Subjective** *Cure (patients reported no urine loss on any occasion, and a negative pad test) at 12 weeks*: I: 3/25, II: 5/21 *Cure (as above) or improvement (patients reported losing urine less often than before treatment) at 12 weeks*: I: 12/25, II: 11/21

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Pohl 2004[171] (abstract only) *Study design/method*: 2-arm RCT, Germany *Duration of study*: 3 months	*Inclusion criteria*: Women with SUI *Exclusion criteria*: Not reported *N randomised*: 70 at the time of publication (results for 31 are shown) *N lost to follow-up*: Not reported *Type of incontinence*: SUI '*Suffering from disease*' (visual analogue scale): I: 6.00, II: 6.70 *Stress test under standardised condition* (no further detail, unit of measurement unclear, average): I: 2.32, II: 2.60 *Pad test under standardised condition* (no further detail, unit of measurement unclear, average): I: 4.82, II: 11.4 *Levator contraction* (digital palpation, average): I: 1.75, II: 2.00	I. PFMT + ES, *N* = 21 II. PFMT + BF, *N* = 10 (*N* in analysis) *PFMT + ES: PFMT* = twice a day for 10 minutes, to perform VPFMC with 10 seconds' hold, 10 seconds' rest. *N* of contractions not reported. ES = no detail *PFMT + BF: PFMT* as above. BF = no detail *Additional information*: Ongoing trial	**Objective** *Stress test under standardised condition* (no further detail, unit of measurement unclear, average): I: 1.50, II: 1.70 *Pad test under standardised condition* (no further detail, unit of measurement unclear, average): I: 6.21, II: 10.0 **Surrogate outcomes** *Levator contraction* (digital palpation, average): I: 2.55, II: 2.70 **Adverse events** *N experiencing adverse events*: I: 0/21, II: 0/10	**Quality of life** 'Suffering from disease' (visual analogue scale, 0-10, 0 = no suffering, 10 = maximum suffering; average score): I: 4.81, II: 5.33
Ramsay 1990[128] (abstract only) *Study design/method*: 2-arm RCT, parallel design. Single centre, Scotland *Duration of study*: 3 months	*Inclusion criteria*: Women whose only symptom was SUI *Exclusion criteria*: Not reported *N randomised*: 44 *N lost to follow-up*: None *Type of incontinence*: SUI (and USI?)	I. PFMT, *N* = 22 II. Placebo PFMT, *N* = 22 *PFMT*: Set: Four maximum isometric VPFMC, with 4-second hold and 10-second rest. One set every waking hour. Duration of training: 3 months. Supervision: NR *Placebo PFMT*: As PFMT but comprising hip abductor muscle contraction with feet crossed at the ankles *Additional information*: It is probable that both groups received physiotherapy counselling, given that the study aimed to assess: (1) the effectiveness of physiotherapy; (2) what proportion of success can be attributed directly to PFMT as opposed to general support and counselling obtained during physiotherapy; (3) the compliance of patients undergoing home-based, taught PFMT	**Objective** *Pad test* (not defined): I: mean reduction 2.1 g, II: mean increase 1.5 g, 'significant' between-group difference **Surrogate outcomes** *Adherence*: The highest number of exercise (contractions) performed in 1 week = 130 (30% of the maximum possible). The mean frequency of exercises per week = 15% of the requested level. No difference between groups. Authors note that lack of PFMT effect may be due to the very poor exercise level (poor compliance) *Vaginal squeeze pressure* (perineometry score): Not significantly different between groups, the mean score in each group improving	**Subjective** *Patient-perceived improvement* (not defined): I: 14/22, II: 14/22

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Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Sand 1995[134] *Study design/method*: 2-arm RCT. Six centres, USA *Duration of study*: 3 months	*Inclusion criteria*: Women with USI, ambulatory, community dwelling, understand questions, comply with visits, not seek other treatment, no current incontinence treatment, neurologically normal *Exclusion criteria*: Detrusor instability, pregnant, demand pacemaker, prior pelvic floor stimulation, pelvic implanted devices, active vaginal lesions or infections, urinary tract infection, hypermenorrhoea or menorrhagia, urinary retention > 100 ml, pelvic surgery in past 6 months, atrophic vaginitis, genital prolapse to introitus, pelvic irradiation, intrinsic sphincter indeficiency *N randomised*: 52 *N lost to follow-up*: I: 7/35, II: 1/17 *Type of incontinence*: USI *Age* (years, mean, SD): I: 50.9 (9.8), II: 57.7 (13.3), $p = 0.04$ *Episodes of leakage in 24 hours* (mean, SE): I: 28, 3.1 (0.65), II: 16, 3.0 (0.45) *N of pad changes per week* (weekly diary, mean, SE): I: 28, 6.2 (1.08), II: 16, 9.7 (3.37) *Weight of urine lost on 20-minute pad test at a fixed bladder volume* (g, mean, SE): I: 28, 45.2 (10.24), II: 16, 30.0 (10.85) *Other*: Height, weight, % prior incontinence surgery, parity, % postmenopausal *Had tried PFMT previously*: I: 14/35, II: 10/17	I. ES, $N = 35$ II. Sham ES, $N = 17$ (N randomised) *ES*: Innova (Empi, Inc.) pelvic floor stimulator. Seven office visits over 15 weeks (12 weeks' treatment plus 2 weeks before and 1 week after treatment) with weekly telephone follow-up on non-visit weeks. A total of 70 hours of device use was planned *Sham ES*: No details *Additional information*: Denominators (N of valid observations) not provided and assumed to be N randomised 'The investigators deliberately did not try to educate patients about pelvic muscle exercises or treatment of incontinence or modify their behaviour in any way, so that a true 'bare bones' assessment of the efficacy of pelvic floor stimulation could be made' (p. 78)	**Objective** *Cure by diary* (the absence of reported leakage episodes on 24-hour diary): I: 0/35, II: 1/17, $p = 0.33$ *Cure or improvement by diary* (50% in leakage episodes on 24-hour diary): I: 13/35, II: 2/17, $p = 0.05$ *Cure by pad test* (≤1 g of leakage on 20-minute fixed-volume pad test): I: 7/35, II: 2/17, $p = 0.38$ *Cure or improvement by pad test* (50% decrease in fluid loss on 20-minute fixed-volume pad test): I: 16/35, II: 3/17, $p = 0.05$ *Change in episodes of leakage in 24 hours* (24-hour diary, mean, SE): I: 35, –1.2 (0.5), II: 17, 0.8 (0.53), $p = 0.04$ *Change in N of pad changes per week* (weekly diary, mean change, SE): I: 35, –2.1 (0.8), II: 17, 1.5 (1.43), $p = 0.07$ *Change in N of micturition in 24 hours* (24-hour diary, mean change): I: 35, –0.2, II: 17, 0.7, NS, SE not reported *Change in weight of urine lost on 20-minute pad test at a fixed bladder volume* (g, mean, SE): I: 35, –29.9 (9.7), II: 17, 2.3 (5.59), $p = 0.005$ **Surrogate outcomes** *Adherence* (N with 80% compliance, i.e. > 50 hours of planned 70-hour device use): I: 21/35 (61%), II: 15/17 (89%) *Change in vaginal muscle strength* (perineometer, mmHg, mean, SE): I: 35, 4.6 (1.4), II: 17, –1.1 (1.51), $p = 0.02$	**Subjective** *Change in severity of urinary incontinence* (10-point visual analogue scale, mean, SE): I: 35, –2.1 (0.5), II: 17, 0.1 (0.49), $p = 0.007$ Note: Decrease in values represent improvement *Change in severity of stress incontinence* (10-point visual analogue scale, mean, SE): I: 35, –2.3 (0.6), II: 17, –0.3 (0.60), $p = 0.02$ Note: Decrease in values represent improvement **Quality of life** *SF-36*: 'No significant differences between the two groups for any changes in summary scores from baseline'. Details 'will be reported else where' (p. 78) *Other*: The ES device is 'about US$1000' ***Subgroup analysis*** In terms of the weight of urine lost on pad test and vaginal muscle strength, the results remained significantly better for the active ES group after controlling for age (the two groups were unbalanced at baseline)

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
			Adverse events *N experiencing adverse events*: • vaginal irritation: I: 5/35, II: 2/17 • occasional pain: I: 3/35, II: 1/17 • vaginal infection: I: 4/35, II: 2/17 • urinary tract infection: I: 1/35, 2/17 *Diarrhoea and abdominal pain thought to be unrelated to device use*: I: 1/35, II: 0/17 No severe or irreversible adverse events during the study *Discontinued treatment because of adverse events*: I: 2/35 (persistent vaginal irritation), II: 0/17	
Savage 2005[166] *Study design/method*: 2-arm RCT. Multicentred, two sites, UK. Pilot study *Duration of study*: 12 weeks	*Inclusion criteria*: Women with a pure clinical history of SUI; leaks on cough, sneeze, jump or movement; frequency <8 per day; nocturia once a day or less; occasional mild urgency only; and pelvic floor muscle strength of grade ≥2+ *Exclusion criteria*: Incontinence symptoms other than SUI (e.g. urgency, urge incontinence and faecal incontinence); dominant symptoms suggestive of prolapse; positive urinalysis; pregnancy; use of concomitant treatments (e.g. anticholinergic medication); pathology affecting ability to exercise (e.g. acute back pain, severe rheumatoid arthritis), concurrent neurological or psychiatric disease; women who had given birth or had gynaecological surgery within the previous 6 months; physiotherapy treatment for this condition within the past 2 years; women already practising lumbopelvic stability or pilates exercises; women unable to attend regular training sessions	I. PFMT, *N* = 4 II. Modified pilates (lumbopelvic stability training), *N* = 6 (*N* in analysis) *PFMT*: Before randomisation, participants received education about the anatomy and function of the pelvic floor and bladder, and were taught how to perform a correct VPFMC by therapist. Six individual physiotherapy sessions of 30–45 minutes in duration (in the outpatient physiotherapy department) over a 12-week period with the expectation that the patients would practice their allocated training at home between sessions. PFMT = maximal contractions held for 1–2 seconds ('fast' contractions), submaximal contractions ('slow' contractions) held while breathing, and staged contractions, where the pelvic floor is gradually tightened to maximum and then allowed to release slowly	**Surrogate outcomes** *Pelvic floor muscle strength* (digital vaginal assessment by palpation of the muscles and grading on the modified Oxford scale; mean, range): I: 3.5 (3–4), II: 4.41 (3–5) *Pelvic floor muscle endurance* (seconds, mean, range): I: 8 (6, 10), II: 9.1 (7, 10) *N having incontinence surgery*: I: 1/4 considering an operation (referred to consultant), II: not reported	**Quality of life** *King's Health Questionnaire (composite scores regarding symptoms, severity and quality of life, mean, range)*: I: 256.92 (147.20– 416.64), II: 152.37 (83.82–197.20) *King's Health Questionnaire (symptom severity scores, mean, range)*: I: 5.5 (2–9), II: 3.5 (1–6) *N desiring further treatment*: I: 2/4 needed only physiotherapy follow-up, 2/4 referred for a consultant opinion, II: 0/6 needed any medical input, 2/6 required ongoing physiotherapy; individual data reported in table 8 *Satisfaction, 100%* (*N* of participants): I: 1/4, II: 1/6 Note: The authors note that this patient in group I was 100% satisfied because she now knew that PFMT would not work and felt confident that she needed an operation *Satisfaction, 80–99%* (*N* of participants): I: 1/4, II: 3/6

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
	N randomised: II *N lost to follow-up*: I: 1/5, II: 0/6 *Type of incontinence*: SUI *Age* (years, mean, range): I: 54.60 (37–79), II: 48.17 (range not reported) *King's Health Questionnaire* (composite score, mean, range): I: 293.02 (161.05, 522.15), II: 242.10 (122.21, 361.1) *King's Health Questionnaire* (symptoms, severity, mean, range): I: 5.72 (2–10), II: 6 (4–12) *Power of pelvic floor muscle* (mean, range): I: 3.25 (2.5–4.0), II: 3.33 (2.5–4.0) *Length (endurance) of pelvic floor muscle* (mean, range): I: 7.25 (4–10), II: 6.16 (3–10) *Other*: BMI, parity (*N* of deliveries), % post- and perimenopausal	Contractions were taught in different positions. Encouraged to practise the PFMT sequence several times during the day. Programme tailored to individual's ability. At each review, new goals for the coming week were identified. Also taught 'The Knack'. Other physiotherapy modalities (e.g. electrical stimulation, vaginal cones) were not allowed. Duration of training: 12 weeks *Pilates*: Lumbopelvic stability training exercises were taught using the modified pilates method. *Stage 1*: Taught how to activate and control deep abdominal and pelvic floor muscles in a co-contraction. The importance of relearning motor control of these muscles to stabilise the pelvic region was underlined. Breathing patterns were emphasised. *Stage 2*: Co-contraction together with relaxed breathing were performed in different positions, progressing to antigravity positions. The physiotherapist monitored the patient by palpating the lower abdominal muscles, and by monitoring movement of the pelvis and spine. *Stage 3*: The exercises were developed by applying low load to the muscles through limb movement patterns. Also taught how to use a similar co-contraction with breathing during activities of daily living and in situations which cause bladder leakage. Encouraged to perform a series of exercises which they enjoyed and/or found challenging for 10–15 minutes at home at lease every other day. Six individual physiotherapy sessions of 30–45 minutes in duration over a 12-week period with the expectation that the patients would practice their allocated training at home between sessions		Note: The authors postulate over 80% satisfaction as a satisfactory clinical outcome

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Seo 2004[195] *Study design/method*: 2-arm parallel study. Multicentre but number of centres not stated *Duration of study*: 6 weeks	*Inclusion criteria*: Women with SUI who required non-surgical treatment *Exclusion criteria*: Not reported *N randomised*: 120 *N lost to follow-up*: None? *Type of incontinence*: SUI *Age* (years, mean, SD): I: 42.7 (11.3), II: 44.5 (12.1), $p = 0.63$ *Pad test* (type of test and unit of measurement not specified): I: 5.56 (6.05), II: 6.51 (2.55), $p = 0.210$ *Maximal vaginal pressure* (mmHg): I: 17.78 (10.96), II: 23.01 (11.70), $p = 0.231$ *Duration of pelvic floor muscle contraction* (seconds): I: 4.86 (2.31), II: before 5.47 (3.48), $p = 0.581$ *Other*: Weight, parity	I. PFMT + ES + BF, $N = 60$ II. VC, $N = 60$ (N in analysis) *ES + BF (+PFMT)*: 20-minute sessions twice a week for 6 weeks to perform alternately functional electrical stimulation (FES) and BF (presumably BF of VPFMC but this is not stated). FES = simultaneous electrical stimulation of 35 Hz and 50 Hz for 24 seconds, and repeat this for 20 minutes *'New' VC*: Each cone has a dumbbell shape and is 150 g. Instructed by a specially trained nurse to start lying down, and progress to sitting with the cone in place while contracting the pelvic floor muscles. VPFMC with 5-second hold, 10 seconds' rest. Repeat this for at least 5 minutes daily for 6 weeks. Pelvic floor muscle awareness and compliance were assessed at the hospital once a week *Additional information:* Not relevant for direct head-to-head comparisons; data were therefore extracted for primary outcomes only		**Subjective** *'Improvement in the degree of incontinence'* (unclear how this was measured): I: 55/60, II: 53/60

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Shepherd 1983[155] *Study design/method*: 2-arm RCT. Single centre, England *Duration of study*: Length of treatment period unclear. Measurement at '3 months after treatment was completed'	*Inclusion criteria*: Women with USI, with stable bladders *Exclusion criteria*: Not reported *N randomised*: 22 *N lost to follow-up*: I: 0/11, II: 3/11 (lack of motivation suggested as possible cause of withdrawal) *Type of incontinence*: USI *Age* (years, mean, range): I: 48.2 (23–63), II: 48.4 (28–67) *Duration of symptoms* (years, mean, range): I: 11 (0.5–30), II: 9 (0.67–16) *Number of incontinent episodes/week*: I: 6.5 (1–18), II: 5.5 (3–12) *Number of micturitions/day* (mean, range) I: 8.6 (6–10), II: 8.0 (5–10) *Other*: % prior incontinence surgery, parity	I. PFMT + IVRD + BF ('pelvic exerciser'), *N* = 11 II. PFMT, *N* = 11 (*N* in analysis) *PFMT + IVRD + BF*: Initial measurement of pelvic floor muscle and then instructed from physiotherapist a series of graded exercises with intravaginal 'exerciser' connected to visual BF to perform daily at home. Weekly clinic visit *PFMT*: Initial measurement of pelvic floor muscle and then taught 'conventional' home exercises from physiotherapist. Weekly clinic visit *Additional information*: Paper states that 'If there was no improvement after six attendances at weekly intervals, alternative treatment was arranged'. No further details available	**Objective** *Episodes of leakage per week* (diary, mean, range): I: 1.1 (0–8), II: 4.1 (0–7) *N of micturition in 24 hours* (diary, mean, range): I: 6.1 (5–9), II: 7.8 (6–10) *Pelvic squeeze* (cmH_2O, mean, range): I: 19.3 (10–30), II: 11.2 (5–20)	**Subjective** *Cure* (*N* of patients who perceived dryness): I: 8/11 (72.7%), II: 3/11 (27.3%) *Improvement* (*N* of patients who perceived improvement; not including cure): I: 2/11 (18.2%), II: 3/11 (27.3%)
Sherburn 2007[182] **(abstract only)** *Study design/method*: 2-arm RCT, parallel design. Two centres, Australia *Duration of study*: 20 weeks	*Inclusion criteria*: Community-dwelling women over 65 years of age with USI, which is perceived by them as bothersome *Exclusion criteria*: > 10 cmH_2O detrusor pressure rise on cystometry, incontinent due to neurological causes, PFMT intervention within the last 6 months, or unable to give informed consent *N randomised*: 84 *N lost to follow-up*: NR *Type of incontinence*: USI *Age* (years, mean, range): 72 (65–89) 'There were no differences between groups at baseline on any measures'	I. PFMT, *N* = 43 II. BT, *N* = 41 (*N* randomised) *PFMT*: Weekly hour-long exercise and education classes for 20 weeks. Home programme of PFMT (no further details given) *BT*: Weekly hour-long exercise and education classes for 20 weeks. Home programme of BT (no further details given)	**Objective** *Zero leakage on the cough stress test, with no precontraction of pelvic floor muscle*: I: 19/40 (47.5%), II: 9/35 (25.7%) *Zero leakage on the cough stress test, with a pre-contraction of pelvic floor muscle*: I: 23/40 (57.5%), II: 8/35 (22.9%) *Episodes of leakage* (7-day diary, median interquartile range, mean rank): I: 43, 4.5, 11, (36.47), II: 41, 8.0, 27, (47.95), $p = 0.030$ *Stress test – cough* (g, median interquartile range, mean rank): I: 43, 0.1, 1.5, (36.18), II: 41, 0.5, 2.4, (47.09), $p = 0.034$ *Stress test – brace/cough* (g, median interquartile range, mean rank): I: 43, 0.0, 0.4, (32.51), II: 41, 0.3, 0.7, (44.27), $p = 0.008$	**Quality of life** *ICIQ-UI SF score* (median interquartile range, mean rank): I: 43, 5, 4, (34.55), II: 41, 8, 7, (50.01), $p = 0.003$ *AQoL total score* (mean, SD, SEM): I: 43, 14.44 (9.14), 1.394, II: 41, 11.88 (9.27), 1.519, $p = 0.217$ Note: The higher the score, the poorer the QoL '*Bothersome*' (visual analogue scale, not specified, mean, SD, SEM): I: 43, 2.26 (2.139), 0.326, II: 41, 3.68 (2.654), 0.420, $p = 0.009$ Participant global perception of change: the PFMT group reported a greater perception of change in symptoms, $p = 0.004$ Satisfaction with treatment: no significant difference between groups, $p = 0.102$

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Smith 1996[177] *Study design/method*: 4-arm RCT (only details of 2 arms given). Single centre, USA *Duration of study*: 16 weeks	*Inclusion criteria*: Women predominantly with urodynamically proven genuine stress urinary incontinence (type 2 incontinence with Valsalva leak point of between 60 and 110 cm of water) or detrusor overactivity *Exclusion criteria*: Type 3 stress incontinence, pregnant, history of prolonged urinary retention, vaginal vault prolapse, diminished sensory perception, cardiac pacemaker, mixed incontinence if major/minor component (GSI or DO) not determined *N randomised*: predominantly GSI 18, predominantly DO 39 *N lost to follow-up*: predominantly GSI, I: 0/9, II: 0/9; predominantly DO, 1/39 *Type of incontinence*: GSI or DO as the major component of incontinence; data reported separately for women predominantly with GSI *Age* (years, average, range): women predominantly with GSI, I: 9, 48 (36–70), II: 9, 53 (26–72) *Other*: Parity; % estrogen	I. PFMT, *N* = 9 II. ES, *N* = 9 (*N* in analysis) *PFMT*: Correct VPFMC confirmed by vaginal examination and perineal squeeze. Sixty 'slow and quick' VPFMC per day for 16 weeks. Clinic visits every 4–6 weeks *ES*: Intravaginal neuromuscular stimulation (Stimtech Products Inc). Output starting with a 5-second contraction time (range 3–15), a duty cycle of 1 to 2 (range 1–1, to 1–2), 15 minutes twice a day (at home) progressing to 60 minutes twice a day over 16 weeks. Amplitude progressed from 5–10 mA to maximum of 80 mA (range 1–100). Clinic visits every 4–6 weeks *Additional information*: Intervention arms I and II for women predominantly with GSI (*N* = 18), and III and IV for women predominantly with DO (*N* = 39). Details of interventions III and IV not given as comparisons not used in this review	**Objective** *Cured* (cessation of incontinence and no longer requiring pads): women predominantly with GSI, I: 1/9, II: 2/9 *Improved* (≥ 50% reduction in the *N* of pads and episodes of urinary incontinence; not including cure): women predominantly with GSI, I: 3/9, II: 4/9 *Episodes of leakage per week* (voiding diaries, average, range): women predominantly with GSI, I: 2.4 (0–6), II: 1.4 (0–5) *N of pad changes per week* (voiding diaries, average, range): women predominantly with GSI, I: 5.4 (0–10), II: 4.0 (0–10) *N having incontinence surgery* (timing not reported): women predominantly with GSI, I: 3/9, II: 2/9 **Adverse events** *N experiencing adverse events* (women with GSI and DO, see Additional information section): • 2/57 vaginal irritation • 2/57 urinary tract infections • 1/57 ill-defined tingling in the thigh of unknown cause *Discontinued treatment because of adverse events*: women predominantly with GSI, I: 0/9, II: 0/9	

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Swithinbank 2005[119] *Study design/method*: Crossover trial with random allocation to the order in which participants increased or decreased decaffeinated fluids in weeks 3 or 4 *Duration of study*: 4 weeks	*Inclusion criteria*: Women with USI or idiopathic detrusor overactivity (IDO); the USI group was naive to surgery *Exclusion criteria*: Urinary tract infection, hepatic, cardiac or renal disease, diabetes mellitus; those on antidepressants, anticholinergics or diuretics *N randomised*: Not reported *N lost to follow-up*: USI: 9/48, IDO: 6/36 *Type of incontinence*: USI 48, IDO 36; data for USI reported separately *Age* (years, mean, range): 54.8 (31–76) *Episodes of leakage in 24 hours* (median, interquartile range, women with USI only): Week 1 (baseline): 1.6 (0.6, 2.8), week 2 (decaffeinated fluids): 0.8 (0.1–1.9) *N of micturition in 24 hours* (median, interquartile range, women with USI only): Week 1 (baseline): 7.2 (6.2–8.4), week 2 (decaffeinated fluids): 7.0 (5.9–8.9) *24-hour pad test* (g, median, interquartile range): Week 1 (baseline): 7.6 (3.3, 18.3), week 2 (decaffeinated fluids): 7.1 (2.7–12.1) *Mean fluid intake per day* (week 1): 1639 ml	I. Caffeine free and increasing fluid, *N* = 39 II. Caffeine free and decreasing fluid, *N* = 39 (*N* in analysis, crossover, women with USI only) *Treatment* (crossover): During the first week, participants drank normally. In the second week all participants drank normally, but only decaffeinated fluids. After this participants were randomised to either increasing decaffeinated fluids to 3 litres (20 cups) per day for a week, followed by a week of reducing decaffeinated fluids to 750 ml (five cups) per day, or vice versa. Results from the weeks with increased and decreased fluids were compared. Urine osmolality was measured at weekly clinic visit to assess compliance *Additional information*: Data on patients with IDO not extracted	**Objective** *Episodes of leakage in 24 hours* (median, interquartile range; daily diary over 4 weeks; women with USI only): I: 0.7 (0.3–3), II: 0.5 (0.2–2.1) *N of micturition in 24 hours* (median, interquartile range; daily diary over 4 weeks; women with USI only): I: 8.3 (7.0–10.9), II: 6.3 (5.0–7.1) *24-hour pad weight* (g, median, interquartile range, women with USI only): I: 7.9 (4.0–19.7), II: 6.9 (3.1–13.9) *Mean fluid intake per day* (ml, all women with USI or IDO): Week 2 with decaffeinated fluids: 1630 ml; week increasing fluid: 2673 ml; week decreasing fluid: 872 ml *Adverse events*: Constipation, thirst	**Subjective** *Quality of life* (Overall, how much do your urinary symptoms interfere with your life?'): Decreasing fluid intake (week 3 or 4) showed significant improvement in quality of life compared with the baseline week ($p < 0.003$). However, there was no difference in quality-of-life impact among any of the other weeks *Shorter version of the Bristol Female Lower Urinary Tract Symptoms symptom questionnaire* (all women with USI or IDO): The mean impact of urinary symptoms remained as 'a little' on daily life for the study period

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Tapp 1987[191] (abstract only) *Study design/method*: 2-arm RCT *Duration of study*: 3 months' treatment (plus 6 months' follow-up but data are reported for assessment at 3 months only)	*Inclusion criteria*: Women with USI with no other significant urodynamic abnormality *Exclusion criteria*: Previous incontinence or prolapse surgery *N randomised*: 29 *N lost to follow-up*: Not reported *Type of incontinence*: USI *Visual analogue symptom score – stress incontinence* (no detail, score %, mean, SD): I: 15, 78 (24), II: 14, 84 (20) *Visual analogue symptom score – urge incontinence* (no detail, score %, mean, SD): I: 15, 30 (23), II: 14, 44 (38)	I. PFMT, *N* = 15 II. PFMT + ES, *N* = 14 (*N* in analysis) *PFMT ('physiotherapy')*: Individual training with continence advisor. Comprehensive teaching about the mechanism of continence and the action of pelvic floor. PFMT four times per hour, every hour of the day. Weekly clinic visits for 3 months *PFMT ('physiotherapy') +ES*: PFMT (3 months) and education as above. Individual training with continence advisor. ES = faradic stimulation with vaginal probe twice a week for 1 month	**Objective** *Pad test* (g, mean, SD): no within-group (before–after) differences or between-group differences *N having incontinence surgery after treatment*: I: 10/15, II: 6/14	**Subjective** *Visual analogue symptom score – stress incontinence* (no detail, score %, mean, SD): I: 15, 67 (29), NS (pre-post), II: 14, 65 (28), $p < 0.05$ (pre-post) *Visual analogue symptom score – urge incontinence* (no detail, score %, mean , SD): I: 15, 29 (28), NS (pre-post), II: 14, 36 (30), NS (pre-post)

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Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Tapp 1989[185] (abstract only) *Study design/method*: 3-arm RCT. Single centre, England *Duration of study*: 3 months for PFMT group, and 6 months for surgery group	*Inclusion criteria*: Consecutive women with USI and no other urodynamic abnormality *Exclusion criteria*: A history of urological or vaginal surgery *N randomised*: 81 *N lost to follow-up*: I: 6/27, II: 3/26, III: 4/28 *Type of incontinence*: USI	I. PFMT, *N* = 21 II. PFMT + ES, *N* = 23 III. Surgery, *N* = 24 (*N* in analysis) *PFMT*: 14 clinic visits over 3 months with continence advisor trained to teach PFMT. Patients assessed after 3-month treatment and at 6 months *PFMT + ES*: PFMT as above. ES = faradism. Patients assessed after 3-month treatment and at 6 months *Surgery*: Burch colposuspension. Patients assessed at 6 months after surgery *Additional information*: For PFMT and PFMT + ES, some unsatisfied patients requested surgery at the end of 3 or 6 months' assessment This trial is published in two abstracts (Tapp 1989)[185,305] but there were inconsistencies in data reporting. Authors were contacted and informed that data in Tapp (1989)[185] should be used, as they are more complete	**Objective** *'Objectively cured'* (not defined) after primary treatment: I: 4/21 at 3 months, II: 3/23 at 3 months, III: 18/24 at 6 months *'Symptomatic improvement'* (not defined) after primary treatment (not including 'cure'): I: 9/21 at 3 months, II: 13/23 at 3 months, III: 5/24 at 6 months *N having incontinence surgery as secondary treatment after 3 months*: I: 11/21, II: 8/23, III: NA *Objective cure or improvement at 6 months* (of those who did not have surgery): Return of symptoms at 6 months (of those who did not have surgery): see above Objectively cured at 6 months (of those who had surgery as secondary treatment):	

	I	II
Cured at 6 months	2/10	2/15
Symptomatically better at 6 months	7/10	8/15
Symptoms relapsed and requested surgery at 6 months	1/10	5/15

	I	II
Cured	10/12	8/13
Awaiting assessment	0/12	3/13

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Taylor 1986[156] *Study design/method*: 4-arm RCT, pilot study. Single centre, USA *Duration of study*: 9 weeks	*Inclusion criteria*: Women aged ≥ 55 years, currently experiencing simple urinary stress incontinence. Non-institutionalised ambulatory women who could speak English *Exclusion criteria*: Known neurogenic or neuromuscular disorders (e.g. diabetes, multiple sclerosis, Parkinson's, stroke); symptoms indicating urinary tract infection; taking medications for urological disorders *N randomised*: 13 *N lost to follow-up*: 1/13 participants (group not specified) participated in the trial but results were not included in the analysis because she had missed a weekly clinic visit following a heart attack ('Subjects had to make all nine, weekly visits to be included in the study data') *Type of incontinence*: SUI 'Demographic data concerning age, weight, parity, previous pelvic repair surgery, multiple or difficult births were collected in the health history for later analysis.	I. PFMT II. PFMT + clinic BF and home BF III. PFMT + clinic BF and home IVRD IV. PFMT + clinic BF (*N* in each group unclear) *PFMT*: One 90-minute introductory visit at clinic where correct VPFMC was taught using an electromyographic device called the Personal Perineometer™. Participants then returned for 30-minute individual visits, once per week for 8 weeks. PFMT at home = 100 VPFMC with 10-second hold, once a day. Duration of training: 9 weeks. Instructed to repeat this exercise 'for the rest of their lives'. Also received advice not to restrict fluid intake, and strategies to reduce frequency. Participants provided with a take-home teaching guide. Pelvic floor muscle strength was measured at clinic at entry and exit only *PFMT + clinic BF + home BF*: PFMT as above. In addition, clinic and home BF. Weekly BF in the clinic setting = participants measured for pelvic floor muscle strength and allotted 10 minutes of private use of the BF device. Home BF = visual BF (Personal Perineometer™) *PFMT + clinic BF + home IVRD*: PFMT and clinic BF as above plus vaginal probe (detached from the BF machine and so no visual BF) in situ to be used as a resistive device during PFMT *PFMT + clinic BF*: PFMT as above with BF used only during clinic visits. No home BF devices for daily exercises *Additional information*: 'Pretest-post-test control group design with a randomly assigned, self-selected sample'		**Subjective** *Cure* (% of women describing themselves as continent): I: 67%, II: 100%, III: not reported, IV: not reported,; the rate obtained by groups II, III and IV as a whole was also 67%

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Terry 1996[193] (abstract only) *Study design/method*: 2-arm parallel study. Single centre, Scotland *Duration of study*: 6-week treatment + follow-up at 6 months	*Inclusion criteria*: Women with USI able to retain vaginal cone *Exclusion criteria*: Not repeated *N randomised*: 60 *N lost to follow-up*: I: 7/30, II: 19/30 *Type of incontinence*: USI *Standardised pad test after a series of provocative exercises with a full bladder* (g, mean): I: 38.2, II: 32.5	I. VC, *N* = 30 II. PFMT + ES, *N* = 30 (*N* in analysis) *VC*: Enhanced vaginal cones, one cylindrical weight of 75 g. No details given *PFMT + ES*: Supervised physiotherapy, 12 sessions over 6 weeks with a combination of interferential therapy and PFMT with no further details *Additional information*: Not relevant for direct head-to-head comparisons; data were therefore extracted for primary outcomes only		**Subjective** *Patient perception at 6 months* (5-point scale, asking how the women were compared with before treatment): significant and similar improvement for both groups *Patient perception at 6 months* (10-cm analogue scale, asking how bad the women thought their continence was at present): significant and similar improvement for both groups *Quality of life at 6 months* (10-cm analogue scale, asking how badly the women's continence affected their lifestyle): significant and similar improvement for both groups

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
van Kerrebroeck 2004[117] *Study design/method*: 2-arm RCT. Multicentre; 46 sites in Belgium, Canada, Denmark, France, Germany, the Netherlands, Sweden and UK *Duration of study*: 12 weeks (+2-week screening, 2-week no-SNRI, and 2-week placebo lead- in prior to randomisation)	*Inclusion criteria*: Women aged ≥ 18 with clinical diagnosis of predominant and 'bothersome' SUI of ≥ 3 months' duration, with seven incontinence episodes/week. Micturition frequency of < 8 per day and ≤ 2 per night; positive cough stress test and positive stress pad test *Exclusion criteria*: Predominant symptoms of urge incontinence, unable to tolerate bladder filling to 400 ml or with first sensation of bladder filling at ≤ 100 ml *N randomised*: 494 *N lost to follow-up*: I: 68/247 (27%), II: 21/247 (8%) *Type of incontinence*: Predominant symptoms of SUI (MUI) *Age* (years, mean, SD): I: 52 ± 11.0 , II: 54 ±10, $p = 0.01$ *Episodes of leakage per week* (mean, SD, range): I: 17.3 ± 12.9 (0–81), II: 17.2 ±12.4 (1–68), extreme outliers *Episodes of leakage (N with ≥ 14 episodes per week)*: I: 125/247, II: 131/247 *PGI-S* ('moderate' or 'severely' abnormal urinary tract function): I: 166/247, II: 169/247 *I-QoL score* (mean, SD): I: 66.7 ± 20.1, II: 64.5 ± 21.3 *Other*: BMI, ethnicity, % prior incontinence surgery, % performing PFMT	I. Duloxetine 80 mg taken as 40 mg twice daily, $N = 247$ II. Placebo, $N = 247$ (*N* randomised) *Additional information*: The study recruited 'type 3' population; data were therefore extracted for primary outcomes only Dichotomous data calculated from percentage in paper, using the *N* of women included in the 'ITT' analysis with at least one postrandomisation measure (last outcome measure carried forward) Diary data were completed daily during the week prior to each clinic visit. Two diaries were completed prior to randomisation and three following randomisation	**Objective** *Cure or improvement* (50–100% reduction in incontinence episodes on daily paper diaries): I: 110/212 (51.9%), II: 81/242 (33.5%), $p < 0.001$ **Surrogate outcomes** *Adherence* (average % of treatment doses ingested): I: 82%, II: 94%, $p < 0.001$ **Adverse events** *N experiencing adverse events*: I: 200/247 (81%), II: 158/247 (64%), $p < 0.001$ *Adverse events* (occurring in at least 5% of patients on duloxetine or occurring significantly more often with duloxetine than placebo): *Nausea*, dry mouth, constipation, fatigue, *insomnia*, *dizziness*, headache, increased sweating, vomiting, somnolence, tremor (Note: *Italic text* indicates that this type of event caused withdrawal) *Discontinued treatment because of adverse events*: I: 53/247 (21.5%), II: 12/247 (4.9%); adverse events as above, and *attention disturbance*	**Subjective** *PGI-I* ('very much/much/a little' better): I: 135/240 (56.2%), II: 118/245 (48.2%) **Quality of life** *I-QoL* (mean): I: 240, before 66.6, after 72.2, II: 245, before 64.4, after 68.5, $p = 0.127$ Note: Based on data from randomised subjects with at least one postrandomisation measure

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Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Williams 2006[129] *Study design/method*: 3-arm RCT. Leicester MRC, UK *Duration of study*: 3 months	*Inclusion criteria*: Women with urodynamic diagnosis of USI or MUI and DO who had already had an 8-week primary care intervention (2-armed trial comparing a new nurse-led service with existing care; if, after 8 weeks' treatment in the nursing arm of the trial, participants reported any episode of UI, day time frequency of ≥8, nocturia of ≥2 reported in a 3-day diary, 24-hour pad test weight of ≥8 g, or patient complaint of urgency most of the time, they were offered a urodynamic investigation) *Exclusion criteria*: Women who were pregnant, had urinary fistula, pelvic malignancy, severe prolapse and those currently receiving treatment for urinary symptoms (e.g. on a waiting list for continence surgery) *N randomised*: 238 *N lost to follow-up*: I: 3/79, II: 1/80, III: 3/79 *Type of incontinence (USI/MUI)*: I: 53/26, II: 57/23, III: 56/23 *Age* (years, mean, SD): I: 55.9 (8.5), II: 58.2 (9.4), III: 56.7 (10.8) *Episodes of leakage in 24 hours* (median, interquartile range): I: 79, 1.7 (0.7–4.0), II: 80, 1.2 (0.3–3.3), III: 79, 1.0 (0.3–2.8) *Leakage* (several times per months or more): I: 78/79, II: 76/80, III: 72/79 *Other*: Parity, % postmenopausal	I. PFMT, *N* = 77 II. VC, *N* = 79 III. 'Standard care', *N* = 75 (*N* in analysis) *PFMT*: Correct VPFMC taught by specially trained nurses. Individualised exercise regimen, including time to hold maximum contractions, the *N* of quick contractions and the *N* of sets per day (4+). Digital pelvic floor muscle assessment at 2-weekly intervals. Duration of treatment: 12 weeks. Supervision: Clinic visits at 2-weekly intervals for 6 weeks and at 12 weeks *VC*: Femina, Urohealth Systems Inc. At first visit, patients were taught by specially trained nurses how to use the cones and given a prescription of activity (1–lying, 2–sitting, 3–standing, 4–housework, 5–exercise), cone weight (10–60 g), length of holds (10–15 minutes), and the *N* of times to be used per day (2–3). Commenced using the heaviest cone that the women could hold for >5 and <15 minutes whilst standing, then the weight was increased until the heaviest could be held for 15 minutes twice daily whilst undertaking the most strenuous level of activity. Duration of treatment: 12 weeks. Supervision: Clinic visits at 2-weekly intervals for 6 weeks and at 12 weeks Note: Author confirmed that PFMT programme does not include standard BF treatment	**Objective** *Change in N of episodes of leakage in 24 hours* (3-day diary, mean, 95% CI): I: 77, –1.03 (–1.73 to –0.32), II: 79, –0.28 (–0.87 to 0.31), III: 75, –0.59 (–1.04 to –0.13) *Change in N of pad changes in 24 hours* (mean, 95% CI): I: 77, 0.05 (–0.30 to 0.41), II: 79, –0.04 (–0.25 to 0.17), III: 75, –0.16 (–0.39 to 0.06) *Change in N of micturition in 24 hours* (mean, 95% CI): I: 77, –0.23 (–0.56 to 0.11), II: 79, 0.11 (–0.22 to 0.43), III: 75, –0.27 (–0.65 to 0.11) *Change in urine loss on 1-hour pad test* (g, mean, 95% CI): I: 77, –7.39 (–13.76 to –1.02), II: 79, –3.68 (–8.43 to 1.07), III: 75, –6.11 (–12.64 to 0.42) *Change in urine loss on 24-hour pad test* (g, mean, 95% CI): I: 77, –2.06 (–13.82 to 9.71), II: 79, –5.19 (–12.22 to 1.84), III: 75, –7.25 (–14.63 to 0.17) **Surrogate outcomes** *Adherence* (*N* reporting that they followed the instructions all or most of the time): I: 59/77 (76%), II: 40/79 (50%), III: 60/75 (80%) *Change in perineometry* (average peak/rest) pressure, mean, 95% CI): I: 77, 1.62 (–0.33 to 3.59), II: 79, 0.25 (–1.10 to 1.73), III: 75, 0.13 (–1.65 to 1.91) *Change in pelvic floor function* (modified Oxford scale, mean, 95% CI): I: 77, 0.56 (0.30 to 0.83), II: 79, 0.04 (–0.15 to 0.23), III: 75, 0.23 (0.04 to 0.42)	**Subjective** *N cured (no symptoms)*: I: 4/77, II: 7/79, III: 6/75 *Mild or no problem*: I: 47/77, II: 51/79, III: 53/75 **Quality of life** *The Leicester Impact Scale* (0–42, lower score = better health; median, interquartile range): I: 77, 2.0 (0.0 to 5.0), II: 79, 2.0 (0.0 to 5.0), III: 75, 1.5 (0.0 to 5.0) *The Leicester Urinary Symptom Questionnaire, leakage* (several times per months or more): I: 72/77, II: 69/79, III: 68/75 *The Leicester Urinary Symptom Questionnaire, frequency* (hourly or more): I: 27/77, II: 25/79, III: 21/75 *The Leicester Urinary Symptom Questionnaire, urgency* (very strong or overwhelming): I: 27/77, II: 27/79, III: 26/75 *The Leicester Urinary Symptom Questionnaire, nocturia* (≥3 per night): I: 18/77, II: 8/79, III: 7/75 *N satisfied with current urinary symptoms for the rest of life*: I: 30/77, II: 30/79, III: 34/75 *'How motivated do you feel to continue with treatment?'* (A lot): I: 55/77, II: 44/79, III: 53/75

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
		'*Standard care*': Given a leaflet detailing the location of pelvic floor muscles and three steps to exercising these muscles, i.e. pelvic floor awareness (PFA). Clinic visits with nurse at 2-weekly intervals for 6 weeks and at 12 weeks *Additional information*: Nested within a 2-armed trial; all participants had already had an 8-week primary intervention phase, which comprised behavioural intervention, including advice on fluid intake, caffeine intake, bladder re-education, PFA and weight loss (healthy eating). PFA included teaching of 'The Knack'	**Adverse events** *N experiencing adverse events*: I: 2/79, II: 2/80, III: 0/79 *Adverse events*: urinary tract infection; no other side effects reported by the three groups *Discontinued treatment because of adverse events*: I: 0/79, II: 0/80, III: 0/79	*Other*: • consultation times with the nurse: I: 34 minutes, II: 29 minutes, III: 26 minutes • costs: I: £338, II: £305, III: £287 • costs *not* associated with the nurse: I: £16, II: £8, III: £17 Subgroup analysis: • SUI vs MUI: 'no differences in the primary measures of urinary incontinence in those with USI only and those with USI and OAB' (p. 1049)
Wilson 1987[157] *Study design/method*: Quasi-RCT, consecutive assignment. Single centre, UK *Duration of study*: 6 weeks' treatment, with 6 months' follow-up	*Inclusion criteria*: Women diagnosed to have USI *Exclusion criteria*: None stated *N randomised*: 60 *N lost to follow-up*: None at 6 weeks *Type of incontinence*: USI *Age* (years, mean, range): 46.8 (19–79) *N of pad changes in 24 hours* (mean, SD): I: 15, 2.0 (1.3), II: 15, 2.3 (2.0), III: 15, 3.3 (2.7), IV: 15, 3.0 (2.1) *N of micturition in 24 hours* (mean, SD): I: 15, 8.6 (2.7), II: 15, 8.7 (2.7), III: 15, 9.1 (3.2), IV: 12, 8.24 (2.7) *Pelvic floor muscle strength* (perineometer reading, mmHg, mean, SD): I: 15, 7.1 (5.4), II: 15, 5.8 (3.6), III: 15, 5.1 (4.2), IV: 14, 5.8 (4.4) *Other*: The four groups reported to be comparable with respect to age, weight, parity, severity of leakage and the occurrence of previous surgery for incontinence *N prior incontinence surgery*: 12/60	I. PFMT + BF, *N* = 15 II. PFMT + BF + ES (faradism), *N* = 15 III. PFMT + BF + ES (interferential therapy), *N* = 15 IV. PFMT, *N* = 15 (*N* in analysis) *PFMT + BF*: Correct VPFMC taught in the hospital physiotherapy department with a vaginal perineometer. Three series of 6 VPFMC with 5 seconds' hold and 15 seconds' rest, 2-minute rest between each series, performed with the perineometer in the hospital physiotherapy department for 12 sessions over 6 weeks. Patients also given an instruction leaflet for PFMT to be performed daily at home: 5 VPFMC with a few seconds hold before getting up, after getting up, then half hourly thereafter, progressing to 10 VPFMC every half hour. Duration of training: 6 weeks. Supervision: Clinic visits twice a week	**Objective** *N of pad changes in 24 hours after treatment* (mean, SD): I: 15, 0.9 (1.5), II: 15, 1.3 (1.4), III: 15, 1.6 (2.3), IV: 15, 2.7 (2.5) *N of micturition in 24 hours after treatment* (mean, SD): I: 15, 7.6 (1.6), II: 15, 7.8 (2.0), III: 15, 8.0 (1.8), IV: 12, 8.20 (2.7) **Surrogate outcomes** *Pelvic floor muscle strength after treatment* (perineometer reading, mmHg, mean, SD): I: 15, 15.7 (10.5), II: 15, 9.0 (5.4), III: 15, 16.5 (8.3), IV: 14, 6.9 (7.7)	**Subjective** *Subjective improvement after treatment* ('much improved' or 'improved'): I: 11/15, II: 11/15, III: 10/15, IV: 4/15 *Subjective improvement at 6 months* ('much improved' or 'improved'): I: 9/14, II: 10/15, III: 9/15, IV: 4/15 *Subgroup analysis*: For groups I, II and III, successes and failures were compared to identify factors contributing to treatment success

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
		PFMT: One session in the hospital physiotherapy department (possibly with the help of a vaginal perineometer). Patients given an instruction sheet for PFMT to be done daily at home for 6 weeks, as in the hospital-treated group above *ES (faradism)*: Faradism involves the use of a low frequency current to stimulate striated muscle contraction. A saddle-shaped indifferent electrode placed over the sacrum and the active buttery electrode applied to the perineum, with as strong a current as the patient could tolerate. Three sets of 12 surges with a 2-minute rest between sets performed in hospital for 12 sessions over 6 weeks *ES (interferential therapy)*: Interferential therapy involves a low frequency stimulating current within the body while avoiding the problems of skin resistance. Four medium-sized suction electrodes (2 each on the abdomen and adductor muscles of the thighs) transmitted a 20- to 25-mA current, giving 15 pulses at a pressure peak 0.25–0.30 Pa/cm^2. The first session lasted 10 minutes and then progressed to 15 minutes. Performed in hospital for 12 sessions over 6 weeks		

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Wise 1993[188] (abstract only) *Study design/method*: 3-arm RCT, parallel design. Single centre, England *Duration of study*: 12 weeks	*Inclusion criteria*: Women with USI *Exclusion criteria*: None stated *N randomised*: 61 or 62 (unclear) *N lost to follow-up*: I: 6/21, II: 2/21, III: 4/20 *Type of incontinence*: USI The groups reported to be matched for age, parity and severity of USI	I. PFMT + VC, *N* = 15 II. VC, *N* = 19 III. ES, *N* = 16 (*N* in analysis) *PFMT + VC*: Correct VPFMC taught by vaginal palpation. Set: 10 VPFMC. Sets per day: 10. Duration of training: 12 weeks. Supervision: Patients seen at 2, 6 and 12 weeks. Cones used in identical manner as the VC group below *VC*: Not examined vaginally but just instructed to use cones for 15 minutes two times per day, progressing to heavier weight when successful on two consecutive occasions. Patients seen at 2, 6 and 12 weeks *ES*: Maximal vaginal electrical stimulation (CONMAX), 20 MHz, 0.75-ms pulse duration, continuous stimulation at maximum tolerable intensity between 0 and 90 mA. Home treatment 20 minutes per day for 12 weeks. Patients seen at 2, 6 and 12 weeks	**Objective** *Improvement (not defined) on pad test*: I: 14/15, II: 14/19, III: 12/16 *Reduction in weight of urine loss on pad test* (40-minute test with standard bladder volume): I: $p = 0.006$, II: $p = 0.011$, III: $p = 0.163$. '… decrease in pad weight after treatment was significantly greater ($p = 0.038$) for the PFMT + VC group compared to the ES group, but not when comparing the PFMT + VC group and the VC group ($p = 0.053$)' **Surrogate outcomes** *Pelvic floor muscle strength*: 'In the two groups using cones, there was a significant increase in both the passive and active cone weight following treatment'. No difference between groups	**Subjective** *Improvement in the symptom* (visual analogue symptom scores): I: $p = 0.002$, II: $p = 0.028$, III: $p = 0.011$. The degree of symptomatic improvement was greater in the PFMT + VC group than in both the ES and VC groups
Wong 1997a[158] (abstract only) *Study design/method*: RCT. Single centre, Hong Kong *Duration of study*: 8 weeks	*Inclusion criteria*: Chinese women with USI *Exclusion criteria*: Previous failure to PFMT, previous incontinence surgery *N randomised*: Not reported. Data reported for 17 women *N lost to follow-up*: Not reported *Type of incontinence*: USI *Age* (years, mean, SD): 48.2 ± 7.3 'The two groups were comparable with respect to duration of symptoms, parity, frequency of incontinence per week and pad test result'	I. PFMT, *N* = 7 II. PFMT + BF, *N* = 10 (*N* in analysis) *PFMT*: 'Standard protocol of pelvic floor re-education'. '8 clinic visits, two times weekly' (two visits per week over 4 weeks? Unclear) *PFMT + BF*: As above with addition of BF (PRS9300) from a vaginal surface electrode and a rectal catheter to record abdominal contraction	**Objective** *Reduction in episodes of leakage per week* (7-day diary, mean, SD): I: 9.1 ± 12.3, II: 2.0 ± 3.5, $p > 0.05$ *Reduction in 1-hour pad test* (g, mean, SD): I: 18.7 ± 24.8, II: 7.4 ± 6.1, $p > 0.05$	**Subjective** *Change (?reduction) in Incontinence Impact questionnaire (IIQ) score* (mean, SD): I: 24.5 ± 10.8, II: 8.5 ± 19.9, $p < 0.05$; 'the extent of improvement is far greater for group A (= PFMT) than group B (= PFMT + BF)'

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Wong 1997b[160] (abstract only) *Study design/method*: 2-arm RCT. Single centre, Hong Kong *Duration of study*: 4 weeks	*Inclusion criteria*: Chinese women in Hong Kong with USI *Exclusion criteria*: Not reported *N randomised*: 47 *N lost to follow-up*: Not reported *Type of incontinence*: USI *Age* (years, mean, SD): 48.8 (9.4) (33–73) *1-hour pad test* (g, mean, SD): 19.9 (30.1) 'The two groups were comparable with respect to age, BMI, results of PFMS (pelvic floor muscle strength), PFME (pelvic floor muscle endurance as holding time by perineometry), pad test and CES (Continence Efficacy Scale, measuring the subjective feeling of self-control over incontinence)' (p. 63)	I. PFMT, with clinic visits, *N* = 21 II. PFMT, home based, *N* = 26 (*N* randomised) *PFMT, with clinic visits*: Eight clinic visits over 4 weeks for PFMT and daily PFMT at home *PFMT, home-based*: Single clinic visit and daily PFMT at home for 4 weeks. Taught the same PFMT programme as the clinic-based group *Additional information* Cure rates presented as cohort, not by group allocation	**Objective** *'Completely continence'* (less than 2 g on 1-hour pad test): 26/47, data by group allocation not reported *Episodes of leakage* (7-day diary): Both groups showed 'significant improvement' over time but no between-group differences *1-hour pad test*: Both groups showed 'significant improvement' over time but no between-group differences **Surrogate outcomes** *Maximal pelvic floor muscle strength as pressure (cmH2O)*: Both groups showed 'significant improvement' over time but no between-group differences *Pelvic floor muscle strength as holding time (seconds) by perineometer*: Both groups showed 'significant improvement' over time but no between-group differences	**Quality of life** *Continence Efficacy Scale* (subjective feeling of self-control over incontinence, 10-point visual analogue scale): Both groups showed 'significant improvement' over time but no between-group differences

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Wong 2001[169] *Study design/method*: 2-arm RCT, Single centre, Hong Kong *Duration of study*: 2 months?	*Inclusion criteria*: Chinese women with GSI *Exclusion criteria*: Second- and third-degree uterine prolapse, previous failure of PFMT, previous continence surgery, neurological pathology, and pad test result of less than 2 g *N randomised*: 38 *N lost to follow-up*: Not reported *Type of incontinence*: USI *Age* (years, mean, SD): I: 47.6 (8.0), II: 44.4 (4.3), $p > 0.05$ *Episodes of leakage per week* (7-day diary, mean, SD): I: 9.1 (14.6), II: 3.5 (5.6), $p > 0.05$ *1-hour pad test* (g, mean, SD): I: 59.7 (108.5), II: 12.5 (12.7), $p > 0.05$ *Pelvic floor muscle strength* (perineometer, cmH_2O): I: 12.9 (10.2), II: 11.4 (7.2), $p > 0.05$ *Pelvic floor muscle endurance* (perineometer, seconds): I: 5.8 (8.5), II: 5.0 (7.8), $p > 0.05$ *IIQ-7 (mean)*: I: 28.57, II: 19.05, $p > 0.05$ *UDI-6 (mean)*: I: 50.00, II: 35.70 (?possible errors in tables 2 and 3), $p > 0.05$ *Other*: Parity	I. PFMT + BF (vaginal), *N* = 19 II. PFMT + BF (vaginal and abdominal), *N* = 19 (*N* randomised) *PFMT + BF (vaginal)*: Four bi-weekly sessions with physiotherapist lasting about half an hour. Session 1 included education and teaching of VPFMC. From session 2, five sets of exercises in crook-lying, with each set including three fast and two slow VPFMC. BF = PRS9300 with a vaginal probe. Patients watched the screen for BF on their performance shown by electromyography. Patients were asked to minimise any excessive abdominal action *PFMT + BF (vaginal and abdominal)*: As above except that patients had the surface electrode attached to the abdominal wall and a vaginal probe in addition. The rectus abdominis was identified as the prime muscle responsible for contraction of the abdominal wall. Electrodes were placed on both sides of umbilicus, recording the activity of the rectus abdominis. Patients were asked to minimise any excessive abdominal action	**Objective** *Episodes of leakage per week* (7-day diary, mean, SD): I: 4.1 (10.7), II: 1.5 (3.0), $p > 0.05$ *1-hour pad test* (with a standardised set of exercises, g, mean, SD): I: 23.0 (69.0), II: 3.9 (3.6), $p > 0.05$ Note: One patient in group I had a leakage of more than 300 g in the pad test **Surrogate outcomes** *Maximal pelvic floor muscle strength* (perineometer, cmH_2O): I: 21.7 (14.0), II: 16.8 (8.1) *Pelvic floor muscle endurance* (perineometer, seconds): I: 6.7 (3.0), II: 6.3 (2.9)	**Quality of life** *Incontinence Impact Questionnaire Short Form* (IIO-7, Chinese translated version, mean): I: 14.29, II: 14.29, *p*-value for between-group difference in change from baseline = 0.037 Note: Scoring 0 = not at all, 1 = lightly, 2 = moderately, 3 = greatly. The average, which ranged from 0 to 3, was multiplied by 33.3 to transform scores into a scale of 0–100 *Urogenital Inventory Short Form* (UDI-6, Chinese translated version, mean): I: 16.67, II: 27.78, *p*-value for between-group difference in change from baseline = 0.044 Note: Scoring as for IIQ-7

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Wyman 1998[183] *Study design/method*: 3-arm RCT part of a multistudy (see Additional information). Block randomisation stratified by urodynamic diagnosis, baseline incontinence severity and treatment centre. Multicentre (two sites), USA *Duration of study*: 3 months' treatment plus follow-up at 3 months after treatment and at mean 3.2 years (no range or SD given)	*Inclusion criteria*: Women aged ≥ 45 years; independent community dwelling; at least one involuntary episode of urine loss per week; mentally intact and functionally capable of independent or assisted toileting *Exclusion criteria*: Uncontrolled metabolic conditions (e.g. diabetes mellitus); urinary tract infection; genitourinary fistula; reversible cause of urinary incontinence; indwelling catheter; residual urinary volume after voiding of greater than 100 ml; inability to perform VPFMC on digital examination *N randomised*: 204 *N withdrawals/dropouts/ losses to follow-up*: immediately after treatment phase: I = 0, II = 5, III = 6; 3 months after end of treatment phase: numbers unclear (numbers in tables don't quite tally with text): I = ?6, II = ?+1, III = ?1; at long-term follow-up, I = 20, II = 17, III = 20 *Type of incontinence* (USI/MUI/DO): I: 48/11/9, II: 48/11/10, III: 49/8/10 *Age* (years, mean, SD): I = 60 (10), II = 62 (10), III = 61 (9)	I. BT, *N* = 68 II. PFMT + BF, *N* = 69 III. BT + PFMT + BF, *N* = 67 (*N* randomised) *BT*: Trained by registered research nurses. Structured education programme (audiovisual and written). Weekly clinic visits with nurse during first 6 weeks. Patients mailed in their treatment logs weekly in weeks 7–12. Bi-weekly phone calls by nurse in weeks 7–12. Scheduled voiding: starting from baseline frequency of 30- or 60-minute voiding interval, increasing interval between voids by 30 minutes each week, aiming to get a 2.5-hour or 3-hour interval between voiding; the schedule usually remained unchanged in the last 6 weeks. Encouraged to use urge inhibition techniques such as affirmations (self-statements), distraction and relaxation techniques *PFMT*: Education and contacts with nurse as in the BT group. Correct VPFMC taught by registered nurses. Graded home exercise regimen with audiocassette. PFMT = five fast VPFMC with 3-second hold and 10 sustained VPFMC with 10-second hold, with 10-second relaxation between contractions twice a day. Progressed to a total of 10 fast and 40 sustained VPFMC per day. Also taught VPFMC to inhibit urge, and 'The Knack' (VPFMC prior to increases in intra-abdominal pressure, such as cough). BF = four weekly 30-minute sessions of visual and verbal biofeedback *BT + PFMT + BF*: BT in weeks 1 and 2, PFMT added in week 3. Education and clinic visits as in the BT group	**Objective** *100% reduction (cure) in episodes of leakage per week immediately after treatment* (7-day diary, mean, SD): I: 12/68, II: 8/64, III: 19/61 *100% reduction (cure) in episodes of leakage per week at 3 months after end of treatment* (mean, SD): I: 10/62, II: 13/65, III: 16/60 *N reporting no incontinence episode at mean 3.2 years* (of those who did not have additional treatment): I: 4/22, II: 1/11, III: 8/16 *50–100% reduction (cure or improvement) in episodes of leakage per week immediately after treatment* (7-day diary, mean, SD): I: 35/68, II: 36/64, III: 43/61 *50–100% reduction (cure or improvement) in episodes of leakage per week at 3 months after end of treatment* (mean, SD): I: 28/62, II: 36/65, III: 35/60 *N of episodes of leakage per week immediately after treatment* (7-day diary, mean, SD): Women with USI only: I: 48, 12.5 (8.3), II: 46, 8.7 (0.0) [sic], III: 42, 7.2 (11.5) • women with DO or MUI: I: *19*, 6.2 (9.1), II: 18, 11.9 (12.7), III: 16, 5.8 (9.5); • all women: I: 68, 10.6 (16.3), II: 64, 9.6 (10.8), III: 61, 6.8 (10.7); *N of episodes of leakage per week at 3 months after end of treatment* (mean, SD): All women: I: 62, 10.0 (12.0), II: 65, 9.4 (14.0), III: 60, 8.1 (12.4) *N of episodes of leakage per week at mean 3.2 years*: Of those who did not seek additional treatment, there were no differences among treatment groups in those who became worse in terms of incontinence episodes as compared to baseline ($p = 0.80$) or at 3 months after end of treatment ($p = 0.97$)	**Subjective** *Improvement immediately after treatment* (5-point Likert scale, 'much better' or 'somewhat better'): I: 43/66, II: 48/63, III: 55/61 *Improvement at 3 months after end of treatment* (5-point Likert scale, 'much better' or 'somewhat better'): I: 37/60, II: 45/64, III: 44/58 **Quality of life** *Urogenital Distress Inventory (UDI) immediately after treatment* (Shumaker *et al.* 1994; mean, SD): Women with USI only: I: 47, 99.2 (54.4), II: 45, 81.2 (39.6), III: 44, 63.2 (49.2) • women with DO or MUI: I: 20, 86.8 (54.8), II: 18, 114.8 (70.3), III: 17, 67.6 (48.5) • all women: I: 67, 95.5 (54.4), II: 63, 90.8 (52.0), III: 61, 64.4 (48.6) *UDI at 3 months after end of treatment* (mean, SD): All women – I: 60, 91.7 (55.0), II: 64, 85.0 (52.4), III: 58, 72.8 (50.4) *Incontinence Impact Questionnaire-Revised (IIQ-R) immediately after treatment* (Shumaker *et al.* 1994; mean, SD): Women with USI only – I: *47*, 68.4 (69.7), II: *45*, 43.5 (47.4), III: *44*, 52.3 (73.4) • women with DO or MUI: I: 19, 81.2 (88.7), II: 18, 88.9 (79.4), III: 17, 31.8 (34.4) • all women: I: 66, 72.1 (75.2), II: 63, 56.8 (61.4), III: 61, 46.6 (65.3) *IIQ-R at 3 months after end of treatment* (mean, SD): All women – I: 60, 65.7 (80.2), II: 64, 59.3 (67.7), III: 58, 59.8 (83.9)

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
	Episodes of leakage per week (mean, SD): • women with USI only: I: 48, 14.8 (1.7), II: 46, 15.3 (14.5), III: 42, 14.5 (4.1) • women with DO or MUI: I: 19, 14.3 (10.3), II: 18, 20.7 (22.4), III: 16, 16.2 (13.7) • all women: I: 68, 14.6 (11.2), II: 64, 16.8 (17.1), III: 61, 14.9 (13.8) *Urogenital Distress Inventory (UDI)* (mean, SD): Women with USI only: I: 47, 124.6 (45.9), II: 45, 114.2 (45.0), III: 44, 120.2 (48.9) • *women with DO or MUI*: I: *20*, 143.2 (54.0), II: 18, 133.2 (59.6), III: 17, 115.4 (42.5) • *all women*: I: 67, 130.1 (48.8), II: 63, 119.7 (49.9), III: 61, 118.9 (46.9) *Incontinence Impact Questionnaire-Revised (IIQ-R)* (mean, SD): Women with USI only: I: 47, 85.7 (67.9), II: 45, 68.2 (55.7), III: 44, 90.4 (72.1) • women with DO or MUI: I: 19, 118.5 (84.4), II: 18, 93.7 (90.3), III: 17, 84.0 (66.9) • all women: I: 66, 95.1 (73.9), II: 63, 75.5 (67.6), III: 61, 88.6 (70.2) *Other*: BMI, ethnicity (% white), education (>high school), $p=0.035$, employment status (% with income >US$20,000/year), % prior incontinence surgery, parity, % postmenopausal without hormone replacement therapy	*Additional information*: This is one trial within a multicentre study including several different trials. Any women considered insufficiently 'estrogenised' were entered into a different trial. Any women who had a stage III or stage IV prolapse were entered into a different trial. Women diagnosed with USI only could choose between entering into this trial of behavioural therapies or could choose to enter a surgical trial	**Surrogate outcomes** *Adherence immediately after treatment* (attended all 6 visits, denominator not specified): I=57%, II: 53%, III=73%, $p=0.047$ *Adherence to scheduled voidings* (denominator not specified): immediately after treatment: I: 85%, II: NA, III: 81%; at 3 months after end of treatment: I: 44%, II: NA, III: 40%; at mean 3.2 years: 38% (group not specified) *Adherence to PFMT* (denominator not specified): immediately after treatment – I: NA, II: 84%, III: 78%; at 3 months after end of treatment – I: NA, II: 64%, III: 58%; at mean 3.2 years: 35% (group not specified) *Balloon manometry immediately after treatment* (mean sustained contraction, mmHg): I: 68, 13.1 (10.6), II: 69, 16.7 (12.9), III: NR, significant improvement from baseline for Group II *Balloon manometry immediately after treatment* (mean fast contraction, mmHg): I: 68, 18.3 (14.0), II: 69, 22.3 (16.2), III: NR, significant improvement from baseline for Group II The degree of improvement in continence status does not correlate directly with the degree of increase in PFM strength **Long term (at mean 3.2 years)** *N having incontinence surgery*: I: 5/48, II: 5/52, III: 8/47 *N having SNRI therapy*: I: 2/48, II: 10/52, III: 5/47 *N having injections*: I: 1/48, II: 2/52, III: 1/47 *N having PFMT*: I: 13/48, II: NR, III: NR *N who sought any additional treatment*: I: 19/48, II: 29/52, III: 18/47 **Adverse events** None reported	*IIQ-R at mean 3.2 years*: Of those who did not seek additional treatment, there were no differences among treatment groups in those who became worse in terms of IIQ-R scores as compared to baseline ($p=0.16$) or at 3 months after end of treatment ($p=0.20$) *Patient satisfaction immediately after treatment* (5-point Likert scale, 'very satisfied' or 'slightly satisfied'): I: 48/66, II: 56/63, III: 57/61 *Patient satisfaction at 3 months after end of treatment* ('very satisfied' or 'slightly satisfied'): I: 47/60, II: 53/64, III: 51/58 **Subgroup analysis** By type of incontinence (USI vs other) Change in mean incontinence episodes per week over time available: authors note that BT appears to have its greatest efficacy at 6 weeks, compared to PFMT at 11–12 weeks

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Zanetti 2007[161] *Study design/method*: 2-arm RCT. Single centre, Brazil *Duration of study*: 3 months	*Inclusion criteria*: Women with USI, urinary leakage observed during physical examination; postmenopausal patients needed to have been on topical hormone replacement therapy for no less than 3 months *Exclusion criteria*: Any kind of disorder affecting muscle or nerve tissues, genital bleeding, pregnancy, urinary tract infection, vulvovaginitis, genital prolapse beyond the hymen, atrophic vaginitis or cardiac pacemakers *N randomised*: 44 *N lost to follow-up*: Not reported *Type of incontinence*: USI *Age* (years, median): I: 54, II: 56, $p = 0.9344$ *N of micturitions in 24 hours* (median): I: 11.0, II: 7.0, $p = 0.4939$ Note: table 2 provides these data as 'micturitions per day' but in the text this is described as 'urine leakage episodes' *1-hour pad test* (g, median): I: 24.7, II: 20.1, $p = 0.8508$ *Incontinence Quality of Life* (median): I: 82, II: 69, $p = 0.3717$ *Other*: BMI, ethnicity, % prior incontinence surgery, parity (*N* of pregnancies), % postmenopausal	I. PFMT unsupervised, $N = 21$ II. PFMT, supervised, $N = 23$ (*N* randomised) *PFMT*: All patients underwent individual physiotherapeutic evaluation to assess their pelvic floor strength by means of bidigital examination during perineal contraction without the association of gluteal and/or adductor muscles. PFMT = 10 VPFMC of 5-second hold and 5-second rest, 20 VPFMC of 2-second hold and 2-second rest, 20 VPFMC of 1-second hold and 1-second rest, and five VPFMC of 10-second hold and 10-second rest, followed by five strong contractions together with a cough, with one-minute intervals with each set. Instructed to perform the sequence daily, repeated in the orthostatic, sitting and supine positions. Monthly assessment of pelvic floor muscle strength by the same physiotherapist by means of bidigital examination, and classified from 0 to 5 in accordance with Sampselle *et al.* (1989). Patients were informed about their evaluation *PFMT, with supervision*: Individual physiotherapeutic evaluation, PFMT sequence and monthly evaluation as above. Instructed to perform the sequence daily, repeated in the orthostatic, sitting and supine positions. In addition, PFMT was performed under guidance from a physiotherapist, twice a week, for 45 minutes	**Objective** *Cure* (pad test negative, i.e. urine leakage of no more than 2 g on 1-hour pad test): I: 2/21, II: 11/23 *N of micturition in 24 hours* (7-day diary, median): I: 10.0 , II: 1.0, $p = 0.0002$ Note: table 2 provides these data as 'micturitions per day' but in the text this is described as 'urine leakage episodes' *1-hour pad test* (g, median): I: 15, II: 3.2, $p = 0.0018$	**Quality of life** *Incontinence Quality of Life* (median): I: 79, II: 89, $p = 0.0456$ Note: Composed of 20 questions. Total scores converted into a percentage. Higher percentage reflects better quality of life *Satisfaction (N of participants who did NOT want any other kind of treatment)*: I: 5/21, II: 16/23

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Zinner 1998[145] (abstract only) *Study design/method*: 4-arm RCT. Multicentre, USA *Duration of study*: 6 weeks (+2 week placebo lead-in)	*Inclusion criteria*: Women with diagnosis of SUI or MUI *Exclusion criteria*: Not specified *N randomised*: 286 *N lost to follow-up*: Unclear *Type of incontinence*: SUI: 140 (49%), MUI: 146 (51%); data reported separately for women with SUI only	I. Duloxetine 20 mg q.d. (= once daily), *N* = 34–35 II. Duloxetine 30 mg q.d., *N* = 26-29 III. Duloxetine 40 mg (30 mg q.d. for 2 weeks, rising to 40 mg q.d. for 4 weeks), *N* = 33–38 I. Placebo, *N* = 34–35[a] (women with SUI only; *N* in analysis, depending on outcomes) *Additional information*: *N* included in analysis was unclear, as denominators were provided as a range (as above). The lowest limit of each range is used as the denominator for each arm. Data were presented for women with SUI only. Authors reported that 'In mixed UI patients, no statistically significant changes were observed'	**Objective** *Cure or improvement on N of leakage episodes per week* (*N* of 'responders' who showed >70% improvement/ reduction; from graph): women with SUI only, I: 15/34, II: 8/26, III: 15/33, IV: 5/34 *Cure or improvement on 1-hour stress pad test* (*N* of 'responders' who showed >70% improvement; from graph): Women with SUI only, I: 15/34, II: 7/26, III: 11/33, IV: 6/34 *Cure or improvement on 24-hour pad test* (*N* of 'responders' who showed >70% improvement; from graph): Women with SUI only, I: 15/34, II: 6/26, III: 13/33, IV: 5/34 *Mean reduction in N of leakage episodes per week* (mean, SD): Women with SUI only, I: 34, 13.9 ± 12.8 , II: 26, 8.8 ± 6.1, III: 33, 7.6 ± 11.3 , IV: 34, 5.9 ± 7.6; duloxetine combined (I-III): 95, 10.1 ± 11.0 *Mean reduction in 1-hour stress pad test* (g, mean, SD): Women with SUI only, I: 34, 13.5 ± 26.2 , II: 26, 5.3 ± 16.3, III: 33, 12.2 ± 21.7, IV: 4.7 ± 15.5; Duloxetine combined (I-III): 95, 10.7 ± 22.2 *Mean reduction in 24-hour pad test* (g, mean, SD): Women with SUI only, I: 34, 40.8 ± 65.0, II: 26, 17.6 ± 49.2, III: 33, 19.6 ± 41.4, IV: 34, 9.4 ± 43.3; Duloxetine combined (I-III): 95, 26.7 ± 53.6 **Adverse events** *Adverse events*: Nausea, but only <2% withdrew because of this. No serious adverse events *Discontinued treatment because of adverse events*: Duloxetine (I–III): 8% (8/95?), placebo (IV): 3% (1/34?); figures calculated from percentages given in paper	**Quality of life** *Mean change in I-QOL score*: Women with SUI only, I: 34, 12.0 ± 16.0 , II: 26, 10.0 ± 6.4 , III: 33, 8.2 ± 10.8 , IV: 34, 2.6 ± 8.8; duloxetine combined (I–III): 95, 10.1 ± 12.0

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Studies of pregnant women

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Dumoulin 2004[199] *Study design/method*: 3-arm RCT. Single centre, Canada *Duration of study*: 8 weeks (plus 1-year follow-up)	*Inclusion criteria*: Women younger than 45 years, premenopausal, still presenting symptoms of SUI at least once per week 3 months after their last delivery *Exclusion criteria*: Women who had experienced UI before pregnancy, who had had previous surgery for SUI, a neurological or psychiatric disease, or a major medical condition, or those who were taking medication that could interfere with their evaluation or treatment; current pregnancy, inability to understand French or English; those with moderate to severe urogenital prolapse; postvoid residual urine volume >50 mg; <5 g of leakage measured by a 20-minute pad test with fixed bladder volume; involuntary detrusor contraction on cystometry *N randomised*: 68 *N lost to follow-up*: I: 1/20, II: 0/23, III: 1/20 *Type of incontinence*: SUI or USI *Age* (years, median, 25th and 75th percentile): I: 36.00 (23.25, 39.00), II: 37.00 (34.00, 39.00), III: 35.50 (33.75, 38.25), $p = 0.802$ *Pad test* (g, median, 25th and 75th percentile): I: 12.50 (7.00, 26.75), II: 20.00 (6.00, 32.00), III: 13.00 (8.75, 42.25), $p = 0.870$ *Other*: BMI, parity	I. PFMT (multimodal), $N = 20$ II. PFMT (multimodal) + abdominal muscle training, $N = 23$ III. Control, $N = 19$ (N in analysis) *PFMT (+BF+ES)*: Weekly sessions with an experienced physiotherapist for 8 consecutive weeks. Each session consisted of 15-minute electrical stimulation (biphasic rectangular from), followed by a 25-minute PFMT with BF, which included strengthening and motor relearning exercises, and a home exercise programme to be done 5 days per week. The UROSTIM Unit (Laborie Medical Technologies, Brossard, Quebec, Canada) was used for electrical stimulation and electromyographic BF during the whole supervised treatment *PFMT (+BF+ES) + abdominal training*: Weekly sessions with an experienced physiotherapist for 8 consecutive weeks. Each session consisted of the multimodal PFMT described above plus 30 minutes of deep abdominal muscle training consisting of isolation, reeducation, and functional retraining of the transversus abdominis *Control subjects*: Eight weekly sessions of relaxation massage for the back and extremities performed by a physiotherapist. Women were asked not to exercise their pelvic floor muscles at home during the study but were offered the possibility of receiving a treatment at trial completion	**Objective** *Objective cure* (<2-g urine loss on pad test): I: 14/20, II: 17/23 , III: 0/19 *20-minute pad test with standardised bladder volume* (g, median, 25th and 75th percentiles): I: 8.00 (4.00, 25.25), II: 19.00 (6.00, 25.00), III: 0.00 (–3.00, 9.75), $p < 0.05$ (I vs III), $p < 0.05$ (II vs III) **Adverse events** *N experiencing adverse events: I*: 0/21, II: 0/23, III: 0/20	**Quality of life** *Incontinence Impact Questionnaire* (total 90, change of score, median, 25th and 75th percentile): I: 13.00 (6.00, 25.00), II: 10.00 (2.00, 16.00), III: 0.50 (–6.50, 5.00); $p < 0.05$ (I vs III), $p < 0.05$ (II vs III) *Urogenital Stress Inventory* (total 57, change of score, median, 25th and 75th percentile): I: 7.00 (3.00, 8.00), II: 4.00 (1.00, 10.00), III: 0.00 (–2.25, 6.50); $p < 0.05$ (I vs III), $p < 0.05$ (II vs III)

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
		Additional information: After 8 weeks, the control group was added to the two treatment groups but it was unclear if this involved any further randomisation. Awaiting author's reply Data extracted for outcomes at the end of 8-week treatment only		
Wilson 1998[197] *Study design/method*: 4-arm RCT (women randomised to a control and intervention group, with the intervention group further randomised into three subgroups). Block randomisation, stratified by parity, *N* of incontinent episodes and type of delivery. Single centre, New Zealand *Duration of study*: 1 year after delivery and at 24–44 months after delivery	*Inclusion criteria*: Women, 3 months postpartum, with urinary incontinence, within catchment area who returned postal questionnaire *Exclusion criteria*: Not specified *N randomised*: 230 *N lost to follow-up*: At 1 year, I: 17/38, II: 20/39, III: 22/36, IV: 26/117; at 24–44 months, I: 12/38, II: 9/39, III: 6/36, IV: 35/117 Withdrawal mainly for reasons of lack of time and inconvenience involved with the hospital-based regimen. Six people in the intervention groups (I, II and III) withdrew due to being 'continent' *Type of incontinence*: Stress 130 (57%), mixed 59 (26%), urge 35 (15%), undefined 6 (3%) *Age* (years, mean, 95% CI): I, II, III (combined): 29.0 (28.8 to 29.2), IV: 27.8 (27.0 to 28.7) *N (%) of women with < 1 incontinent episode per day*: I, II, III (combined): 101 (89%), IV: 104 (89%) *Pad test* (g, mean, 95% CI): I, II, III (combined): 4.0 (1.0 to 7.1), IV: 1.3 (0.9 to 1.7) *Other*: *N* (%) vaginal delivery, *N* (%) parity <4, *N* (%) primipara, *N* (%) performing PFMT in previous month	I. PFMT + VC, *N* = 38 II. PFMT, *N* = 39 III. VC, *N* = 36 IV. Control, *N* = 117 (*N* randomised) All women in the intervention arms (I, II and III) received instruction by one physiotherapist on four occasions in hospital at 3, 4, 6 and 9 months after delivery *PFMT*: VPFMC taught via a vaginal perineometer. Preparatory exercises were provided to help identify the PF muscles, followed by a basic exercise programme of 8–10 sessions/day including 'fast' and 'slow' contractions. Aim of 80-100 VPFMCs per day *VC*: Nine cones in each set, of increasing weight from 20–100 g. Women to retain cones of increasing weights in their vaginas for 15 minutes twice daily *PFMT + VC*: Combined PFMT and VC programmes as described above *Control subjects*: Standard postnatal PFMT as taught by physiotherapists in one antenatal group (12 women) class teaching PF anatomy and exercises, with further daily instruction on PFMT in smaller groups (of 6) from the 2nd postnatal day (if still in hospital) or via an audiotape in hospital at weekends	**Objective** *Home pad test* (Wilson 1991) (g, mean, 95% CI): I: 12, 0.5 (0.1, 0.9), II: 18, 2.1 (–0.3, 4.5), III: 20, 0.6 (0.1, 1.1), IV: 82, 2.6 (0.1, 5.1) **Long term** *N having incontinence surgery by 24–44 months*: 9 (group not specified) **Surrogate outcomes** *Adherence*: • numbers performing PFME in the last month): I: 14/14 (100%), II: 19/19 (100%), III: 15/21 (71%), IV: 59/91 (65%) • numbers performing PFME daily: I: 9/14 (64%), II: 13/19 (68%), III: 4/21 (19%), IV: 8/91 (9%) • number of daily contractions (mean, 95% CI): I: 14, 73 (51, 95), II: 19, 86 (68, 104), III: 21, 26 (19, 33), IV: 91, 35 (30–40) • average teaching time (minutes, mean?, 95% CI): I: 14, 38, (34 to 42), II: 19, 32 (30-34), III: 21, 30 (28 to 32), IV: 91, n/a *Pelvic floor muscle function*: • (perineometry, maximum, cmH_2O, mean, 95% CI): I: 13, 13.0 (8.1 to 17.9), II: 19, 13.6 (9.8 to 17.4), III: 19, 12.7 (8.4 to 17.0), IV: 79, 13.1 (11.3 to 14.9)	**Subjective** *Number* ***not*** *cured 1 year after delivery* (postal questionnaire): I: 8/14 (57%), II: 9/19 (47%), III: 10/21 (48%), IV: 69/91 (76%) ($p = 0.003$ between intervention groups (I–III combined) vs control group) **Quality of life** '*General feeling' at 1 year after delivery*: • very well: I, II, III: 20/54 (37%), IV: 39/91 (43%) • quite well: I, II, III: 30/54 (56%), IV: 46/91 (51%) • not very well: I, II, III: 4/54 (7%), IV: 5/91 (6%) • not well at all: I, II, III: 0/54 (0%), IV: 1/91 (1%) • 'mental feeling' at 1 year after delivery • very happy: I, II, III: 16/54 (30%), IV: 37/91 (41%) • quite happy: I, II, III: 35/54 (65%), IV: 43/91 (47%) • not very happy: I, II, III: 3/54 (6%), IV: 10/91 (11%) No significant differences between the intervention groups (I–III combined) and control group regarding sexual satisfaction at 1 year after delivery

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
			• (perineometry, sustained, cmH_2O, mean, 95% CI): I: 13, 6.1 (4.0 to 8.2), II: 19, 7.9 (5.3 to 10.6), III: 19, 7.8 (4.3 to 11.3), IV: 79, 6.7 (5.4 to 8.1) **Adverse events** *Discontinued treatment because of adverse events* (dislike treatment): I, II, III (combined): 2, IV: 0	Telephone questionnaire at 24–44 months after delivery Note: 168/230 were contacted. Excluding those who had either had another pregnancy or were currently pregnant (*N* = 72) and those who had undergone surgery (*N* = 9), there were 89 available for analysis (I–III: 52, IV: 37). In the 89 women, there were no significant differences between the two groups with respect to the prevalence of urinary incontinence (I–III: 58%, IV: 54%) or compliance with PFMC, which appeared to diminish significantly from 1 year postpartum (I–III: 48% at 1 year, 8% at 24–44 months)

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
Woldringh 2007[198] *Study design/method*: 2-arm RCT, stratified by centre. Multicentre, the Netherlands *Duration of study*: The study consisted of five measurements: 22 weeks' gestation (baseline), week 35 (after three sessions), 8 weeks postpartum (after fourth session), 6 months postpartum and 1 year postpartum	*Inclusion criteria*: Women in weeks 17–20 of pregnancy, with ≥2 incidences of involuntary urine loss during the last month *Exclusion criteria*: Already receiving medical treatment for UI, suffering from comorbidity, or had insufficient knowledge of Dutch language *N randomised*: 264, I: 112, II: 152 *N lost to follow-up*: I: 47/112, II: 53/152. Withdrew due to new pregnancy/motherhood reasons: I: 9/47, II: 13/53; all other reasons for withdrawal unspecified *Type of incontinence* (stress/mixed/urge/NONE): i: 62/45/3/2, ii: 99/45/1/7 *Age* (years, mean, 95% CI): I: 31.9 (31.1 to 32.7) , II: 32.6 (32.0 to 33.3) *UI severity score* (score range 0-10, mean, 95% CI): I: 5.8 (5.4 to 6.2), II: 5.6 (5.2 to 5.9) *Other*: BMI, education, employment status, % nulliparous, % doing VPFMCs already at least once per week	I. PFMT *N* = 112 II. Control *N* = 152 (*N* randomised) *PFMT*: Four sessions of individual therapy with physiotherapist: three sessions (with 2-week interval) between weeks 23 and 30 of pregnancy and one additional session 6 weeks after delivery. Training manual in accordance with the KNGF (Royal Dutch Society of Physiotherapists). The sessions consisted of information aimed to raise the women's awareness of PF muscles and to encourage them to exercise these. In view of the advanced pregnancies, the physiotherapists did not perform vaginal palpation but observation and palpation of the perineal body. They also encouraged women to practice self-palpation. Additional 40-page handbook provided with information on incontinence, PF muscles and PFMT exercises *Control subjects*: Routine care for pregnant women. No further details, but nearly two-thirds of the control group received some instruction on PFMT	**Surrogate outcomes** *Adherence* (following 3 sessions during pregnancy): • 'no exercise at all': I: 6%, II: 36% • 'sometimes': I: 17%, II: 25% • 'regularly but not intensively': I: 0%, II: 26% • 'intensively nearly every day' I: 7%, II: 14% Note: Denominator not specified	**Subjective** *Severity of incontinence score* (composite measure, range 0–10, 0 = no UI at all) *N cured (score 0) at 8 weeks postpartum* (2 weeks following last intervention session): I: 31/81 (38%), II: 35/109 (32%). Difference between groups 6%, 95% CI –20 to 8%, $p = 0.442$ *N cured (score 0) at 1 year postpartum*: I: 25/60 (42%), II: 35/94 (37%); difference between groups 5%, 95%CI –21 to 11%, $p = 0.610$ Note: UI severity score was a combined objective and subjective score. The objective assessment was based on bladder diaries (daily during a whole week). The subjective assessment was based on the validated PRAFAB score (five questions relating to the use of protective pads or garments, the amount of UI, frequency of UI, adjustment in daily activity because of UI, and body image). The total score ranged from 0 to 10. Two dichotomous variables were constructed: (1) 'no UI at all' (score 0) vs 'any UI' (score 1-10), and (2) 'mild UI' (score 0–4) vs 'moderate/severe UI' (score 5–10).

Study	Participant characteristics	Intervention/comparator	Objective outcomes	Subjective outcomes
				Quality of life Incontinence Impact Questionnaire *Impact of incontinence on daily life at 8 weeks postpartum* (*N* of women) • any impact on social relations: I: 8/89 (9%), II: 8/133 (6%) • any impact on emotional health: I: 17/85 (20%), II: 20/125 (16%) • any impact on recreational activities: I: 20/87 (23%), II: 18/129 (14%) • any impact on physical activities: I: 7/88 (8%), II: 13/130 (10%) *Impact of incontinence on daily life at 1 year postpartum* (*N* of women) • *any impact on social relations*: I: 2/67 (3%), II: 5/100 (5%) • *any Impact on emotional health*: I: 11/65 (17%), II: 14/100 (14%) • *any impact on recreational activities*: I: 10/67 (15%), II: 10/100 (10%) • *any impact on physical activities*: I: 4/67 (6%), II: 7/100 (7%)

Appendix 11

Characteristics of included studies: interventions and supervisory intensity

	Trial ID	*N* randomised	Duration (months) of prescribed treatment	*N* of visits per month in active treatment arm	*N* of clinic visits in total in active treatment arm	*N* of arms	Arm 1	Arm 2	Arm 3	Arm 4
1	Aksac 2003[120]	50	2	4	8	3	PFMT	PFMT + BF	NT. No exercises	
2	Arvonen 2001[178]	40	4	0.8	3	2	PFMT	VC		
3	Aukee 2002[146]	30	3	1.7	5	2	PFMT	PFMT + BF. Home BF device		
4	Berghmans 1996[147]	40	1	12	12	2	PFMT. Includes 'The Knack'	PFMT + BF		
5	Bernardes 2000[174]	14	0.3	30.3	10	2	PFMT. Includes micturition control and perineal reinforcement	ES		
6	Bidmead 2002[121]	184	3.5	1.4	5	4	PFMT	PFMT. With sham ES	PFMT + ES	NT. Deferred treatment
7	Blowman 1991[189]	14	?1	2	2	2	PFMT + sham ES	PFMT + ES		
8	Bø 1990[159]	57	6	1 or 5	6 or 30	2	PFMT. Monthly clinic visit (six visits)	PFMT. Monthly clinic visits and weekly exercise class (30 visits)		
9	Bø 1999[115]	122	6	1 or 5	6 or 30	4	PFMT. Monthly clinic visit and weekly exercise class (30 visits)	ES. Monthly clinic visit (six visits)	VC. Monthly clinic visit (six visits)	NT. Instruction on Continence Guard. No clinic visit
10	Borello-France 2006[165]	44	2.25 to 3	4	9 to 12	2	PFMT in supine position with clinic-based BF. Also includes stress strategies	PFMT in supine and upright positions with clinic-based BF. Also includes stress strategies		

	Trial ID	*N* randomised	Duration (months) of prescribed treatment	*N* of visits per month in active treatment arm	*N* of clinic visits in total in active treatment arm	*N* of arms	Arm 1	Arm 2	Arm 3	Arm 4
11	Bourcier 1994[196]	102	6	2 or 3.3	12 or 20	2	PFMT + BF + ES. Twice a week over 6 weeks (12 visits). After assessment at 3 months, participants attended a clinic weekly for 2 months (eight visits). Cure measured at 6 months	PFMT + VC. Weekly session for 3 months (12 visits). After assessment at 3 months encouraged to continue the home treatment. Cure measured at 6 months		
12	Brubaker 1997[130]	148	2	0.5	1	2	ES	Sham ES		
13	Bump 2004[136]	65	1			2	SNRI	Placebo		
14	Burns 1993 [122]	123	2	4	8	3	PFMT	PFMT + BF. BF during clinic visits	NT. No contact with study personnel	
15	Burton 1993[173]	61	NR	NR	NR	2	VC. Use of cone in static position (passive)	VC. Use of cone while doing standardised activities that previously made them incontinent (active)		
16	Cammu 1998[181]	60	3	2 or 4	6 or 12	2	PFMT + BF. Clinic-based BF. Also instructed 'to voluntary contract the pelvic floor prior to a sudden intra-abdominal pressure rise'. Weekly clinic visits (12 visits)	VC. Clinic visits fortnightly (six visits)		
17	Cardozo 2004 [137]	109	2			2	SNRI	Placebo		
18	Castleden 1984[148]	19	1	NR	NR	2	PFMT (crossover)	PFMT + BF (cross over). Home BF device		

	Trial ID	*N* randomised	Duration (months) of prescribed treatment	*N* of visits per month in active treatment arm	*N* of clinic visits in total in active treatment arm	*N* of arms	Arm 1	Arm 2	Arm 3	Arm 4
19	Castro-Diaz 2007[138]	516	2			4	SNRI. 2 x 40 mg daily	SNRI. 1 × 40 mg daily, then 2 × 40 mg daily	SNRI. 2 × 20 mg daily, then 2 × 40 mg daily	Placebo
20	Delneri 2000[186]	20	0.5 or 1	24 for ES	12 for ES	2	ES. Twelve consecutive sessions (excluding Saturday and Sunday)	VC. 4 weeks. *N* of clinic visits not reported		
21	Dmochowski 2003[139]	683	3			2	SNRI	Placebo		
22	Dumoulin 2004 [199]	64	2	4	8	3	PFMT (as part of multimodal rehabilitation including BF and ES). Childbearing women only	PFMT (as part of multimodal rehabilitation including BF and ES) + abdominal muscle training. Childbearing women only	NT. Relaxation massage for the back and extremities by physiotherapist. Childbearing women only	
23	Edwards 2000[170]	20	3	NR	NR	2	PFMT + BF	PFMT + ES		
24	Fantl 1991[135]	131	1.5	4	6	2	BT	NT. No contacts		
25	Ferguson 1990[149]	20	1.5	2	3	2	PFMT. With audiotape	PFMT + BF. With audiotape. Intravaginal resistance device (IVRD) coded as BF		
26	Gallo 1997[162]	86	1 to 1.5	0.67 to 1	1	2	PFMT	PFMT with audiocassette		
27	Ghoniem 2005[57]	201	3	1	3	4	PFMT. With placebo SNRI. Includes 'skill training' ('The Knack')	SNRI. With imitation PFMT	PFMT + SNRI	NT. Imitation PFMT + placebo SNRI. No instruction for 'skill training'
28	Glavind 1996 [150]	40	3	0.6 to 2	2 to 6	2	PFMT. 2–3 clinic visits for 4 weeks. Cure measured at 3 months	PFMT + BF. PFMT as in arm 1 with additional four clinic visits for visual BF. Cure measured at 3 months		

	Trial ID	*N* randomised	Duration (months) of prescribed treatment	*N* of visits per month in active treatment arm	*N* of clinic visits in total in active treatment arm	*N* of arms	Arm 1	Arm 2	Arm 3	Arm 4
29	Goode 2003[123]	200	2	2	4	3	PFMT. 'Behavioural training' including 'stress strategies' and 'urge strategies'	PFMT + ES. PFMT as in arm 1	NT. Self-administered behavioural training using a booklet	
30	Hahn 1991[175]	20	6	1.5	9	2	PFMT. Includes muscle contractions against resistance and during different provocative situations like coughing	ES		
31	Haig 1995[190]	58	3	6.7	20	3	PFMT. Five visits with physiotherapist in the first month, 12 in the second month and three in the third month	PFMT + sham ES. Sham ES in the second month	PFMT + ES. ES in the second month	
32	Haken 1991[179]	64	2.5	1.2	3	2	PFMT	VC		
33	Hay-Smith 2003[164]	128	5	0.8	4	2	Strength and motor learning PFMT	Motor learning PFMT alone		
34	Henalla 1989[124]	76	3	3.3 to 4	10 to 12	4	PFMT. Weekly clinic visits (for 12 weeks?)	ES. 10 sessions, once per week for 10 weeks	NT. Received no treatment	Estrogen cream for 12 weeks – not assessed in review
35	Henalla 1990[125]	54	1.5	NR	NR	3	PFMT	NT	Estrogen cream – not assessed in review	
36	Hofbauer 1990[126]	43	1.5	8 to 12	12 to 18	4	PFMT. Clinic visits twice a week (12 visits)	ES. At clinic, three times per week for 6 weeks (18 visits)	PFMT + ES	NT. Sham ES
37	Jeyaseelan 2000[131]	27	2	NR	NR	2	ES	Sham ES		
38	Johnson 2001[167]	37	1.5	NR	NR	2	PFMT + BF. PFMT using maximal voluntary contraction	PFMT + BF. PFMT using submaximal voluntary contraction		

	Trial ID	*N* randomised	Duration (months) of prescribed treatment	*N* of visits per month in active treatment arm	*N* of clinic visits in total in active treatment arm	*N* of arms	Arm 1	Arm 2	Arm 3	Arm 4
39	Karagkounis 2007[194]	197	0.5	NR	NR	2	PFMT + SNRI	Surgery. The TVT ob system under local or regional anaesthesia followed by 2-day hospitalisation		
40	Kim 2007[118]	70	3	8	24	2	PFMT. Includes fitness exercise	NT. Instructed to lead a normal life and to refrain from special exercises		
41	Kinchen 2005[140]	451	3			2	SNRI	Placebo		
42	Klarskov 1986[184]	50	4	1.3	5	2	PFMT. Median 5 (range 2–13) group lessons. Also taught 'correct lifting technique'	Surgery. Colposuspension, vaginal repair or both. *N* of clinic visits unclear		
43	Klingler 1995[151]	41	3	4	12	2	PFMT	PFMT + BF. BF from the 'Endotrainer' device		
44	Knight 1998[172]	70	6	2.33	14	3	PFMT + BF. BF in clinic and at home	PFMT + BF + ES. ES = maximal intensity at clinic	PFMT+BF + ES. ES = overnight at low intensity at home	
45	Konstantinidou 2007[116]	30	3	1 or 5	3 or 15	2	PFMT. Monthly hospital visit (three visits)	PFMT. Monthly hospital visit plus weekly group sessions (15 visits)		
46	Lagro-Janssen 1991[127]	66	3	0.33	1	2	PFMT. With advice on continent pads	NT. Advice on continent pads		
47	Laycock 1988[176]	36	?1–2	?4 or more	?6–11	2	PFMT. Weekly clinic visits for 6–8 weeks	ES. Average 11 (range 7–13) sessions, 2–3 times a week for 4–6 weeks		
48	Laycock 2001[152]	101	3	2	6	3	PFMT	PFMT + BF. Home BF device	VC	

	Trial ID	*N* randomised	Duration (months) of prescribed treatment	*N* of visits per month in active treatment arm	*N* of clinic visits in total in active treatment arm	*N* of arms	Arm 1	Arm 2	Arm 3	Arm 4
49	Laycock Trial 1 1993[132]	46	?2	?3–5	6–10	2	PFMT + BF + VC. Weekly clinic visit for 2 weeks, then every 10 days for average 6 weeks (total six visits?)	ES. Average 10 sessions. Length of treatment period unclear		
50	Laycock Trial 2 1993[132]	30	?2–3	?3.3–5	10	2	ES. Average 10 sessions	NT. Sham ES		
51	Luber 1997[133]	54	3	2	6	2	ES	Sham ES		
52	Mah 2006[141]	121	2			2	SNRI	Placebo		
53	Manning 2005[142]	617	1.5			2	SNRI	Placebo		
54	Mayne 1988[168]	34	4	1.8	7	2	PFMT, monitored using perineometer in clinic	PFMT, monitored using urethral electrical conductance in clinic		
55	Millard 2004[143]	458	3			2	SNRI	Placebo		
56	Miller 1998[107]	27	0.25	4	1	2	PFMT ('The Knack')	NT		
57	Mørkved 2002[153]	103	6	2.7	16	2	PFMT	PFMT + BF. BF both in clinic and at home		
58	Norton 2002[144]	553	3			4	SNRI. 80 mg	SNRI. 40 mg	SNRI. 20 mg	Placebo
59	Nygaard 1996[163]	71	3	1	3	2	PFMT. Three telephone calls in addition to clinic visits	PFMT with audiotape. Three telephone calls in addition to clinic visits		
60	Oláh 1990[187]	69	1	4 or 12	4 or 12	2	ES. Three sessions per week (12 visits)	VC. Weekly clinic visit (four visits)		
61	Pages 2001[154]	51	3	7	21	2	PFMT. Includes fitness exercise. Group sessions during first 4 weeks. Patients then continued PFMT at home in weeks 5–12	PFMT + BF. Individual BF therapy at clinic during first 4 weeks. Patients then continued PFMT without BF at home in weeks 5–12		

	Trial ID	*N* randomised	Duration (months) of prescribed treatment	*N* of visits per month in active treatment arm	*N* of clinic visits in total in active treatment arm	*N* of arms	Arm 1	Arm 2	Arm 3	Arm 4
62	Peattie 1988[180]	44	1	1 or 3	1 or 3	2	PFMT. Three clinic visits	VC. Weekly telephone calls after initial clinic visit		
63	Pieber 1995[192]	46	3	?1.3	?4	2	PFMT. Includes 'The Knack'	PFMT + VC. Includes 'The Knack'		
64	Pohl 2004[171]	70	3	NR	NR	2	PFMT + BF	PFMT + ES		
65	Ramsay 1990[128]	44	3	NR	NR	2	PFMT	NT. Placebo PFMT		
66	Sand 1995[134]	52	3	1.7	5	2	ES	Sham ES		
67	Savage 2005[166]	11	3	2	6	2	PFMT. Includes 'The Knack'	Modified pilates		
68	Seo 2004[195]	120	1.5	4 or 8	6 or 12	2	PFMT + BF + ES. Clinic visits twice a week (12 visits)	VC. Weekly clinic visits (six visits)		
69	Shepherd 1983[155]	22	4.5	1.3	6	2	PFMT. Weekly clinic visits for ?6 weeks and home exercise programme. Cure rate (and other outcomes) measured at 3 months after treatment was completed (i.e. at 18 weeks)	PFMT + BF. Visual BF from 'Exerciser'. Weekly clinic visit for ?6 weeks. Cure rate (and other outcomes) measured at 3 months after treatment was completed (i.e. at 18 weeks)		
70	Sherburn 2007[182]	84	5	4	20	2	PFMT	BT		
71	Smith 1996[177]	18	4	?0.8	?3	2	PFMT	ES		
72	Swithinbank 2005[119]	84	1	NR	NR	2	Caffeine free, increase fluids then decrease (crossover)	Caffeine free, decrease fluids then increase (crossover)		
73	Tapp 1987[191]	29	3	4 or 5.3	12 or 16	2	PFMT. Weekly visits for 12 weeks (12 visits)	PFMT + ES. PFMT as arm 1 for 12 weeks with ES twice a week for 1 month (16 visits)		

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	Trial ID	*N* randomised	Duration (months) of prescribed treatment	*N* of visits per month in active treatment arm	*N* of clinic visits in total in active treatment arm	*N* of arms	Arm 1	Arm 2	Arm 3	Arm 4
74	Tapp 1989[185]	81	3	4.67	14	3	PFMT. 14 visits over 3 months	PFMT + ES. 14 visits over 3 months	Surgery. Burch colposuspension. *N* of clinic visits unclear	
75	Taylor 1986[156]	13	2.25	4	9	4	PFMT. With advice on 'strategies to reduce frequency'	PFMT + BF. Weekly BF in clinic. With advice on 'strategies to reduce frequency'	PFMT + BF. Weekly BF in clinic + BF device for home use. With advice on 'strategies to reduce frequency'	PFMT + BF. Weekly BF in clinic + home IVRD (vaginal sensors removed from the home BF machine to be used as a resistive device). With advice on 'strategies to reduce frequency'
76	Terry 1996[193]	60	1.5	8	12	2	PFMT + ES. 12 visits over 6 weeks	VC. *N* of visits unclear		
77	van Kerrebroeck 2004[117]	494	3			2	SNRI. 80 mg	Placebo		
78	Williams 2006[129]	238	3	1.33	4	3	PFMT. Four clinic visits over 12 weeks	VC. Four clinic visits over 12 weeks	NT. A leaflet on the location of pelvic floor muscles and three step to exercising these muscles. Encouraged to record in an exercise diary. Four clinic visits over 12 weeks	
79	Wilson 1987[157]	60	1.5	0.7 or 8	1 or 12	4	PFMT. One clinic visit	PFMT + BF. BF during clinic visits twice a week (12 visits)	PFMT + BF + ES. BF during clinic visits twice a week (12 visits). ES = faradism	PFMT + BF + ES. BF during clinic visits twice a week (12 visits). ES = interferential therapy
80	Wilson 1998[197]	230	12?	0.33	4	4	PFMT, VC or both (further randomised). Childbearing women only	NT. Standard postnatal care. Childbearing women only		

	Trial ID	*N* randomised	Duration (months) of prescribed treatment	*N* of visits per month in active treatment arm	*N* of clinic visits in total in active treatment arm	*N* of arms	Arm 1	Arm 2	Arm 3	Arm 4
81	Wise 1993[188]	62	3	1	3	3	ES	VC	PFMT + VC	
82	Woldringh 2007[198]	264	5?	0.8?	4	2	PFMT. Childbearing women only	NT. Routine care. Childbearing women only		
83	Wong 1997a[158]	17	2	4	8	2	PFMT	PFMT + BF		
84	Wong 1997b[160]	47	1	1 or 8	1 or 8	2	PFMT. One clinic visit	PFMT. Eight clinic visits		
85	Wong 2001[169]	38	2?	2	4	2	PFMT + BF (vaginal)	PFMT + BF (vaginal and abdominal)		
86	Wyman 1998[183]	204	3	2	6	3	PFMT + BF. Includes urge inhibition techniques and 'The Knack'. Four BF sessions in clinic	BT. Includes urge-inhibition techniques. Clinic visits and contacts as in arm 1	PFMT + BF + BT. BT in weeks 1 and 2, PFMT added in week 3. 4 BF sessions in clinic	
87	Zanetti 2007[161]	46	3	1 or 9	3 or 27	2	PFMT. Monthly clinic visits (three visits)	PFMT. Monthly clinic visits and additional visits twice a week (27 visits)		
88	Zinner 1998 [145]	127	1.5			4	SNRI. 40 mg	SNRI. 30 mg	SNRI. 20 mg	Placebo

Appendix 12

Characteristics of interventions (pelvic floor muscle training with or without biofeedback)

Study	Duration (months)	*N* of clinic visits	Supervisory intensity[a]	Who provided supervision	*N* of prescribed muscle contractions at home per day	Description
Aksac 2003[120]	2	8	Intensive	Therapist	30	PFMT
		8	Intensive	Therapist	17	PFMT + BF
Arvonen 2001[178]	4	3	Basic	Physiotherapist and nurse	56	PFMT
Aukee 2002[146]	3	5	Basic	Physiotherapist	NR	PFMT
		5	Basic	Physiotherapist	NR	PFMT + BF
Berghmans 1996[147]	1	12	Intensive	Physiotherapist	NR	PFMT
		12	Intensive	Physiotherapist	NR	PFMT + BF
Bernardes 2000[174]	0.3	10	Intensive	Physiotherapist	120	PFMT
Bidmead 2002[121]	3.5	5	Basic	Physiotherapist	NR	PFMT ± active or sham ES
Blowman 1991[189]	1?	2	Basic	Obstetric physiotherapist	80–120	PFMT. With sham ES
Bø 1990[159]	6	6	Basic	Physiotherapist	24–36	PFMT
		30	Intensive	Physiotherapist, and weekly special PFMT class by 'instructor'	24–36	PFMT with additional sessions
Bø 1999[115]	6	30	Intensive	Physiotherapist	96–180	PFMT
Borello-France 2006[165]	2.25–3	9–12	Intensive	Physiotherapist	180	PFMT in supine position with BF
		9–12	Intensive	Physiotherapist	180	PFMT in supine and upright positions with BF
Bourcier 1994[196]	6	20	Intensive	NR	NR	PFMT + BF + ES. Stated as 'ES + BF' but presumably BF of VPFMC
		12	Basic	NR	60	PFMT + VC
Burns 1993[122]	2	8	Intensive	Nurse trained in BF technique	200	PFMT
		8	Intensive	Nurse trained in BF technique	200	PFMT + BF
Cammu 1998[181]	3	12	Intensive	Physiotherapist	20	PFMT + BF
Castleden 1984[148]	1	NR	NR	Physiotherapist	4–5 per hour	PFMT
		NR	NR	Physiotherapist	4–5 per hour	PFMT + BF
Dumoulin 2004[199]	8	8	Intensive	Physiotherapist	NR	PFMT (as part of multimodal rehabilitation including BF and ES) ± abdominal muscle training. Childbearing women only
Edwards 2000[170]	3	NR	NR	NR	NR	PFMT + BF or PFMT + ES

Study	Duration (months)	N of clinic visits	Supervisory intensity[a]	Who provided supervision	N of prescribed muscle contractions at home per day	Description
Ferguson 1990[149]	1.5	3	Basic	NR	45?	PFMT
		3	Basic	NR	45?	PFMT + BF (intravaginal resistance device)
Gallo 1997[162]	1-1.5	1	Basic	Nurse	NR	PFMT
		1	Basic	Nurse	NR	PFMT with audiotape
Ghoniem 2005 [57]	3	3	Basic	Qualified instructor	29	PFMT + active or placebo SNRI
Glavind 1996[150]	3	2	Basic	Physiotherapist	NR	PFMT
		6	Basic	Physiotherapist	NR	PFMT + BF
Goode 2003[123]	2	4	Basic	Nurse practitioner specifically trained by the behavioural psychologist (KL Burgio) and physician (PS Goode)	45	PFMT ± ES
Hahn 1991[175]	6	9	Basic	Physiotherapist	42–96?	PFMT
Haig 1995[190]	3	20	Intensive	Physiotherapist	NR	PFMT ± active or sham ES
Haken 1991[179]	2.5	3	Basic	Continence advisor	50	PFMT
Hay-Smith 2003[164]	5	4	Basic	Physiotherapist	36	Strength and motor relearning PFMT
		4	Basic	Physiotherapist	NR	Motor relearning PFMT
Henalla 1989[124]	3	12	Intensive	Physiotherapist	5 per hour	PFMT
Henalla 1990[125]	1.5	NR	NR	NR	NR	PFMT
Hofbauer 1990[126]	1.5	12	Intensive	Therapist	NR	PFMT ± ES
Johnson 2001[167]	1.5	NR	NR	Investigator (nurse?)	NR (10 minutes)	PFMT (near maximal contraction) + BF
		NR	NR	Investigator (nurse?)	NR (15 minutes)	PFMT (sub-maximal contraction) + BF
Karagkounis 2007[194]	0.5	NR	NR	NR	NR	PFMT + SNRI
Kim 2007[118]	3	24	Intensive	NR	NR	PFMT
Klarskov 1986[184]	4	5	Basic	Physiotherapist	NR	PFMT
Klingler 1995[151]	3	12	Intensive	Physiotherapist	NR	PFMT
		12	Intensive	Physiotherapist	NR	PFMT + BF (Endotrainer device)
Knight 1998[172]	6	14	Intensive	Physiotherapist	120	PFMT + BF ± ES
Konstantinidou 2007[116]	3	3	Basic	NR	NR	PFMT
		15	Intensive	NR	NR	PFMT + additional sessions
Lagro-Janssen 1991[127]	3	1	Basic	GP	50–100	PFMT

Study	Duration (months)	*N* of clinic visits	Supervisory intensity[a]	Who provided supervision	*N* of prescribed muscle contractions at home per day	Description
Laycock 1988[176]	1-2?	6-8?	Intensive	NR	NR	PFMT
Laycock Trial 1 1993[132]	2?	6?	Intensive	Physiotherapist	5 per hour	PFMT + BF + VC
Laycock 2001[152]	3	6	Basic	NR	NR	PFMT
		6	Basic	NR	NR	PFMT + BF
Mayne 1998[168]	4	7	Basic	NR	NR	PFMT + perineometer
		7	Basic	NR	NR	PFMT + urethral electrical conductance
Miller 1998[107]	0.25	1	Intensive	NR	NR	PFMT ('The Knack')
Mørkved 2002[153]	6	16	Intensive	Physiotherapist	30	PFMT
		16	Intensive	Physiotherapist	30	PFMT + BF
Nygaard 1996[163]	3	3	Basic	NR	NR (10 minutes)	PFMT
		3	Basic	NR	NR (270 minutes)	PFMT with audiotape
Pages 2001[154]	3	21	Intensive	Physiotherapist	More than 100 for 4 weeks; 29 for further 2 months	PFMT (group therapy)
		21	Intensive	Physiotherapist	100 for 4 weeks; 29 for further 2 months	PFMT + BF (individual therapy)
Peattie 1988[180]	1	3	Intensive	Physiotherapist	50	PFMT
Pieber 1995[192]	3	4?	Basic	Physiotherapist	100	PFMT ± VC
Pohl 2004[171]	3	NR	NR	NR	NR	PFMT + BF or PFMT + ES
Ramsay 1990[128]	3	NR	NR	NR	4 per hour	PFMT
Savage 2005[166]	3	6	Basic	Physiotherapist	NR	PFMT
Seo 2004[195]	1.5	12	Intensive	NR	NR	PFMT + BF + ES. Stated as ES + BF but presumably BF of VPFMC
Shepherd 1983[155]	4.5?	6	Basic	Physiotherapist	NR	PFMT
		6	Basic	Physiotherapist	NR	PFMT + BF (intravaginal 'Exerciser' connected to visual BF
Sherburn 2007[182]	5	20	Intensive	NR	NR	PFMT
Smith 1996[177]	4	3?	Basic	NR	60	PFMT
Tapp 1987[191]	3	12	Intensive	Continence advisor	4 per hour	PFMT ± ES
Tapp 1989[185]	3	14	Intensive	Continence advisor trained to teach PFMT	NR	PFMT ± ES

Study	Duration (months)	*N* of clinic visits	Supervisory intensity[a]	Who provided supervision	*N* of prescribed muscle contractions at home per day	Description
Taylor 1986[156]	2.25	9	Intensive	Researcher (nurse?)	100	PFMT
		9	Intensive	Researcher (nurse?)	100	PFMT + BF. BF at clinic
		9	Intensive	Researcher (nurse?)	100	PFMT + BF. BF at clinic and at home
		9	Intensive	Researcher (nurse?)	100	PFMT + BF. BF at clinic and the BF machine at home without vaginal sensors to be used as a resistive device
Terry 1996[193]	1.5	12	Intensive	NR	NR	PFMT + ES
Wilson 1987[157]	1.5	1	Basic	Hospital physiotherapy department	NR	PFMT
		12	Intensive	Hospital physiotherapy department	NR	PFMT + BF
Wilson 1998[197]	12	4	Basic	Physiotherapist	80-100	PFMT. Childbearing women only
Williams 2006[129]	3	4	Basic	Specially trained nurse	NR	PFMT
Wise 1993[188]	3	3	Basic	NR	100	PFMT + VC
Woldringh 2007[198]	5?	4	Basic	Physiotherapist	NR	PFMT. Childbearing women only
Wong 1997a[158]	2	8	Intensive	NR	NR	PFMT
		8	Intensive	NR	NR	PFMT + BF
Wong 1997b[160]	1	1	Basic	NR	NR	PFMT
		8	Intensive	NR	NR	PFMT with additional sessions
Wong 2001[169]	2?	4	Basic	Physiotherapist	NT	PFMT + BF (vaginal)
		4	Basic	Physiotherapist	NT	PFMT + BF (vaginal and abdominal)
Wyman 1998[183]	3	6	Basic	Trained registered nurse	50	PFMT + BF ± BT
Zanetti 2007[161]	3	3	Basic	Physiotherapist	180	PFMT
		27	Intensive	Physiotherapist	180	PFMT + additional sessions

NR, not reported.

a Basic, up to two supervisory visits or face-to-face contacts with a health-care professional per month; intensive, more than two supervisory visits or face-to-face contacts with a health-care professional per month.

Note: This table summarises the characteristics of supervision provided. A more detailed description PFMT is given in the study characteristics table (Appendix 10).

Appendix 13

Characteristics of interventions (electrical stimulation)

Study	Duration (month)	Description
Bernardes 2000[174]	0.3	Dualpex (Quark Medical products) with perineal intrauterine electrode. 10 consecutive clinic sessions
Bidmead 2002[121]	3.5	Uromax stimulator with a periform intravaginal electrode at home
Blowman 1991[189]	1?	Neurotrophic stimulation, a method of neuromuscular electrical stimulation. Home stimulator, once per day
Bø 1999 [115]	6	Maximum intermittent vaginal stimulation. Once per day
Bourcier 1994[196]	6	Short-term maximal functional ES and EMG/pressure BF. 12 sessions
Brubaker 1997[130]	2	Transvaginal electrical stimulation. Home treatment, twice daily
Delneri 2000[186]	0.5	Functional electrical stimulation.12 consecutive sessions on weekdays (i.e. not weekends)
Edwards 2000[170]	3	No details provided
Goode 2003[123]	2	Home unit with biphasic pulses. Simultaneous with each muscle contraction induced by electrical stimulation, patients performed VPFMC (voluntary pelvic floor muscle contraction).4 clinic sessions
Hahn 1991[175]	6	Interferential therapy. Home device, once daily
Haig 1995[190]	3	Interferential therapy during clinic visits from second month
Henalla 1989[124]	3	Interferential therapy. 10 clinic sessions
Hofbauer 1990[126]	1.5	Faradism with vaginal and perineal (active) and lumbar (inactive) electrode. 3 times per week
Jeyaseelan 2000[131]	2	Patterned neuromuscular electrical stimulation. Portable stimulator, once daily
Knight 1998[172]	6	Overnight at low intensity at home
		16 × 30-minute session of maximal electrical stimulation. VPFMC performed with the stimulation
Laycock 1988[176]	1–2?	Interferential therapy, 2–3 times a week
Laycock Trial 1 1993[132]	2?	Interferential therapy. 10 clinic sessions
Laycock Trial 2 1993[132]	2–3?	Interferential therapy. 10 clinic sessions
Luber 1997[133]	3	Home device, twice daily
Oláh 1990[187]	1	Interferential therapy at clinic, 3 times per week
Pohl 2004[171]	3	No details provided
Sand 1995[134]	3	Innova (Empi Inc.) pelvic floor stimulator. 7 office visits
Seo 2004[195]	1.5	Clinic sessions, twice a week, to perform alternately functional ES and BF
Smith 1996[177]	4	Intravaginal neuromuscular stimulation. Twice a day at home
Tapp 1987[191]	3	Faradic stimulation, twice a week
Tapp 1989[185]	3	Faradism. No further details
Terry 1996[193]	1.5	Interferential therapy. No further details
Wilson 1987[157]	1.5	Faradism. 12 clinic sessions
		Interferential therapy. 12 clinic sessions
Wise 1993[188]	3	Maximal vaginal electrical stimulation. Home treatment, once daily

Appendix 14

Characteristics of interventions (vaginal cones)

Study	Duration (month)	Description
Arvonen 2001[178]	4	Vaginal balls. The pelvic floor muscle contractions were performed by retaining the ball during movement (e.g. walking, house-keeping)
Bø 1999[115]	6	Mabella cones (cylindrical), once per day
Bourcier 1994[196]	6	Unspecified cones, twice daily
Burton 1993[173]	NR	Unspecified cones, twice daily, in a static position
		Unspecified cones, twice daily, while doing standardised activities that previously made them incontinent
Cammu 1998[181]	3	Femina cones (conical), twice a day. Note: After the first clinic visit 14/30 women in the cones group withdrew and received PFMT but stayed in the VC group
Delneri 2000[186]	1	Femcon cones (conical), once per day
Haken 1991[179]	2.5	Femina cones (conical)? Twice daily
Laycock Trial 1 1993[132]	2?	Unspecified cones, twice daily
Laycock 2001[152]	3	Aquaflex cones, once daily
Oláh 1990[187]	1	Femina cones (conical), twice daily
Peattie 1988[180]	1	Femina cones (conical), twice daily
Pieber 1995[192]	3	Conical weights, once per day
Seo 2004[195]	1.5	'New' cone, which has a dumbbell shape. Use cone in place while contracting the pelvic floor muscles, once per day
Terry 1996[193]	1.5	Enhance cones (cylindrical). No further details
Williams 2006[129]	3	Femina cones, 2–3 times a day
Wilson 1998[197]	12	Unspecified cones, twice daily. Pregnant women only
Wise 1993[188]	12	Unspecified cones, twice daily

Appendix 15

Characteristics of interventions (serotonin–noradrenaline reuptake inhibitor)

Study	Duration (month)	Description
Bump 2004[136]	1	Duloxetine 40 mg twice daily
Cardozo 2004[137]	2	Duloxetine 40 mg twice daily for 4 weeks then escalating to 60 mg twice daily for another 4 weeks
Castro-Diaz 2007[138]	2	Duloxetine 40 mg twice daily
		Duloxetine 40 mg once daily for 2 weeks, escalating to 40 mg twice daily
		Duloxetine 20 mg twice daily for 2 weeks, escalating to 40 mg twice daily
Dmochowski 2003[139]	3	Duloxetine 40 mg twice daily
Ghoniem 2005[57]	3	Duloxetine 80 mg
Karagkounis 2007[194]	NR	Duloxetine 40 mg twice daily
Kinchen 2005[140]	3	Duloxetine 40 mg twice daily. Note: This was a 'naturalistic' study in which participants could, at any point after randomisation, choose to remain on duloxetine as randomised, reduce SNRI doses, add other treatments to duloxetine, or suspend duloxetine and receive other treatments
Mah 2006[141]	2	Duloxetine 40 mg twice daily
Manning 2005[142]	1.5	Duloxetine. Unspecified dose
Millard 2004[143]	3	Duloxetine 40 mg twice daily
Norton 2002[144]	3	Duloxetine 20 mg once daily
		Duloxetine 20 mg twice daily
		Duloxetine 40 mg twice daily
van Kerrebroeck 2004[117]	3	Duloxetine 40 mg twice daily
Zinner 1998[145]	1.5	Duloxetine 20 mg once daily
		Duloxetine 30 mg once daily
		Duloxetine 30 mg once daily for 2 weeks, escalating to 40 mg once daily

Appendix 16

Cure/improvement definitions

Author	Subjective cure	Subjective improvement	Quantified cure	Quantified improvement
Aksac 2003[120]			≤1 g on 1-hour pad test	Cure (≤ 1 g on 1-hour pad test) or improved (≥ 50% reduction in pad weight)
Arvonen 2001[178]	'Good (fully recovered)' on subjective self-rated experience of improvement (4-point scale)	'Good (fully recovered)' or 'Improved' on subjective self-rated experience of improvement (4-point scale)	No leakage, i.e. 0 g on pad test (short provocation test with a standard 300 ml in bladder)	
Berghmans 1996[147]			Cure based on 48-hour pad test	Cure or improvement based on 48-hour pad test
Bernardes 2000[174]	Patient perception (no symptom or no loss of urine, vs light or moderate loss)			
Blowman 1991[189]			Leakage episodes reduced to zero (no accidents per week)	
Bø 1990[159]	'Continent' vs 'almost continent', 'improved', 'unchanged' and 'worse' after supervised treatment	'Continent', 'almost continent', 'improved' vs 'unchanged', 'worse'		
Bø 1990[159]	At 15 years' follow-up, Severity Index (Sandvik *et al.* 1993; 2000[13]): Dry vs slight/moderate/ severe/very severe			
Bø 1999[115]	'Continent' vs 'almost continent', 'improved', 'unchanged' and 'worse'	'Continent', 'almost continent', 'improved' vs 'unchanged', 'worse'	≤ 2-g leakage on pad test with standardised bladder volume	
Bourcier 1994[196]	'Continent after treatment' at 6 months			
Brubaker 1997[130]		Adequate subjective improvement	Cure (GSI/MUI patients only) = cured of (urodynamic) stress urinary incontinence but by definition may still have DO (urge UI)?	
Burns 1993[122]			100% reduction in weekly number of urine losses recorded on (24 hour?) diary	50–100% reduction in weekly number of urine losses recorded on (24 hour?) diary; 50% defined by author as minimal level of reduction
Burton 1993[173]			No leakage after coughing (videocystourethrography)	
Cammu 1998[181]		Cured or improved to a significant degree. 14/30 in VC group withdrew and received PFMT. Extracted data are based on 16/30 really treated with VC	Negative stress test. 14/30 in VC group withdrew and received PFMT. Extracted data are based on 16/30 really treated with VC	

Author	Subjective cure	Subjective improvement	Quantified cure	Quantified improvement
Cardozo 2004[137]		PGI-I ('very much better' and 'much better')		Cure or improvement (*N* of 'responders' with at least 50% decrease in leakage episodes)
Castro-Diaz 2007[138]		PGI-I ('very much better', 'much better' or 'little better'). Data available to show 'very much better' and 'much better' only		
Dmochowski 2003[139]		PGI-I (rating condition as improved)	Cure (no incontinence episodes at the last 7-day diary)	Cure or improvement (50–100% reduction in IEF/week)
Dumoulin 2004[199]			<2 g urine on pad test. Note: childbearing women only	
Fantl 1991[135]			Cure (100% reduction in the number of incontinent episodes on 7-day diary)	Cured or improved (50–100% reduction in the number of incontinent episodes on 7-day diary)
Ghoniem 2005[57]		'Very much better', 'much better' or 'a little better' on PGI-I		≥50% reduction in IEF ('responders')
Glavind 1996[150]	Cure at 2–3 years post treatment (*N* considering themselves still cured)	Improvement at 2–3 years post treatment (*N* considering themselves improved compared with before treatment)		
Glavind 1996[150]			Cure after treatment (<2 g on 1-hour pad test with a bladder volume of 3/4 of cystometric capacity; unclear if at 1 or 3 months)	
Goode 2003[123]		Much better' or 'better' vs 'about the same' or 'worse'	100% reduction in frequency of incontinence by 2-week bladder diary. Data from figure. Cure rate by urodynamic test also available	≥50% reduction in frequency of incontinence by 2-week bladder diary. Data from figure
Hahn 1991[175]	'Cured' vs 'insignificant symptoms', 'improved', 'unchanged', 'worse'	'Cured', 'insignificant symptoms', 'improved' vs 'unchanged', 'worse'	Cure = by the ICS definition, i.e. essentially dry <2-g weight increase at pad test (Sutherst 1981) – not sure what this exactly means though?	
Haken 1991[179]		Subjective assessment on visual analogue scale; significant improvement in both groups ($p < 0.05$) but no between-group difference		Improved on 40-minute pad test with standardised bladder volume (ICS Proceedings 1988)

Author	Subjective cure	Subjective improvement	Quantified cure	Quantified improvement
Hay-Smith 2003[164]	Self-reported change in leakage (cure vs much better/somewhat better/no change/somewhat worse/much worse)	Self-reported change in leakage (cure/much better/somewhat better vs no change/somewhat worse/much worse)	Decrease by more than 4 g on 24-hour pad test	
Henalla 1989[124]				Cure = negative following positive test; significantly improved = ≥ 50% reduction in pad weight from baseline (pad test, Sutherst *et al.* 1981)
Henalla 1990[125]				Cure or improved vs unchanged. Cure and improvement not defined explicitly but 'failure' is defined as < 50% reduction in pad weight from baseline based on perineal pad weighing test (no further detail about test). Cure/improvement definitions may be similar to Henalla 1989,[12] i.e. 'cure' = negative following positive pad test (Sutherst 1981), or 'significantly improved' = ≥ 50% reduction in pad weight from baseline
Hofbauer 1990[126]	Cure. Symptom scale? Method of measurement unclear. Time of assessment unclear: immediately after 6-week treatment or at 6-month follow-up	Cure or improvement. Symptom scale? Method of measurement unclear. Time of assessment unclear: immediately after 6-week treatment or at 6-month follow-up		
Johnson 2001[167]			No episodes of urine loss on daily diary during the 8th week of the study, i.e. 1 week immediately after treatment phase	
Kim 2007[118]	Cured of urine leakage based on an interview asking if woman has experienced urine leakage and, if yes, the frequency of the leakage using the 6-point scale			
Kinchen 2005[140]		PGI-I ('better')		
Klarskov 1986[184]	'Cured' vs 'improved', 'unchanged', 'worse'	'Cured' or 'improved' vs 'unchanged' or 'worse'		

Author	Subjective cure	Subjective improvement	Quantified cure	Quantified improvement
Klingler 1995[151]		'Subjective improvement'	Cure (*N* not using continence pads)	
Knight 1998[172]		'Cure' or 'great improvement' at 12 months. PFMT + BF + ES groups performed exercises with ES for the first 6 months and then without ES for the following 6 months		Cured (dry or urine loss of < 2 g) or greatly improved (75% or more reduction in urine loss at repeat pad test) at 12 months. Pad test at 75% of the maximum cystometric capacity (Janez *et al.* 1985). PFMT + BF + ES groups performed exercises with ES for the first 6 months and then without ES for the following 6 months
Knight 1998[172]		'Cure' or 'great improvement' at 6 months		Cured (dry or urine loss of < 2 g) or greatly improved (75% or more reduction in urine loss at repeat pad test) at 6 months. Pad test at 75% of the max cystometric capacity (Janez *et al.* 1985)
Konstantinidou 2007[116]		Patient Global Impression of Improvement ('Has your condition improved over the past 4 weeks?' – *yes*)	*N* of women NOT reporting underwear wetting	
Lagro-Janssen 1991[127]		'Cured' or 'improved' vs 'unchanged' or 'worse'	'Dry' vs 'mild', 'moderate' or 'severe'. Based on GP assessment scores regarding frequency and amount of urine loss, use of protective pads or garments, and restrictions in daily activities owing to incontinence	
Laycock 1988[176]		'Much improved' or 'some improvement'		
Laycock Trial 1 1993[132]	'Cured' vs 'improved', 'no change', 'worse'	'Cured', 'improved' vs 'no change', 'worse'	< 0.5 g increase in urine loss based on standard pad test (Sutherst *et al.* 1981). Patients with urine loss < 2 g (defined as clinically insignificant) at baseline were excluded from the *N* cured (PV = 1, ES = 3)	Cure = < 0.5 g increase in urine loss based on standard pad test (Sutherst *et al.* 1981), or improved = > 30% decrease; also include patients with urine loss < 2 g (defined as clinically significant) at baseline (PV = 1, ES = 3)

Author	Subjective cure	Subjective improvement	Quantified cure	Quantified improvement
Laycock Trial 2 1993[132]	'Cured' vs 'improved', 'no change', 'worse'. Cure rates based on visual analogue scale also reported	'Cured', 'improved' vs 'no change', 'worse'. Cure and improvement rates based on visual analogue scale also reported	<0.5 g increase in urine loss based on standard pad test (Sutherst *et al.* 1981). Patients with urine loss <2 g (defined as clinically insignificant) at baseline (sham ES = 2, ES = 2) are not included in the number cured	Cure = <0.5 g increase in urine loss based on standard pad test (Sutherst *et al.* 1981), or improved = >30% decrease. Patients with urine loss <2 g (defined as clinically insignificant) at baseline (sham ES = 2, ES = 2) are not included in the *N* cured or improved
Luber 1997[133]	Resolution of symptom, scale 5 on tested but non-validated questionnaire	Cure (resolution of symptom, scale 5), or moderate improvement (scale 3–4) on tested but non-validated questionnaire	Stress test negative	
Mah 2006[141]		PGI-I ('very much better', 'much better' or 'a little better')		Cure or improvement (IEF responders with ≥50% reduction in IEF/week based on weekly diary)
Manning 2005[142]		PGI-I (all 'better' responses) (from graph)		
Mayne 1988[168]			Cured (short exercise perineal pad test, vs improved, no change, worse)	Cured or improved (short exercise perineal pad test, vs no change or worse)
Millard 2004[143]		PGI-I ('very much better', 'much better' or 'a little better')	Cured (no incontinent episodes at last visit; 7-day diary)	Cure or improvement (50–100% reduction in incontinence episodes; 7-day diary)
Mørkved 2002[153]	Subjective assessment of severity, 'unproblematic' (defined by author as subjective cure) as opposed to 'minor problem', 'moderate problem', 'problematic' or 'very problematic'		Cure (<2-g leakage) on stress pad test with standardised bladder volume at 6 months. Cure by 48-hour pad test also reported by stress pad test is defined by author as objective cure	
Norton 2002[144]		PGI-I ('very much better'/'much better')	Cure based on *N* of incontinent episodes in 24 hours at last diary	
Oláh 1990[187]	Cured after 4-week treatment	Cured or improved after 4-week treatment	No leakage on continence chart after treatment. Chart starting a week before treatment and continuing throughout the course of therapy	Improvement in (the frequency of?) weekly urinary leakage after treatment (continence chart)

Author	Subjective cure	Subjective improvement	Quantified cure	Quantified improvement
Pages 2001[154]	Patient assessment at 3 months (cure vs improved/no change). Based on questionnaire responses. Cure = no incontinence episodes and symptoms. Data in table and text do not match. Data in text are used here	Patient assessment at 3 months (cure/improved vs no change). Based on questionnaire responses. Cure = no incontinence episodes and symptoms; improved = at least 50% decrease in incontinence episodes and symptoms. Data in table and text do not match. Data in text are used here		
Peattie 1988[180]		Improvement (not defined) – data taken from Cochrane review (Hay-Smith 2001)[224]		Improvement on pad test – data taken from Cochrane review (Hay-Smith 2001)[224]
Pieber 1995[192]	Patients reported no urine loss on any occasion, and a negative pad test	Cure (patients reported no urine loss on any occasion, and a negative pad test) or improvement (patients reported losing urine less often than before treatment)		
Ramsay 1990[128]		'Improvement' vs 'no change' or 'deteriorated'		
Sand 1995[134]			The absence of reported leakage episodes based on 24-hour diary. Cure by pad test also reported	≥ 50% decrease in leakage episodes on 24-hour diary. Improvement by pad test also reported
Seo 2004[195]				'Improvement in the degree of incontinence' (unclear how this was measured)
Shepherd 1983[155]	Cure (*N* of patients who perceived dryness)	Improvement (*N* of patients who perceived improvement)		
Sherburn 2007[182]			Zero leakage on the cough stress test, with no precontraction of pelvic floor muscle. Test with a precontraction also reported	
Smith 1996[177]			Cure = cessation of incontinence and no longer requiring pads	Cure = cessation of incontinence and no longer requiring pads, or improvement = ?50% reduction in the number of pads and episodes of urinary incontinence

Author	Subjective cure	Subjective improvement	Quantified cure	Quantified improvement
Tapp 1989[185]			'Objectively cured' (not defined)	'Objectively cured' or 'symptomatic improvement' (not defined)
van Kerrebroeck 2004[117]		PGI-I ('very much/much/a little' better)		Cure or improvement (50–100% reduction in incontinence episodes on daily paper diaries)
Williams 2006[129]	No symptoms	Mild or no problem		
Wilson 1987[157]		'Much improved' or 'improved'		
Wilson 1998[197]	Not incontinent (postal questionnaire). Note: childbearing women only			
Wise 1993[188]				Improvement on pad test (40-minute test with standard bladder volume); no further detail given
Woldringh 2007[198]	'No UI at all' based on a composite score ranging from 0 to 10, derived from a validated questionnaire (the PRAFAB score) and bladder diaries. Note: childbearing women only			
Wyman 1998[183]		'Much better' or 'somewhat better' on 5-point Likert scale	100% reduction in episodes of leakage per week immediately after treatment (7-day diary, mean, SD)	50–100% reduction in episodes of leakage per week immediately after treatment (7-day diary, mean, SD)
Wyman 1998[183]		'Much better' or 'somewhat better' on 5-point Likert scale at 3 months after end of 3-month treatment	100% reduction in episodes of leakage per week immediately at 3 months after end of 3-month treatment (7-day diary, mean, SD)	50–100% reduction in episodes of leakage per week immediately at 3 months after end of 3-month treatment (7-day diary, mean, SD)
Wyman 1998[183]			*N* reporting no incontinence episode at mean 3.2 years (of those who did not have additional treatment)	
Zanetti 2007[161]			Cure (pad test negative, i.e. urine leakage of no more than 2 g on 1-hour pad test)	
Zinner 1998[145]				*N* of 'responders' who showed >70% improvement/reduction in leakage episodes per week; from graph. Women with SUI only

Appendix 17

Direct pairwise comparisons: additional data tables for primary outcomes

Comparison 01 – PFMT with or without BF vs no treatment

	PFMT ± BF		NT				
	N	Value	*N*	Value	Reported *p*-value	Notes	Population type
Social Activity Index							
PFMT vs NT							
Aksac 2003[120]	20	7.5 (1.2)	10	3.6 (0.6)	<0.001	Score (median, SD)	1
Bø 1999[115]	25	0.6 (1.02)	30	–0.2 (1.68)	NR	Change in score (mean, SD)	1
PFMT + BF vs NT							
Aksac 2003[120]	20	8.1 (0.8)	10	3.6 (0.6)	<0.001	Score (median, SD)	1
I-QoL							
PFMT vs NT							
Ghoniem 2005[57]	49	7.8	45	4.8	NR	Mean % score increase	1
The Leicester Impact Scale							
PFMT vs NT							
Williams 2006[a129]	77	2 (0.0, 5.0)	75	1.5 (0.0, 5.0)	0.990	Score (median, interquartile range)	2
Incontinence Impact Questionnaire							
PFMT vs NT							
Goode 2003[123]	66	No difference	67	No difference	NR	Total score	3

	PFMT *n/N*	NT *n/N*	Reported *p*-value	Notes	Population type
Bristol Female Lower Urinary Tract Symptoms (B-FLUTS)					
PFMT vs NT					
Bø 1999[115]	7/25	10/30	< 0.54 (*sic*)	1. Problems because of avoiding places and situations (*N* of women)	1
Bø 1999[115]	1/25	12/30	< 0.01	2. Problems with interference with social life (*N* of women)	1
Bø 1999[115]	11/25	24/30	< 0.01	3. Problem with interference with physical activity (*N* of women)	1
Bø 1999[115]	14/25	25/30	< 0.1 (*sic*)	4. Overall interference with life (*N* of women)	1
Bø 1999[115]	1/25	11/30	< 0.1 (*sic*)	5. Unsatisfied if had to spend rest of life as now (*N* of women)	1
Bø 1999[115]	4/25	15/30	0.03	6. Sex life spoilt by urinary symptoms (*N* of women)	1
Bø 1999[115]	3/25	15/30	0.02	7. Problem with sex life being spoilt (*N* of women)	1
Bø 1999[115]	3/25	10/30	0.1	8. Problem with painful intercourse (*N* of women)	1
Bø 1999[115]	3/25	13/30	0.02	9. Urinary incontinence with intercourse (*N* of women)	1

	PFMT		NT			
	N	**Value**	***N***	**Value**	**Notes**	**Population type**
SF-36 (generic)						
PFMT vs NT						
Goode 2003[123]	66	No difference	67	No difference	Score	3
Norwegian version of the Quality of Life Scale (QoLS-N) (generic)						
PFMT vs NT						
Bø 1999[115]	25	90.1 (9.5)	30	85.2 (12.05)	Score (mean, SD)	1

B-FLUTS, Bristol Female Lower Urinary Tract Symptoms ('a little/somewhat/a lot' OR 'a bit of a problem/quite a problem/a serious problem'); lifestyle questions (28–31, 33) and sex-life questions (21–24) only.
a Lower scores reflect better quality of life.

Comparison 02 – PFMT vs PFMT + BF

	PFMT		PFMT ± BF				
	n/N	**%**	***n/N***	**%**	**OR (95% CI)**	**Measure**	**Population type**
Cure rate							
PFMT vs PFMT + BF (≥ 1-year follow-up)							
Glavind 1996[150]	0/14	0	5/19	26	0.09 (0.01 to 1.80), $p = 0.115$	1	1
Improvement rate							
PFMT vs PFMT + BF (< 1-year follow-up)							
Wilson 1987[157]	4/15	27	9/14	64	0.20 (0.04 to 0.98), $p = 0.048$	1	1
PFMT vs PFMT + BF (≥ 1-year follow-up)							
Glavind 1996[150]	4/14	29	8/19	42	0.55 (0.13 to 2.40), $p = 0.427$	1	1

Comparison 03 – PFMT vs PFMT with additional sessions

	PFMT		PFMT + add				
	n/N	**%**	***n/N***	**%**	**OR (95% CI)**	**Measure**	**Population type**
Cure rate (≥ 1-year follow-up)							
Bø 1990[159]	4/25	16	6/20	30	0.44 (0.11 to 1.87), $p = 0.268$	1	1

Comparison 04 – strength and motor relearning PFMT vs motor relearning PFMT alone

	S+M PFMT		M PFMT				Population type
	n/N	%	*n/N*	%	OR (95% CI)	Measure	
Cure rate							
Hay-Smith 2003[164]	1/61	2	4/62	6	0.24 (0.03 to 2.23), $p=0.210$	I	3
Improvement rate							
Hay-Smith 2003[164]	52/61	85	48/62	77	1.69 (0.67 to 4.25), $p=0.269$	I	3
King's Health Questionnaire							
	N	**Value**	***N***	**Value**	**Reported *p*-value**		**Population type**
[a]Hay-Smith 2003[164]	60	17.1 (19.3)	55	18.2 (17.7)	0.751	1. General health perception (mean, SD)	3
[a]Hay-Smith 2003[164]	60	49.4 (24.9)	55	38.8 (27.8)	0.032	2. Incontinence impact (mean, SD)	3
[a]Hay-Smith 2003[164]	57	27.2 (23.7)	52	20.5 (27.7)	0.178	3. Role limitation (mean, SD)	3
[a]Hay-Smith 2003[164]	57	31.3 (22.5)	51	22.6 (22.8)	0.048	4. Physical limitation (mean, SD)	3
[a]Hay-Smith 2003[164]	56	11.8 (18.6)	51	10.5 (21.3)	0.728	5. Social limitation (mean, SD)	3
[a]Hay-Smith 2003[164]	40	13.8 (23.2)	40	14.6 (24.8)	0.877	6. Personal relationships (mean, SD)	3
[a]Hay-Smith 2003[164]	58	26.1 (28)	51	20 (24.1)	0.236	7. Emotions (mean, SD)	3
[a]Hay-Smith 2003[164]	54	28.4 (19.6)	51	32 (19.7)	0.346	8. Sleep/energy (mean, SD)	3

a Lower scores reflect better quality of life.

Comparison 05 – PFMT (in supine) + BF vs PFMT (in supine and upright) + BF

	PFMT supine		PFMT supine/upright		Reported *p*-value	Notes	Population type
	N	**Value**	***N***	**Value**			
Incontinence Impact Questionnaire							
Borello-France 2006[165]	22	27.6 (32.7)	22	24.7 (31)	0.62	Change in score (mean reduction, SD)	I

Comparison 06 – PFMT vs PFMT via pilates

	PFMT		Pilates			
	N	Value	*N*	*Value*	Notes	Population type
King's Health Questionnaire						
[a]Savage 2005[166]	4	256.9 (147.2 to 416.6)	6	152.37 (83.82 to 197.20)	Composite scores regarding symptoms, severity and quality of life (mean, range)	1

a Lower scores reflect better quality of life.

Comparison 07 – PFMT (maximal contraction) + BF vs PFMT (submaximal contraction) + BF

	PFMTmax + BF		PFMTsub + BF				
	n/N	%	*n/N*	%	OR (95% CI)	Measure	Population type
Cure rate							
Johnson 2001[167]	6/16	38	4/16	25	1.80 (0.39 to 8.22), $p = 0.448$	2	1

Comparison 08 – PFMT + perineometer vs PFMT + urethral conductance

	PFMT + per		PFMT + ureth				
	n/N	%	*n/N*	%	OR (95% CI)	Measure	Population type
Cure rate							
Mayne 1988[168]	2/13	15	2/14	14	1.09 (0.13 to 9.12), $p = 0.936$	2	1
Improvement rate							
Mayne 1988[168]	7/13	54	2/7	29	1.17 (0.26 to 5.29), $p = 0.842$	2	1

Comparison 09 – PFMT + BF (vaginal) vs PFMT + BF (vaginal and abdominal)

	PFMT + BF (vag)		PFMT + BF (vag/ab)			
	N	Value	*N*	Value	Notes	Population type
Incontinence Impact Questionnaire Short Form (IIQ-7)						
[a]Wong 2001[169]	19	14.29	19	14.29	Score (mean)	1
Urogenital Inventory Short Form (UDI-6)						
[a]Wong 2001[169]	19	16.67	19	27.78	Score (mean)	1

a Lower scores reflect better quality of life.

Comparison 10 – ES vs NT

	ES		NT			
	N	Value	*N*	Value	Notes	Population type
SF-36						
Jeyaseelan 2000[131]	12	No difference	12	No difference	Score	1
Sand 1995[134]	35	No difference	17	No difference	Score	1

Comparison 11 – PFMT + BF + ES (faradism) vs PFMT + BF + ES (IFT)

	PFMT + BF + ES (farad)		PFMT + BF + ES (IFT)				
	n/*N*	%	*n*/*N*	%	OR (95% CI)	Measure	Population type
Improvement							
Wilson 1987[157]	11/15	73	10/15	67	1.38 (0.29 to 6.60), $p = 0.691$	1	1
Improvement (< 1-year follow-up)							
Wilson (follow-up) 1987	10/15	67	9/15	60	1.33 (0.30 to 5.92), $p = 0.705$	1	1

Comparison 12 – PFMT + BF + ES (maximal at clinic) vs PFMT + BF + ES (low intensity at home)

	PFMT + BF + ES (max)		PFMT + BF + ES (low)				
	n/*N*	%	*n*/*N*	%	OR (95% CI)	Measure	Population type
Improvement							
Knight 1998[172]	16/20	80	9/19	47	4.44 (1.08 to 18.36), $p = 0.039$	1	1
Improvement (< 1-year follow-up)							
Knight (follow-up) 1998	17/20	85	7/15	47	6.48 (1.32 to 31.83), $p = 0.021$	1	1

Comparison 13 – VC-passive vs VC-active

	VC-active		VC-passive				
	n/*N*	%	*n*/*N*	%	OR (95% CI)	Measure	Population type
Cure rate							
Burton 1993	18/31	58	21/30	70	0.59 (0.21 to 1.71), $p = 0.334$	2	1

Comparison 14 – SNRI vs NT

	SNRI		NT				
	n/N	**%**	***n/N***	**%**	**OR (95% CI)**	**Measure**	**Population type**
Improvement							
SNRI80 vs NT (< 1-year follow-up)							
Kinchen 2004	103/210	49	90/218	41	1.37 (0.93 to 2.01), $p = 0.107$	1	3

	SNRI		NT				
	N	**Value**	**N**	**Value**	**Reported *p*-value**		**Population type**
I-QoL							
SNRI80 vs NT (< 1-year follow-up)							
Kinchen 2004	210	13.8	218	12.1	0.26	Change in score	3

Comparison 15 – Comparison of different SNRI doses: cure, improvement and adverse events

	SNRI 1		SNRI 2				
	n/N	%	*n/N*	%	OR (95% CI)	Measure	Population type
Cure rate							
SNRI80 vs SNRI40							
Norton 2002[144]	23/123	19	30/123	24	0.71 (0.39 to 1.32), $p = 0.279$	2	2
SNRI80 vs SNRI20							
Norton 2002[144]	23/123	19	21/128	16	1.17 (0.61 to 2.25), $p = 0.633$	2	2
SNRI40 vs SNRI20							
Norton 2002[144]	30/123	24	21/128	16	1.64 (0.88 to 3.07), $p = 0.118$	2	2
Improvement rate							
SNRI80 vs SNRI40							
Norton 2002[144]	57/130	44	48/129	37	1.32 (0.80 to 2.17), $p = 0.277$	1	2
SNRI80 vs SNRI20							
Norton 2002[144]	57/130	44	41/132	31	1.73 (1.05 to 2.87), $p = 0.033$	1	2
SNRI40 vs SNRI30							
Zinner 1998[145]	15/33	45	8/26	31	1.88 (0.64 to 5.51), $p = 0.253$	2	1
SNRI40 vs SNRI20							
Zinner 1998	15/33	45	15/34	44	1.06 (0.40 to 2.77)	2	1
Norton 2002[144]	48/129	37	41/132	31	1.32 (0.79 to 2.20)	1	2
Total	63/162	39	56/166	34	1.25 (0.80 to 1.97), $p = 0.329$		
SNRI30 vs SNRI20							
Zinner 1998[145]	8/26	31	15/34	44	0.56 (0.19 to 1.65), $p = 0.294$	2	1
N experiencing adverse events							
	n/N	%	*n/N*	%	**Notes**		**Population**
SNRI80 vs SNRI40							
Norton 2002[144]	102/140	73	93/137	68	Adverse events that occurred in ≥ 5% of subjects in any treatment arm: nausea, headache, diarrhoea, constipation, dry mouth, dizziness, insomnia, sinusitis, fatigue, nasopharyngitis		2
SNRI80 vs SNRI20							
Norton 2002[144]	102/140	73	86/138	62	As above		2
SNRI40 vs SNRI20							
Norton 2002[144]	93/137	68	86/138	62	As above		2
SNRI80, starting 40 b.i.d. vs starting 40 q.d.							
Castro-Diaz 2007[138]	87/136	64	76/127	60	Adverse events that occurred in ≥ 2 patients in first 4 weeks: nausea, dry mouth, constipation, somnolence, dizziness, insomnia, fatigue, headache, diarrhoea		3
SNRI80, starting 40 b.i.d. vs starting 20 b.i.d.							
Castro-Diaz 2007[138]	87/136	64	69/133	52	As above		3
SNRI80, starting 40 q.d. vs starting 20 b.i.d.							
Castro-Diaz 2007[138]	76/127	60	69/133	52	As above		3

Comparison 16 – Comparison of different SNRI doses: quality of life

	SNRI 1		SNRI 2			
	N	**Value**	***N***	**Value**	**Notes**	**Population type**
I-QoL						
SNRI80 vs SNRI40						
Norton 2002[144]	130	9.3	129	7.8	Change in score (mean)	2
SNRI80 vs SNRI20						
Norton 2002[144]	130	9.3	132	5.3	Change in score (mean)	2
SNRI40 vs SNRI30						
Zinner 1998[145]	33	8.2 (10.8)	26	10 (6.4)	Change in score (mean, SD)	1
SNRI40 vs SNRI20						
Zinner 1998[145]	33	8.2 (10.8)	34	12 (16)	Change in score (mean, SD)	1
Norton 2002[144]	129	7.8	132	5.3	Change in score (mean)	2
SNRI30 vs SNRI20						
Zinner 1998[145]	26	10 (6.4)	34	12 (16)	Change in score (mean, SD)	1

Comparison 17 – PFMT + ES vs no treatment

	PFMT + ES		NT			
	N	**Value**	***N***	**Value**	**Notes**	**Population type**
SF-36 (generic)						
Goode 2003[123]	67	No difference	67	No difference	Score	3

Comparison 18 – PFMT with or without BF vs BT

	PFMT ± BF		BT				
	n/N	%	*n/N*	%	OR (95% CI)	Measure	Population type
Cure rate							
PFMT + BF vs BT (< 1-year follow-up)							
Wyman 1998[183]	13/65	20	10/62	16	1.30 (0.52 to 3.23), $p = 0.572$	2	2
PFMT + BF vs BT (≥ 1-year follow-up; women who did not seek additional treatment only)							
Wyman 1998[183]	1/11	9	4/22	18	0.45 (0.04 to 4.60), $p = 0.501$	2	2
Improvement							
PFMT + BF vs BT (< 1-year follow-up)							
Wyman 1998[183]	45/64	70	37/60	62	1.47 (0.70 to 3.11), $p = 0.310$	1	2

	PFMT ± BF		BT			
	N	Value	N	Value	Notes	Population type
Urogenital Distress Inventory						
PFMT + BF vs BT (< 1-year follow-up)						
[a]Wyman 1998[183]	64	85 (52.4)	60	91.7 (55)	Score (mean, SD)	2
Incontinence Impact Questionnaire-Revised						
PFMT + BF vs BT (< 1-year follow-up)						
[a]Wyman 1998[183]	64	59.3 (67.7)	60	65.7 (80.2)	Score (mean, SD)	2
PFMT + BF vs BT (≥ 1-year follow-up)						
Wyman 1998[183]	11	No difference	22	No difference	Score (mean, SD)[a]	2
Assessment of quality of life (A-QoL) (generic)						
PFMT vs BT						
[a]Sherburn 2007[182]	43	14.44 (9.14)	41	11.88 (9.27)	Total score (mean, SD)	1

a Lower scores reflect better quality of life.

Comparison 19 – ES vs VC

	ES		VC				
	n/N	%	*n/N*	%	OR (95% CI)	Measure	Population type
Cure rate (< 1-year follow-up)							
Oláh 1990[187]	12/30	40	10/24	42	0.93 (0.31 to 2.78), $p = 0.901$	1	3
Improvement rate (< 1-year follow-up)							
Oláh 1990[187]	17/30	57	17/24	71	0.54 (0.17 to 1.68), $p = 0.287$	1	3

Comparison 20 – PFMT (± BF) vs PFMT (± BF) + ES

	PFMT ± BF		PFMT ± BF + ES				
	n/N	%	*n/N*	%	OR (95% CI)	Measure	Population type
Improvement rate							
PFMT + BF vs PFMT + BF + ES (< 1-year follow-up)							
Wilson 1987[157]	9/14	64	19/30	63	1.04 (0.28 to 3.91), $p = 0.951$	1	1
PFMT + BF vs PFMT + BF + ES (< 1-year follow-up)							
Knight 1998[172]	9/14	64	24/35	69	0.825 (0.224 to 3.044), $p = 0.773$	1	1

	PFMT ± BF		PFMT ± BF + ES			
	N	Value	*N*	Value	Notes	Population type
SF-36 (generic)						
PFMT vs PFMT + ES						
Goode 2003[123]	66	No difference	67	No difference	Total score	3

Comparison 21 – PFMT + BF vs PFMT + BF + BT

	PFMT + BF		PFMT + BF + BT				
	n/N	%	*n/N*	%	OR (95% CI)	Measure	Population type
Cure rate							
PFMT + BF vs PFMT + BF + BT (< 1-year follow-up)							
Wyman 1998[183]	13/65	20	16/60	27	0.69 (0.30 to 1.58), $p = 0.379$	2	2
PFMT + BF vs PFMT + BF + BT (1-year follow-up)[b]							
Wyman 1998[183]	1/11	9	8/16	50	0.10 (0.01 to 0.98), $p = 0.048$	2	2
Improvement rate							
PFMT + BF vs PFMT + BF + BT (< 1-year follow-up)							
Wyman 1998	45/64	70	44/58	76	0.75 (0.34 to 1.69), $p = 0.491$	1	2

	PFMT + BF		PFMT + BF + BT			
	N	Value	N	Value	Notes	Population type
Urogenital Distress Inventory						
PFMT + BF vs PFMT + BF + BT (< 1-year follow-up)						
[a]Wyman 1998[183]	64	85 (52.4)	58	72.8 (50.4)	Score (mean, SD)	2
Incontinence Impact Questionnaire-Revised						
PFMT + BF vs PFMT + BF + BT (< 1-year follow-up)						
[a]Wyman 1998[183]	64	59.3 (67.7)	58	59.8 (83.9)	Score (mean, SD)	2
PFMT + BF vs PFMT + BF + BT (1-year follow-up)[b]						
[a]Wyman 1998[183]	11	No difference	16	No difference	Score (mean, SD)	2

a Lower scores reflect better quality of life.
b Women who did not have additional treatment only.

Comparison 22 – PFMT + BF + BT vs BT

	PFMT + BF + BT		BT				
	n/N	%	*n/N*	%	OR (95% CI)	Measure	Population type
Cure rate							
PFMT + BF + BT vs BT (< 1-year follow-up)							
Wyman 1998[183]	16/60	27	10/62	16	1.89 (0.78 to 4.59), $p = 0.159$	2	2
PFMT + BF + BT vs BT (≥ 1-year follow-up)[b]							
Wyman 1998[183]	8/16	50	4/22	18	4.50 (1.04 to 19.39), $p = 0.044$	2	2
Improvement rate							
PFMT + BF + BT vs BT (< 1-year follow-up)							
Wyman 1998[183]	44/58	76	37/60	62	1.95 (0.88 to 4.33), $p = 0.099$	1	2

	PFMT + BF + BT		BT			
	N	Value	N	Value	Notes	Population type
Urogenital Distress Inventory						
PFMT + BF + BT vs BT (< 1-year follow-up)						
[a]Wyman 1998[183]	58	72.8 (50.4)	60	91.7 (55)	Score (mean, SD)	2
Incontinence Impact Questionnaire-Revised						
PFMT + BF + BT vs BT (< 1-year follow-up)						
[a]Wyman 1998[183]	58	59.8 (83.9)	60	65.7 (80.2)	Score (mean, SD)	2
PFMT + BF + BT vs BT (≥ 1-year follow-up)[b]						
Wyman 1998[183]	16	No difference	22	No difference	Score (mean, SD)	2

a Lower scores reflect better quality of life.
b Women who did not seek additional treatment only.

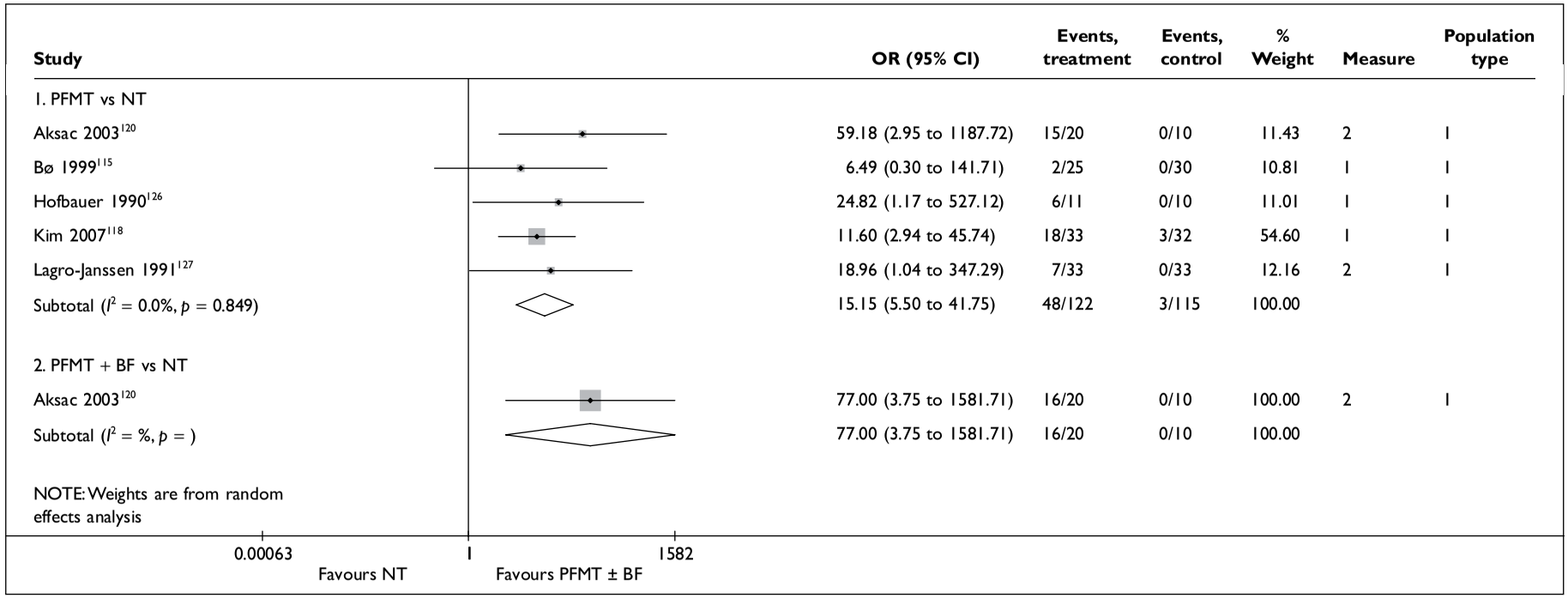
Comparison 23 – other comparisons considered not relevant to the review (cure and improvement only)

	Intervention 1		Intervention 2				
	n/N	%	*n/N*	%	OR (95% CI)	Measure	Population type
Cure							
PFMT + ES vs surgery							
Tapp 1989[185]	3/23	13	18/24	75	0.05 (0.01 to 0.23), $p < 0.001$	2	1
PFMT + BF + VC vs ES							
Laycock Trial 1993[132]	2/16	13	1/23	4	3.14 (0.26 to 37.99), $p = 0.368$	1	1
PFMT + ES + BF vs PFMT + VC							
Bourcier 1994[196]	31/46	67	16/38	42	2.84 (1.17 to 6.93), $p = 0.022$	1	1
Improvement							
PFMT vs PFMT + BF + ES (faradism)							
Wilson 1987[157]	4/15	27	11/15	73	0.13 (0.03 to 0.67), $p = 0.014$	1	1
Wilson 1987[157] (< 1-year follow-up)	4/15	27	10/15	67	0.18 (0.04 to 0.87), $p = 0.033$	1	1
PFMT vs PFMT + BF + ES (IFT)							
Wilson 1987[157]	4/15	27	10/15	67	0.18 (0.04 to 0.87), $p = 0.033$	1	1
Wilson 1987[157] (< 1-year follow-up)	4/15	27	9/15	60	0.24 (0.05 to 1.13), $p = 0.072$	1	1
PFMT + ES vs surgery							
Tapp 1989[185]	16/23	70	23/24	96	0.10 (0.01 to 0.89), $p = 0.039$	2	1
PFMT + VC vs ES							
Wise 1993[188]	14/15	93	12/16	75	4.67 (0.46 to 47.63), $p = 0.194$	2	1
PFMT + BF + VC vs ES							
Laycock Trial 1 1993[132]	7/16	44	14/23	61	0.50 (0.14 to 1.83), $p = 0.294$	1	1
PFMT + ES + BF vs VC							
Seo 2004[195]	55/60	92	53/60	88	1.45 (0.43 to 4.86), $p = 0.545$	1	1

Appendix 18

Direct pairwise comparisons: cure and improvement rate (population type 1 only)

COMPARISON 01 Cure rates: pelvic floor muscle training with or without biofeedback versus no treatment (population type 1 only)



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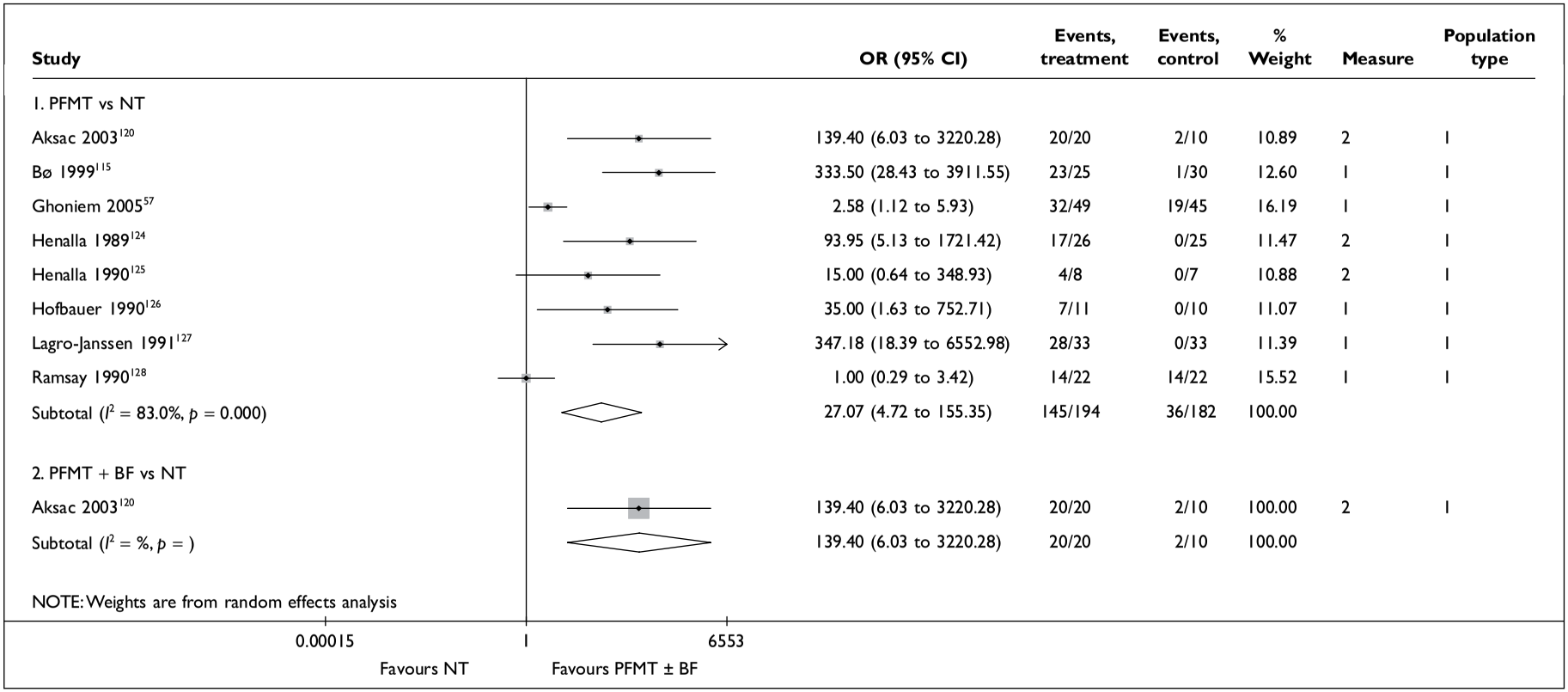
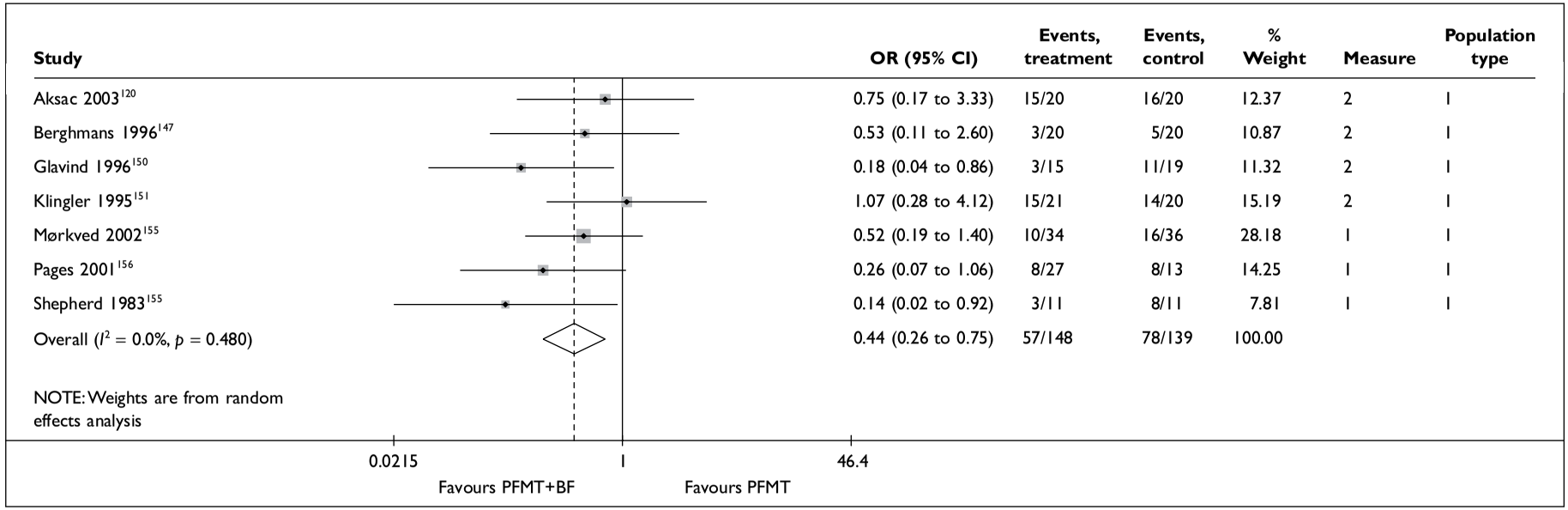
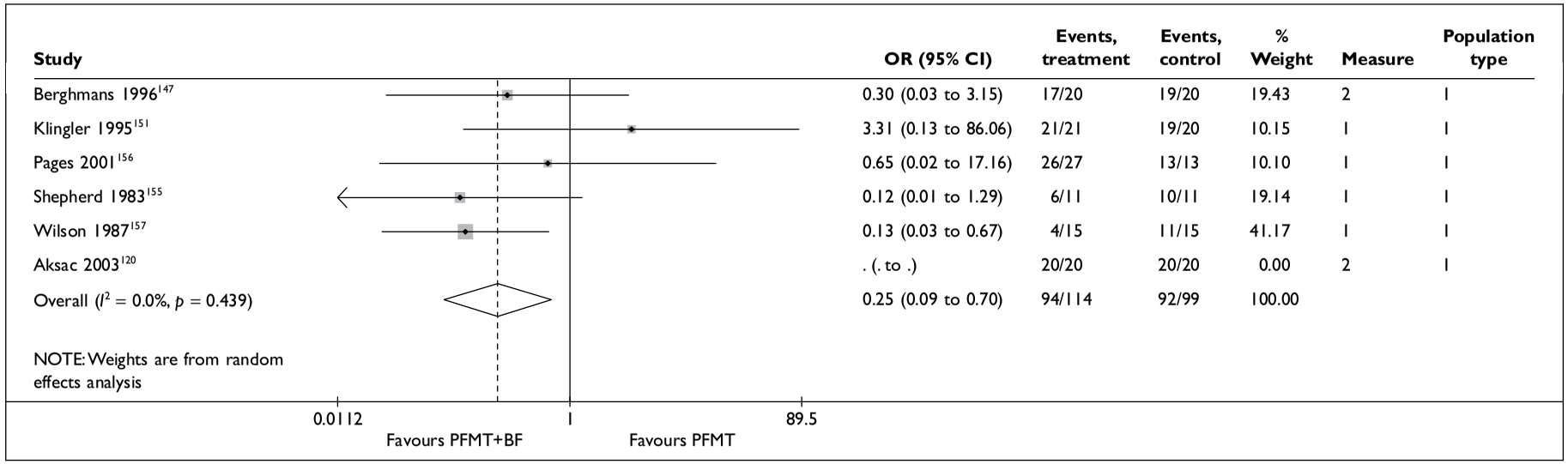
COMPARISON 02 Improvement rates: pelvic floor muscle training with or without biofeedback versus no treatment (population type 1 only)



COMPARISON 03 Cure rates: pelvic floor muscle training versus pelvic floor muscle training + biofeedback (population type 1 only)

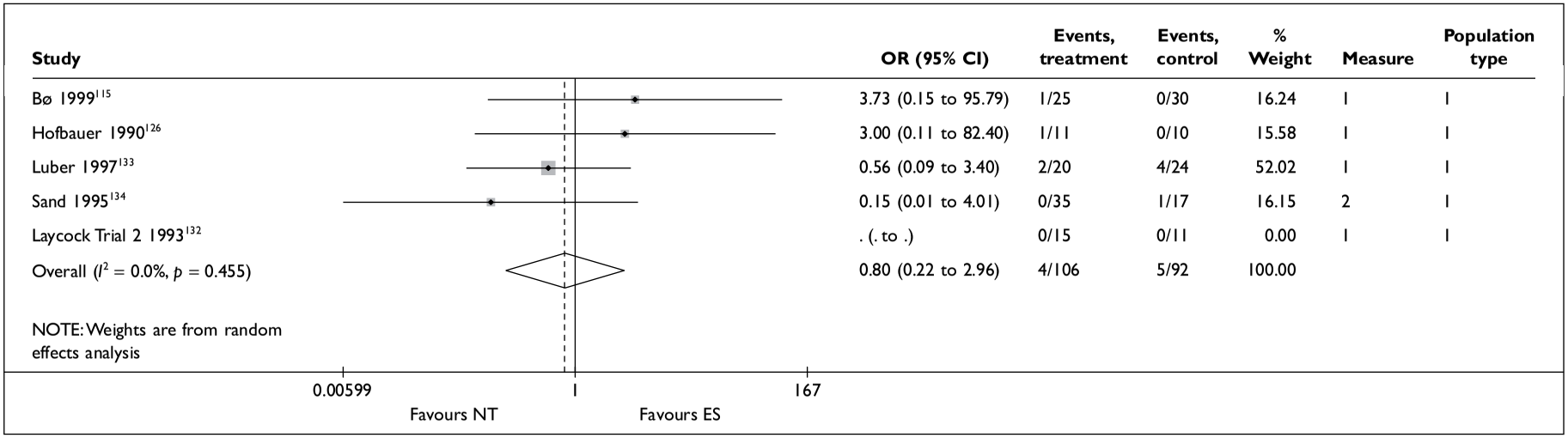


COMPARISON 04 Cure rates: pelvic floor muscle training versus pelvic floor muscle training + biofeedback (population type 1 only)



DOI: 10.3310/hta14400

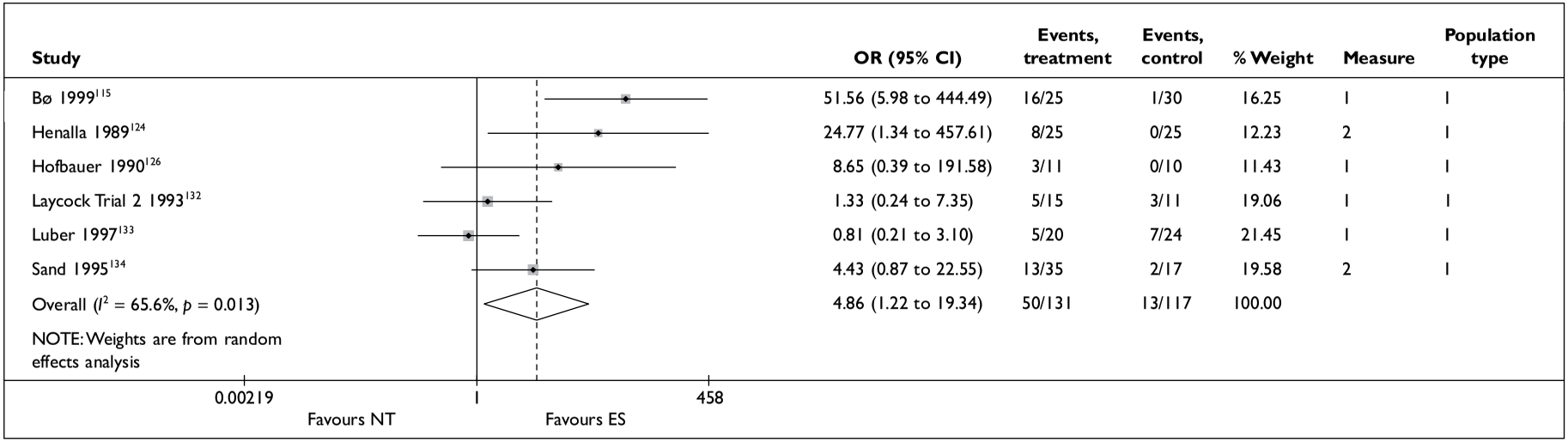
COMPARISON 05 Cure rates: electrical stimulation versus no treatment (population type 1 only)



Study	OR (95% CI)	Events, treatment	Events, control	% Weight	Measure	Population type
Bø 1999[115]	3.73 (0.15 to 95.79)	1/25	0/30	16.24	1	1
Hofbauer 1990[126]	3.00 (0.11 to 82.40)	1/11	0/10	15.58	1	1
Luber 1997[133]	0.56 (0.09 to 3.40)	2/20	4/24	52.02	1	1
Sand 1995[134]	0.15 (0.01 to 4.01)	0/35	1/17	16.15	2	1
Laycock Trial 2 1993[132]	. (. to .)	0/15	0/11	0.00	1	1
Overall (I^2 = 0.0%, p = 0.455)	0.80 (0.22 to 2.96)	4/106	5/92	100.00		

NOTE: Weights are from random effects analysis

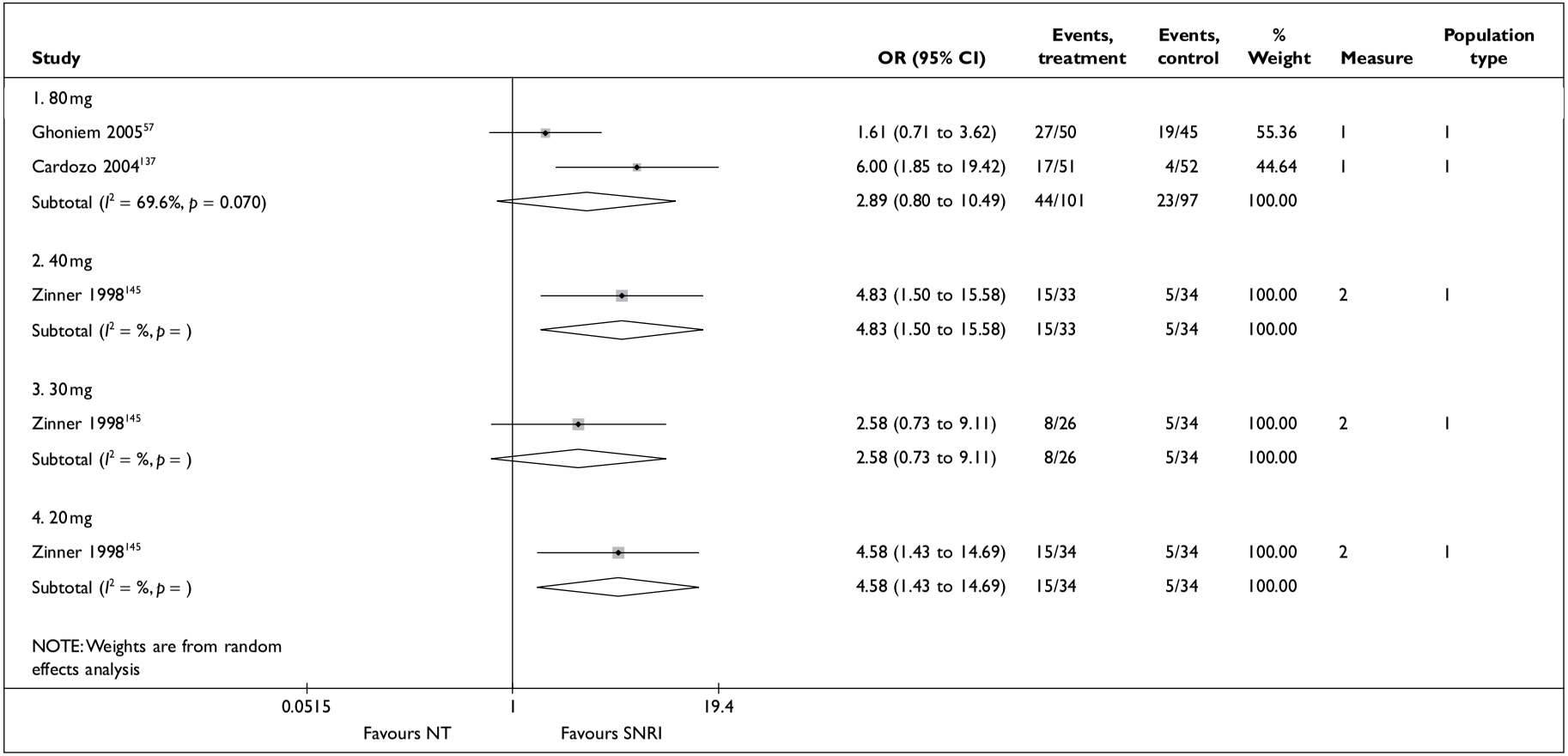
COMPARISON 06 Improvement rates: electrical stimulation versus no treatment (population type 1 only)



Study	OR (95% CI)	Events, treatment	Events, control	% Weight	Measure	Population type
Bø 1999[115]	51.56 (5.98 to 444.49)	16/25	1/30	16.25	1	1
Henalla 1989[124]	24.77 (1.34 to 457.61)	8/25	0/25	12.23	2	1
Hofbauer 1990[126]	8.65 (0.39 to 191.58)	3/11	0/10	11.43	1	1
Laycock Trial 2 1993[132]	1.33 (0.24 to 7.35)	5/15	3/11	19.06	1	1
Luber 1997[133]	0.81 (0.21 to 3.10)	5/20	7/24	21.45	1	1
Sand 1995[134]	4.43 (0.87 to 22.55)	13/35	2/17	19.58	2	1
Overall (I^2 = 65.6%, p = 0.013)	4.86 (1.22 to 19.34)	50/131	13/117	100.00		

NOTE: Weights are from random effects analysis

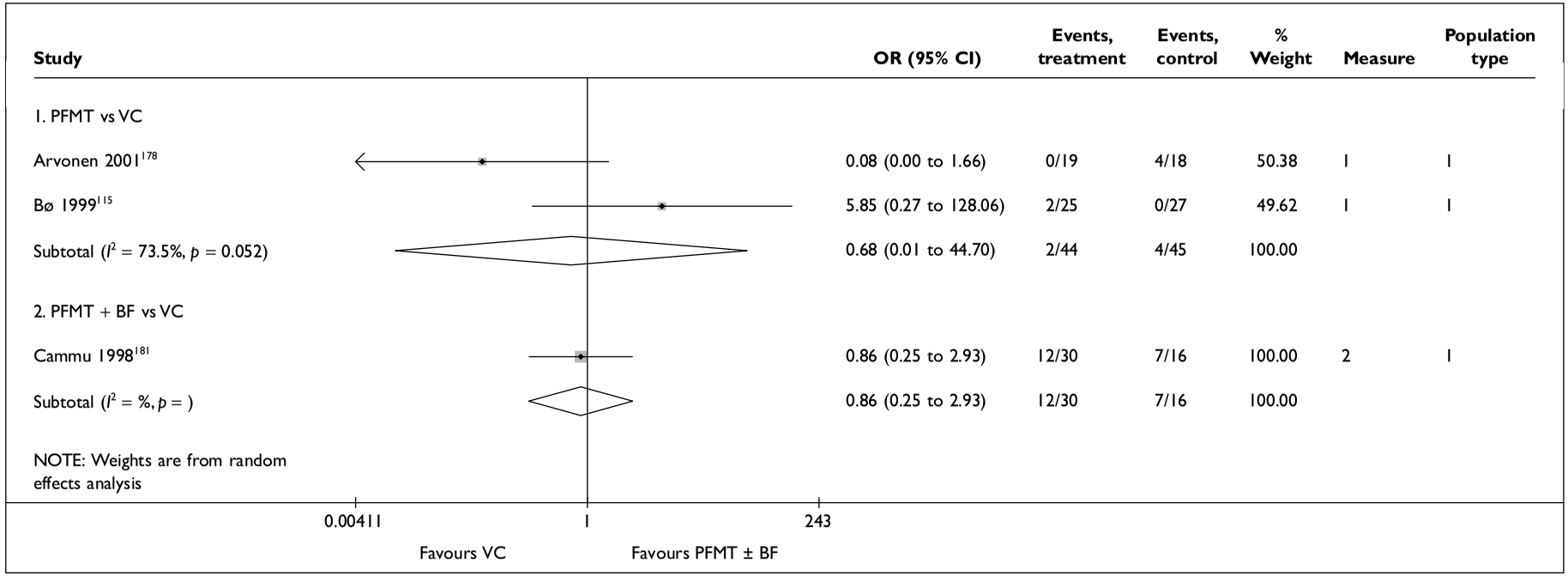
COMPARISON 07 Improvement rates: serotonin–noradrenaline reuptake inhibitor versus no treatment (population type 1 only)



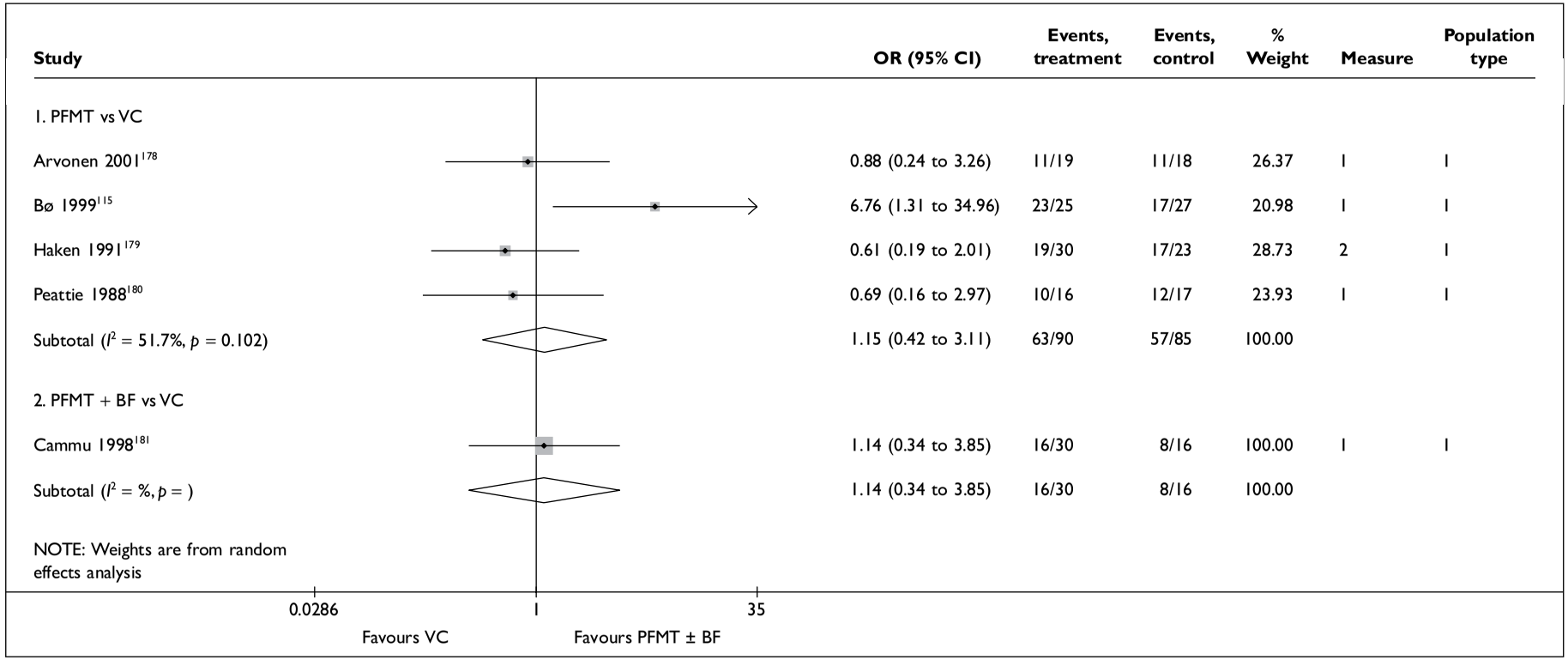
Study	OR (95% CI)	Events, treatment	Events, control	% Weight	Measure	Population type
1. 80 mg						
Ghoniem 2005[57]	1.61 (0.71 to 3.62)	27/50	19/45	55.36	1	1
Cardozo 2004[137]	6.00 (1.85 to 19.42)	17/51	4/52	44.64	1	1
Subtotal (I^2 = 69.6%, p = 0.070)	2.89 (0.80 to 10.49)	44/101	23/97	100.00		
2. 40 mg						
Zinner 1998[145]	4.83 (1.50 to 15.58)	15/33	5/34	100.00	2	1
Subtotal (I^2 = %, p =)	4.83 (1.50 to 15.58)	15/33	5/34	100.00		
3. 30 mg						
Zinner 1998[145]	2.58 (0.73 to 9.11)	8/26	5/34	100.00	2	1
Subtotal (I^2 = %, p =)	2.58 (0.73 to 9.11)	8/26	5/34	100.00		
4. 20 mg						
Zinner 1998[145]	4.58 (1.43 to 14.69)	15/34	5/34	100.00	2	1
Subtotal (I^2 = %, p =)	4.58 (1.43 to 14.69)	15/34	5/34	100.00		

NOTE: Weights are from random effects analysis

COMPARISON 08 Cure rates: pelvic floor muscle training with or without biofeedback versus vaginal cones (population type 1 only)



COMPARISON 09 Improvement rates: pelvic floor muscle training with or without biofeedback versus vaginal cones (population type 1 only)



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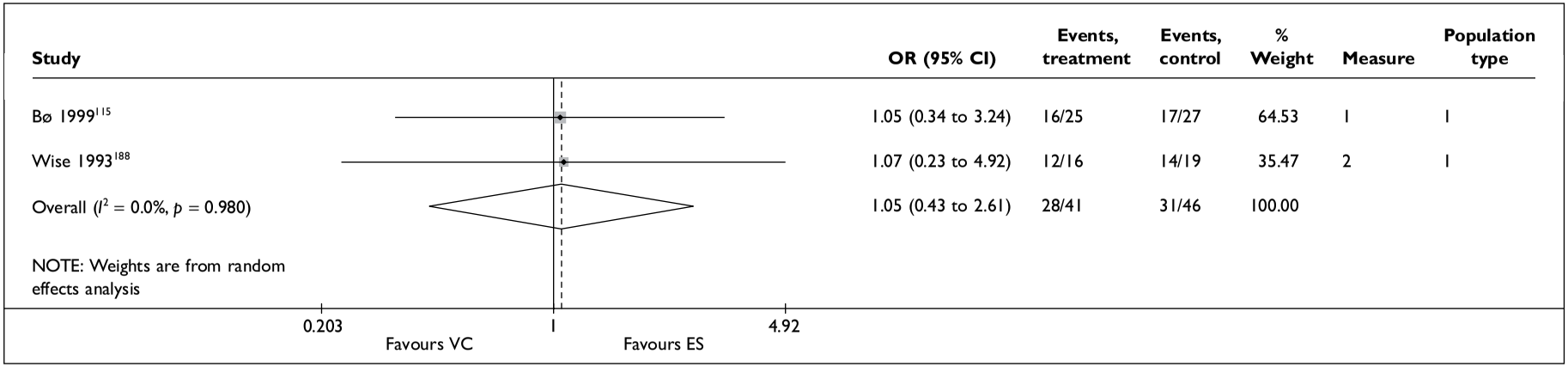
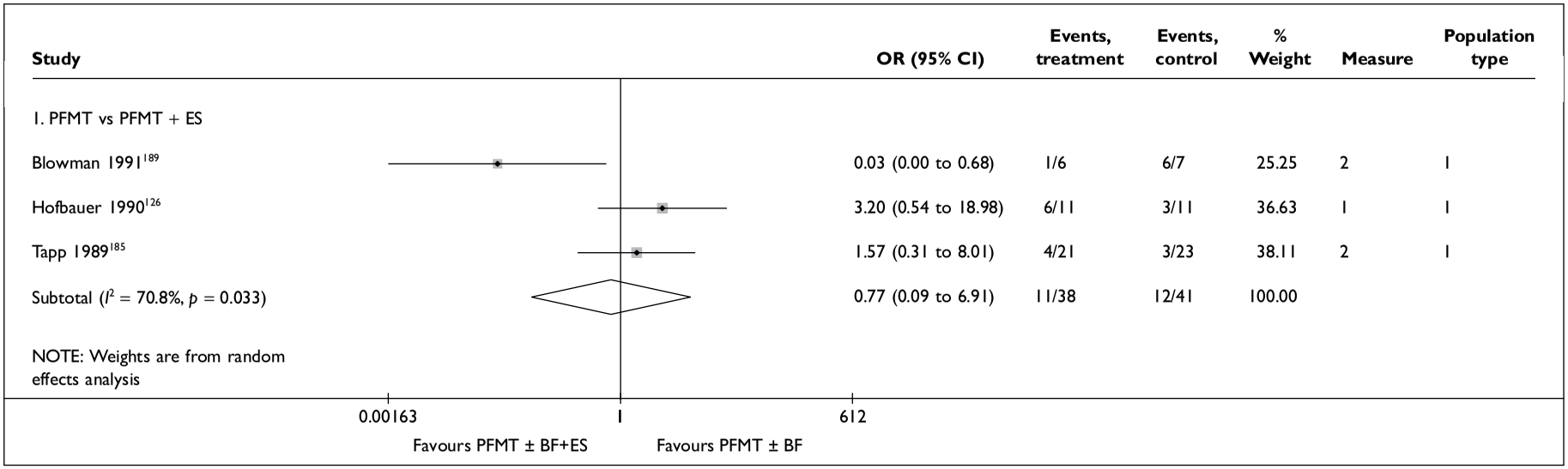
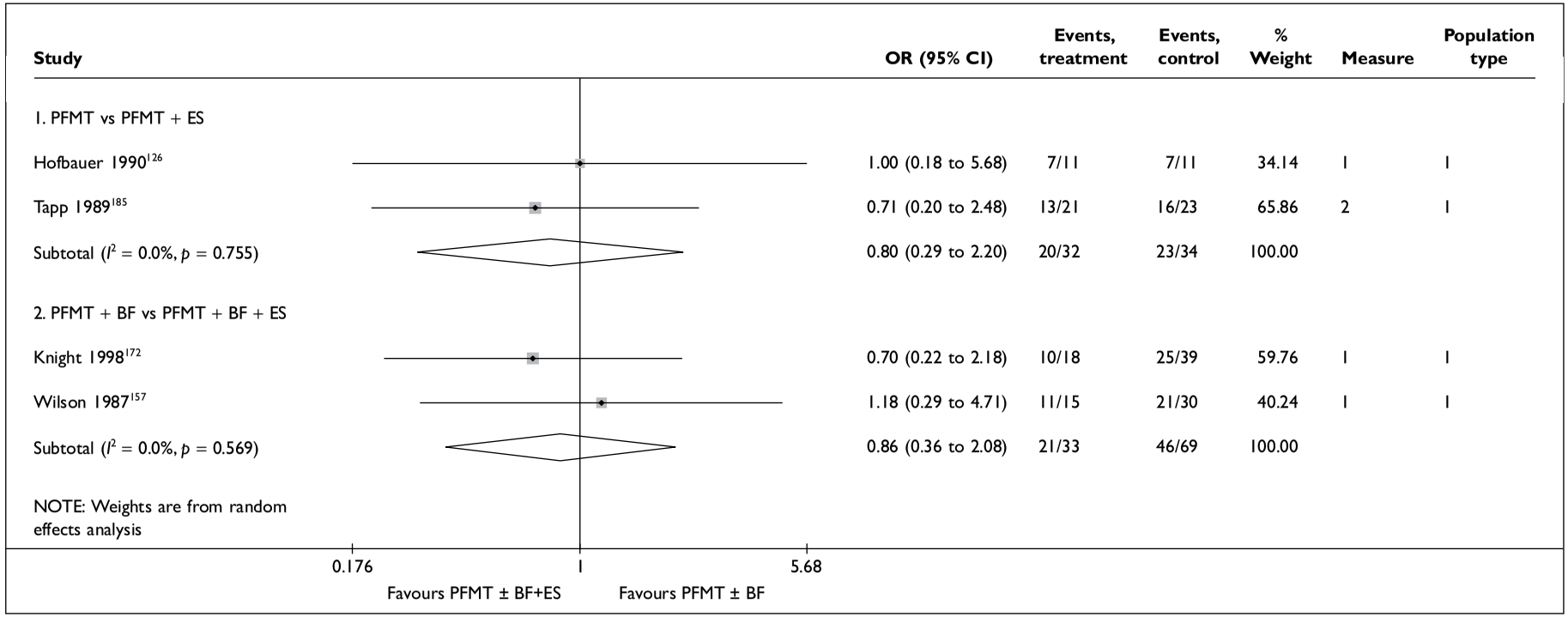
COMPARISON 10 Improvement rates: electrical stimulation versus vaginal cones (population type 1 only)



COMPARISON 11 Cure rates: pelvic floor muscle training (± biofeedback) versus pelvic floor muscle training (biofeedback) + electrical stimulation (population type 1 only)



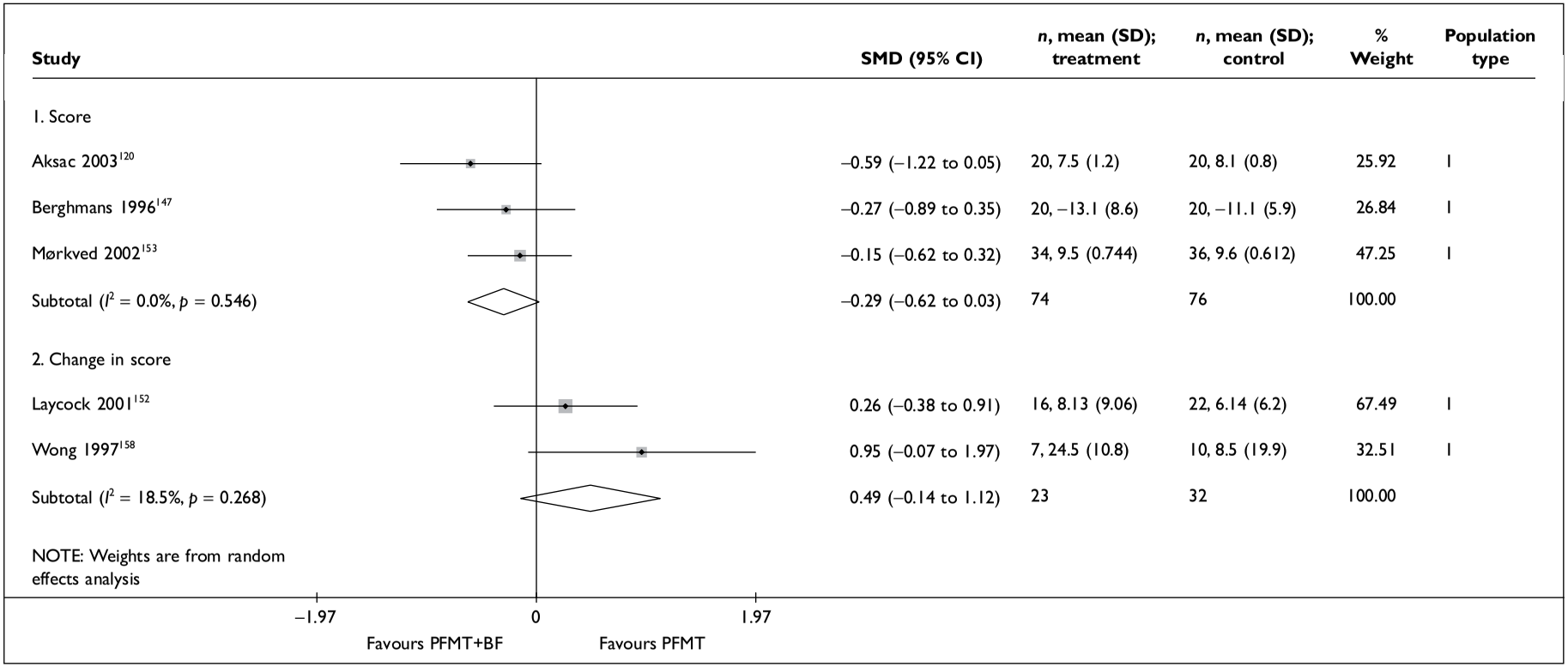
COMPARISON 12 Improvement rates: pelvic floor muscle training (± biofeedback) versus pelvic floor muscle training (biofeedback) + electrical stimulation (population type 1 only)



Appendix 19

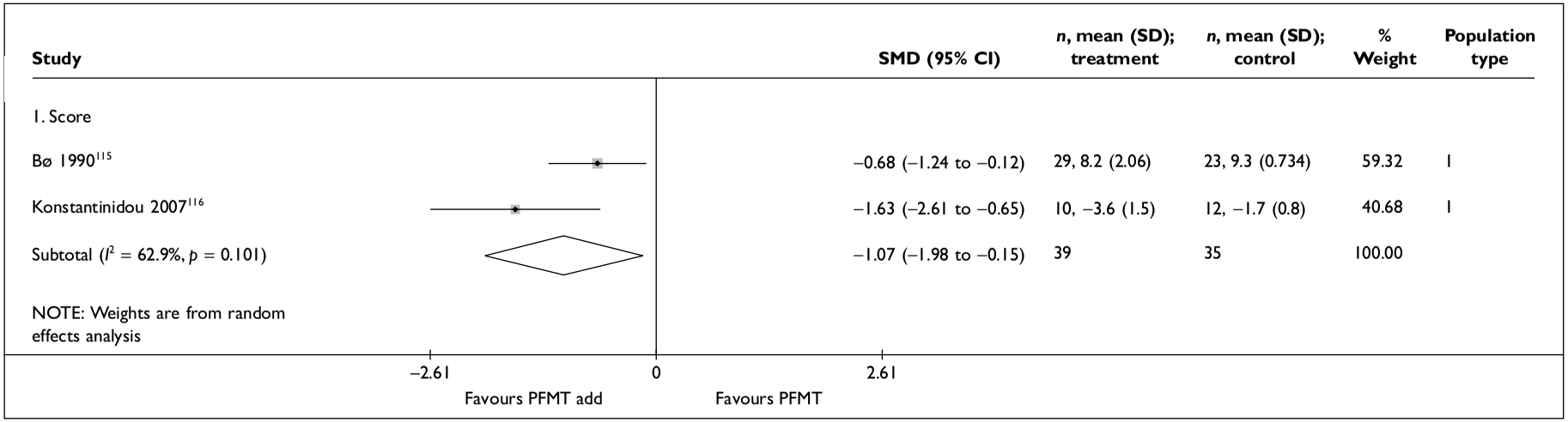
Direct pairwise comparisons: quality of life

COMPARISON 01 Condition-specific quality of life: pelvic floor muscle training versus pelvic floor muscle training with biofeedback

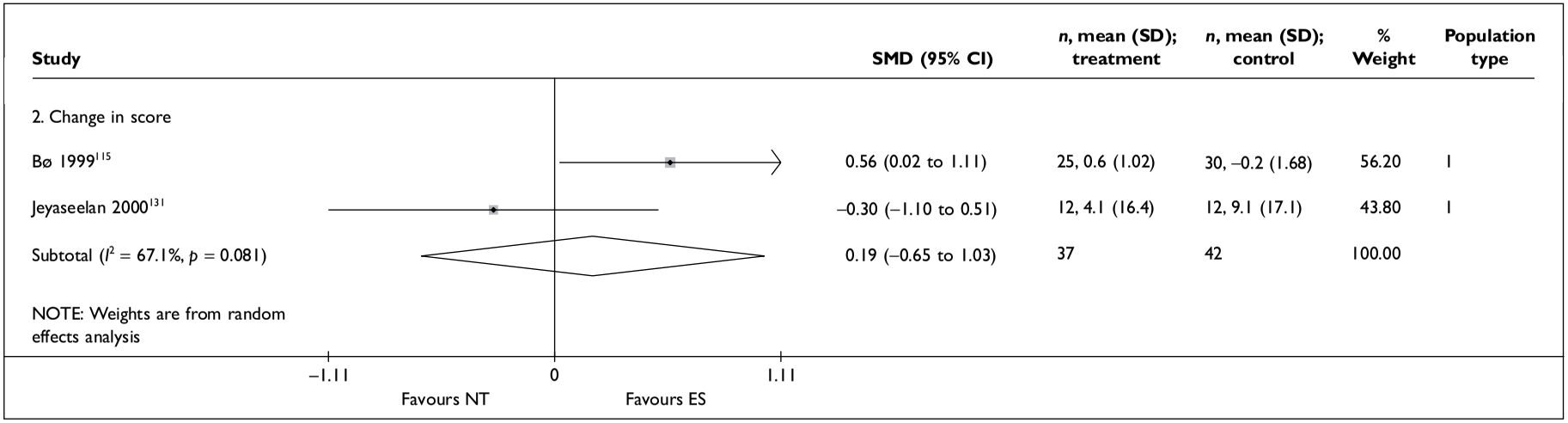


DOI: 10.3310/hta14400

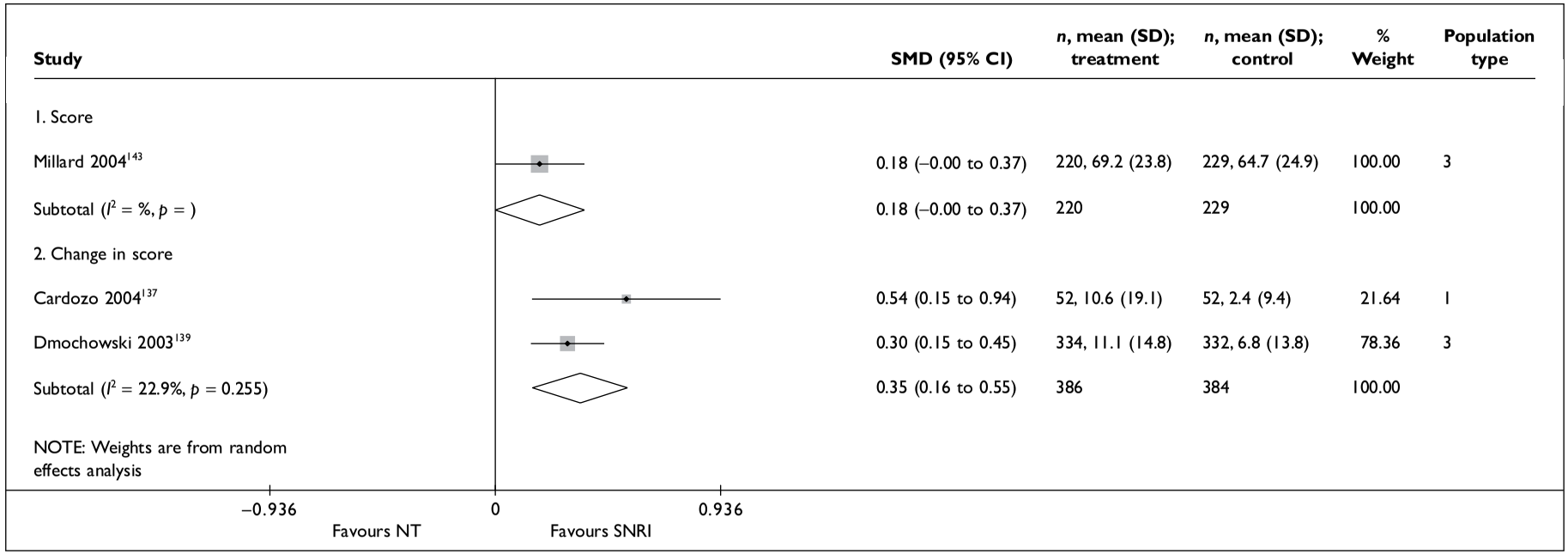
COMPARISON 02 Condition-specific quality of life: pelvic floor muscle training versus pelvic floor muscle training with additional sessions



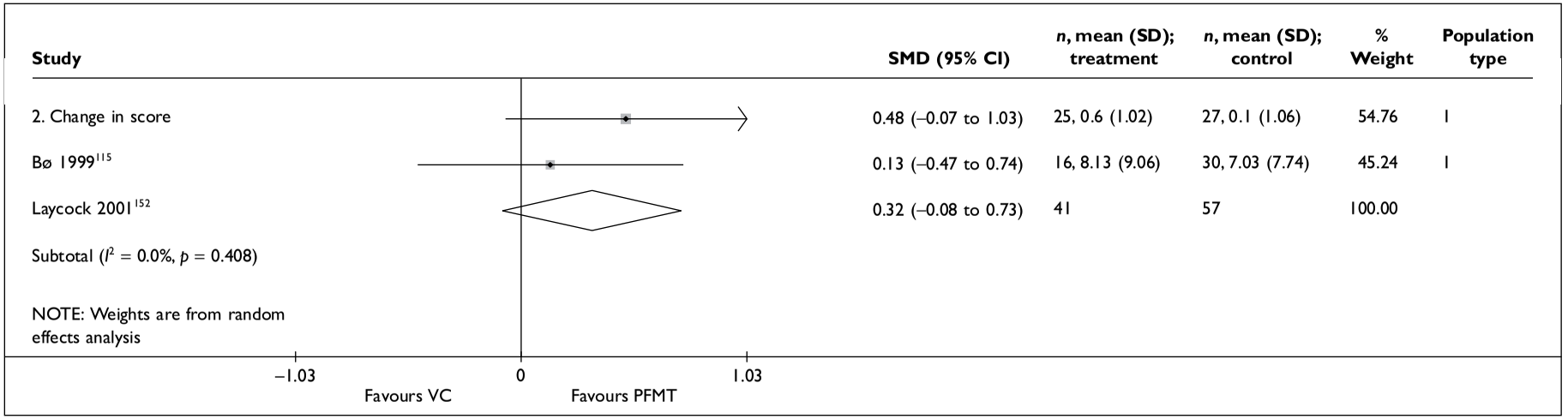
COMPARISON 03 Condition-specific quality of life: electrical stimulation versus no treatment



COMPARISON 04 Condition-specific quality of life: serotonin–noradrenaline reuptake inhibitor 80 mg versus no treatment



COMPARISON 05 Condition-specific quality of life: pelvic floor muscle training versus vaginal cones



Appendix 20

Trials of treatment for stress urinary incontinence in childbearing women

Three randomised trials[197–199] have tested the efficacy of treatments for SUI for women after childbirth and their baseline characteristics are summarised in *Table 83*.

The first study[199] recruited women with persistent SUI symptoms (and urodynamic stress incontinence) 3 months or more after last delivery and randomised them to three groups: PFMT, PFMT plus abdominal muscle training, and control (relaxation massage). PFMT was provided as part of multimodal pelvic floor rehabilitation (including BF and ES). More than 70% of the women in both treatment groups (70% in the PFMT group and 74% in the PFMT-plus-abdominal-training group) were cured, compared with none in the control group. The results showed a greater change (improvement) in scores on condition-specific quality of life in both treatment groups than the control group but no statistically significant difference was found between the two treatment groups.

The second study[197] recruited women complaining of stress urinary incontinence 3 months postpartum and randomised them to a control group treated with basic PFMT and an intervention group split between intensive PFMT alone, VCs alone or both intensive PFMT and VCs. The results showed a statistically significantly higher cure rate in the intervention group than in the control groups (50% against 24%, $p = 0.0003$), although there was no difference in cure rate between the three intervention arms. No information regarding improvement rates or changes in quality of life were reported.

The third study[198] randomised women who complained of SUI, during weeks 17–20 of pregnancy, between intensive PFMT consisting of three physiotherapy sessions between weeks 23 and 30 of pregnancy together with a fourth session 6 weeks after delivery, and routine care that included brief instruction on pelvic floor muscle exercises. The results showed no difference in cure rates between the intervention and control arms at 8 weeks (38% against 32%, p = NS) and 12 months (42% against 37%, p = NS) after delivery nor in change to condition-specific quality of life. Improvement rates were not reported.

TABLE 83 *Baseline characteristics of studies investigating alternative treatments for women with postnatal SUI*

Study ID	Population type	Duration (month)	Comparator	*N* randomised	Age	Supervisory intensity[a]	Note
Dumoulin 2004[199]	I	2	PFMT	21	36.0	Intensive	PFMT as part of multimodal rehabilitation with BF and ES
			PFMT + abdominal muscle training	23	37.0	Intensive	PFMT as part of multimodal rehabilitation with BF and ES
			NT	20	35.5	Intensive	Relaxation massage for the back and extremities; women asked not to perform PFMT
Wilson 1998[197]	2	12	PFMT	39	29.0	Average	
			VC	36	29.0	Average	
			PFMT + VC	38	29.0	Average	
			NT (routine care)	117	27.8	Average	Routine care with some instructions on PFMT
Woldringh 2007[198]	2	8 weeks postpartum	PFMT	112	31.9	Average	
			NT	152	32.6	Average	Routine care with some instructions on PFMT

a Average, up to two clinic visits per month; intensive, more than two clinic visits per month.

TABLE 84 *Primary outcomes: childbearing women*

	Arm 1		Arm 2				
	n/N	**%**	***n/N***	**%**	**OR (95% CI)**	**Measure**	**Population type**
Cure rate							
PFMT vs NT							
Dumoulin 2004[199]	14/20	70	0/19	0	87.00 (4.53 to 1671.63), $p=0.03$	2	1
Wilson 1998[197]	10/19	53	22/91	24	3.48 (1.26 to 9.67), $p=0.016$	1	2
Woldringh 2007[198]	31/81	38	35/109	32	1.31 (0.72 to 2.39), $p=0.378$	1 and 2	2
PFMT vs NT (< 1-year follow-up)							
Woldringh 2007	25/60	42	35/94	37	1.20 (0.62 to 2.33), $p=0.582$	1 and 2	2
PFMT + abdominal training vs NT							
Dumoulin 2004[199]	17/23	74	0/19	0	105.00 (5.51 to 2002.02), $p=0.02$	2	1
PFMT vs PFMT + abdominal training							
Dumoulin 2004[199]	14/20	70	17/23	74	0.82 (0.22 to 3.13), $p=0.776$	2	1
PFMT + VC vs NT							
Wilson 1998[197]	6/14	43	22/91	24	2.35 (0.74 to 7.52), $p=0.149$	1	2
VC vs NT							
Wilson 1998[197]	11/21	52	22/91	24	3.45 (1.29 to 9.21), $p=0.013$	1	2
PFMT vs VC							
Wilson 1998[197]	10/19	53	11/21	52	1.01 (0.29 to 3.50), $p=0.987$	1	2
PFMT vs PFMT + VC							
Wilson 1998[197]	10/19	53	6/14	43	1.48 (0.37 to 5.95), $p=0.579$	1	2
PFMT + VC vs VC							
Wilson 1998[197]	6/14	43	11/21	52	0.68 (0.17 to 2.66), $p=0.581$	1	2
Incontinence Impact Quality of Life							
	N	**Value**	***N***	**Value**	**Reported *p*-value**		
PFMT vs NT							
Dumoulin 2004[199]	20	13.00 (6.00 to 25.00)	19	0.50 (–6.50 to 5.00)	<0.05	Change in score (median, 25th and 75th percentile)	1
PFMT + abdominal training vs NT							
Dumoulin 2004[199]	23	10.00 (2.00 to 16.00)	19	0.50 (–6.50 to 5.00)	<0.05	Change in score (median, 25th and 75th percentile)	1
PFMT vs PFMT + abdominal training							
Dumoulin 2004[199]	20	13.00 (6.00 to 25.00)	23	10.00 (2.00 to 16.00)	$p>0.05$	Change in score (median, 25th and 75th percentile)	1

Appendix 21

Data on secondary outcomes (population types 1 and 2 only)

Number of incontinence episodes

	Intervention 1		Intervention 2			
	N	Value	*N*	Value	Outcome definition	Population type
Comparison with no treatment						
PFMT vs NT						
Aksac 2003[120]	20	3.5 (0.5)	10	2.4 (0.9)	*N* of episodes (4-point ordinal scale, median, SD); 1 = once a day, 4 = once a month	1
Bø 1999[115]	25	–1.2 (2.04)	30	0.3 (2.24)	Change in *N* of episodes in 3 days (diary, mean change, SD)	1
Ghoniem 2005[57]	46	–34.7	44	–28.9	Change in *N* of episodes per week (pooled paper diaries completed at each visit, median % decrease)	1
Lagro-Janssen 1991[127]	33	4.8 (5.86)	33	25.3 (15.83)	*N* of episodes per week (mean, SD); 7-day bladder chart	1
Burns 1993[122]	43	8 (10)	40	17 (19)	*N* of episodes per week (24-hour diary, mean, SD)	2
Williams 2006[129]	77	–1.03 (3.16)	75	–0.59 (2.01)	Change in *N* of episodes in 24 hours (3-day diary, mean, SD)	2
PFMT + BF vs NT						
Aksac 2003[120]	20	3.6 (0.4)	10	2.4 (0.9)	*N* of episodes (4-point ordinal scale, median, SD); 1 = once a day, 4 = once a month	1
Burns 1993[122]	40	5 (6)	40	17 (19)	*N* of episodes (24-hour diary, mean, SD)	2
VC vs NT						
Bø 1999[115]	27	0.8 (5.3)	30	0.3 (2.24)	Change in *N* of episodes in 3 days (diary, mean change, SD)	1
Williams 2006[129]	79	–0.28 (2.68)	75	–0.59 (2.01)	Change in *N* of episodes in 24 hours (3-day diary, mean, SD)	2
BT vs NT						
Fantl 1991[135]	45	10 (12)	43	19 (19)	*N* of episodes (7-day diary, mean, SD)	1
SNRI 80 mg vs NT						
Bump 2004[136]	34	No data	31	No data	Change in *N* of episodes: 'Duloxetine was significantly superior to placebo'	1
Cardozo 2004[137]	46	–7.1	52	–2.9	Change in *N* of episodes per week (median decrease)	1
Cardozo 2004[137]	46	–59.8	52	–26.9	Change in *N* of episodes per week (median % decrease)	1
Ghoniem 2005[57]	46	–56.5	44	–28.9	Change in *N* of episodes per week (pooled paper diaries completed at each visit, median % decrease)	1

	Intervention 1		Intervention 2			
	N	Value	*N*	Value	Outcome definition	Population type
Norton 2002[144]	130	–58	132	–40	Change in *N* of episodes in 24 hours (median % reduction at last visit)	2
SNRI 40 mg vs NT						
Zinner 1998[145]	33	–7.6 (11.3)	34	–5.9 (7.6)	Change in *N* of episodes per week (mean reduction, SD)	1
Zinner (40/30/20 mg groups combined) 1998[145]	95	–10.1 (11)	34	–5.9 (7.6)	Change in *N* of episodes per week (mean reduction, SD)	1
Norton 2002[144]	129	–59	132	–40	Change in *N* of episodes in 24 hours (median % reduction at last visit)	2
SNRI 30 mg vs NT						
Zinner 1998[145]	26	–8.8 (6.1)	34	–5.9 (7.6)	Change in *N* of episodes per week (mean reduction, SD)	1
SNRI 20 mg vs NT						
Zinner 1998[145]	34	–13.9 (12.8)	34	–5.9 (7.6)	Change in *N* of episodes per week (mean reduction, SD)	1
Norton 2002[144]	132	–44	132	–40	Change in *N* of episodes in 24 hours (median % reduction at last visit)	2
PFMT + SNRI vs NT						
Ghoniem 2005[57]	44	–57.4	44	–28.9	Change in *N* of episodes per week (pooled paper diaries completed at each visit, median % decrease)	1
Comparison of different variants of PFMT						
PFMT vs PFMT + BF						
Aksac 2003[120]	20	3.5 (0.5)	20	3.6 (0.4)	*N* of episodes of leakage (4-point ordinal scale, median, SD). 1 = once a day, 4 = once a month	1
Berghmans 1996[147]	20	1.4 (3.5)	20	0.8 (1.3)	*N* of episodes in 24 hours (mean, SD)	1
Laycock 2001[152]	16	–1.13 (1.42)	22	–1.2 (1.29)	Change in *N* of episodes in 24 hours (mean, SD)	1
Shepherd 1983[155]	11	4.1 (0 to 7)	11	1.1 (0 to 8)	*N* of episodes per week (diary, mean, range)	1
Wong 1997a[158]	7	–9.1 (12.3)	10	–2 (3.5)	Change in *N* of episodes per week (7-day diary, mean reduction, SD)	1
Burns 1993[122]	43	8 (10)	40	5 (6)	*N* of episodes per week at 8 weeks (24-hour diary, mean, SD)	2
PFMT vs PFMT with additional sessions						
Konstantinidou 2007[116]	10	12.5 (7)	12	2.9 (2.8)	*N* of episodes of per week (7-day diary, mean, SD)	1
Wong 1997b[160]	26	No data	21	No data	*N* of episodes of (7-day diary). Both groups showed 'significant improvement' over time but no between-group differences	1

	Intervention 1		Intervention 2			
	N	**Value**	***N***	**Value**	**Outcome definition**	**Population type**
PMFT (in supine position) + BF vs PFMT (in supine and upright position) + BF						
Borello-France 2006[165]	22	–4 (4.7)	22	–5.4 (4.8)	Change in *N* of episodes per week (7-day bladder diary, mean, SD)	1
PFMT (maximal contraction) + BF vs PFMT (submaximal contraction) + BF						
Johnson 2001[167]	16	0.79 (1.65)	16	1.15 (2.55)	*N* of episodes of in 24 hours (daily diary for 8 weeks, mean, SD)	1
PFMT + BF (vaginal) vs PFMT + BF (vaginal and abdominal)						
Wong 2001[169]	19	4.1 (10.7)	19	1.5 (3.0)	*N* of episodes per week (7-day diary, mean, SD), $p > 0.05$	1
Comparison of different SNRI doses						
SNRI 80 mg vs SNRI 40 mg						
Norton 2002[144]	130	–58	129	–59	Change in *N* of episodes in 24 hours (median % reduction at last visit)	2
SNRI 80 mg vs SNRI 20 mg						
Norton 2002[144]	130	–58	132	–44	Change in *N* of episodes in 24 hours (median % reduction at last visit)	2
SNRI 40 mg vs SNRI 30 mg						
Zinner 1998[145]	33	–7.6 (11.3)	26	–8.8 (6.1)	Change in *N* of episodes per week (mean reduction, SD)	1
SNRI 40 mg vs SNRI 20 mg						
Zinner 1998[145]	33	–7.6 (11.3)	34	–13.9 (12.8)	Change in *N* of episodes per week (mean reduction, SD)	1
Norton 2002[144]	129	–59	132	–44	Change in *N* of episodes in 24 hours (median % reduction at last visit)	2
SNRI 30 mg vs SNRI 20 mg						
Zinner 1998[145]	26	–8.8 (6.1)	34	–13.9 (12.8)	Change in *N* of episodes per week (mean reduction, SD)	1
Comparison of different treatments (single modality)						
PFMT vs ES						
Bø 1999[115]	25	–1.2 (2.04)	25	–0.7 (3.32)	Change in *N* of episodes in 3 days (diary, mean, SD)	1
PFMT vs VC						
Bø 1999[115]	25	–1.2 (2.04)	27	0.8 (5.3)	Change in *N* of episodes in 3 days (diary, mean change, SD)	1
Laycock 2001[152]	16	–1.13 (1.42)	30	–1 (1.04)	Change in *N* of episodes in 24 hours (mean reduction, SD)	1
Williams 2006[129]	77	–1.03 (3.16)	79	–0.28 (2.68)	Change in *N* of episodes in 24 hours (3-day diary, mean, SD)	2
PFMT + BF vs VC						
Cammu 1998[181]	30	5.6 (5.5)	16	8.3 (15)	*N* of episodes per week (1-week diary, mean, SD)	1
Laycock 2001[152]	22	–1.2 (1.29)	30	–1 (1.04)	Change in *N* of episodes in 24 hours (mean reduction, SD)	1

	Intervention 1		Intervention 2		Outcome definition	Population type
	N	Value	*N*	Value		
PFMT vs BT						
Sherburn 2007[182]	43	4.5 (11)	41	8 (27)	*N* of episodes (7-day diary, median interquartile range)	1
PFMT + BF vs BT						
Wyman 1998[183]	46	8.7 (0)	48	12.5 (8.3)	*N* of episodes per week at 3 months (7-day diary, mean, SD). Women with USI only	1
Wyman (follow-up) 1998[183]	65	9.4 (14)	62	10 (12)	*N* of episodes of per week at 6 months (7-day diary, mean, SD). 3 months after the 3-month treatment period. Women with USI/MUI/DO	2
PFMT vs SNRI 80 mg						
Ghoniem 2005[57]	46	–34.7	46	–56.5	Change in *N* of episodes per week (pooled paper diaries completed at each visit, median % decrease)	1
PFMT vs surgery						
Klarskov 1986[184]	24	2 (0 to 20)	26	0 (0 to 14)	*N* of episodes in 3 days at 4 months (3-day voiding and incontinence chart, median, range)	1
Comparison of different treatments (dual modality)						
PFMT vs PFMT + ES						
Blowman 1991[189]	6	6 (0 to 21)	7	0 (0 to 1)	*N* of episodes per week (1-week continence chart, median, range). $p < 0.05$	1
PFMT vs PFMT + SNRI 80 mg						
Ghoniem 2005[57]	46	–34.7	44	–57.4	Change in episodes of leakage per week (pooled paper diaries completed at each visit, median % decrease)	1
PFMT + BF vs PFMT + BF + BT						
Wyman 1998[183]	46	8.7 (0)	42	7.2 (11.5)	*N* of episodes per week at 3 months (7-day diary, mean, SD). Women with USI only	1
Wyman (follow-up) 1998[183]	65	9.4 (14)	60	8.1 (12.4)	*N* of episodes per week at 6 months (7-day diary, mean, SD); 3 months after the 3-month treatment period. Women with USI/MUI/DO	2
PFMT + BF + BT vs BT						
Wyman 1998[183]	42	7.2 (11.5)	48	12.5 (8.3)	*N* of episodes per week at 3 months (7-day diary, mean, SD). Women with USI only	1
Wyman (follow-up) 1998[183]	60	8.1 (12.4)	62	10 (12)	*N* of episodes per week at 6 months (7-day diary, mean, SD); 3 months after the 3-month treatment period. Women with USI/MUI/DO	2
PFMT + SNRI vs SNRI						
Ghoniem 2005[57]	44	–57.4	46	–56.5	Change in *N* of episodes per week (pooled paper diaries completed at each visit, median % decrease)	1

Pad test (urine loss)

	Intervention 1		Intervention 2			
	N	Value	*N*	Value	Outcome definition	Population type
Comparison with no treatment						
PFMT vs NT						
Aksac 2003[120]	20	2.1 (0.4)	10	28.2 (3.7)	1-hour pad test (g, median, SD)	1
Bidmead 2002[121]	40	–9.62 (21.31)	20	3.65 (7.65)	Change in pad weight (fixed volume pad test with half-hour exercise programme) (g, mean change, SD)	1
Bø 1999[115]	25	–30.2 (33.67)	30	–12.7 (40.52)	Change in stress pad test (fixed volume, 60 second) (g, mean change, SD)	1
Bø 1999[115]	25	–6.6 (14.03)	30	–7.1 (36.61)	Change in 24-hour pad test (g, mean change, SD)	1
Henalla 1989[124]	26	6	25	12	Pad test at 3 months (Sutherst *et al.* 1981) (g, from graph)	1
Miller 1998[107]	13	0.4 (1.04)	10	21.2 (44.8)	Paper towel test, mild cough (wet area, cm^2, mean, SD). Cough with 'The Knack' for PFMT group, cough without 'The Knack' for control group. Wet area 1 cm^2 is equivalent to 0.039 ml	1
Miller 1998[107]	13	5.4 (15.3)	10	26.8 (46.7)	Paper towel test, deep cough (wet area, cm^2, mean, SD). Cough with 'The Knack' for PFMT group, cough without 'The Knack' for control group. Wet area 1 cm^2 is equivalent to 0.039 ml	1
Ramsay 1990[128]	22	–2.1	22	1.5	Change in pad test (not defined, g, mean change). 'Significant' between-group difference	1
Williams 2006[129]	77	–7.39 (28.52)	75	–6.11 (28.85)	Change in urine loss on 1-hour pad test (g, mean, SD)	2
Williams 2006[129]	77	–2.06 (52.67)	75	–7.25 (32.7)	Change in urine loss on 24-hour pad test (g, mean, SD)	2
PFMT (+ sham ES) vs NT						
Bidmead 2002[121]	42	–2.01 (13.93)	20	3.65 (7.65)	Change in pad weight (fixed volume pad test with half hour exercise programme) (g, mean change, SD)	1
PFMT + BF vs NT						
Aksac 2003[120]	20	1.2 (0.2)	10	28.2 (3.7)	1-hour pad test (g, median, SD)	1
ES vs NT						
Laycock Trial 2 1993[132]	15	–56.8	11	–21.4	Percentage change in standard pad test (Sutherst *et al.* 1981 with modification, average % decrease). Significant different between groups	1
Jeyaseelan 2000[131]	12	0.5 (–33 to 71)	12	0.1 (–15 to 61)	Change in 1-hour pad test (g, median, range)	1
Sand 1995[134]	35	–29.9 (57.39)	17	2.3 (23.05)	Change in weight of urine lost on 20-minute pad test at a fixed bladder volume (g, mean, SD)	1
Henalla 1989[124]	25	9.5	25	12	Pad test at 3 months (Sutherst *et al.* 1981) (g, from graph)	1

	Intervention 1		Intervention 2			
	N	Value	*N*	Value	Outcome definition	Population type
Bø 1999[115]	25	–7.4 (34.44)	30	–12.7 (40.52)	Change in stress pad test (fixed volume, 60-second) (g, mean change, SD)	1
Bø 1999[115]	25	–0.5 (21.43)	30	–7.1 (36.61)	Change in 24-hour pad test (at home) (g, mean change, SD)	1
VC vs NT						
Bø 1999[115]	27	–14.7 (34.2)	30	–12.7 (40.52)	Change in stress pad test (fixed volume, 60 second) (g, mean change, SD)	1
Bø 1999[115]	27	–22 (89.34)	30	–7.1 (36.61)	Change in 24-hour pad test (at home) (g, mean change, SD)	1
Williams 2006[129]	79	–3.68 (21.54)	75	–6.11 (28.85)	Change in urine loss on 1-hour pad test (g, mean, SD)	2
Williams 2006[129]	79	–5.19 (31.88)	75	–7.25 (32.7)	Change in urine loss on 24-hour pad test (g, mean, SD)	2
BT vs NT						
Fantl 1991[135]	45	10 (21)	43	29 (74)	Pad test (g, mean, SD)	1
SNRI 80 mg vs NT						
Norton 2002[144]	130	–29 (–100 to 12,333)	132	–30 (–100 to 2175)	Median % change in 1-hour stress pad test	2
SNRI 40 mg vs NT						
Zinner 1998[145]	33	12.2 (21.7)	34	4.7 (15.5)	Mean reduction in 1-hour stress pad test (g, mean, SD)	1
Zinner 1998[145]	33	19.6 (41.4)	34	9.4 (43.3)	Mean reduction in 24-hour pad test (g, mean, SD)	1
Zinner (40-, 30- and 20-mg groups combined) 1998[145]	95	10.7 (22.2)	34	4.7 (15.5)	Mean reduction in 1-hour stress pad test (g, mean, SD)	1
Zinner (40-, 30- and 20-mg groups combined) 1998[145]	95	26.7 (53.6)	34	9.4 (43.3)	Mean reduction in 24-hour pad test (g, mean, SD)	1
Norton 2002[144]	129	–43 (–100 to 5800)	132	–30 (–100 to 2175)	Median % change in 1-hour stress pad test	2
SNRI 20 mg vs NT						
Zinner 1998[145]	34	13.5 (26.2)	34	4.7 (15.5)	Mean reduction in 1-hour stress pad test (g, mean, SD)	1
Zinner 1998[145]	34	40.8 (65)	34	9.4 (43.3)	Mean reduction in 24-hour pad test (g, mean, SD)	1
Norton 2002[144]	132	–11 (–100 to 3240)	132	–30 (–100 to +2175)	Median % change in 1-hour stress pad test	2
PFMT + ES vs NT						
Bidmead 2002[121]	82	–5.74 (17.3)	20	3.65 (7.65)	Change in pad weight (fixed volume pad test with half-hour exercise programme) (g, mean change, SD)	1

	Intervention 1		Intervention 2		Outcome definition	Population type
	N	**Value**	***N***	**Value**		
Comparison of different variants of PFMT						
PFMT vs PFMT + BF						
Aksac 2003[120]	20	2.1 (0.4)	20	1.2 (0.2)	1-hour pad test (g, median, SD)	1
Aukee 2002[146]	15	22.5 (19.6)	15	19 (19.7)	24-hour pad test at 12 weeks (g, mean, SD). Note: baseline values were significantly lower for BF group; no between-group difference after adjustment ($p = 0.907$)	1
Berghmans 1996[147]	20	12.5 (12)	20	12.2 (15.4)	48-hour pad test (g, mean, SD)	1
Ferguson 1990[149]	7	3.4 (4.7)	7	1.4 (1.7)	30-minute pad test at 6 weeks (g, mean, SD, range)	1
Ferguson 1990[149]	7	–6.9 (7.4)	7	–3.4 (4)	Change in 30-minute pad test from baseline to 6 weeks (g, mean, SD)	1
Ferguson 1990[149]	10	5.8 (5.6)	10	5.6 (4.7)	24-hour pad test at 6 weeks (g, mean, SD)	1
Ferguson 1990[149]	10	–9.1 (13.6)	10	–5.1 (8.1)	Change in-24 hour pad test from baseline to 6 weeks (g, mean, SD)	1
Glavind 1996[150]	15	19 [0, 51]	19	2.5 (1 to 10)	1-hour pad test after 1 month (with a bladder volume of 3/4 of cystometric capacity) (g, median, 95% CI)	1
Glavind 1996[150]	15	10 [2, 27]	19	0.8 (0 to 4)	1-hour pad test after 3 months (with a bladder volume of 3/4 of cystometric capacity) (g, median, 95% CI)	1
Klingler 1995[151]	21	2.9 [0, 19]	20	1.2 (0 to 22)	Pad test (not defined; g, ?mean, range)	1
Mørkved 2002[153]	34	9.9 (21.12)	36	5.5 (10.56)	Stress pad test with standardised bladder volume at 6 months (g, mean, SD).	1
Mørkved 2002[153]	34	17.7 (22.61)	36	20.4 (19.9)	Mean change in leakage on stress pad test with standardised bladder volume at 6 months (g, mean, SD)	1
Mørkved 2002[153]	34	3.8 (7.14)	36	7 (16.38)	48-hour pad test at 6 months (g, mean, SD)	1
Mørkved 2002[153]	34	42.5 (36.29)	36	33 (32.14)	Mean change in leakage 48-hour pad test at 6 months (g, mean, SD).	1
Wong 1997a[158]	7	18.7 (24.8)	10	7.4 (6.1)	Reduction in 1-hour pad test (g, mean, SD)	1
PFMT vs PFMT + additional sessions						
Bø 1990[159]	29	23 (35.72)	23	7.1 (15.42)	90-second pad test at 6 months (g, mean, SD). Data for PFMT with additional sessions obtained from graph	1
Wong 1997b[160]	26	No data	21	No data	1-hour pad test: both groups showed 'significant improvement' over time but no between-group differences	1
Zanetti 2007[161]	21	15	23	3.2	1-hour pad test (g, median)	1

	Intervention 1		Intervention 2			
	N	Value	*N*	Value	Outcome definition	Population type
PFMT (in supine position) + BF vs PFMT (in supine and upright position) + BF						
Borello-France 2006[165]	22	–3.9 (3.8)	22	–5.1 (3.9)	Change in pad test [modified 1-hour pad test by ICS (Abrams 1998) with full bladder and provocative manoeuvres] (g, mean, SD)	1
PFMT (maximal contraction) + BF vs PFMT (submaximal contraction) + BF						
Johnson 2001[167]	16	3.84 (5.29)	16	3.41 (4.79)	10-hour pad test (g, mean, SD)	1
PFMT + BF (vaginal) vs PFMT + BF (vaginal and abdominal)						
Wong 2001[169]	19	23 (69.0)	19	3.9 (3.6)	1-hour pad test (with a standardised set of exercises, g, mean, SD), $p > 0.05$. Note: One patient in the vaginal BF group had a leakage of more than 300 g in the pad test	1
PFMT + BF vs PFMT + ES						
Pohl 2004[171]	10	1.7	21	1.5	Stress test under standardised condition (no further detail, unit of measurement unclear, average)	1
Pohl 2004[171]	10	10	21	6.21	Pad test under standardised condition (no further detail; unit of measurement unclear)	1
Comparison of different variants of ES						
PFMT + BF + ES (maximal intensity at clinic) vs PFMT + BF + ES (low intensity at home)						
Knight 1998[172]	20	1.5 (0.0 to 28.1)	19	2.9 (0.0 to 50.9)	Urine loss on pad test at 6 months [at 75% of the max cystometric capacity (Janez *et al.* 1985)] (g, median, range)	1
Knight 1998[172]	20	91.3 (–72.4 to 100.0)	19	76.5 (–580.3 to 100.0)	% change in urine loss on pad test at 6 months (median, range). No significant between-group difference	1
Knight 1998[172]	20	100 (–67.5 to 100.0)	16	97.5 (–415.1 to 100.0)	% change in urine loss on pad test at 12 months (median, range)	1
Comparison of different variants of VC						
VC passive vs VC active						
Burton 1993	31	4.1	30	2	40-minute pad test (ml, mean)	1
Comparison of different SNRI doses						
SNRI 80 mg vs SNRI 40 mg						
Norton 2002[144]	130	–29 (–100 to 12,333)	129	–43 (–100 to 5800)	Median % change in 1-hour stress pad test	2
SNRI 80 mg vs SNRI 20 mg						
Norton 2002[144]	130	–29 (–100 to 12,333)	132	–11 [–100 to 3240]	Median % change in 1-hour stress pad test	2
SNRI 40 mg vs SNRI 30 mg						
Zinner 1998[145]	33	12.2 (21.7)	26	5.3 (16.3)	Change in 1-hour stress pad test (g, mean reduction, SD)	1
Zinner 1998[145]	33	19.6 (41.4)	26	17.6 (49.2)	Change in 24-hour pad test (g, mean reduction, SD)	1

	Intervention 1		Intervention 2		Outcome definition	Population type
	N	**Value**	***N***	**Value**		
SNRI 40 mg vs SNRI 20 mg						
Zinner 1998[145]	33	12.2 (21.7)	34	13.5 (26.2)	Change in 1-hour stress pad test (g, mean reduction, SD)	1
Zinner 1998[145]	33	19.6 (41.4)	34	40.8 (65)	Change in 24-hour pad test (g, mean reduction, SD)	1
Norton 2002[144]	129	–43 (–100 to 5800)	132	–11 (–100 to 3240)	Median % change in 1-hour stress pad test	2
SNRI 30 mg vs SNRI 20 mg						
Zinner 1998[145]	26	5.3 (16.3)	34	13.5 (26.2)	Change in 1-hour stress pad test (g, mean reduction, SD)	1
Zinner 1998[145]	26	17.6 (49.2)	34	40.8 (65)	Change in 24-hour pad test (g, mean reduction, SD)	1
Comparison of different treatments (single modality)						
PFMT vs ES						
Laycock 1988[176]	11	36.33 (7.7 to 72.4)	18	30.55 (3.0 to 78.0)	Change in pad test (not defined) (g, mean reduction, range)	1
Henalla 1989[124]	26	6	25	9.5	Pad test at 3 months (Sutherst *et al.* 1981) (g, from graph)	1
Bø 1999[115]	25	–30.2 (33.67)	25	–7.4 (34.44)	Change in stress pad test (fixed volume, 60 second) (g, mean change, SD)	1
Bø 1999[115]	25	–6.6 (14.03)	25	–0.5 (21.43)	Change in 24-hour pad test (g, mean change, SD)	1
PFMT vs VC						
Arvonen 2001[178]	19	5 [0, 90]	18	1 (0 to 100)	Pad test (short provocation test with a standard 300 ml in bladder) (g, median, range)	1
Bø 1999[115]	25	–30.2 (33.67)	27	–14.7 (34.2)	Change in stress pad test (fixed volume, 60 second) (g, mean change, SD)	1
Bø 1999[115]	25	–6.6 (14.03)	27	–22 (89.34)	Change in 24-hour pad test (g, mean change, SD)	1
Peattie 1988[180]	16	No data	17	No data	Extended pad test (no detail): significant reduction in both groups, no between-group difference	1
Williams 2006[129]	77	–7.39 (28.52)	79	-3.68 (21.54)	Change in urine loss on 1-hour pad test (g, mean, SD)	2
Williams 2006[129]	77	–2.06 (52.67)	79	–5.19 (31.88)	Change in urine loss on 24-hour pad test (g, mean, SD)	2
PFMT vs BT						
Sherburn 2007[182]	43	0.1 (1.5)	41	0.5 (2.4)	Stress test – cough (g, median interquartile range), $p = 0.034$	1
Sherburn 2007[182]	43	0 (0.4)	41	0.3 (0.7)	Stress test – brace/cough (g, median interquartile range), $p = 0.008$	1
PFMT vs surgery						
Klarskov 1986[184]	24	No data	26	No data	Standardised 60-minute pad test (Klarskov and Hald 1984)[406] at 4 months. Better for the operated patients than for the PFMT patients, $p < 0.0005$	1

	Intervention 1		Intervention 2			
	N	Value	*N*	Value	Outcome definition	Population type
ES vs VC						
Bø 1999[115]	25	–7.4 (34.44)	27	–14.7 (34.2)	Change in stress pad test (fixed volume, 60 second) (g, mean change, SD)	I
Bø 1999[115]	25	–0.5 (21.43)	27	–22 (89.34)	Change in 24-hour pad test (g, mean change, SD)	I
Delneri 2000[186]	10	9.5	10	9.5	Pad test (not defined) (g, mean). No between-group difference	I
Comparison of different treatments (dual modality)						
PFMT vs PFMT + ES						
Bidmead 2002[121]	40	–9.62 (21.31)	82	–5.74 (17.3)	Change in pad weight (fixed-volume pad test with half-hour exercise programme) (g, mean change, SD)	I
Haig 1995[190]	8	12.2 (9.4)	11	10.6 (6.2)	48-hour pad test (g, mean, SD)	I
Tapp 1987[191]	15	No data	14	No data	Pad test. No within-group (before/after) differences or between-group differences	I
PFMT (+ sham ES) vs PFMT + ES						
Bidmead 2002[121]	42	–2.01 (13.934	82	–5.74 (17.296	Change in pad weight (fixed-volume pad test with half-hour exercise programme) (g, mean change, SD)	I
Haig 1995[190]	11	38.7 (49.4)	11	10.6 (6.2	48-hour pad test (g, mean, SD)	I
PFMT + BF vs PFMT + BF + ES (maximal intensity at clinic)						
Knight 1998[172]	18	0.8 (0.0 to 88.1)	20	1.5 (0.0 to 28.1)	Urine loss on pad test at 6 months [at 75% of the max cystometric capacity (Janez *et al.* 1985)] (g, median, range)	I
Knight 1998[172]	18	90.7 (–17.1 to 100.0)	20	91.3 (–72.4 to 100.0)	% change in urine loss on pad test at 6 months (median, range). No significant between-group difference	I
Knight 1998[172]	15	100 (–8.1 to 100.0)	20	100 (–67.5 to 100.0)	% change in urine loss on pad test at 12 months (median, range)	I
PFMT + BF vs PFMT + BF + ES (low intensity at home)						
Knight 1998[172]	18	0.8 (0.0 to 88.1)	19	2.9 (0.0 to 50.9)	Urine loss on pad test at 6 months [at 75% of the maximal cystometric capacity (Janez *et al.* 1985)] (g, median, range)	I
Knight 1998[172]	18	90.7 (–17.1 to 100.0)	19	76.5 (–580.3 to 100.0)	% change in urine loss on pad test at 6 months (median, range). No significant between-group difference	I
Knight 1998[172]	15	100 (–8.1 to 100.0)	16	97.5 (–415.1 to 100.0)	% change in urine loss on pad test at 12 months (median, range)	I
PFMT + VC vs VC						
Wise 1993[188]	15	no data	19	no data	Reduction in weight of urine loss on pad test (40-minute test with standard bladder volume). No significant difference between groups ($p = 0.053$)	I

Number of pad changes

	Intervention 1		Intervention 2			
	N	Value	*N*	Value	Outcome definition	Population type
Comparison with no treatment						
PFMT vs NT						
Ghoniem 2005[57]	46	–24.8	44	–10.5	Change *N* of pad changes per week (median % decrease)	1
Williams 2006[129]	77	0.05 (1.59)	75	–0.16 (0.99)	Change in *N* of pad changes in 24 hours (mean, SD)	2
ES vs NT						
Sand 1995[134]	35	–2.1 (4.73)	17	1.5 (5.9)	Change in *N* of pad changes per week (weekly diary, mean, SD)	1
VC vs NT						
Williams 2006[129]	79	–0.04 (0.95)	75	–0.16 (0.99)	Change in *N* of pad changes in 24 hours (mean, SD)	2
SNRI 80 mg vs NT						
Bump 2004[136]	34	No data	31	No data	Decreases in *N* of pads used. 'Duloxetine was significantly superior to placebo'	1
Cardozo 2004[137]	46	–34.5	*52*	–4.8	Change in *N* of pad changes (median % reduction)	1
Ghoniem 2005[57]	46	–35.3	44	–10.5	Change in *N* of pad changes per week (median % decrease)	1
PFMT + SNRI vs NT						
Ghoniem 2005[57]	44	–45.7	44	–10.5	Change in *N* of pad changes per week (median % decrease)	1
Comparison of different variants of PFMT						
PFMT vs PFMT + BF						
Klingler 1995[151]	21	0.6 (0 to 6)	20	0.1 (0 to 2)	*N* of pad changes in 24 hours (?mean, range)	1
Laycock 2001[152]	16	–1.88 (2.35)	22	–2.27 (3.57)	Change in *N* of pad changes in 24 hours (bladder diary, mean reduction, SD)	1
Wilson 1987[157]	15	2.7 (2.5)	15	0.9 (1.5)	*N* of pad changes in 24 hours after treatment (mean, SD)	1
PFMT vs PFMT + additional sessions						
Bø 1990[159]	26	9	21	12	Self-reported pad use at 15 years (*N* of women). 'Never or only during physical activity'. $p = 0.15$	1
Bø 1990[159]	26	7	21	3	Self-reported pad use at 15 years (*N* of women). 'Always'. $p = 0.47$	1
Konstantinidou 2007[116]	10	2.4 (1.3)	12	0.8 (0.1)	*N* of pad changes in 24 hours (7-day diary, mean, SD)	1
Comparison of different variants of ES						
PFMT + BF + ES (faradism) vs PFMT + BF + ES (IFT)						
Wilson 1987[157]	15	1.3 (1.4)	15	1.6 (2.3)	*N* of pad changes in 24 hours after treatment (mean, SD)	1

	Intervention 1		Intervention 2			
	N	Value	*N*	Value	Outcome definition	Population type
Comparison of different treatments (single modality)						
PFMT vs VC						
Laycock 2001[152]	16	–1.88 (2.35)	30	–2.9 (4.22)	Change in *N* of pad changes in 24 hours (bladder diary, mean reduction, SD)	1
Williams 2006[129]	77	0.05 (1.59)	79	–0.04 (0.95)	Change in *N* of pad changes in 24 hours (mean, SD)	2
PFMT + BF vs VC						
Cammu 1998[181]	30	6 (5.6)	16	8.6 (15)	*N* of pad changes in 24 hours (1-week diary, mean, SD)	1
Laycock 2001[152]	22	–2.27 (3.56)	30	–2.9 (4.22)	Change in *N* of pad changes in 24 hours (bladder diary, mean reduction, SD)	1
PFMT vs SNRI						
Ghoniem 2005[57]	46	–24.8	46	–35.3	Change in *N* of pad changes per week (median % decrease)	1
Comparison of different treatments (dual modality)						
PFMT + BF vs PFMT + BF + ES (faradism)						
Wilson 1987[157]	15	0.9 (1.5)	15	1.3 (1.4)	*N* of pad changes in 24 hours after treatment (mean, SD)	1
PFMT + BF vs PFMT + BF + ES (IFT)						
Wilson 1987[157]	15	0.9 (1.5)	15	1.6 (2.3)	*N* of pad changes in 24 hours after treatment (mean, SD)	1
PFMT vs PFMT + SNRI						
Ghoniem 2005[57]	46	–24.8	44	–45.7	Change in *N* of pad changes per week (median % decrease)	1
PFMT + SNRI vs SNRI						
Ghoniem 2005[57]	44	–45.7	46	–35.3	Change in *N* of pad changes per week (median % decrease)	1

Other secondary outcomes

Data on the following secondary outcomes are reported in Appendix 10.

Type of outcome and study ID	Type of interventions
Number of micturitions	
Blowman 1991[189]	PFMT vs PFMT + ES
Brubaker 1997[130]	ES vs NT
Bump 2004[136]	SNRI vs placebo
Fantl 1991[135]	BT vs NT
Haig 1995[190]	PFMT vs PFMT + sham ES vs PFMT + ES
Klarskov 1986[184]	PFMT vs surgery
Konstantinidou 2007[116]	PFMT vs PFMT with additional sessions
Laycock Trial 2 1993[132]	ES vs NT
Norton 2002[144]	SNRI 80 mg vs 40 mg vs 20 mg vs placebo
Pages 2001[154]	PFMT vs PFMT + BF
Sand 1995[134]	ES vs NT
Shepherd 1983[155]	PFMT vs PFMT + BF
Williams 2006[129]	PFMT vs VC vs NT
Wilson 1987[157]	PFMT vs PFMT + BF vs PFMT + BF + ES (faradism) vs PFMT + BF + ES (IFT)
Zanetti 2007[161]	PFMT vs PFMT with additional sessions
Participants satisfaction or desire for further treatment	
Arvonen 2001[178]	PFMT vs VC
Blowman 1991[189]	PFMT vs PFMT + ES
Bø 1990[159]	PFMT vs PFMT with additional sessions
Bø 1999[115]	PFMT vs ES vs VC vs NT
Cammu 1998[181]	PFMT + BF vs VC
Glavind 1996[150]	PFMT vs PFMT + BF
Haken 1991[179]	PFMT vs VC
Klarskov 1986[184]	PFMT vs surgery
Lagro-Janssen 1991[127]	PFMT vs NT
Luber 1997[133]	ES vs NT
Mørkved 2002[153]	PFMT vs PFMT + BF
Savage 2005[166]	PFMT vs modified pilates
Sherburn 2007[182]	PFMT vs BT
Williams 2006[129]	PFMT vs VC vs NT
Wyman 1998[183]	PFMT + BF vs BT vs PFMT + BF + BT
Zanetti 2007[161]	PFMT vs PFMT with additional sessions
Number of women having incontinence surgery	
Aukee 2002[146]	PFMT vs PFMT + BF
Bø 1990[159]	PFMT vs PFMT with additional sessions
Cammu 1998[181]	PFMT + BF vs VC
Klarskov 1986[184]	PFMT vs surgery
Mørkved 2002[153]	PFMT vs PFMT + BF
Peattie 1988[180]	PFMT vs VC

Type of outcome and study ID	Type of interventions
Pieber 1995[192]	PFMT vs PFMT + VC
Savage 2005[166]	PFMT vs modified pilates
Tapp 1987[191]	PFMT vs PFMT + ES
Tapp 1989[185]	PFMT vs PFMT + ES vs surgery
Wyman 1998[183]	PFMT + BF vs BT vs PFMT + BF + BT
Recurrence	
Blowman 1991[189]	PFMT vs PFMT + ES
Henalla 1989[124]	PFMT vs ES vs NT
Tapp 1989[185]	PFMT vs PFMT + ES vs surgery
Measures of pelvic floor muscle functions	
Aksac 2003[120]	PFMT vs PFMT + BF vs NT
Arvonen 2001[178]	PFMT vs VC
Aukee 2002[146]	PFMT vs PFMT + BF
Bernardes 2000[174]	PFMT vs ES
Blowman 1991[189]	PFMT vs PFMT + ES
Bø 1990[159]	PFMT vs PFMT with additional sessions
Bø 1999[115]	PFMT vs ES vs VC vs NT
Borello-France 2006[165]	PFMT in supine position + BF vs PFMT in supine and upright positions + BF
Burns 1993[122]	PFMT vs PFMT + BF vs NT
Cammu 1998[181]	PFMT + BF vs VC
Ferguson 1990[149]	PFMT vs PFMT + BF
Ghoniem 2005[57]	PFMT vs SNRI vs PFMT + SNRI vs NT
Hahn 1991[175]	PFMT vs ES
Henalla 1989[124]	PFMT vs ES vs NT
Jeyaseelan 2000[131]	ES vs NT
Johnson 2001[167]	PFMT (maximal contraction) + BF vs PFMT (submaximal contraction) + BF
Knight 1998[172]	PFMT + BF vs PFMT + BF + ES (maximal intensity) vs PFMT+BF + ES (low intensity)
Konstantinidou 2007[116]	PFMT vs PFMT with additional sessions
Laycock 2001[152]	PFMT vs PFMT + BF vs VC
Laycock Trial 2 1993[132]	ES vs NT
Mørkved 2002[153]	PFMT vs PFMT + BF
Pages 2001[154]	PFMT vs PFMT + BF
Pohl 2004[171]	PFMT + BF vs PFMT + ES
Ramsay 1990[128]	PFMT vs NT
Sand 1995[134]	ES vs NT
Savage 2005[166]	PFMT vs modified pilates
Shepherd 1983[155]	PFMT vs PFMT + BF
Williams 2006[129]	PFMT vs VC vs NT
Wilson 1987[157]	PFMT vs PFMT + BF vs PFMT + BF + ES (faradism) vs PFMT + BF + ES (IFT)
Wise 1993[188]	ES vs VC vs PFMT + VC

Type of outcome and study ID	Type of interventions
Wong 1997b[160]	PFMT vs PFMT with additional sessions
Wong 2001[169]	PFMT + BF (vaginal) vs PFMT + BF (vaginal and abdominal)
Wyman 1998[183]	PFMT + BF vs BT vs PFMT + BF + BT
Treatment adherence	
Aukee 2002[146]	PFMT vs PFMT + BF
Bidmead 2002[121]	PFMT vs PFMT + sham ES vs PFMT + ES vs NT
Blowman 1991[189]	PFMT vs PFMT + ES
Bø 1990[159]	PFMT vs PFMT with additional sessions
Bø 1999[115]	PFMT vs ES vs VC vs NT
Borello-France 2006[165]	PFMT in supine position + BF vs PFMT in supine and upright positions + BF
Brubaker 1997[130]	ES vs NT
Gallo 1997[162]	PFMT vs PFMT with audiocassette
Ghoniem 2005[57]	PFMT vs SNRI vs PFMT + SNRI vs NT
Glavind 1996[150]	PFMT vs PFMT + BF
Jeyaseelan 2000[131]	ES vs NT
Kim 2007[118]	PFMT vs NT
Knight 1998[172]	PFMT + BF vs PFMT + BF + ES (maximal intensity) vs PFMT + BF + ES (low intensity)
Lagro-Janssen 1991[127]	PFMT vs NT
Laycock 2001[152]	PFMT vs PFMT + BF vs VC
Mørkved 2002[153]	PFMT vs PFMT + BF
Norton 2002[144]	SNRI 80 mg vs 40 mg vs 20 mg vs placebo
Peattie 1988[180]	PFMT vs VC
Ramsay 1990[128]	PFMT vs NT
Sand 1995[134]	ES vs NT
Williams 2006[129]	PFMT vs VC vs NT
Wyman 1998[183]	PFMT vs VC vs NT

Appendix 22

Mixed-treatment comparison model

The WINBUGS code for the multiarm random effects mixed-treatment comparison model is shown below. It is taken from the website of the Multi-parameter Evidence Synthesis Research Group from the Department of Community Based Medicine at the University of Bristol.[114,202] The code has been adapted to allow the calculation of the log odds ratios and the odds ratios in both directions.

```
model{
for(i in 1:NS){
        w[i,1] <-0
        delta[i,t[i,1]]<-0
        mu[i] ~ dnorm(0,.0001)                          # vague priors for trial baselines
        for (k in 1:na[i]) {
            r[i,k] ~ dbin(p[i,t[i,k]],n[i,k])           # binomial likelihood
            logit(p[i,t[i,k]])<-mu[i]+delta[i,t[i,k]] } # model
            for (k in 2:na[i]) {
                delta[i,t[i,k]] ~ dnorm(md[i,t[i,k]],taud[i,t[i,k]]) # trial-specific LOR distributions
                md[i,t[i,k]] <- d[t[i,k]] - d[t[i,1]] + sw[i,k]      # mean of LOR distributions
                taud[i,t[i,k]] <- tau *2*(k-1)/k                     # precision of LOR distributions
                w[i,k] <- (delta[i,t[i,k]] - d[t[i,k]] + d[t[i,1]])  # adjustment, multi-arm RCTs
                sw[i,k] <-sum(w[i,1:k-1])/(k-1) }                    # cumulative adjustment for multi-arm trials
}

d[1]<-0
for (k in 2:NT){d[k] ~ dnorm(0,.0001) }                 # vague priors for basic parameters
sd~dunif(0,2)                                           # vague prior for random effects standard deviation
tau<-1/pow(sd,2)

# Absolute log odds(success) on Treatment 1, based on a separate model on the trials with Treatment 1
arms. The parameter values for both the cure and improvement models are presented. Only one row is
used in any model.
mA ~ dnorm(-2.787,11.344) # 11.344=1/(0.2969^2) – Cure model.
mA ~ dnorm(-1.032,9.072) # 9.072=1/(0.332^2) – Improvement model.
# Absolute pr(success) of the other treatments based on T[1] and the mean relative treatment effects
for (k in 1:NT) { logit(T[k])<- mA +d[k] }

# ranking
for (k in 1:NT) { rk[k]<-NT+1 - rank(T[],k)
      best[k]<-equals(rk[k],1)}

# pairwise ORs
for (c in 1:NT)
      { for (k in 1:NT)
         { lor[c,k] <- d[k] - d[c]
         log(or[c,k]) <- lor[c,k]
         }
      }
}
```

Choice of prior distributions

Three sets of parameters: the log odds ratios of treatment to no treatment, the individual trial baselines and the random effects standard deviation require a prior distribution to be applied to them. The prior distributions shown before are those given in the code from the MPES programme website.[202] These are *vague* priors, i.e. they are designed to express little information about the parameter. The MPES programme provides advise to users to be considered over the choice of prior for the random effects standard deviation parameter. Several alternatives for its prior distributions were explored, based on suggestions in Lambert and colleagues[407] on both the cure and improvement models (PFMT split by number of sessions only). The difference between the estimates from these alternative priors to those from the prior reported above were small enough to be considered irrelevant.

Data for cure, with PFMT split

#Treatment codes: NT(1), PFMT basic(2), PFMT+BF(3), ES(4), VC(5), SNRI(6), BT(7), PFMT+ES(8), PFMT+ES+BF(9), PFMT+VC(10), PFMT+VC+BF(11), PFMT+BF+BT(12), PFMT extra(13)

list(NS=38,NT=13)

r[,1]	n[,1]	t[,1]	r[,2]	n[,2]	t[,2]	r[,3]	n[,3]	t[,3]	r[,4]	n[,4]	t[,4]	na[]	
0	10	1	15	20	13	16	20	3	NA	1	NA	3	#Aksac 2003[120]
0	19	2	4	18	5	NA	1	NA	NA	1	NA	2	#Arvonen 2001[178]
3	20	13	5	20	3	NA	1	NA	NA	1	NA	2	#Berghmans 1996[147]
5	7	13	2	7	4	NA	1	NA	NA	1	NA	2	#Bernardes 2000[174]
1	6	2	6	7	8	NA	1	NA	NA	1	NA	2	#Blowman 1991[189]
0	30	1	2	25	13	1	25	4	0	27	5	4	#Bø 1999[115]
31	46	9	16	38	10	NA	1	NA	NA	1	NA	2	#Bourcier 1994[196]
3	44	1	5	46	4	NA	1	NA	NA	1	NA	2	#Brubaker 1997[130]
1	40	1	7	43	13	9	40	3	NA	1	NA	3	#Burns 1993[122]
12	30	3	7	16	5	NA	1	NA	NA	1	NA	2	#Cammu 1998[181]
2	63	1	7	60	7	NA	1	NA	NA	1	NA	2	#Fantl 1991[135]
3	15	2	11	19	3	NA	1	NA	NA	1	NA	2	#Glavind 1996[150]
10	67	1	11	66	2	10	67	8	NA	1	NA	3	#Goode 2003[123]
1	10	2	1	10	4	NA	1	NA	NA	1	NA	2	#Hahn 1991[175]
0	10	1	6	11	13	1	11	4	3	11	8	4	#Hofbauer 1990[126]
3	32	1	18	33	13	NA	1	NA	NA	1	NA	2	#Kim 2007[118]
15	21	13	14	20	3	NA	1	NA	NA	1	NA	2	#Klingler 1995[151]
0	33	1	7	33	2	NA	1	NA	NA	1	NA	2	#Lagro-Janssen 1991[127]
1	23	4	2	16	11	NA	1	NA	NA	1	NA	2	#Laycock Trial 1 1993[132]

0	11	1	0	15	4	NA	1	NA	NA	1	NA	2	#Laycock Trial 2 1993[132]
4	24	1	2	20	4	NA	1	NA	NA	1	NA	2	#Luber 1997[133]
10	34	13	16	36	3	NA	1	NA	NA	1	NA	2	#Mørkved 2002[153]
4	30	4	4	24	5	NA	1	NA	NA	1	NA	2	#Oláh 1990[187]
8	27	13	8	13	3	NA	1	NA	NA	1	NA	2	#Pages 2001[154]
3	25	2	5	21	10	NA	1	NA	NA	1	NA	2	#Pieber 1995[192]
1	17	1	0	35	4	NA	1	NA	NA	1	NA	2	#Sand 1995[134]
3	11	2	8	11	3	NA	1	NA	NA	1	NA	2	#Shepherd 1983[155]
19	40	13	9	35	7	NA	1	NA	NA	1	NA	2	#Sherburn 2007[182]
1	9	2	2	9	4	NA	1	NA	NA	1	NA	2	#Smith 1996[177]
4	21	13	3	23	8	NA	1	NA	NA	1	NA	2	#Tapp 1989[185]
6	75	1	4	77	2	7	79	5	NA	1	NA	3	#Williams 2006[129]
8	64	3	12	68	7	19	61	12	NA	1	NA	3	#Wyman 1998[183]
20	132	1	23	123	6	NA	1	NA	NA	1	NA	2	#Norton 2002[144]
19	322	1	30	286	6	NA	1	NA	NA	1	NA	2	#Dmochowski 2003[139]
14	229	1	14	200	6	NA	1	NA	NA	1	NA	2	#Millard 2004[143]
0	29	2	2	23	13	NA	1	NA	NA	1	NA	2	#Bø 1990[159]
7	10	2	12	12	13	NA	1	NA	NA	1	NA	2	#Konstantinidou 2007[116]
2	21	2	11	23	13	NA	1	NA	NA	1	NA	2	#Zanetti 2007[161]

END

Starting values.
list(d=c(NA,0,0,0,0, 0,0,0,0,0, 0,0,0), sd=1,
mu=c(0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0),
mA=0)

Data for cure, with PFMT combined

#Treatment codes: NT(1), PFMT-Both(2), PFMT+BF(3), ES(4), VC(5), SNRI(6), BT(7), PFMT+ES(8), PFMT+ES+BF(9), PFMT+VC(10), PFMT+VC+BF(11), PFMT+BF+BT(12)

list(NS=35,NT=12)

r[,1]	n[,1]	t[,1]	r[,2]	n[,2]	t[,2]	r[,3]	n[,3]	t[,3]	r[,4]	n[,4]	t[,4]	na[]
0	10	1	15	20	2	16	20	3	NA	1	NA	3	#Aksac 2003[120]
0	19	2	4	18	5	NA	1	NA	NA	1	NA	2	#Arvonen 2001[178]

3	20	2	5	20	3	NA	1	NA	NA	1	NA	2	#Berghmans 1996[147]
5	7	2	2	7	4	NA	1	NA	NA	1	NA	2	#Bernardes 2000[174]
1	6	2	6	7	8	NA	1	NA	NA	1	NA	2	#Blowman 1991[189]
0	30	1	2	25	2	1	25	4	0	27	5	4	#Bø 1999[115]
31	46	9	16	38	10	NA	1	NA	NA	1	NA	2	#Bourcier 1994[196]
3	44	1	5	46	4	NA	1	NA	NA	1	NA	2	#Brubaker 1997[130]
1	40	1	7	43	2	9	40	3	NA	1	NA	3	#Burns 1993[122]
12	30	3	7	16	5	NA	1	NA	NA	1	NA	2	#Cammu 1998[181]
2	63	1	7	60	7	NA	1	NA	NA	1	NA	2	#Fantl 1991[135]
3	15	2	11	19	3	NA	1	NA	NA	1	NA	2	#Glavind 1996[150]
10	67	1	11	66	2	10	67	8	NA	1	NA	3	#Goode 2003[123]
1	10	2	1	10	4	NA	1	NA	NA	1	NA	2	#Hahn 1991[175]
0	10	1	6	11	2	1	11	4	3	11	8	4	#Hofbauer 1990[126]
3	32	1	18	33	2	NA	1	NA	NA	1	NA	2	#Kim 2007[118]
15	21	2	14	20	3	NA	1	NA	NA	1	NA	2	#Klingler 1995[151]
0	33	1	7	33	2	NA	1	NA	NA	1	NA	2	#Lagro-Janssen 1991[127]
1	23	4	2	16	11	NA	1	NA	NA	1	NA	2	#Laycock Trial 1 1993[132]
0	11	1	0	15	4	NA	1	NA	NA	1	NA	2	#Laycock Trial 2 1993[132]
4	24	1	2	20	4	NA	1	NA	NA	1	NA	2	#Luber 1997[133]
10	34	2	16	36	3	NA	1	NA	NA	1	NA	2	#Mørkved 2002[153]
4	30	4	4	24	5	NA	1	NA	NA	1	NA	2	#Oláh 1990[187]
8	27	2	8	13	3	NA	1	NA	NA	1	NA	2	#Pages 2001[154]
3	25	2	5	21	10	NA	1	NA	NA	1	NA	2	#Pieber 1995[192]
1	17	1	0	35	4	NA	1	NA	NA	1	NA	2	#Sand 1995[134]
3	11	2	8	11	3	NA	1	NA	NA	1	NA	2	#Shepherd 1983[155]
19	40	2	9	35	7	NA	1	NA	NA	1	NA	2	#Sherburn 2007[182]
1	9	2	2	9	4	NA	1	NA	NA	1	NA	2	#Smith 1996[177]
4	21	2	3	23	8	NA	1	NA	NA	1	NA	2	#Tapp 1989[185]

6	75	1	4	77	2	7	79	5	NA	1	NA	3	#Williams 2006[129]
8	64	3	12	68	7	19	61	12	NA	1	NA	3	#Wyman 1998[183]
20	132	1	23	123	6	NA	1	NA	NA	1	NA	2	#Norton 2002[144]
19	322	1	30	286	6	NA	1	NA	NA	1	NA	2	#Dmochowski 2003[139]
14	229	1	14	200	6	NA	1	NA	NA	1	NA	2	#Millard 2004[143]

END

Starting values.
list(d=c(NA,0,0,0,0, 0,0,0,0,0, 0,0), sd=1,
mu=c(0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0),
mA=0)

Data for improvement, with PFMT split

#Treatment codes: NT(1), PFMT basic(2), PFMT+BF(3), ES(4), VC(5), BT(6), SNRI(7), PFMT+ES(8), PFMT+ES+BF(9), PFMT+VC(10), PFMT+VC+BF(11), PFMT+BF+BT(12), PFMT+SNRI(13), PFMT extra(14)

list(NS=47,NT=14)

r[,1]	n[,1]	t[,1]	r[,2]	n[,2]	t[,2]	r[,3]	n[,3]	t[,3]	r[,4]	n[,4]	t[,4]	na[]	
2	10	1	20	20	14	20	20	3	NA	1	NA	3	#Aksac 2003[120]
11	19	2	11	18	5	NA	1	NA	NA	1	NA	2	#Arvonen 2001[178]
17	20	14	19	20	3	NA	1	NA	NA	1	NA	2	#Berghmans 1996[147]
1	30	1	23	25	14	16	25	4	17	27	5	4	#Bø 1999[115]
19	29	2	22	23	14	NA	1	NA	NA	1	NA	2	#Bø 1990[159]
10	60	1	21	61	4	NA	1	NA	NA	1	NA	2	#Brubaker 1997[130]
7	40	1	26	43	14	27	40	3	NA	1	NA	3	#Burns 1993[122]
16	30	3	8	16	5	NA	1	NA	NA	1	NA	2	#Cammu 1998[181]
15	63	1	45	60	7	NA	1	NA	NA	1	NA	2	#Fantl 1991[135]
19	45	1	32	49	2	27	50	6	36	51	13	4	#Ghoniem 2005[57]
32	40	1	45	47	2	45	47	8	NA	1	NA	3	#Goode 2003[123]
10	10	2	8	10	4	NA	1	NA	NA	1	NA	2	#Hahn 1991[175]
19	30	2	17	23	5	NA	1	NA	NA	1	NA	2	#Haken 1991[179]
0	25	1	17	26	14	8	25	4	NA	1	NA	3	#Henalla 1989[124]
0	7	1	4	8	2	NA	1	NA	NA	1	NA	2	#Henalla 1990[125]

0	10	1	7	11	14	3	11	4	7	11	8	4	#Hofbauer 1990[126]
21	21	14	19	20	3	NA	1	NA	NA	1	NA	2	#Klingler 1995[151]
10	18	3	25	39	9	NA	1	NA	NA	1	NA	2	#Knight 1998[172]
2	10	2	12	12	14	NA	1	NA	NA	1	NA	2	#Konstantinidou 2007[116]
0	33	1	28	33	2	NA	1	NA	NA	1	NA	2	#Lagro-Janssen 1991[127]
8	11	14	16	18	4	NA	1	NA	NA	1	NA	2	#Laycock 1988[176]
14	23	4	7	16	11	NA	1	NA	NA	1	NA	2	#Laycock Trial 1 1993[132]
3	11	1	5	15	4	NA	1	NA	NA	1	NA	2	#Laycock Trial 2 1993[132]
7	24	1	5	20	4	NA	1	NA	NA	1	NA	2	#Luber 1997[133]
27	30	4	19	24	5	NA	1	NA	NA	1	NA	2	#Oláh 1990[187]
26	27	14	13	13	3	NA	1	NA	NA	1	NA	2	#Pages 2001[154]
10	16	14	12	17	5	NA	1	NA	NA	1	NA	2	#Peattie 1988[180]
12	25	2	11	21	10	NA	1	NA	NA	1	NA	2	#Pieber 1995[192]
14	22	1	14	22	2	NA	1	NA	NA	1	NA	2	#Ramsay 1990[128]
2	17	1	13	35	4	NA	1	NA	NA	1	NA	2	#Sand 1995[134]
53	60	5	55	60	9	NA	1	NA	NA	1	NA	2	#Seo 2004[195]
6	11	2	10	11	3	NA	1	NA	NA	1	NA	2	#Shepherd 1983[155]
4	9	2	6	9	4	NA	1	NA	NA	1	NA	2	#Smith 1996[177]
13	21	14	16	23	8	NA	1	NA	NA	1	NA	2	#Tapp 1989[185]
53	75	1	47	77	2	51	79	5	NA	1	NA	3	#Williams 2006[129]
4	15	2	11	15	3	21	30	9	NA	1	NA	3	#Wilson 1987[157]
12	16	4	14	19	5	14	15	10	NA	1	NA	3	#Wise 1993[188]
48	63	3	43	66	7	55	61	12	NA	1	NA	3	#Wyman 1998[183]
4	52	1	17	51	6	NA	1	NA	NA	1	NA	2	#Cardozo 2004[137]
67	112	1	270	344	6	NA	1	NA	NA	1	NA	2	#Castro-Diaz 2007[138]
36	132	1	57	130	6	NA	1	NA	NA	1	NA	2	#Norton 2002[144]
131	332	1	207	334	6	NA	1	NA	NA	1	NA	2	#Dmochowski 2003[139]
111	218	1	148	208	6	NA	1	NA	NA	1	NA	2	#Kinchen 2005 [140]

33	57	1	35	56	6	NA	1	NA	NA	1	NA	2	#Mah 2006[141]
137	311	1	196	306	6	NA	1	NA	NA	1	NA	2	#Manning 2005[142]
147	229	1	162	220	6	NA	1	NA	NA	1	NA	2	#Millard 2004[143]
118	245	1	135	240	6	NA	1	NA	NA	1	NA	2	#van Kerrebroeck 2004[306]

END

list(d=c(NA,0,0,0,0, 0,0,0,0,0, 0,0,0,0), sd=1, mA=0,
mu=c(0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0))

Data for improvement, with PFMT combined

#Treatment codes: NT(1), PFMT-Both(2), PFMT+BF(3), ES(4), VC(5), BT(6), SNRI(7), PFMT+ES(8), PFMT+ES+BF(9), PFMT+VC(10), PFMT+VC+BF(11), PFMT+BF+BT(12), PFMT+SNRI(13)

list(NS=45,NT=13)

r[,1]	n[,1]	t[,1]	r[,2]	n[,2]	t[,2]	r[,3]	n[,3]	t[,3]	r[,4]	n[,4]	t[,4]	na[]	
2	10	1	20	20	2	20	20	3	NA	1	NA	3	#Aksac 2003[120]
11	19	2	11	18	5	NA	1	NA	NA	1	NA	2	#Arvonen 2001[178]
17	20	2	19	20	3	NA	1	NA	NA	1	NA	2	#Berghmans 1996[147]
1	30	1	23	25	2	16	25	4	17	27	5	4	#Bø 1999[115]
10	60	1	21	61	4	NA	1	NA	NA	1	NA	2	#Brubaker 1997[130]
7	40	1	26	43	2	27	40	3	NA	1	NA	3	#Burns 1993[122]
16	30	3	8	16	5	NA	1	NA	NA	1	NA	2	#Cammu 1998[181]
15	63	1	45	60	7	NA	1	NA	NA	1	NA	2	#Fantl 1991[135]
19	45	1	32	49	2	27	50	6	36	51	13	4	#Ghoniem 2005[57]
32	40	1	45	47	2	45	47	8	NA	1	NA	3	#Goode 2003[123]
10	10	2	8	10	4	NA	1	NA	NA	1	NA	2	#Hahn 1991[175]
19	30	2	17	23	5	NA	1	NA	NA	1	NA	2	#Haken 1991[179]
0	25	1	17	26	2	8	25	4	NA	1	NA	3	#Henalla 1989[124]
0	7	1	4	8	2	NA	1	NA	NA	1	NA	2	#Henalla 1990[125]
0	10	1	7	11	2	3	11	4	7	11	8	4	#Hofbauer 1990 [126]
21	21	2	19	20	3	NA	1	NA	NA	1	NA	2	#Klingler 1995[151]
10	18	3	25	39	9	NA	1	NA	NA	1	NA	2	#Knight 1998[172]

0	33	1	28	33	2	NA	1	NA	NA	1	NA	2	#Lagro-Janssen 1991[127]
8	11	2	16	18	4	NA	1	NA	NA	1	NA	2	#Laycock 1988[176]
14	23	4	7	16	11	NA	1	NA	NA	1	NA	2	#Laycock Trial 1 1993 [132]
3	11	1	5	15	4	NA	1	NA	NA	1	NA	2	#Laycock Trial 2 1993[132]
7	24	1	5	20	4	NA	1	NA	NA	1	NA	2	#Luber 1997[133]
27	30	4	19	24	5	NA	1	NA	NA	1	NA	2	#Oláh 1990[187]
26	27	2	13	13	3	NA	1	NA	NA	1	NA	2	#Pages 2001[154]
10	16	2	12	17	5	NA	1	NA	NA	1	NA	2	#Peattie 1988[180]
12	25	2	11	21	10	NA	1	NA	NA	1	NA	2	#Pieber 1995[192]
14	22	1	14	22	2	NA	1	NA	NA	1	NA	2	#Ramsay 1990[128]
2	17	1	13	35	4	NA	1	NA	NA	1	NA	2	#Sand 1995[134]
53	60	5	55	60	9	NA	1	NA	NA	1	NA	2	#Seo 2004[195]
6	11	2	10	11	3	NA	1	NA	NA	1	NA	2	#Shepherd 1983[155]
4	9	2	6	9	4	NA	1	NA	NA	1	NA	2	#Smith 1996[177]
13	21	2	16	23	8	NA	1	NA	NA	1	NA	2	#Tapp 1989[185]
53	75	1	47	77	2	51	79	5	NA	1	NA	3	#Williams 2006[129]
4	15	2	11	15	3	21	30	9	NA	1	NA	3	#Wilson 1987[157]
12	16	4	14	19	5	14	15	10	NA	1	NA	3	#Wise 1993[188]
48	63	3	43	66	7	55	61	12	NA	1	NA	3	#Wyman 1998[183]
4	52	1	17	51	6	NA	1	NA	NA	1	NA	2	#Cardozo 2004[137]
67	112	1	270	344	6	NA	1	NA	NA	1	NA	2	#Castro-Diaz 2007[138]
36	132	1	57	130	6	NA	1	NA	NA	1	NA	2	#Norton 2002[144]
131	332	1	207	334	6	NA	1	NA	NA	1	NA	2	#Dmochowski 2003[139]
111	218	1	148	208	6	NA	1	NA	NA	1	NA	2	#Kinchen 2005 [140]
33	57	1	35	56	6	NA	1	NA	NA	1	NA	2	#Mah 2006[141]
137	311	1	196	306	6	NA	1	NA	NA	1	NA	2	#Manning 2005[142]
147	229	1	162	220	6	NA	1	NA	NA	1	NA	2	#Millard 2004[143]
118	245	1	135	240	6	NA	1	NA	NA	1	NA	2	#van Kerrebroeck 2004[306]

END

```
list(d=c(NA,0,0,0,0, 0,0,0,0,0, 0,0,0),sd=1,
mu=c(0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0),
mA=0)
```

Model of 'no-treatment' arms

The WINBUGS model used to estimate the distribution of the absolute cure rate for no treatment is given below. It uses the no-treatment trial arms and applies a random effects model. The posterior mean and standard deviation of the 'logitP' term were used as the values of the parameters of the normal distribution applied to the 'mA' term in the main model.

```
model{
for(i in 1:N){
r[i]~dbin(p[i],n[i])
q[i] ~ dnorm(logitP,tau)
logit(p[i])<-q[i]
}

logitP~dnorm(0,0.0001)
tau<-1/pow(sd,2)
sd~dunif(0,2)

prob<-exp(logitP)/(1+exp(logitP))

}
```

CURE

```
Data
list(r=c(0,0,3,1,2,10,0,3,0,0,4,1,6,20,19,14),n=c(10,30,44,40,63,67,10,32,33,11,24,17,75,132,322,229),
N=16)
Starting values  list(logitP=0,sd=1,q=c(0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0))
```

IMPROVEMENT

```
Data
list(r=c(2,1,10,7,15,19,32,0,0,0,0,3,7,14,2,53,4,67,36,131,111,33,137,147,118),
n=c(10,30,60,40,63,45,40,25,7,10,33,11,24,22,17,75,52,112,132,332,218,57,311,229,245),
N=25)

Starting values  list(logitP=0,sd=1,q=c(0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0, 0,0,0,0,0))
```

Appendix 23

Mixed treatment comparisons: tables of odds ratios

These tables show the posterior distribution of the odds ratios between each pair of treatments, displaying the mean, SD, median and the 2.5th and 97.5th percentiles. As stated in Chapter 8 (see Results), the median should be used as the point estimate, in preference to the mean. Intervention 1 is being compared to intervention 2, so an odds ratio greater than one implies that intervention 1 is better than intervention 2.

TABLE 85 *Cure: pelvic floor muscle training split into basic and extra sessions*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
PFMT basic	NT	1.4	0.627	1.28	0.554	2.92
PFMT extra sessions	NT	12	5.7	10.7	5.03	26.2
PFMT + BF	NT	14	7.38	12.3	5.35	32.7
ES	NT	1.64	0.88	1.45	0.55	3.86
VC	NT	4.18	2.62	3.55	1.23	10.9
SNRI	NT	1.57	0.771	1.43	0.582	3.46
BT	NT	9.34	7.17	7.53	2.34	27
PFMT + ES	NT	3.78	2.84	3.05	1.09	10.7
PFMT + ES + BF	NT	30.7	182	9.21	0.569	172
PFMT + VC	NT	6.89	18	3.13	0.324	36
PFMT + VC + BF	NT	86.4	2750	5.82	0.245	263
PFMT + BT + BF	NT	37.8	55.1	25.2	4.94	146
NT	PFMT basic	0.855	0.387	0.782	0.342	1.81
PFMT extra sessions	PFMT basic	9.47	4.82	8.36	3.74	21.7
PFMT + BF	PFMT basic	11	5.89	9.63	4.12	25.9
ES	PFMT basic	1.32	0.793	1.13	0.393	3.32
VC	PFMT basic	3.26	2.07	2.77	0.982	8.51
SNRI	PFMT basic	1.35	1.02	1.11	0.333	3.8
BT	PFMT basic	7.49	6.31	5.9	1.7	23.1
PFMT + ES	PFMT basic	2.95	2.21	2.37	0.859	8.49
PFMT + ES + BF	PFMT basic	22.1	151	7.16	0.502	121
PFMT + VC	PFMT basic	4.91	11.1	2.43	0.3	24.4
PFMT + VC + BF	PFMT basic	71.2	2300	4.55	0.19	213
PFMT + BT + BF	PFMT basic	30.2	49.8	19.6	3.79	121
NT	PFMT extra sessions	0.0997	0.0417	0.0933	0.0381	0.199
PFMT basic	PFMT extra sessions	0.129	0.0577	0.12	0.0462	0.268
PFMT + BF	PFMT extra sessions	1.22	0.421	1.15	0.592	2.22
ES	PFMT extra sessions	0.153	0.0863	0.135	0.0448	0.368
VC	PFMT extra sessions	0.383	0.228	0.332	0.105	0.959

continued

TABLE 85 *Cure: pelvic floor muscle training split into basic and extra sessions (continued)*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
SNRI	PFMT extra sessions	0.156	0.103	0.134	0.036	0.41
BT	PFMT extra sessions	0.819	0.517	0.709	0.223	2.08
PFMT + ES	PFMT extra sessions	0.339	0.227	0.285	0.0984	0.895
PFMT + ES + BF	PFMT extra sessions	2.72	16.3	0.858	0.0489	15.3
PFMT + VC	PFMT extra sessions	0.621	1.42	0.29	0.0281	3.24
PFMT + VC + BF	PFMT extra sessions	7.5	214	0.535	0.0217	24.1
PFMT + BT + BF	PFMT extra sessions	3.25	3.75	2.37	0.468	11.4
NT	PFMT + BF	0.0882	0.041	0.0813	0.0306	0.187
PFMT basic	PFMT + BF	0.113	0.0538	0.104	0.0386	0.243
PFMT extra sessions	PFMT + BF	0.92	0.324	0.867	0.45	1.69
ES	PFMT + BF	0.136	0.0843	0.117	0.0362	0.348
VC	PFMT + BF	0.333	0.201	0.288	0.0913	0.841
SNRI	PFMT + BF	0.138	0.0979	0.117	0.03	0.379
BT	PFMT + BF	0.715	0.458	0.617	0.193	1.86
PFMT + ES	PFMT + BF	0.304	0.228	0.247	0.0789	0.868
PFMT + ES + BF	PFMT + BF	2.47	18.2	0.745	0.0417	13.5
PFMT + VC	PFMT + BF	0.549	1.31	0.252	0.0243	2.87
PFMT + VC + BF	PFMT + BF	7.13	253	0.467	0.0186	21.4
PFMT + BT + BF	PFMT + BF	2.75	3	2.06	0.439	9.33
NT	ES	0.777	0.413	0.689	0.259	1.82
PFMT basic	ES	1.02	0.599	0.884	0.301	2.55
PFMT extra sessions	ES	8.71	5.37	7.43	2.72	22.3
PFMT + BF	ES	10.2	6.83	8.55	2.88	27.6
VC	ES	2.96	2.05	2.47	0.759	8.2
SNRI	ES	1.22	0.938	0.986	0.26	3.61
BT	ES	6.9	6.32	5.22	1.27	22.6
PFMT + ES	ES	2.76	2.44	2.1	0.624	8.8
PFMT + ES + BF	ES	22.6	171	6.35	0.36	127
PFMT + VC	ES	4.98	13.6	2.16	0.207	27.1
PFMT + VC + BF	ES	52.2	1750	4.01	0.2	162
PFMT + BT + BF	ES	27.8	45.8	17.4	2.89	114
NT	VC	0.324	0.196	0.281	0.0922	0.811
PFMT basic	VC	0.413	0.243	0.361	0.118	1.02
PFMT extra sessions	VC	3.58	2.44	3.02	1.04	9.53
PFMT + BF	VC	4.12	2.72	3.47	1.19	11
ES	VC	0.486	0.334	0.406	0.122	1.32
SNRI	VC	0.51	0.439	0.402	0.0962	1.57
BT	VC	2.82	2.78	2.12	0.507	9.32
PFMT + ES	VC	1.15	1.19	0.856	0.233	3.8
PFMT + ES + BF	VC	9.36	89.2	2.57	0.143	51.5
PFMT + VC	VC	2.04	5.84	0.87	0.0817	11
PFMT + VC + BF	VC	27	930	1.63	0.064	77.5
PFMT + BT + BF	VC	11.3	21.4	7.11	1.18	45.9
NT	SNRI	0.775	0.391	0.699	0.29	1.72
PFMT basic	SNRI	1.08	0.783	0.901	0.263	3.01

TABLE 85 *Cure: pelvic floor muscle training split into basic and extra sessions (continued)*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
PFMT extra sessions	SNRI	9.35	7.74	7.44	2.44	27.8
PFMT + BF	SNRI	10.9	9.34	8.58	2.64	33.4
ES	SNRI	1.28	1.08	1.01	0.277	3.85
VC	SNRI	3.25	3.07	2.49	0.636	10.4
BT	SNRI	7.28	8.04	5.27	1.23	25.4
PFMT + ES	SNRI	2.98	3.94	2.1	0.591	10.4
PFMT + ES + BF	SNRI	24.6	174	6.44	0.344	140
PFMT + VC	SNRI	5.41	15.8	2.19	0.197	29.9
PFMT + VC + BF	SNRI	74	3220	4.09	0.154	201
PFMT + BT + BF	SNRI	29.8	62	17.6	2.79	131
NT	BT	0.158	0.108	0.133	0.0371	0.428
PFMT basic	BT	0.207	0.153	0.17	0.0433	0.589
PFMT extra sessions	BT	1.68	1.13	1.41	0.481	4.48
PFMT + BF	BT	1.94	1.32	1.62	0.539	5.18
ES	BT	0.247	0.213	0.191	0.0443	0.788
VC	BT	0.614	0.564	0.471	0.107	1.97
SNRI	BT	0.248	0.238	0.19	0.0394	0.811
PFMT + ES	BT	0.562	0.675	0.401	0.0968	1.98
PFMT + ES + BF	BT	4.75	47.4	1.21	0.0601	26.1
PFMT + VC	BT	1.02	3.27	0.414	0.0327	5.57
PFMT + VC + BF	BT	13	482	0.768	0.0262	39.4
PFMT + BT + BF	BT	4.54	5.41	3.35	0.74	15.5
NT	PFMT + ES	0.373	0.219	0.328	0.0932	0.92
PFMT basic	PFMT + ES	0.477	0.277	0.422	0.118	1.16
PFMT extra sessions	PFMT + ES	4.05	2.43	3.51	1.12	10.2
PFMT + BF	PFMT + ES	4.78	3.16	4.05	1.15	12.7
ES	PFMT + ES	0.573	0.408	0.476	0.114	1.6
VC	PFMT + ES	1.45	1.13	1.17	0.263	4.29
SNRI	PFMT + ES	0.582	0.461	0.475	0.096	1.69
BT	PFMT + ES	3.22	2.86	2.49	0.504	10.3
PFMT + ES + BF	PFMT + ES	9.64	45.9	3.03	0.148	55
PFMT + VC	PFMT + ES	2.26	5.56	1.02	0.0835	11.9
PFMT + VC + BF	PFMT + ES	24.6	552	1.87	0.0656	91.2
PFMT + BT + BF	PFMT + ES	12.7	17.4	8.37	1.16	50.2
NT	PFMT + ES + BF	0.336	4.37	0.109	0.00583	1.76
PFMT basic	PFMT + ES + BF	0.393	6.51	0.14	0.00829	1.99
PFMT extra sessions	PFMT + ES + BF	4.09	130	1.17	0.0656	20.5
PFMT + BF	PFMT + ES + BF	4.98	204	1.34	0.0739	24
ES	PFMT + ES + BF	0.53	10.3	0.158	0.0079	2.78
VC	PFMT + ES + BF	1.33	22.8	0.389	0.0194	7.01
SNRI	PFMT + ES + BF	0.54	9.06	0.155	0.00715	2.91
BT	PFMT + ES + BF	2.97	27.1	0.827	0.0384	16.7
PFMT + ES	PFMT + ES + BF	1.43	66.5	0.33	0.0182	6.78
PFMT + VC	PFMT + ES + BF	0.487	0.668	0.341	0.0647	1.77

continued

TABLE 85 *Cure: pelvic floor muscle training split into basic and extra sessions (continued)*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
PFMT + VC + BF	PFMT + ES + BF	33.4	2240	0.633	0.00919	69
PFMT + BT + BF	PFMT + ES + BF	12.9	283	2.75	0.107	70
NT	PFMT + VC	0.634	1.59	0.32	0.0278	3.09
PFMT basic	PFMT + VC	0.735	1.73	0.412	0.041	3.34
PFMT extra sessions	PFMT + VC	7.16	26.9	3.45	0.309	35.6
PFMT + BF	PFMT + VC	8.41	40.1	3.96	0.349	41.2
ES	PFMT + VC	0.973	2.79	0.464	0.0369	4.84
VC	PFMT + VC	2.42	6.67	1.15	0.0912	12.2
SNRI	PFMT + VC	1.01	3.26	0.457	0.0334	5.08
BT	PFMT + VC	5.64	16.5	2.42	0.179	30.6
PFMT + ES	PFMT + VC	2.28	12.6	0.982	0.0838	12
PFMT + ES + BF	PFMT + VC	4.21	6.97	2.93	0.565	15.5
PFMT + VC + BF	PFMT + VC	67.7	4860	1.86	0.0369	150
PFMT + BT + BF	PFMT + VC	23.4	94.7	8.04	0.486	129
NT	PFMT + VC + BF	0.661	3.6	0.172	0.0038	4.09
PFMT basic	PFMT + VC + BF	0.865	4.51	0.22	0.00469	5.27
PFMT extra sessions	PFMT + VC + BF	7.72	80.9	1.87	0.0415	46.2
PFMT + BF	PFMT + VC + BF	9.31	173	2.14	0.0467	53.7
ES	PFMT + VC + BF	0.904	15.5	0.249	0.00619	5.01
VC	PFMT + VC + BF	2.58	20.3	0.615	0.0129	15.6
SNRI	PFMT + VC + BF	1.08	12.6	0.244	0.00497	6.49
BT	PFMT + VC + BF	6.07	47.7	1.3	0.0254	38.2
PFMT + ES	PFMT + VC + BF	2.47	16.8	0.534	0.011	15.3
PFMT + ES + BF	PFMT + VC + BF	19.5	324	1.58	0.0145	109
PFMT + VC	PFMT + VC + BF	4.37	37.5	0.539	0.00667	27.1
PFMT + BT + BF	PFMT + VC + BF	25.2	255	4.36	0.0721	154
NT	PFMT + BT + BF	0.0558	0.0672	0.0397	0.00685	0.203
PFMT basic	PFMT + BT + BF	0.0724	0.091	0.051	0.00825	0.264
PFMT extra sessions	PFMT + BT + BF	0.594	0.763	0.422	0.0879	2.14
PFMT + BF	PFMT + BT + BF	0.665	0.825	0.487	0.107	2.28
ES	PFMT + BT + BF	0.0874	0.141	0.0574	0.00877	0.347
VC	PFMT + BT + BF	0.215	0.307	0.141	0.0218	0.851
SNRI	PFMT + BT + BF	0.0886	0.147	0.0568	0.00765	0.359
BT	PFMT + BT + BF	0.401	0.425	0.299	0.0646	1.35
PFMT + ES	PFMT + BT + BF	0.202	0.425	0.12	0.0199	0.862
PFMT + ES + BF	PFMT + BT + BF	1.69	18.8	0.363	0.0143	9.36
PFMT + VC	PFMT + BT + BF	0.362	1.58	0.124	0.00773	2.06
PFMT + VC + BF	PFMT + BT + BF	5.83	317	0.23	0.00651	13.9

TABLE 86 *Improvement: pelvic floor muscle training split into basic and extra sessions*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
PFMT basic	NT	4.97	2.37	4.47	2.03	10.9
PFMT extra sessions	NT	29.8	17	25.7	10.3	73.1
PFMT + BF	NT	31	21.8	25.4	8.68	86.9
ES	NT	6.14	3	5.49	2.39	13.7
VC	NT	7.86	4.65	6.77	2.6	19.4
SNRI	NT	2.29	0.87	2.14	1.06	4.4
BT	NT	18.3	23.4	12	2.16	73.3
PFMT + ES	NT	29.6	31	20.7	4.51	108
PFMT + ES + BF	NT	31.2	35.3	21.6	4.5	116
PFMT + VC	NT	21.7	35.6	12.2	1.83	99.2
PFMT + VC + BF	NT	7.44	28.4	2.66	0.181	42
PFMT + BT + BF	NT	160	401	69.8	6.59	852
PFMT + SNRI	NT	7.37	11.8	4.42	0.646	31.8
NT	PFMT basic	0.241	0.104	0.224	0.0916	0.493
PFMT extra sessions	PFMT basic	6.62	3.8	5.75	2.11	16.2
PFMT + BF	PFMT basic	6.78	4.5	5.68	1.88	18.3
ES	PFMT basic	1.39	0.748	1.23	0.454	3.25
VC	PFMT basic	1.71	0.904	1.52	0.581	3.97
SNRI	PFMT basic	0.546	0.309	0.48	0.159	1.32
BT	PFMT basic	4.18	5.37	2.7	0.416	17
PFMT + ES	PFMT basic	6.62	7.05	4.62	0.915	24.4
PFMT + ES + BF	PFMT basic	6.65	6.52	4.86	1.02	23.3
PFMT + VC	PFMT basic	4.47	6.34	2.74	0.437	18.9
PFMT + VC + BF	PFMT basic	1.66	9.93	0.595	0.0375	9.26
PFMT + BT + BF	PFMT basic	35.3	91.3	15.6	1.36	186
PFMT + SNRI	PFMT basic	1.64	2.4	0.988	0.13	7.17
NT	PFMT extra sessions	0.0431	0.022	0.0389	0.0137	0.097
PFMT basic	PFMT extra sessions	0.197	0.108	0.174	0.0617	0.473
PFMT + BF	PFMT extra sessions	1.17	0.769	0.988	0.316	3.11
ES	PFMT extra sessions	0.241	0.132	0.214	0.0758	0.571
VC	PFMT extra sessions	0.304	0.181	0.264	0.0873	0.761
SNRI	PFMT extra sessions	0.0978	0.0629	0.0835	0.0236	0.255
BT	PFMT extra sessions	0.73	0.923	0.469	0.069	2.99
PFMT + ES	PFMT extra sessions	1.09	1.02	0.806	0.173	3.67
PFMT + ES + BF	PFMT extra sessions	1.19	1.31	0.842	0.159	4.34
PFMT + VC	PFMT extra sessions	0.832	1.34	0.475	0.0627	3.82
PFMT + VC + BF	PFMT extra sessions	0.282	0.936	0.104	0.00632	1.61
PFMT + BT + BF	PFMT extra sessions	6.1	14.6	2.71	0.227	32.5
PFMT + SNRI	PFMT extra sessions	0.303	0.49	0.172	0.0197	1.37
NT	PFMT + BF	0.0455	0.0277	0.0394	0.0115	0.115
PFMT basic	PFMT + BF	0.206	0.13	0.176	0.0548	0.531

continued

TABLE 86 *Improvement: pelvic floor muscle training split into basic and extra sessions (continued)*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
PFMT extra sessions	PFMT + BF	1.2	0.775	1.01	0.322	3.16
ES	PFMT + BF	0.261	0.183	0.216	0.0592	0.731
VC	PFMT + BF	0.317	0.211	0.266	0.0798	0.855
SNRI	PFMT + BF	0.103	0.0762	0.0845	0.0207	0.297
BT	PFMT + BF	0.695	0.799	0.475	0.0798	2.63
PFMT + ES	PFMT + BF	1.23	1.47	0.814	0.133	4.82
PFMT + ES + BF	PFMT + BF	1.12	1.02	0.849	0.192	3.68
PFMT + VC	PFMT + BF	0.874	1.45	0.479	0.0599	4.04
PFMT + VC + BF	PFMT + BF	0.305	1.13	0.105	0.0059	1.75
PFMT + BT + BF	PFMT + BF	5.46	10.9	2.73	0.277	26.9
PFMT + SNRI	PFMT + BF	0.319	0.556	0.174	0.0185	1.5
NT	ES	0.199	0.0909	0.182	0.0731	0.418
PFMT basic	ES	0.926	0.511	0.815	0.308	2.2
PFMT extra sessions	ES	5.4	3.08	4.68	1.75	13.2
PFMT + BF	ES	5.74	4.34	4.63	1.37	16.9
VC	ES	1.42	0.833	1.23	0.441	3.51
SNRI	ES	0.452	0.276	0.39	0.125	1.15
BT	ES	3.5	4.72	2.19	0.329	14.6
PFMT + ES	ES	5.37	5.72	3.78	0.752	19.7
PFMT + ES + BF	ES	5.72	6.4	3.94	0.745	21.5
PFMT + VC	ES	3.84	6.34	2.23	0.326	16.9
PFMT + VC + BF	ES	1.17	3.72	0.483	0.0375	6.27
PFMT + BT + BF	ES	29.9	78.5	12.6	1.06	159
PFMT + SNRI	ES	1.42	2.48	0.806	0.0964	6.41
NT	VC	0.166	0.088	0.148	0.0515	0.384
PFMT basic	VC	0.743	0.392	0.66	0.252	1.72
PFMT extra sessions	VC	4.45	2.77	3.79	1.32	11.5
PFMT + BF	VC	4.54	3.18	3.75	1.17	12.5
ES	VC	0.928	0.528	0.811	0.285	2.27
SNRI	VC	0.376	0.252	0.317	0.0896	1.01
BT	VC	2.83	3.81	1.78	0.263	11.8
PFMT + ES	VC	4.52	5.2	3.05	0.553	17.3
PFMT + ES + BF	VC	4.38	4.32	3.19	0.682	15.1
PFMT + VC	VC	3.07	4.73	1.8	0.264	13.6
PFMT + VC + BF	VC	1.09	4.23	0.393	0.0244	6.12
PFMT + BT + BF	VC	23.7	58.6	10.3	0.862	126
PFMT + SNRI	VC	1.16	2.01	0.652	0.0761	5.28
NT	SNRI	0.497	0.186	0.467	0.227	0.943
PFMT basic	SNRI	2.45	1.56	2.09	0.76	6.29
PFMT extra sessions	SNRI	14.8	10.8	12	3.92	42.4
PFMT + BF	SNRI	15.4	13.3	11.8	3.37	48.4
ES	SNRI	3.04	1.99	2.57	0.871	8
VC	SNRI	3.89	2.93	3.16	0.987	11.2
BT	SNRI	9.09	12.9	5.59	0.887	38.7
PFMT + ES	SNRI	14.7	19.3	9.66	1.82	58.2

TABLE 86 *Improvement: pelvic floor muscle training split into basic and extra sessions (continued)*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
PFMT + ES + BF	SNRI	15.5	20	10.1	1.84	61.8
PFMT + VC	SNRI	10.7	19.4	5.69	0.754	51.2
PFMT + VC + BF	SNRI	3.69	14.5	1.24	0.0781	21.1
PFMT + BT + BF	SNRI	79.4	214	32.5	2.79	438
PFMT + SNRI	SNRI	3.49	5.8	2.06	0.289	15.3
NT	BT	0.121	0.14	0.0833	0.0137	0.464
PFMT basic	BT	0.583	0.803	0.371	0.059	2.41
PFMT extra sessions	BT	3.45	5.07	2.13	0.335	14.5
PFMT + BF	BT	3.19	3.96	2.11	0.38	12.5
ES	BT	0.726	0.97	0.456	0.0683	3.04
VC	BT	0.908	1.35	0.562	0.085	3.81
SNRI	BT	0.277	0.361	0.179	0.0258	1.13
PFMT + ES	BT	3.49	7.74	1.72	0.177	17.4
PFMT + ES + BF	BT	3.41	6.52	1.8	0.203	16.1
PFMT + VC	BT	2.54	7.02	1.01	0.0827	14.3
PFMT + VC + BF	BT	0.89	4.94	0.22	0.00909	5.52
PFMT + BT + BF	BT	11.9	28.8	5.77	0.602	59.6
PFMT + SNRI	BT	0.896	2.64	0.366	0.027	4.83
NT	PFMT + ES	0.0653	0.061	0.0484	0.00926	0.222
PFMT basic	PFMT + ES	0.303	0.309	0.217	0.0411	1.09
PFMT extra sessions	PFMT + ES	1.69	1.62	1.24	0.273	5.79
PFMT + BF	PFMT + ES	1.88	2.3	1.23	0.207	7.51
ES	PFMT + ES	0.369	0.369	0.265	0.0507	1.33
VC	PFMT + ES	0.478	0.54	0.328	0.0579	1.81
SNRI	PFMT + ES	0.149	0.163	0.104	0.0172	0.549
BT	PFMT + ES	1.14	2.04	0.582	0.0574	5.65
PFMT + ES + BF	PFMT + ES	1.9	3.48	1.05	0.123	8.78
PFMT + VC	PFMT + ES	1.31	3.22	0.59	0.0544	6.88
PFMT + VC + BF	PFMT + ES	0.44	1.96	0.127	0.00606	2.67
PFMT + BT + BF	PFMT + ES	9.77	30.7	3.36	0.2	56.5
PFMT + SNRI	PFMT + ES	0.467	1.04	0.214	0.0173	2.45
NT	PFMT + ES + BF	0.0635	0.063	0.0462	0.00866	0.222
PFMT basic	PFMT + ES + BF	0.283	0.28	0.206	0.0429	0.98
PFMT extra sessions	PFMT + ES + BF	1.71	1.94	1.19	0.231	6.3
PFMT + BF	PFMT + ES + BF	1.58	1.53	1.18	0.272	5.21
ES	PFMT + ES + BF	0.364	0.406	0.254	0.0466	1.34
VC	PFMT + ES + BF	0.428	0.428	0.314	0.0662	1.47
SNRI	PFMT + ES + BF	0.144	0.161	0.0994	0.0162	0.544
BT	PFMT + ES + BF	1.04	1.81	0.557	0.062	4.92
PFMT + ES	PFMT + ES + BF	1.75	2.87	0.957	0.114	8.13
PFMT + VC	PFMT + ES + BF	1.21	2.83	0.565	0.0546	6.27
PFMT + VC + BF	PFMT + ES + BF	0.435	2.15	0.123	0.00567	2.63
PFMT + BT + BF	PFMT + ES + BF	8.4	23.4	3.21	0.222	47.1

continued

TABLE 86 *Improvement: pelvic floor muscle training split into basic and extra sessions (continued)*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
PFMT + SNRI	PFMT + ES + BF	0.449	1.03	0.205	0.0167	2.33
NT	PFMT + VC	0.131	0.168	0.0819	0.0101	0.547
PFMT basic	PFMT + VC	0.567	0.681	0.364	0.0529	2.29
PFMT extra sessions	PFMT + VC	3.56	5	2.11	0.262	16
PFMT + BF	PFMT + VC	3.68	5.75	2.09	0.247	16.7
ES	PFMT + VC	0.727	0.959	0.449	0.0591	3.07
VC	PFMT + VC	0.892	1.16	0.556	0.0734	3.79
SNRI	PFMT + VC	0.298	0.429	0.176	0.0195	1.33
BT	PFMT + VC	2.29	5.84	0.987	0.0701	12.1
PFMT + ES	PFMT + VC	3.58	7.01	1.7	0.146	18.4
PFMT + ES + BF	PFMT + VC	3.62	7.1	1.77	0.159	18.3
PFMT + VC + BF	PFMT + VC	0.857	4.64	0.216	0.00808	5.42
PFMT + BT + BF	PFMT + VC	19.4	95.4	5.71	0.262	114
PFMT + SNRI	PFMT + VC	0.91	2.36	0.362	0.0227	5.15
NT	PFMT + VC + BF	0.978	2.89	0.376	0.0238	5.53
PFMT basic	PFMT + VC + BF	4.64	14	1.68	0.108	26.7
PFMT extra sessions	PFMT + VC + BF	27.6	92.2	9.66	0.62	158
PFMT + BF	PFMT + VC + BF	29.3	102	9.54	0.572	170
ES	PFMT + VC + BF	4.99	13.7	2.07	0.16	26.7
VC	PFMT + VC + BF	7.18	23.6	2.54	0.163	41
SNRI	PFMT + VC + BF	2.25	7.39	0.805	0.0475	12.8
BT	PFMT + VC + BF	17.9	103	4.55	0.181	110
PFMT + ES	PFMT + VC + BF	27.4	126	7.87	0.375	165
PFMT + ES + BF	PFMT + VC + BF	29	118	8.13	0.38	177
PFMT + VC	PFMT + VC + BF	20.4	161	4.63	0.184	124
PFMT + BT + BF	PFMT + VC + BF	156	1010	26.2	0.748	987
PFMT + SNRI	PFMT + VC + BF	7.24	39.1	1.66	0.0587	44.5
NT	PFMT + BT + BF	0.0302	0.0725	0.0143	0.00117	0.152
PFMT basic	PFMT + BT + BF	0.143	0.348	0.0641	0.00537	0.738
PFMT extra sessions	PFMT + BT + BF	0.848	2.67	0.369	0.0308	4.4
PFMT + BF	PFMT + BT + BF	0.737	1.71	0.366	0.0372	3.61
ES	PFMT + BT + BF	0.179	0.48	0.0791	0.00628	0.946
VC	PFMT + BT + BF	0.223	0.667	0.0971	0.00793	1.16
SNRI	PFMT + BT + BF	0.0687	0.17	0.0308	0.00228	0.359
BT	PFMT + BT + BF	0.34	0.659	0.174	0.0168	1.66
PFMT + ES	PFMT + BT + BF	0.868	3.5	0.298	0.0177	5.01
PFMT + ES + BF	PFMT + BT + BF	0.822	3.97	0.312	0.0213	4.51
PFMT + VC	PFMT + BT + BF	0.656	5	0.175	0.00875	3.82
PFMT + VC + BF	PFMT + BT + BF	0.219	1.58	0.0382	0.00101	1.34
PFMT + SNRI	PFMT + BT + BF	0.222	1.46	0.0634	0.00281	1.32
NT	PFMT + SNRI	0.366	0.517	0.226	0.0315	1.55
PFMT basic	PFMT + SNRI	1.73	2.71	1.01	0.14	7.67
PFMT extra sessions	PFMT + SNRI	10.8	19.1	5.82	0.729	50.7
PFMT + BF	PFMT + SNRI	11.3	24.8	5.75	0.668	54.2

TABLE 86 *Improvement: pelvic floor muscle training split into basic and extra sessions (continued)*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
ES	PFMT + SNRI	2.23	3.8	1.24	0.156	10.4
VC	PFMT + SNRI	2.82	5.08	1.53	0.189	13.1
SNRI	PFMT + SNRI	0.805	1.21	0.484	0.0653	3.46
BT	PFMT + SNRI	6.72	18.9	2.73	0.207	37.1
PFMT + ES	PFMT + SNRI	10.7	26.1	4.68	0.409	57.7
PFMT + ES + BF	PFMT + SNRI	11.3	28.9	4.89	0.43	60
PFMT + VC	PFMT + SNRI	7.89	45.7	2.76	0.194	44.1
PFMT + VC + BF	PFMT + SNRI	2.65	12.7	0.602	0.0225	17
PFMT + BT + BF	PFMT + SNRI	60.5	329	15.8	0.759	357

TABLE 87 *Cure: pelvic floor muscle training combined*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
PFMT	NT	5.22	2.85	4.56	1.95	12.4
PFMT + BF	NT	11.8	8.56	9.65	3.37	33.3
ES	NT	1.98	1.42	1.63	0.506	5.54
VC	NT	6.25	5.58	4.75	1.24	20.2
SNRI	NT	1.77	1.47	1.42	0.377	5.35
BT	NT	7.06	8.43	4.87	1.05	26.1
PFMT + ES	NT	6.36	6.62	4.59	1.2	22.4
PFMT + ES + BF	NT	378	19,000	32.7	0.842	1540
PFMT + VC	NT	40.3	281	11.2	0.671	227
PFMT + VC + BF	NT	2610	372,000	6.61	0.175	453
PFMT + BT + BF	NT	40	125	17.7	1.83	206
NT	PFMT	0.239	0.113	0.219	0.0805	0.512
PFMT + BF	PFMT	2.32	1.07	2.11	0.936	4.99
ES	PFMT	0.418	0.268	0.355	0.108	1.1
VC	PFMT	1.27	0.953	1.04	0.285	3.65
SNRI	PFMT	0.42	0.422	0.313	0.0571	1.45
BT	PFMT	1.44	1.59	1.07	0.234	4.85
PFMT + ES	PFMT	1.27	1.09	1	0.288	3.9
PFMT + ES + BF	PFMT	71.7	6490	7.15	0.197	275
PFMT + VC	PFMT	7.3	41.5	2.44	0.161	40.7
PFMT + VC + BF	PFMT	351	44,500	1.43	0.0367	94.4
PFMT + BT + BF	PFMT	7.72	17.6	3.9	0.41	37.6
NT	PFMT + BF	0.119	0.0719	0.104	0.0301	0.297
PFMT	PFMT + BF	0.514	0.227	0.474	0.2	1.07
ES	PFMT + BF	0.211	0.166	0.168	0.0409	0.633
VC	PFMT + BF	0.624	0.52	0.493	0.117	1.89
SNRI	PFMT + BF	0.209	0.231	0.148	0.0232	0.763
BT	PFMT + BF	0.685	0.715	0.505	0.104	2.32
PFMT + ES	PFMT + BF	0.647	0.668	0.475	0.109	2.23

continued

TABLE 87 *Cure: pelvic floor muscle training combined (continued)*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
PFMT + ES + BF	PFMT + BF	33.2	2090	3.4	0.08	141
PFMT + VC	PFMT + BF	3.75	19.3	1.16	0.0667	20.8
PFMT + VC + BF	PFMT + BF	237	36,000	0.674	0.016	46.9
PFMT + BT + BF	PFMT + BF	3.45	7.06	1.85	0.202	16.3
NT	ES	0.731	0.489	0.615	0.181	1.98
PFMT	ES	3.38	2.29	2.82	0.911	9.3
PFMT + BF	ES	7.72	6.63	5.95	1.58	24.4
VC	ES	3.89	3.61	2.93	0.678	12.8
SNRI	ES	1.3	1.64	0.872	0.14	5
BT	ES	4.75	6.65	3.01	0.491	19.7
PFMT + ES	ES	4.14	5.12	2.82	0.598	15.5
PFMT + ES + BF	ES	206	7050	20.2	0.481	956
PFMT + VC	ES	25	133	6.89	0.373	144
PFMT + VC + BF	ES	810	104,000	4	0.126	232
PFMT + BT + BF	ES	25.9	79.8	10.9	0.954	138
NT	VC	0.266	0.219	0.211	0.0496	0.807
PFMT	VC	1.19	0.927	0.963	0.274	3.51
PFMT + BF	VC	2.65	2.4	2.03	0.528	8.53
ES	VC	0.451	0.415	0.341	0.0782	1.48
SNRI	VC	0.472	0.7	0.299	0.041	1.93
BT	VC	1.68	3.1	1.03	0.154	7.13
PFMT + ES	VC	1.5	2.04	0.966	0.177	6.03
PFMT + ES + BF	VC	116	15,500	6.86	0.154	341
PFMT + VC	VC	8.97	74.3	2.35	0.12	52.4
PFMT + VC + BF	VC	668	109,000	1.38	0.0323	102
PFMT + BT + BF	VC	9.06	29.8	3.75	0.304	48
NT	SNRI	0.883	0.727	0.706	0.187	2.66
PFMT	SNRI	4.68	5.73	3.2	0.69	17.5
PFMT + BF	SNRI	10.6	15.1	6.77	1.31	43.1
ES	SNRI	1.78	2.52	1.15	0.2	7.15
VC	SNRI	5.63	9.12	3.35	0.52	24.4
BT	SNRI	6.36	12.5	3.44	0.466	30.3
PFMT + ES	SNRI	5.81	10.7	3.21	0.514	26.8
PFMT + ES + BF	SNRI	357	17,700	23.1	0.469	1360
PFMT + VC	SNRI	37.8	308	7.9	0.355	215
PFMT + VC + BF	SNRI	2600	373,000	4.64	0.0988	395
PFMT + BT + BF	SNRI	37.3	159	12.5	0.922	206
NT	BT	0.278	0.275	0.205	0.0383	0.956
PFMT	BT	1.26	1.29	0.935	0.206	4.28
PFMT + BF	BT	2.73	2.91	1.98	0.431	9.62
ES	BT	0.512	0.689	0.332	0.0509	2.04
VC	BT	1.56	2.39	0.975	0.14	6.51
SNRI	BT	0.493	0.798	0.291	0.033	2.15
PFMT + ES	BT	1.6	2.67	0.935	0.143	7.07

TABLE 87 *Cure: pelvic floor muscle training combined (continued)*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
PFMT + ES + BF	BT	85.2	4000	6.74	0.134	355
PFMT + VC	BT	9.58	63.4	2.3	0.1	56.1
PFMT + VC + BF	BT	1110	175,000	1.36	0.0253	110
PFMT + BT + BF	BT	7.01	17.8	3.64	0.419	32.7
NT	PFMT + ES	0.274	0.226	0.218	0.0446	0.836
PFMT	PFMT + ES	1.22	0.901	0.998	0.257	3.47
PFMT + BF	PFMT + ES	2.79	2.68	2.11	0.448	9.21
ES	PFMT + ES	0.483	0.483	0.355	0.0645	1.67
VC	PFMT + ES	1.51	1.73	1.04	0.166	5.67
SNRI	PFMT + ES	0.481	0.665	0.311	0.0373	1.95
BT	PFMT + ES	1.71	2.51	1.07	0.142	6.99
PFMT + ES + BF	PFMT + ES	70.3	3310	7.15	0.146	323
PFMT + VC	PFMT + ES	8.62	47.8	2.44	0.113	49.5
PFMT + VC + BF	PFMT + ES	452	68,700	1.43	0.0293	102
PFMT + BT + BF	PFMT + ES	9.19	29.5	3.91	0.279	48.1
NT	PFMT + ES + BF	0.2	1.63	0.0306	0.000648	1.19
PFMT	PFMT + ES + BF	0.878	7.8	0.14	0.00364	5.07
PFMT + BF	PFMT + ES + BF	2.13	20.9	0.294	0.00712	12.5
ES	PFMT + ES + BF	0.347	2.4	0.0496	0.00105	2.08
VC	PFMT + ES + BF	1.12	10.3	0.146	0.00294	6.51
SNRI	PFMT + ES + BF	0.357	2.97	0.0434	0.000739	2.13
BT	PFMT + ES + BF	1.32	16.2	0.148	0.00282	7.45
PFMT + ES	PFMT + ES + BF	1.16	12.7	0.14	0.0031	6.88
PFMT + VC	PFMT + ES + BF	0.732	2.36	0.342	0.0319	3.63
PFMT + VC + BF	PFMT + ES + BF	51	5330	0.205	0.00111	47.9
PFMT + BT + BF	PFMT + ES + BF	8.1	137	0.544	0.00759	37.4
NT	PFMT + VC	0.261	0.877	0.0892	0.0044	1.49
PFMT	PFMT + VC	1.11	3.69	0.41	0.0246	6.2
PFMT + BF	PFMT + VC	2.64	9.59	0.861	0.048	15
ES	PFMT + VC	0.467	1.85	0.145	0.00693	2.68
VC	PFMT + VC	1.42	5.52	0.426	0.0191	8.37
SNRI	PFMT + VC	0.478	2.48	0.127	0.00466	2.81
BT	PFMT + VC	1.63	7.55	0.435	0.0178	9.99
PFMT + ES	PFMT + VC	1.51	7.78	0.41	0.0202	8.89
PFMT + ES + BF	PFMT + VC	6.25	17.9	2.92	0.276	31.4
PFMT + VC + BF	PFMT + VC	114	14,700	0.595	0.00561	85.4
PFMT + BT + BF	PFMT + VC	9.37	77.1	1.59	0.0454	55.5
NT	PFMT + VC + BF	0.931	6.55	0.151	0.00221	5.71
PFMT	PFMT + VC + BF	4.51	36.7	0.701	0.0106	27.2
PFMT + BF	PFMT + VC + BF	10.5	100	1.49	0.0213	62.7
ES	PFMT + VC + BF	1.3	12.8	0.25	0.0043	7.94
VC	PFMT + VC + BF	5.4	66.9	0.726	0.0098	30.9
SNRI	PFMT + VC + BF	1.67	17.4	0.215	0.00254	10.1

continued

TABLE 87 *Cure: pelvic floor muscle training combined (continued)*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
BT	PFMT + VC + BF	6.96	197	0.736	0.00913	39.5
PFMT + ES	PFMT + VC + BF	5.91	87.3	0.698	0.00978	34.1
PFMT + ES + BF	PFMT + VC + BF	462	50,000	4.87	0.0209	903
PFMT + VC	PFMT + VC + BF	35.7	617	1.68	0.0117	178
PFMT + BT + BF	PFMT + VC + BF	38.2	1290	2.67	0.0243	206
NT	PFMT + BT + BF	0.112	0.271	0.0565	0.00486	0.547
PFMT	PFMT + BT + BF	0.501	1.08	0.257	0.0266	2.44
PFMT + BF	PFMT + BT + BF	1.03	2.39	0.542	0.0614	4.95
ES	PFMT + BT + BF	0.206	0.626	0.0916	0.00727	1.05
VC	PFMT + BT + BF	0.623	2.02	0.267	0.0209	3.29
SNRI	PFMT + BT + BF	0.203	0.722	0.0802	0.00485	1.09
BT	PFMT + BT + BF	0.51	1.1	0.275	0.0306	2.39
PFMT + ES	PFMT + BT + BF	0.665	2.64	0.256	0.0208	3.59
PFMT + ES + BF	PFMT + BT + BF	57.4	8750	1.84	0.0268	132
PFMT + VC	PFMT + BT + BF	4.08	64.7	0.629	0.018	22
PFMT + VC + BF	PFMT + BT + BF	149	16,600	0.374	0.00485	41.2

TABLE 88 *Improvement: pelvic floor muscle training combined*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
PFMT	NT	9.9	4.35	8.97	4.4	20.8
PFMT + BF	NT	26.6	18.9	21.7	7.24	75.2
ES	NT	5.31	2.66	4.75	2.02	11.9
VC	NT	8.18	4.98	6.99	2.63	20.7
SNRI	NT	2.4	0.932	2.24	1.09	4.68
BT	NT	17.5	23.6	11.3	1.92	70.1
PFMT + ES	NT	18.6	20.1	13.1	2.91	67.5
PFMT + ES + BF	NT	34.2	40.4	23.2	4.71	130
PFMT + VC	NT	32.6	62.3	17.7	2.55	153
PFMT + VC + BF	NT	6.52	21.5	2.28	0.147	37.3
PFMT + BT + BF	NT	151	467	62.2	5.39	818
PFMT + SNRI	NT	9.7	15.7	5.63	0.784	43
NT	PFMT	0.118	0.0462	0.111	0.0481	0.227
PFMT + BF	PFMT	2.8	1.64	2.42	0.869	6.98
ES	PFMT	0.577	0.268	0.526	0.214	1.23
VC	PFMT	0.861	0.419	0.778	0.315	1.9
SNRI	PFMT	0.28	0.15	0.25	0.0835	0.655
BT	PFMT	1.92	2.5	1.26	0.191	7.68
PFMT + ES	PFMT	1.96	1.83	1.46	0.321	6.53
PFMT + ES + BF	PFMT	3.54	3.47	2.58	0.555	12.2
PFMT + VC	PFMT	3.3	5.37	1.97	0.3	14.3
PFMT + VC + BF	PFMT	0.687	2.02	0.256	0.0156	3.91
PFMT + BT + BF	PFMT	15.8	40.7	6.94	0.572	85

TABLE 88 *Improvement: pelvic floor muscle training combined (continued)*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
PFMT + SNRI	PFMT	1.07	1.65	0.63	0.0776	4.68
NT	PFMT + BF	0.0536	0.0334	0.046	0.0133	0.138
PFMT	PFMT + BF	0.474	0.269	0.414	0.143	1.15
ES	PFMT + BF	0.266	0.192	0.218	0.0585	0.755
VC	PFMT + BF	0.386	0.264	0.322	0.0935	1.06
SNRI	PFMT + BF	0.127	0.096	0.103	0.0251	0.372
BT	PFMT + BF	0.772	0.915	0.52	0.0828	2.98
PFMT + ES	PFMT + BF	0.914	1.12	0.601	0.0978	3.57
PFMT + ES + BF	PFMT + BF	1.43	1.31	1.07	0.233	4.8
PFMT + VC	PFMT + BF	1.54	3.01	0.811	0.0971	7.33
PFMT + VC + BF	PFMT + BF	0.316	1.19	0.106	0.00549	1.83
PFMT + BT + BF	PFMT + BF	5.98	13.3	2.84	0.272	30.1
PFMT + SNRI	PFMT + BF	0.492	0.901	0.261	0.0259	2.37
NT	ES	0.231	0.108	0.211	0.0841	0.496
PFMT	ES	2.11	1.02	1.9	0.81	4.67
PFMT + BF	ES	5.75	4.45	4.59	1.33	17.1
VC	ES	1.71	1.01	1.48	0.525	4.26
SNRI	ES	0.552	0.343	0.473	0.147	1.43
BT	ES	3.88	5.64	2.39	0.337	16.5
PFMT + ES	ES	3.95	4.26	2.77	0.554	14.4
PFMT + ES + BF	ES	7.29	8.88	4.93	0.907	27.7
PFMT + VC	ES	6.67	11.9	3.74	0.531	30.5
PFMT + VC + BF	ES	1.2	3.29	0.484	0.0345	6.59
PFMT + BT + BF	ES	32.6	97.6	13.2	1	181
PFMT + SNRI	ES	2.16	3.7	1.2	0.139	9.97
NT	VC	0.161	0.0882	0.143	0.0484	0.38
PFMT	VC	1.43	0.701	1.29	0.527	3.18
PFMT + BF	VC	3.78	2.69	3.11	0.948	10.7
ES	VC	0.775	0.446	0.675	0.235	1.9
SNRI	VC	0.384	0.264	0.321	0.0883	1.05
BT	VC	2.62	3.79	1.61	0.226	11.1
PFMT + ES	VC	2.76	3.2	1.87	0.338	10.5
PFMT + ES + BF	VC	4.64	4.78	3.32	0.689	16.4
PFMT + VC	VC	4.48	7.91	2.52	0.358	20.2
PFMT + VC + BF	VC	0.938	3.37	0.329	0.0189	5.31
PFMT + BT + BF	VC	21.6	62.8	8.89	0.69	118
PFMT + SNRI	VC	1.49	2.71	0.814	0.0872	6.98
NT	SNRI	0.477	0.184	0.447	0.214	0.921
PFMT	SNRI	4.69	2.84	4.01	1.53	12
PFMT + BF	SNRI	12.6	10.9	9.72	2.69	39.9
ES	SNRI	2.52	1.69	2.11	0.7	6.79
VC	SNRI	3.88	2.96	3.12	0.953	11.3
BT	SNRI	8.34	13.2	5.02	0.75	35.6

continued

TABLE 88 *Improvement: pelvic floor muscle training combined (continued)*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
PFMT + ES	SNRI	8.82	10.7	5.84	1.11	34.6
PFMT + ES + BF	SNRI	16.2	21.5	10.4	1.84	65.8
PFMT + VC	SNRI	15.5	32.6	7.93	1.01	74.7
PFMT + VC + BF	SNRI	3.14	12.7	1.02	0.0599	18.1
PFMT + BT + BF	SNRI	71.8	232	27.7	2.17	404
PFMT + SNRI	SNRI	4.4	7.12	2.52	0.337	20
NT	BT	0.133	0.158	0.0886	0.0143	0.521
PFMT	BT	1.26	1.7	0.796	0.13	5.24
PFMT + BF	BT	3	4.07	1.92	0.336	12.1
ES	BT	0.69	1.01	0.419	0.0607	2.97
VC	BT	1.03	1.5	0.62	0.0899	4.43
SNRI	BT	0.319	0.44	0.199	0.0281	1.33
PFMT + ES	BT	2.42	5.24	1.16	0.116	12.3
PFMT + ES + BF	BT	4.1	8.34	2.07	0.227	20
PFMT + VC	BT	4.24	17.2	1.57	0.121	23.1
PFMT + VC + BF	BT	0.868	5.16	0.202	0.00793	5.26
PFMT + BT + BF	BT	11.8	31.5	5.5	0.551	60.8
PFMT + SNRI	BT	1.3	6.41	0.502	0.0346	7.22
NT	PFMT + ES	0.103	0.095	0.0764	0.0148	0.344
PFMT	PFMT + ES	0.923	0.849	0.686	0.153	3.12
PFMT + BF	PFMT + ES	2.55	3.07	1.66	0.28	10.2
ES	PFMT + ES	0.506	0.516	0.362	0.0693	1.81
VC	PFMT + ES	0.781	0.882	0.535	0.0949	2.96
SNRI	PFMT + ES	0.245	0.259	0.171	0.0289	0.901
BT	PFMT + ES	1.73	3.53	0.864	0.0814	8.63
PFMT + ES + BF	PFMT + ES	3.26	5.52	1.77	0.21	15.2
PFMT + VC	PFMT + ES	3.02	6.62	1.36	0.126	16.2
PFMT + VC + BF	PFMT + ES	0.609	2.35	0.175	0.00789	3.7
PFMT + BT + BF	PFMT + ES	14.6	82.5	4.77	0.268	86.3
PFMT + SNRI	PFMT + ES	0.963	2.35	0.434	0.034	5.02
NT	PFMT + ES + BF	0.0599	0.0608	0.043	0.00772	0.212
PFMT	PFMT + ES + BF	0.529	0.525	0.388	0.0819	1.8
PFMT + BF	PFMT + ES + BF	1.26	1.21	0.935	0.208	4.29
ES	PFMT + ES + BF	0.295	0.324	0.203	0.0361	1.1
VC	PFMT + ES + BF	0.415	0.417	0.301	0.0611	1.45
SNRI	PFMT + ES + BF	0.143	0.165	0.0966	0.0152	0.545
BT	PFMT + ES + BF	0.93	1.84	0.484	0.0499	4.4
PFMT + ES	PFMT + ES + BF	1.03	1.81	0.564	0.066	4.75
PFMT + VC	PFMT + ES + BF	1.75	4.57	0.754	0.0701	9.4
PFMT + VC + BF	PFMT + ES + BF	0.358	1.75	0.0991	0.00405	2.18
PFMT + BT + BF	PFMT + ES + BF	7.44	23	2.67	0.169	42.8
PFMT + SNRI	PFMT + ES + BF	0.559	1.64	0.244	0.0183	2.94
NT	PFMT + VC	0.0919	0.119	0.0565	0.00654	0.392
PFMT	PFMT + VC	0.807	1.04	0.509	0.07	3.34
PFMT + BF	PFMT + VC	2.21	3.44	1.23	0.137	10.3

TABLE 88 *Improvement: pelvic floor muscle training combined (continued)*

Intervention 1	Intervention 2	Mean	SD	Median	2.5%	97.5%
ES	PFMT + VC	0.439	0.601	0.267	0.0328	1.88
VC	PFMT + VC	0.651	0.874	0.397	0.0494	2.79
SNRI	PFMT + VC	0.219	0.313	0.126	0.0134	0.992
BT	PFMT + VC	1.52	3.73	0.638	0.0432	8.29
PFMT + ES	PFMT + VC	1.56	3.16	0.738	0.0619	7.96
PFMT + ES + BF	PFMT + VC	2.78	5.63	1.33	0.106	14.3
PFMT + VC + BF	PFMT + VC	0.539	2.63	0.128	0.00438	3.34
PFMT + BT + BF	PFMT + VC	12.7	56.9	3.5	0.146	78.1
PFMT + SNRI	PFMT + VC	0.859	2.6	0.318	0.0177	4.84
NT	PFMT + VC + BF	1.2	3.69	0.438	0.0268	6.8
PFMT	PFMT + VC + BF	11.3	38	3.91	0.256	64.3
PFMT + BF	PFMT + VC + BF	31	119	9.47	0.546	182
ES	PFMT + VC + BF	5.28	16.4	2.07	0.152	29
VC	PFMT + VC + BF	9.25	37.6	3.04	0.188	53
SNRI	PFMT + VC + BF	2.9	9.99	0.981	0.0551	16.7
BT	PFMT + VC + BF	21	114	4.95	0.19	126
PFMT + ES	PFMT + VC + BF	21.6	122	5.73	0.271	127
PFMT + ES + BF	PFMT + VC + BF	39.6	197	10.1	0.46	247
PFMT + VC	PFMT + VC + BF	46.4	2720	7.8	0.299	228
PFMT + BT + BF	PFMT + VC + BF	190	2870	27.1	0.709	1130
PFMT + SNRI	PFMT + VC + BF	12.2	106	2.47	0.0827	74
NT	PFMT + BT + BF	0.0354	0.0836	0.0161	0.00122	0.186
PFMT	PFMT + BT + BF	0.33	0.822	0.144	0.0118	1.75
PFMT + BF	PFMT + BT + BF	0.729	1.62	0.352	0.0332	3.67
ES	PFMT + BT + BF	0.182	0.489	0.0758	0.00553	0.996
VC	PFMT + BT + BF	0.269	0.739	0.113	0.00851	1.45
SNRI	PFMT + BT + BF	0.0849	0.232	0.0361	0.00248	0.46
BT	PFMT + BT + BF	0.37	0.969	0.182	0.0165	1.82
PFMT + ES	PFMT + BT + BF	0.631	1.94	0.21	0.0116	3.74
PFMT + ES + BF	PFMT + BT + BF	1.04	3.73	0.374	0.0234	5.92
PFMT + VC	PFMT + BT + BF	1.12	5.89	0.286	0.0128	6.85
PFMT + VC + BF	PFMT + BT + BF	0.229	1.83	0.0369	0.000886	1.41
PFMT + SNRI	PFMT + BT + BF	0.349	2.01	0.091	0.00359	2.09
NT	PFMT + SNRI	0.296	0.464	0.178	0.0233	1.28
PFMT	PFMT + SNRI	2.82	4.97	1.59	0.214	12.9
PFMT + BF	PFMT + SNRI	7.75	16.7	3.84	0.422	38.6
ES	PFMT + SNRI	1.55	2.85	0.836	0.1	7.21
VC	PFMT + SNRI	2.38	5.02	1.23	0.143	11.5
SNRI	PFMT + SNRI	0.677	1.11	0.396	0.0499	2.97
BT	PFMT + SNRI	5.36	32.1	1.99	0.139	28.9
PFMT + ES	PFMT + SNRI	5.47	14.9	2.31	0.2	29.5
PFMT + ES + BF	PFMT + SNRI	9.99	27.4	4.1	0.34	54.7
PFMT + VC	PFMT + SNRI	9.62	35.3	3.14	0.207	56.7
PFMT + VC + BF	PFMT + SNRI	1.95	11.7	0.404	0.0135	12.1
PFMT + BT + BF	PFMT + SNRI	45.9	245	11	0.478	279

Appendix 24

Cost-effectiveness: model structure

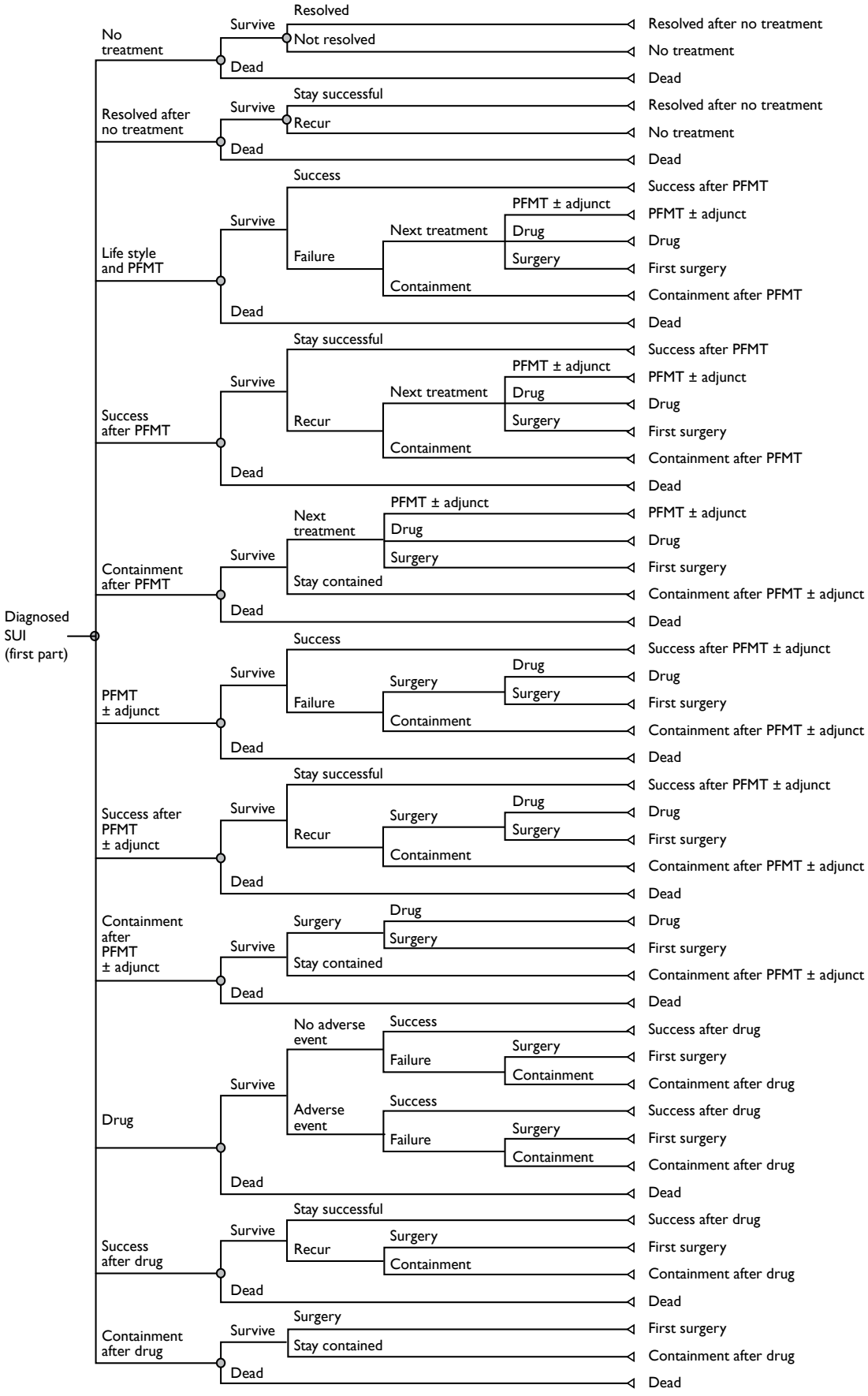


FIGURE 44 *Diagram of Markov model for non-surgical treatment.*

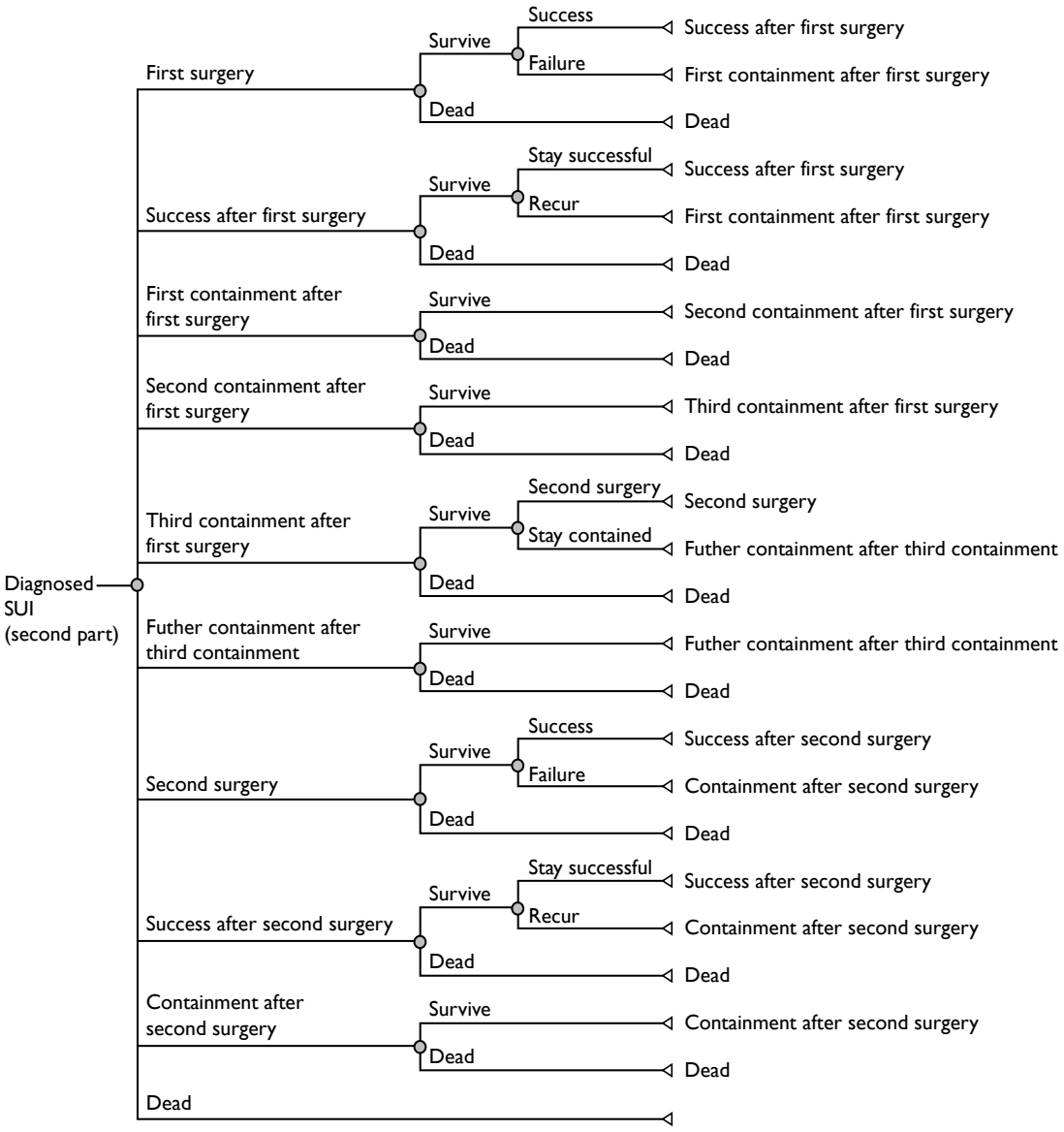


FIGURE 45 *Diagram of Markov model for surgical treatment following non-surgical treatment.*

Appendix 25

Cost-effectiveness: estimation of transition probabilities

TABLE 89 *Probability of recurrence for pelvic floor muscle training basic*

Cycle	Probability	Cycle	Probability
0	0	36	0.032883
1	0.014915	37	0.033392
2	0.015433	38	0.0339
3	0.015951	39	0.034408
4	0.016468	40	0.034916
5	0.016985	41	0.035423
6	0.017502	42	0.03593
7	0.018019	43	0.036437
8	0.018535	44	0.036944
9	0.019051	45	0.03745
10	0.019567	46	0.037956
11	0.020082	47	0.038462
12	0.020598	48	0.038968
13	0.021113	49	0.039473
14	0.021627	50	0.039978
15	0.022142	51	0.040483
16	0.022656	52	0.040987
17	0.02317	53	0.041492
18	0.023684	54	0.041996
19	0.024197	55	0.042499
20	0.02471	56	0.043003
21	0.025223	57	0.043506
22	0.025735	58	0.044009
23	0.026248	59	0.044512
24	0.02676	60	0.045014
25	0.027271	61	0.045516
26	0.027783	62	0.046018
27	0.028294	63	0.04652
28	0.028805	64	0.047021
29	0.029316	65	0.047522
30	0.029826	66	0.048023
31	0.030336	67	0.048524
32	0.030846	68	0.049024
33	0.031356	69	0.049524
34	0.031865	70	0.050024
35	0.032374		

continued

TABLE 89 *Probability of recurrence for pelvic floor muscle training basic (continued)*

Cycle	Probability	Cycle	Probability
71	0.050523	116	0.072732
72	0.051023	117	0.073219
73	0.051522	118	0.073707
74	0.05202	119	0.074194
75	0.052519	120	0.074681
76	0.053017	121	0.075167
77	0.053515	122	0.075653
78	0.054013	123	0.076139
79	0.05451	124	0.076625
80	0.055007	125	0.077111
81	0.055504	126	0.077596
82	0.056001	127	0.078081
83	0.056497	128	0.078566
84	0.056993	129	0.07905
85	0.057489	130	0.079535
86	0.057985	131	0.080019
87	0.05848	132	0.080502
88	0.058975	133	0.080986
89	0.05947	134	0.081469
90	0.059964	135	0.081952
91	0.060459	136	0.082435
92	0.060953	137	0.082917
93	0.061446	138	0.083399
94	0.06194	139	0.083881
95	0.062433	140	0.084363
96	0.062926	141	0.084845
97	0.063419	142	0.085326
98	0.063911	143	0.085807
99	0.064404	144	0.086287
100	0.064896	145	0.086768
101	0.065387	146	0.087248
102	0.065879	147	0.087728
103	0.06637	148	0.088208
104	0.066861	149	0.088687
105	0.067351	150	0.089166
106	0.067842	151	0.089645
107	0.068332	152	0.090124
108	0.068822	153	0.090602
109	0.069312	154	0.091081
110	0.069801	155	0.091558
111	0.07029	156	0.092036
112	0.070779	157	0.092514
113	0.071267	158	0.092991
114	0.071756	159	0.093468
115	0.072244	160	0.093944

TABLE 90 *Probability of recurrence for pelvic floor muscle training extra sessions*

Cycle	Probability	Cycle	Probability
0	0	44	0.023618
1	0.011617	45	0.023896
2	0.011898	46	0.024173
3	0.012179	47	0.02445
4	0.012459	48	0.024727
5	0.01274	49	0.025004
6	0.01302	50	0.025281
7	0.0133	51	0.025558
8	0.013581	52	0.025835
9	0.013861	53	0.026112
10	0.014141	54	0.026388
11	0.014421	55	0.026665
12	0.014701	56	0.026941
13	0.014981	57	0.027218
14	0.015261	58	0.027494
15	0.015541	59	0.02777
16	0.01582	60	0.028047
17	0.0161	61	0.028323
18	0.016379	62	0.028599
19	0.016659	63	0.028875
20	0.016938	64	0.02915
21	0.017217	65	0.029426
22	0.017496	66	0.029702
23	0.017776	67	0.029978
24	0.018055	68	0.030253
25	0.018333	69	0.030529
26	0.018612	70	0.030804
27	0.018891	71	0.031079
28	0.01917	72	0.031355
29	0.019448	73	0.03163
30	0.019727	74	0.031905
31	0.020005	75	0.03218
32	0.020284	76	0.032455
33	0.020562	77	0.03273
34	0.02084	78	0.033004
35	0.021119	79	0.033279
36	0.021397	80	0.033554
37	0.021675	81	0.033828
38	0.021952	82	0.034103
39	0.02223	83	0.034377
40	0.022508	84	0.034651
41	0.022786	85	0.034925
42	0.023063	86	0.0352
43	0.023341	87	0.035474

continued

TABLE 90 *Probability of recurrence for pelvic floor muscle training extra sessions (continued)*

Cycle	Probability	Cycle	Probability
88	0.035748	125	0.045831
89	0.036022	126	0.046102
90	0.036295	127	0.046373
91	0.036569	128	0.046644
92	0.036843	129	0.046914
93	0.037116	130	0.047185
94	0.03739	131	0.047456
95	0.037663	132	0.047726
96	0.037937	133	0.047997
97	0.03821	134	0.048267
98	0.038483	135	0.048538
99	0.038756	136	0.048808
100	0.039029	137	0.049078
101	0.039302	138	0.049348
102	0.039575	139	0.049618
103	0.039848	140	0.049888
104	0.040121	141	0.050158
105	0.040394	142	0.050428
106	0.040666	143	0.050698
107	0.040939	144	0.050967
108	0.041211	145	0.051237
109	0.041483	146	0.051507
110	0.041756	147	0.051776
111	0.042028	148	0.052045
112	0.0423	149	0.052315
113	0.042572	150	0.052584
114	0.042844	151	0.052853
115	0.043116	152	0.053122
116	0.043388	153	0.053391
117	0.04366	154	0.05366
118	0.043931	155	0.053929
119	0.044203	156	0.054197
120	0.044474	157	0.054466
121	0.044746	158	0.054735
122	0.045017	159	0.055003
123	0.045288	160	0.055272
124	0.04556		

TABLE 91 *Probability of recurrence for serotonin–noradrenaline reuptake inhibitor*

Cycle	Probability	Cycle	Probability
0	0	44	0.053443
1	0.823528	45	0.052689
2	0.386011	46	0.051962
3	0.292955	47	0.05126
4	0.242917	48	0.050581
5	0.210574	49	0.049926
6	0.187546	50	0.049292
7	0.170126	51	0.048678
8	0.156382	52	0.048083
9	0.145201	53	0.047507
10	0.135886	54	0.046948
11	0.12798	55	0.046406
12	0.121166	56	0.04588
13	0.11522	57	0.045368
14	0.109974	58	0.044871
15	0.105306	59	0.044388
16	0.101118	60	0.043918
17	0.097335	61	0.043461
18	0.093898	62	0.043015
19	0.090757	63	0.042581
20	0.087875	64	0.042158
21	0.085217	65	0.041746
22	0.082757	66	0.041344
23	0.080473	67	0.040952
24	0.078345	68	0.040569
25	0.076355	69	0.040195
26	0.074491	70	0.03983
27	0.07274	71	0.039474
28	0.071092	72	0.039125
29	0.069536	73	0.038784
30	0.068065	74	0.038451
31	0.066672	75	0.038125
32	0.06535	76	0.037806
33	0.064093	77	0.037494
34	0.062897	78	0.037188
35	0.061756	79	0.036889
36	0.060667	80	0.036596
37	0.059627	81	0.036308
38	0.058631	82	0.036027
39	0.057677	83	0.03575
40	0.056761	84	0.03548
41	0.055882	85	0.035214
42	0.055038	86	0.034954
43	0.054225		

continued

TABLE 91 *Probability of recurrence for serotonin–noradrenaline reuptake inhibitor (continued)*

Cycle	Probability	Cycle	Probability
87	0.034698	124	0.027701
88	0.034447	125	0.02756
89	0.034201	126	0.027421
90	0.033959	127	0.027283
91	0.033722	128	0.027148
92	0.033489	129	0.027013
93	0.033259	130	0.026881
94	0.033034	131	0.02675
95	0.032813	132	0.026621
96	0.032595	133	0.026494
97	0.032382	134	0.026368
98	0.032171	135	0.026243
99	0.031964	136	0.02612
100	0.031761	137	0.025999
101	0.031561	138	0.025879
102	0.031364	139	0.02576
103	0.03117	140	0.025643
104	0.030979	141	0.025527
105	0.030791	142	0.025412
106	0.030606	143	0.025299
107	0.030424	144	0.025187
108	0.030245	145	0.025076
109	0.030068	146	0.024967
110	0.029894	147	0.024859
111	0.029723	148	0.024752
112	0.029554	149	0.024646
113	0.029387	150	0.024541
114	0.029223	151	0.024437
115	0.029061	152	0.024335
116	0.028902	153	0.024234
117	0.028744	154	0.024133
118	0.028589	155	0.024034
119	0.028436	156	0.023936
120	0.028285	157	0.023839
121	0.028136	158	0.023742
122	0.027989	159	0.023647
123	0.027844	160	0.023553

TABLE 92 *Probability of recurrence for tension-free vaginal tape*

Cycle	Probability	Cycle	Probability
0	0	44	0.001726
1	0.129507	45	0.001696
2	0.023541	46	0.001668
3	0.015666	47	0.00164
4	0.012052	48	0.001613
5	0.00992	49	0.001588
6	0.008496	50	0.001563
7	0.007469	51	0.001539
8	0.006689	52	0.001516
9	0.006074	53	0.001493
10	0.005575	54	0.001472
11	0.005161	55	0.001451
12	0.004812	56	0.001431
13	0.004512	57	0.001411
14	0.004253	58	0.001392
15	0.004025	59	0.001374
16	0.003823	60	0.001356
17	0.003644	61	0.001339
18	0.003482	62	0.001322
19	0.003336	63	0.001306
20	0.003204	64	0.00129
21	0.003083	65	0.001274
22	0.002971	66	0.001259
23	0.002869	67	0.001245
24	0.002775	68	0.00123
25	0.002687	69	0.001217
26	0.002605	70	0.001203
27	0.002529	71	0.00119
28	0.002458	72	0.001177
29	0.002391	73	0.001164
30	0.002329	74	0.001152
31	0.00227	75	0.00114
32	0.002214	76	0.001129
33	0.002161	77	0.001117
34	0.002111	78	0.001106
35	0.002064	79	0.001095
36	0.002019	80	0.001085
37	0.001976	81	0.001074
38	0.001936	82	0.001064
39	0.001897	83	0.001054
40	0.00186	84	0.001044
41	0.001824	85	0.001035
42	0.00179	86	0.001025
43	0.001758		

continued

TABLE 92 *Probability of recurrence for tension-free vaginal tape (continued)*

Cycle	Probability	Cycle	Probability
87	0.001016	124	0.000772
88	0.001007	125	0.000768
89	0.000999	126	0.000763
90	0.00099	127	0.000758
91	0.000981	128	0.000754
92	0.000973	129	0.000749
93	0.000965	130	0.000745
94	0.000957	131	0.00074
95	0.000949	132	0.000736
96	0.000942	133	0.000732
97	0.000934	134	0.000727
98	0.000927	135	0.000723
99	0.000919	136	0.000719
100	0.000912	137	0.000715
101	0.000905	138	0.000711
102	0.000898	139	0.000707
103	0.000892	140	0.000703
104	0.000885	141	0.000699
105	0.000878	142	0.000695
106	0.000872	143	0.000692
107	0.000866	144	0.000688
108	0.00086	145	0.000684
109	0.000853	146	0.000681
110	0.000847	147	0.000677
111	0.000841	148	0.000673
112	0.000836	149	0.00067
113	0.00083	150	0.000667
114	0.000824	151	0.000663
115	0.000819	152	0.00066
116	0.000813	153	0.000656
117	0.000808	154	0.000653
118	0.000803	155	0.00065
119	0.000797	156	0.000647
120	0.000792	157	0.000643
121	0.000787	158	0.00064
122	0.000782	159	0.000637
123	0.000777	160	0.000634

TABLE 93 *All-cause female mortality from age 45 years*

Age	Cycle	Probability	Age	Cycle	Probability
45	0	0.0003865	56	44	0.00107025
45.25	1	0.000398813	56.25	45	0.001092875
45.5	2	0.000411125	56.5	46	0.0011155
45.75	3	0.000423438	56.75	47	0.001138125
46	4	0.00043575	57	48	0.00116075
46.25	5	0.00045075	57.25	49	0.001186188
46.5	6	0.00046575	57.5	50	0.001211625
46.75	7	0.00048075	57.75	51	0.001237063
47	8	0.00049575	58	52	0.0012625
47.25	9	0.00050875	58.25	53	0.001299313
47.5	10	0.00052175	58.5	54	0.001336125
47.75	11	0.00053475	58.75	55	0.001372938
48	12	0.00054775	59	56	0.00140975
48.25	13	0.0005555	59.25	57	0.001442313
48.5	14	0.00056325	59.5	58	0.001474875
48.75	15	0.000571	59.75	59	0.001507438
49	16	0.00057875	60	60	0.00154
49.25	17	0.000598938	60.25	61	0.001580438
49.5	18	0.000619125	60.5	62	0.001620875
49.75	19	0.000639313	60.75	63	0.001661313
50	20	0.0006595	61	64	0.00170175
50.25	21	0.000670125	61.25	65	0.0017415
50.5	22	0.00068075	61.5	66	0.00178125
50.75	23	0.000691375	61.75	67	0.001821
51	24	0.000702	62	68	0.00186075
51.25	25	0.000716313	62.25	69	0.001902813
51.5	26	0.000730625	62.5	70	0.001944875
51.75	27	0.000744938	62.75	71	0.001986938
52	28	0.00075925	63	72	0.002029
52.25	29	0.000775	63.25	73	0.00209375
52.5	30	0.00079075	63.5	74	0.0021585
52.75	31	0.0008065	63.75	75	0.00222325
53	32	0.00082225	64	76	0.002288
53.25	33	0.000838125	64.25	77	0.002343563
53.5	34	0.000854	64.5	78	0.002399125
53.75	35	0.000869875	64.75	79	0.002454688
54	36	0.00088575	65	80	0.00251025
54.25	37	0.000908	65.25	81	0.002577313
54.5	38	0.00093025	65.5	82	0.002644375
54.75	39	0.0009525	65.75	83	0.002711438
55	40	0.00097475	66	84	0.0027785
55.25	41	0.000998625	66.25	85	0.002844688
55.5	42	0.0010225	66.5	86	0.002910875
55.75	43	0.001046375			

continued

TABLE 93 *All-cause female mortality from age 45 years (continued)*

Age	Cycle	Probability	Age	Cycle	Probability
66.75	87	0.002977063	76	124	0.008308
67	88	0.00304325	76.25	125	0.008546375
67.25	89	0.003121813	76.5	126	0.00878475
67.5	90	0.003200375	76.75	127	0.009023125
67.75	91	0.003278938	77	128	0.0092615
68	92	0.0033575	77.25	129	0.009546063
68.25	93	0.003448938	77.5	130	0.009830625
68.5	94	0.003540375	77.75	131	0.010115188
68.75	95	0.003631813	78	132	0.01039975
69	96	0.00372325	78.25	133	0.010697563
69.25	97	0.003801063	78.5	134	0.010995375
69.5	98	0.003878875	78.75	135	0.011293188
69.75	99	0.003956688	79	136	0.011591
70	100	0.0040345	79.25	137	0.011940688
70.25	101	0.004159938	79.5	138	0.012290375
70.5	102	0.004285375	79.75	139	0.012640063
70.75	103	0.004410813	80	140	0.01298975
71	104	0.00453625	80.25	141	0.013396375
71.25	105	0.00469825	80.5	142	0.013803
71.5	106	0.00486025	80.75	143	0.014209625
71.75	107	0.00502225	81	144	0.01461625
72	108	0.00518425	81.25	145	0.015069063
72.25	109	0.0053295	81.5	146	0.015521875
72.5	110	0.00547475	81.75	147	0.015974688
72.75	111	0.00562	82	148	0.0164275
73	112	0.00576525	82.25	149	0.016904313
73.25	113	0.0059625	82.5	150	0.017381125
73.5	114	0.00615975	82.75	151	0.017857938
73.75	115	0.006357	83	152	0.01833475
74	116	0.00655425	83.25	153	0.01876875
74.25	117	0.006769438	83.5	154	0.01920275
74.5	118	0.006984625	83.75	155	0.01963675
74.75	119	0.007199813	84	156	0.02007075
75	120	0.007415	84.25	157	0.020737063
75.25	121	0.00763825	84.5	158	0.021403375
75.5	122	0.0078615	84.75	159	0.022069688
75.75	123	0.00808475	85	160	0.022736

TABLE 94 *EQ-5D score adjusted by age from 45 years*

Age	Cycle	Values	Age	Cycle	Values
45	0	0.85	56	44	0.8005
45.25	1	0.848875	56.25	45	0.799375
45.5	2	0.84775	56.5	46	0.79825
45.75	3	0.846625	56.75	47	0.797125
46	4	0.8455	57	48	0.796
46.25	5	0.844375	57.25	49	0.794875
46.5	6	0.84325	57.5	50	0.79375
46.75	7	0.842125	57.75	51	0.792625
47	8	0.841	58	52	0.7915
47.25	9	0.839875	58.25	53	0.790375
47.5	10	0.83875	58.5	54	0.78925
47.75	11	0.837625	58.75	55	0.788125
48	12	0.8365	59	56	0.787
48.25	13	0.835375	59.25	57	0.785875
48.5	14	0.83425	59.5	58	0.78475
48.75	15	0.833125	59.75	59	0.783625
49	16	0.832	60	60	0.7825
49.25	17	0.830875	60.25	61	0.781375
49.5	18	0.82975	60.5	62	0.78025
49.75	19	0.828625	60.75	63	0.779125
50	20	0.8275	61	64	0.778
50.25	21	0.826375	61.25	65	0.776875
50.5	22	0.82525	61.5	66	0.77575
50.75	23	0.824125	61.75	67	0.774625
51	24	0.823	62	68	0.7735
51.25	25	0.821875	62.25	69	0.772375
51.5	26	0.82075	62.5	70	0.77125
51.75	27	0.819625	62.75	71	0.770125
52	28	0.8185	63	72	0.769
52.25	29	0.817375	63.25	73	0.767875
52.5	30	0.81625	63.5	74	0.76675
52.75	31	0.815125	63.75	75	0.765625
53	32	0.814	64	76	0.7645
53.25	33	0.812875	64.25	77	0.763375
53.5	34	0.81175	64.5	78	0.76225
53.75	35	0.810625	64.75	79	0.761125
54	36	0.8095	65	80	0.76
54.25	37	0.808375	65.25	81	0.758875
54.5	38	0.80725	65.5	82	0.75775
54.75	39	0.806125	65.75	83	0.756625
55	40	0.805	66	84	0.7555
55.25	41	0.803875	66.25	85	0.754375
55.5	42	0.80275	66.5	86	0.75325
55.75	43	0.801625			

continued

TABLE 94 *EQ-5D score adjusted by age from 45 years (continued)*

Age	Cycle	Values	Age	Cycle	Values
66.75	87	0.752125	76	124	0.7105
67	88	0.751	76.25	125	0.709375
67.25	89	0.749875	76.5	126	0.70825
67.5	90	0.74875	76.75	127	0.707125
67.75	91	0.747625	77	128	0.706
68	92	0.7465	77.25	129	0.704875
68.25	93	0.745375	77.5	130	0.70375
68.5	94	0.74425	77.75	131	0.702625
68.75	95	0.743125	78	132	0.7015
69	96	0.742	78.25	133	0.700375
69.25	97	0.740875	78.5	134	0.69925
69.5	98	0.73975	78.75	135	0.698125
69.75	99	0.738625	79	136	0.697
70	100	0.7375	79.25	137	0.695875
70.25	101	0.736375	79.5	138	0.69475
70.5	102	0.73525	79.75	139	0.693625
70.75	103	0.734125	80	140	0.6925
71	104	0.733	80.25	141	0.691375
71.25	105	0.731875	80.5	142	0.69025
71.5	106	0.73075	80.75	143	0.689125
71.75	107	0.729625	81	144	0.688
72	108	0.7285	81.25	145	0.686875
72.25	109	0.727375	81.5	146	0.68575
72.5	110	0.72625	81.75	147	0.684625
72.75	111	0.725125	82	148	0.6835
73	112	0.724	82.25	149	0.682375
73.25	113	0.722875	82.5	150	0.68125
73.5	114	0.72175	82.75	151	0.680125
73.75	115	0.720625	83	152	0.679
74	116	0.7195	83.25	153	0.677875
74.25	117	0.718375	83.5	154	0.67675
74.5	118	0.71725	83.75	155	0.675625
74.75	119	0.716125	84	156	0.6745
75	120	0.715	84.25	157	0.673375
75.25	121	0.713875	84.5	158	0.67225
75.5	122	0.71275	84.75	159	0.671125
75.75	123	0.711625	85	160	0.67

Appendix 26

Cost-effectiveness: sensitivity analyses based on cure rates

TABLE 95 *Sensitivity analysis associated with success rates or mortality rates of tension-free vaginal tape*

	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
Strategy	**Cost (£)**	**Incremental cost (£)**	**QALYs**	**Incremental QALYs**	**Incremental cost per QALY (£)**	**10,000**	**20,000**	**30,000**	**40,000**	**50,000**
Base case (base case mortality rate of TVT is 0.0005, success rate of TVT is based on Ward study[213,215,216])										
LS–PFMT extra sessions–TVT	1644		16.20			74	72	71	71	71
LS–PFMT extra sessions–SNRI–TVT	1727	82	16.06	–0.13	Dominated	7	7	7	7	7
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	16.02	–0.17	Dominated	2	2	2	2	2
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	15.89	–0.30	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	16.03	–0.17	Dominated	2	2	2	2	2
LS–TVT	1973	328	16.08	–0.12	Dominated	15	18	18	19	19
Success rate of TVT is increased by 5%										
LS–PFMT extra sessions–TVT	1559		16.25			73	70	70	70	69
LS–PFMT extra sessions–SNRI–TVT	1644	85	16.11	–0.14	Dominated	4	5	5	5	5
LS–PFMT basic–PFMT extra sessions–TVT	1676	117	16.07	–0.17	Dominated	1	1	1	1	1
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1763	203	15.94	–0.31	Dominated	1	1	1	1	1
LS–PFMT basic–TVT	1774	215	16.10	–0.15	Dominated	0	0	0	0	0
LS–TVT	1855	296	16.16	–0.09	Dominated	20	23	23	24	24
Mortality rate of TVT is 0										
LS–PFMT extra sessions–TVT	1645		16.20			76	74	73	73	73
LS–PFMT extra sessions–SNRI–TVT	1727	82	16.07	–0.13	Dominated	6	6	5	5	5
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	16.03	–0.17	Dominated	2	2	2	2	2
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	15.90	–0.30	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1887	242	16.04	–0.17	Dominated	2	2	2	2	2
LS–TVT	1973	329	16.09	–0.11	Dominated	15	18	18	18	19

LS, lifestyle advice; PFMT, pelvic floor muscle training; SNRI, serotonin–noradrenaline reuptake inhibitors; TVT, tension-free vaginal tape.

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TABLE 96 *Sensitivity analysis associated with starting age*

	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
Strategy	**Cost (£)**	**Incremental cost (£)**	**QALYs**	**Incremental QALYs**	**Incremental cost per QALY (£)**	**10,000**	**20,000**	**30,000**	**40,000**	**50,000**
Base case (starting age = 45years)										
LS–PFMT extra sessions–TVT	1644		16.20			74	72	71	71	71
LS–PFMT extra sessions–SNRI–TVT	1727	82	16.06	–0.13	Dominated	7	7	7	7	7
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	16.02	–0.17	Dominated	2	2	2	2	2
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	15.89	–0.30	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	16.03	–0.17	Dominated	2	2	2	2	2
LS–TVT	1973	328	16.08	–0.12	Dominated	15	18	18	19	19
Starting age = 50 years										
LS–PFMT extra sessions–TVT	1618		15.27			69	67	67	66	66
LS–PFMT extra sessions–SNRI–TVT	1698	81	15.13	–0.14	Dominated	8	8	8	8	8
LS–PFMT basic–PFMT extra sessions–TVT	1730	112	15.09	–0.18	Dominated	2	2	2	2	2
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1812	195	14.96	–0.32	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1864	247	15.10	–0.17	Dominated	2	2	2	2	2
LS–TVT	1946	329	15.16	–0.11	Dominated	19	21	21	21	22
Starting age = 60 years										
LS–PFMT extra sessions–TVT	1530		12.58			68	65	64	64	64
LS–PFMT extra sessions–SNRI–TVT	1606	75	12.45	–0.13	Dominated	8	8	8	8	8
LS–PFMT basic–PFMT extra sessions–TVT	1639	109	12.40	–0.18	Dominated	3	3	3	3	3
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1715	185	12.27	–0.31	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1800	270	12.41	–0.17	Dominated	3	3	3	3	3
LS–TVT	1872	342	12.48	–0.10	Dominated	19	22	22	22	23

TABLE 97 *Sensitivity analysis associated with time horizon*

	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
Strategy	**Cost (£)**	**Incremental cost (£)**	**QALYs**	**Incremental QALYs**	**Incremental cost per QALY (£)**	**10,000**	**20,000**	**30,000**	**40,000**	**50,000**
Base case (time horizon = 40 years)										
LS–PFMT extra sessions–TVT	1644		16.20			74	72	71	71	71
LS–PFMT extra sessions–SNRI–TVT	1727	82	16.06	–0.13	Dominated	7	7	7	7	7
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	16.02	–0.17	Dominated	2	2	2	2	2
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	15.89	–0.30	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	16.03	–0.17	Dominated	2	2	2	2	2
LS–TVT	1973	328	16.08	–0.12	Dominated	15	18	18	19	19
Time horizon = 30 years										
LS–PFMT extra sessions–TVT	1614		14.67			78	77	75	75	75
LS–PFMT extra sessions–SNRI–TVT	1697	82	14.57	–0.11	Dominated	6	6	6	6	6
LS–PFMT basic–PFMT extra sessions–TVT	1728	114	14.53	–0.14	Dominated	2	2	2	2	2
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1812	198	14.43	–0.25	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1854	240	14.52	–0.15	Dominated	1	1	1	1	1
LS–TVT	1931	317	14.56	–0.11	Dominated	12	14	15	15	16

Strategy	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
	Cost (£)	Incremental cost (£)	QALYs	Incremental QALYs	Incremental cost per QALY (£)	10,000	20,000	30,000	40,000	50,000
Time horizon = 20 years										
LS–PFMT extra sessions–TVT	1525		11.69			84	83	82	82	82
LS–PFMT extra sessions–SNRI–TVT	1603	78	11.62	–0.07	Dominated	6	6	6	6	6
LS–PFMT basic–PFMT extra sessions–TVT	1637	112	11.58	–0.11	Dominated	1	1	1	1	1
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1715	190	11.51	–0.18	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1791	266	11.56	–0.13	Dominated	1	1	1	1	1
LS–TVT	1853	328	11.59	–0.10	Dominated	9	9	10	10	10
Time horizon = 10 years										
LS–PFMT extra sessions–TVT	1290		6.97			88	87	87	86	87
LS–PFMT extra sessions–SNRI–TVT	1349	59	6.93	–0.04	Dominated	7	6	6	6	6
LS–PFMT basic–PFMT extra sessions–TVT	1391	101	6.90	–0.07	Dominated	1	1	1	1	1
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1449	159	6.86	–0.11	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1676	387	6.89	–0.09	Dominated	0	0	0	0	0
LS–TVT	1733	443	6.91	–0.06	Dominated	4	6	6	6	6

LS, lifestyle advice; PFMT, pelvic floor muscle training; SNRI, serotonin–noradrenaline reuptake inhibitors; TVT, tension-free vaginal tape.

TABLE 98 *Sensitivity analysis associated with quality of life*

Strategy	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
	Cost (£)	Incremental cost (£)	QALYs	Incremental QALYs	Incremental cost per QALY (£)	10,000	20,000	30,000	40,000	50,000
Base case (Manca[220] and Haywood[219] studies)										
LS–PFMT extra sessions–TVT	1644		16.20			74	72	71	71	71
LS–PFMT extra sessions–SNRI–TVT	1727	82	16.06	−0.13	Dominated	7	7	7	7	7
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	16.02	−0.17	Dominated	2	2	2	2	2
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	15.89	−0.30	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	16.03	−0.17	Dominated	2	2	2	2	2
LS–TVT	1973	328	16.08	−0.12	Dominated	15	18	18	19	19
Quality of life adjusted by age										
LS–PFMT extra sessions–TVT	1644		14.95			77	76	75	75	75
LS–PFMT extra sessions–SNRI–TVT	1727	82	14.82	−0.13	Dominated	5	5	5	5	5
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	14.78	−0.18	Dominated	1	1	1	1	1
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	14.65	−0.31	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	14.78	−0.17	Dominated	1	1	1	1	1
LS–TVT	1973	328	14.85	−0.11	Dominated	16	17	18	18	18
Quality of life from Chapter 4										
LS–PFMT extra sessions–TVT	1644		12.45			79	77	76	75	75
LS–PFMT extra sessions–SNRI–TVT	1727	82	12.35	−0.10	Dominated	5	6	6	6	6
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	12.32	−0.13	Dominated	2	2	2	2	2
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	12.22	−0.23	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	12.32	−0.13	Dominated	1	1	1	1	1
LS–TVT	1973	328	12.36	−0.09	Dominated	13	15	16	16	16

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Strategy	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
	Cost (£)	Incremental cost (£)	QALYs	Incremental QALYs	Incremental cost per QALY (£)	10,000	20,000	30,000	40,000	50,000
Base case (Manca[220] and Haywood[219] studies)										
LS–PFMT extra sessions–TVT	1644		16.20			74	72	71	71	71
LS–PFMT extra sessions–SNRI–TVT	1727	82	16.06	–0.13	Dominated	7	7	7	7	7
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	16.02	–0.17	Dominated	2	2	2	2	2
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	15.89	–0.30	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	16.03	–0.17	Dominated	2	2	2	2	2
LS–TVT	1973	328	16.08	–0.12	Dominated	15	18	18	19	19
Quality of life of success after treatment is increased by 5% in base case										
LS–PFMT extra sessions–TVT	1644		16.96			77	76	75	75	75
LS–PFMT extra sessions–SNRI–TVT	1727	82	16.81	–0.15	Dominated	7	7	7	7	7
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	16.77	–0.19	Dominated	3	2	2	2	2
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	16.63	–0.33	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	16.76	–0.20	Dominated	1	1	1	1	1
LS–TVT	1973	328	16.80	–0.16	Dominated	13	14	14	14	14
Quality of life of success after treatment is increased by 10% in base case										
LS–PFMT extra sessions–TVT	1644		17.72			79	79	79	79	79
LS–PFMT extra sessions–SNRI–TVT	1727	82	17.56	–0.16	Dominated	6	6	6	6	6
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	17.52	–0.20	Dominated	2	2	2	2	2
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	17.36	–0.35	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	17.49	–0.23	Dominated	2	2	2	2	2
LS–TVT	1973	328	17.52	–0.20	Dominated	11	11	11	12	12

continued

TABLE 98 *Sensitivity analysis associated with quality of life (continued)*

Strategy	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
	Cost (£)	Incremental cost (£)	QALYs	Incremental QALYs	Incremental cost per QALY (£)	10,000	20,000	30,000	40,000	50,000
Base case (Manca[220] and Haywood[219] studies)										
LS–PFMT extra sessions–TVT	1644		16.20			74	72	71	71	71
LS–PFMT extra sessions–SNRI–TVT	1727	82	16.06	–0.13	Dominated	7	7	7	7	7
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	16.02	–0.17	Dominated	2	2	2	2	2
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	15.89	–0.30	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	16.03	–0.17	Dominated	2	2	2	2	2
LS–TVT	1973	328	16.08	–0.12	Dominated	15	18	18	19	19
Quality of life of success after treatment is increased by 15% in base case										
LS–PFMT extra sessions–TVT	1644		18.48			78	78	77	77	77
LS–PFMT extra sessions–SNRI–TVT	1727	82	18.31	–0.17	Dominated	9	9	9	9	9
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	18.26	–0.21	Dominated	3	3	3	3	3
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	18.10	–0.38	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	18.22	–0.26	Dominated	1	1	1	1	1
LS–TVT	1973	328	18.24	–0.24	Dominated	9	10	10	10	10
Quality of life of failure after treatment is decreased by 5% in base case										
LS–PFMT extra sessions–TVT	1644		16.16			79	78	78	78	78
LS–PFMT extra sessions–SNRI–TVT	1727	82	16.02	–0.14	Dominated	6	6	6	6	6
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	15.98	–0.18	Dominated	3	3	3	3	3
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	15.84	–0.31	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	15.97	–0.19	Dominated	1	1	1	1	1
LS–TVT	1973	328	16.01	–0.15	Dominated	11	12	13	13	13

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Strategy	Deterministic result: Cost (£)	Incremental cost (£)	QALYs	Incremental QALYs	Incremental cost per QALY (£)	Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%): 10,000	20,000	30,000	40,000	50,000
Base case (Manca[220] and Haywood[219] studies)										
LS–PFMT extra sessions–TVT	1644		16.20			74	72	71	71	71
LS–PFMT extra sessions–SNRI–TVT	1727	82	16.06	–0.13	Dominated	7	7	7	7	7
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	16.02	–0.17	Dominated	2	2	2	2	2
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	15.89	–0.30	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	16.03	–0.17	Dominated	2	2	2	2	2
LS–TVT	1973	328	16.08	–0.12	Dominated	15	18	18	19	19
Quality of life of failure after treatment is decreased by 10% in base case										
LS–PFMT extra sessions–TVT	1644		16.12			78	77	77	77	77
LS–PFMT extra sessions–SNRI–TVT	1727	82	15.97	–0.14	Dominated	9	9	9	9	9
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	15.93	–0.18	Dominated	2	3	3	3	3
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	15.79	–0.32	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	15.90	–0.21	Dominated	1	1	1	1	1
LS–TVT	1973	328	15.93	–0.19	Dominated	9	10	11	11	11
Quality of life of failure after treatment is decreased by 15% in base case										
LS–PFMT extra sessions–TVT	1644		16.08			80	79	79	79	79
LS–PFMT extra sessions–SNRI–TVT	1727	82	15.93	–0.15	Dominated	9	9	9	9	9
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	15.89	–0.19	Dominated	3	3	3	3	3
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	15.74	–0.33	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	15.84	–0.23	Dominated	1	1	2	2	2
LS–TVT	1973	328	15.85	–0.22	Dominated	7	8	8	8	8

continued

TABLE 98 *Sensitivity analysis associated with quality of life (continued)*

Strategy	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
	Cost (£)	Incremental cost (£)	QALYs	Incremental QALYs	Incremental cost per QALY (£)	10,000	20,000	30,000	40,000	50,000
Quality of life of success after treatment is increased by 5% and quality of life of failure after treatment is decreased by 5% in base case										
LS–PFMT extra sessions–TVT	1644		16.92			79	79	78	78	78
LS–PFMT extra sessions–SNRI–TVT	1727	82	16.77	–0.15	Dominated	7	7	7	6	6
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	16.73	–0.19	Dominated	3	3	3	3	3
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	16.58	–0.34	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	16.70	–0.22	Dominated	1	1	1	1	1
LS–TVT	1973	328	16.72	–0.19	Dominated	10	11	11	11	11
Quality of life of success after treatment is increased by 10% and quality of life of failure after treatment is decreased by 10% in base case										
LS–PFMT extra sessions–TVT	1644		17.64			80	79	79	79	79
LS–PFMT extra sessions–SNRI–TVT	1727	82	17.47	–0.17	Dominated	8	8	8	8	8
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	17.43	–0.21	Dominated	4	4	4	4	4
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	17.26	–0.38	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	17.37	–0.27	Dominated	1	2	2	2	2
LS–TVT	1973	328	17.37	–0.27	Dominated	7	7	8	8	8
Quality of life of success after treatment is increased by 15% and quality of life of failure after treatment is decreased by 15% in base case										
LS–PFMT extra sessions–TVT	1644		18.36			80	80	80	80	80
LS–PFMT extra sessions–SNRI–TVT	1727	82	18.18	–0.18	Dominated	10	10	10	10	10
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	18.13	–0.23	Dominated	4	4	4	4	4
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	17.95	–0.41	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	18.03	–0.32	Dominated	1	1	1	1	1
LS–TVT	1973	328	18.01	–0.35	Dominated	5	5	5	5	5

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TABLE 99 *Sensitivity analysis associated with changes to discount rates*

Strategy	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
	Cost (£)	Incremental cost (£)	QALYs	Incremental QALYs	Incremental cost per QALY (£)	10,000	20,000	30,000	40,000	50,000
Base case (discount rates of cost and benefits was 3.5%)										
LS–PFMT extra sessions–TVT	1644		16.20			74	72	71	71	71
LS–PFMT extra sessions–SNRI–TVT	1727	82	16.06	–0.13	Dominated	7	7	7	7	7
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	16.02	–0.17	Dominated	2	2	2	2	2
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	15.89	–0.30	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	16.03	–0.17	Dominated	2	2	2	2	2
LS–TVT	1973	328	16.08	–0.12	Dominated	15	18	18	19	19
Discount rates of cost and benefits was 1%										
LS–PFMT extra sessions–TVT	1934		23.87			55	54	54	54	54
LS–PFMT extra sessions–SNRI–TVT	2044	109	23.75	–0.12	Dominated	12	13	12	12	12
LS–PFMT basic–PFMT extra sessions–TVT	2067	133	23.73	–0.14	Dominated	9	9	9	9	9
LS–PFMT basic–TVT	2100	165	23.70	–0.16	Dominated	7	7	7	7	7
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	2181	247	23.61	–0.26	Dominated	0	0	0	0	0
LS–TVT	2204	270	23.71	–0.16	Dominated	17	18	18	18	18
Discount rates of cost and benefits was 6%										
LS–PFMT extra sessions–TVT	1459		11.80			85	84	83	82	82
LS–PFMT extra sessions–SNRI–TVT	1522	63	11.67	–0.13	Dominated	3	3	3	3	3
LS–PFMT basic–PFMT extra sessions–TVT	1557	98	11.62	–0.18	Dominated	0	0	0	0	0
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1620	161	11.49	–0.31	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1751	292	11.63	–0.17	Dominated	0	0	0	0	0
LS–TVT	1833	375	11.70	–0.09	Dominated	12	13	13	14	15

TABLE 100 *Sensitivity analysis associated with changes to the probability of use of containment products after failure or recurrence for non-surgical treatment*

	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
Strategy	**Cost (£)**	**Incremental cost (£)**	**QALYs**	**Incremental QALYs**	**Incremental cost per QALY (£)**	**10,000**	**20,000**	**30,000**	**40,000**	**50,000**
Base case (the probabilities of containment after failure or recurrence for non–surgical treatments are 0%)										
LS–PFMT extra sessions–TVT	1644		16.20			74	72	71	71	71
LS–PFMT extra sessions–SNRI–TVT	1727	82	16.06	–0.13	Dominated	7	7	7	7	7
LS–PFMT basic–PFMT extra sessions–TVT	1758	113	16.02	–0.17	Dominated	2	2	2	2	2
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1842	197	15.89	–0.30	Dominated	0	0	0	0	0
LS–PFMT basic–TVT	1886	242	16.03	–0.17	Dominated	2	2	2	2	2
LS–TVT	1973	328	16.08	–0.12	Dominated	15	18	18	19	19
The probabilities of containment after failure or recurrence for non-surgical treatments are 30%										
LS–PFMT extra sessions–TVT	1917		15.85			59	58	57	57	57
LS–PFMT extra sessions–SNRI–TVT	1992	75	15.72	–0.13	Dominated	12	12	12	12	12
LS–PFMT basic–PFMT extra sessions–TVT	2018	101	15.69	–0.16	Dominated	14	14	14	14	15
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	2094	177	15.57	–0.28	Dominated	1	1	1	1	1
LS–TVT	2249	332	15.67	–0.18	Dominated	10	11	11	11	11
LS–PFMT basic–TVT	2263	346	15.57	–0.28	Dominated	4	5	5	5	5
The probabilities of containment after failure or recurrence for non-surgical treatments are 60%										
LS–PFMT extra sessions–TVT	2190		15.50			52	51	51	51	51
LS–PFMT extra sessions–SNRI–TVT	2259	68	15.39	–0.12	Dominated	20	20	19	19	19
LS–PFMT basic–PFMT extra sessions–TVT	2279	89	15.36	–0.14	Dominated	16	16	17	17	17
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	2346	156	15.25	–0.26	Dominated	2	2	2	2	2
LS–TVT	2525	335	15.27	–0.24	Dominated	8	9	9	9	9
LS–PFMT basic–TVT	2639	449	15.12	–0.39	Dominated	2	2	3	3	3

Appendix 27

Cost-effectiveness: sensitivity analyses based on improvement rates

TABLE 101 *Sensitivity analysis associated with success rates or mortality rates of TVT*

Strategy	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
	Cost (£)	Incremental cost	QALYs	Incremental QALYs	Incremental cost per QALY	10,000	20,000	30,000	40,000	50,000
Base case (base case mortality rate of TVT is 0)										
LS–PFMT basic–PFMT extra sessions–TVT	1795		16.31			8	7	7	7	7
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	16.24	–0.07	Dominated	7	7	6	6	6
LS–PFMT basic–TVT	1873	78	16.34	0.04	Extendedly dominated	10	7	6	6	5
LS–PFMT extra sessions–TVT	1938	143	16.37	0.07	2147	64	68	69	69	69
LS–PFMT extra sessions–SNRI–TVT	1965	27	16.27	–0.10	Dominated	10	10	10	10	10
LS–TVT	2425	487	16.20	–0.17	Dominated	1	2	2	2	3
Success rate of TVT is increased by 5%										
LS–PFMT basic–PFMT extra sessions–TVT	1756		16.33			5	4	3	3	3
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1769	13	16.26	–0.07	Dominated	4	4	3	3	3
LS–PFMT basic–TVT	1815	58	16.38	0.05	1128	11	6	5	5	5
LS–PFMT extra sessions–TVT	1886	71	16.41	0.03	2706	68	73	73	73	73
LS–PFMT extra sessions–SNRI–TVT	1917	32	16.30	–0.11	Dominated	11	12	12	12	12
LS–TVT	2335	449	16.27	–0.14	Dominated	1	2	3	4	4
Mortality rate of TVT is 0										
LS–PFMT basic–PFMT extra sessions–TVT	1795		16.31			8	7	7	6	6
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	16.24	–0.07	Dominated	6	5	5	5	4
LS–PFMT basic–TVT	1873	79	16.35	0.04	2059	11	7	7	7	7
LS–PFMT extra sessions–TVT	1938	65	16.38	0.03	2138	66	71	72	72	72
LS–PFMT extra sessions–SNRI–TVT	1966	27	16.28	–0.10	Dominated	9	9	9	9	9
LS–TVT	2426	487	16.21	–0.17	Dominated	1	1	1	2	2

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TABLE 102 *Sensitivity analysis associated with starting age*

Strategy	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
	Cost (£)	Incremental cost	QALYs	Incremental QALYs	Incremental cost per QALY	10,000	20,000	30,000	40,000	50,000
Base case (starting age = 45 years)										
LS–PFMT basic–PFMT extra sessions–TVT	1795		16.31			8	7	7	7	7
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	16.24	–0.07	Dominated	7	7	6	6	6
LS–PFMT basic–TVT	1873	78	16.34	0.04	Extendedly dominated	10	7	6	6	5
LS–PFMT extra sessions–TVT	1938	143	16.37	0.07	2147	64	68	69	69	69
LS–PFMT extra sessions–SNRI–TVT	1965	27	16.27	–0.10	Dominated	10	10	10	10	10
LS–TVT	2425	487	16.20	–0.17	Dominated	1	2	2	2	3
Starting age = 50 years										
LS–PFMT basic–PFMT extra sessions–TVT	1720		15.38			8	7	6	6	6
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1724	4	15.31	–0.07	Dominated	7	6	6	6	6
LS–PFMT basic–TVT	1814	94	15.41	0.04	Extendedly dominated	13	9	9	8	8
LS–PFMT extra sessions–TVT	1875	156	15.45	0.07	2249	59	62	63	63	64
LS–PFMT extra sessions–SNRI–TVT	1899	23	15.34	–0.11	Dominated	13	13	13	13	13
LS–TVT	2370	494	15.28	–0.17	Dominated	2	2	3	3	3
Starting age = 60 years										
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1472		12.63			11	10	9	9	9
LS–PFMT basic–PFMT extra sessions–TVT	1479	7	12.68	0.06	126	10	8	7	7	7
LS–PFMT basic–TVT	1628	149	12.71	0.03	Extendedly dominated	9	8	7	7	7
LS–PFMT extra sessions–TVT	1677	197	12.74	0.06	3344	51	53	53	54	53
LS–PFMT extra sessions–SNRI–TVT	1689	12	12.65	–0.09	Dominated	18	19	19	19	19
LS–TVT	2209	533	12.58	–0.16	Dominated	2	3	4	4	5

TABLE 103 *Sensitivity analysis associated with time horizon*

Strategy	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
	Cost (£)	Incremental cost	QALYs	Incremental QALYs	Incremental cost per QALY	10,000	20,000	30,000	40,000	50,000
Base case (time horizon = 40 years)										
LS–PFMT basic–PFMT extra sessions–TVT	1795		16.31			8	7	7	7	7
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	16.24	–0.07	Dominated	7	7	6	6	6
LS–PFMT basic–TVT	1873	78	16.34	0.04	Extendedly dominated	10	7	6	6	5
LS–PFMT extra sessions–TVT	1938	143	16.37	0.07	2147	64	68	69	69	69
LS–PFMT extra sessions–SNRI–TVT	1965	27	16.27	–0.10	Dominated	10	10	10	10	10
LS–TVT	2425	487	16.20	–0.17	Dominated	1	2	2	2	3
Time horizon = 30 years										
LS–PFMT basic–PFMT extra sessions–TVT	1700		14.78			10	8	6	6	6
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1701	1	14.73	–0.05	Dominated	7	5	5	5	5
LS–PFMT basic–TVT	1794	94	14.80	0.02	Extendedly dominated	8	5	5	4	4
LS–PFMT extra sessions–TVT	1853	153	14.82	0.04	3471	65	72	73	73	73
LS–PFMT extra sessions–SNRI–TVT	1877	24	14.75	–0.08	Dominated	9	10	10	10	10
LS–TVT	2335	482	14.66	–0.16	Dominated	0	1	1	1	1

Strategy	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
	Cost (£)	Incremental cost	QALYs	Incremental QALYs	Incremental cost per QALY	10,000	20,000	30,000	40,000	50,000
Time horizon = 20 years										
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1403		11.76			8	5	4	4	4
LS–PFMT basic–PFMT extra sessions–TVT	1419	16	11.78	0.02	731	27	14	11	10	10
LS–PFMT basic–TVT	1613	195	11.78	<0.01	Extendedly dominated	3	1	1	1	1
LS–PFMT extra sessions–TVT	1641	222	11.81	0.02	10,058	54	69	73	74	75
LS–PFMT extra sessions–SNRI–TVT	1650	9	11.76	–0.05	Dominated	9	10	10	10	10
LS–TVT	2161	520	11.67	–0.13	Dominated	0	0	0	0	0
Time horizon = 10 years										
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	818		7.03			21	10	7	5	5
LS–PFMT basic–PFMT extra sessions–TVT	833	15	7.03	<0.01	3722	68	62	49	39	33
LS–PFMT basic–TVT	1139	306	7.03	0	Dominated	0	0	0	0	0
LS–PFMT extra sessions–SNRI–TVT	1145	312	7.02	–0.01	Dominated	1	4	5	5	5
LS–PFMT extra sessions–TVT	1159	326	7.04	0.01	62,613	10	24	40	51	58
LS–TVT	1883	724	6.96	–0.08	Dominated	0	0	0	0	0

TABLE 104 *Sensitivity analysis associated with quality of life*

Strategy	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
	Cost (£)	Incremental cost (£)	QALYs	Incremental QALYs	Incremental cost per QALY (£)	10,000	20,000	30,000	40,000	50,000
Base case (Manca[220] and Haywood[219] studies)										
LS–PFMT basic–PFMT extra sessions–TVT	1795		16.31			8	7	7	7	7
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	16.24	–0.07	Dominated	7	7	6	6	6
LS–PFMT basic–TVT	1873	78	16.34	0.04	Extendedly dominated	10	7	6	6	5
LS–PFMT extra sessions–TVT	1938	143	16.37	0.07	2147	64	68	69	69	69
LS–PFMT extra sessions–SNRI–TVT	1965	27	16.27	–0.10	Dominated	10	10	10	10	10
LS–TVT	2425	487	16.20	–0.17	Dominated	1	2	2	2	3
Quality of life adjusted by age										
LS–PFMT basic–PFMT extra sessions–TVT	1795		15.06			13	9	9	8	8
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	15.00	–0.07	Dominated	13	12	12	11	11
LS–PFMT basic–TVT	1873	78	15.10	0.03	Extendedly dominated	7	7	7	7	7
LS–PFMT extra sessions–TVT	1938	143	15.13	0.06	2207	58	61	62	62	62
LS–PFMT extra sessions–SNRI–TVT	1965	27	15.03	–0.10	Dominated	10	10	11	11	11
LS–TVT	2425	487	14.96	–0.17	Dominated	0	1	1	1	1
Quality of life weighed by obtained in Chapter 4										
LS–PFMT basic–PFMT extra sessions–TVT	1795		12.53			8	6	6	6	6
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	12.48	–0.05	Dominated	5	4	4	4	4
LS–PFMT basic–TVT	1873	78	12.56	0.03	Extendedly dominated	10	7	7	6	6
LS–PFMT extra sessions–TVT	1938	143	12.59	0.05	2793	68	72	73	73	73
LS–PFMT extra sessions–SNRI–TVT	1965	27	12.51	–0.08	Dominated	9	10	10	10	10
LS–TVT	2425	487	12.45	–0.13	Dominated	0	1	1	1	1

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Strategy	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
	Cost (£)	Incremental cost (£)	QALYs	Incremental QALYs	Incremental cost per QALY (£)	10,000	20,000	30,000	40,000	50,000
Base case (Manca[220] and Haywood[219] studies)										
LS–PFMT basic–PFMT extra sessions–TVT	1795		16.31			8	7	7	7	7
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	16.24	–0.07	Dominated	7	7	6	6	6
LS–PFMT basic–TVT	1873	78	16.34	0.04	Extendedly dominated	10	7	6	6	5
LS–PFMT extra sessions–TVT	1938	143	16.37	0.07	2147	64	68	69	69	69
LS–PFMT extra sessions–SNRI–TVT	1965	27	16.27	–0.10	Dominated	10	10	10	10	10
LS–TVT	2425	487	16.20	–0.17	Dominated	1	2	2	2	3
Quality of life of success after treatment is increased by 5% in base case										
LS–PFMT basic–PFMT extra sessions–TVT	1795		17.10			10	7	6	6	6
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	17.02	–0.08	Dominated	8	7	7	6	6
LS–PFMT basic–TVT	1873	78	17.13	0.04	Extendedly dominated	5	5	5	5	5
LS–PFMT extra sessions–TVT	1938	143	17.17	0.07	2013	65	69	70	71	71
LS–PFMT extra sessions–SNRI–TVT	1965	27	17.06	–0.11	Dominated	10	11	11	11	11
LS–TVT	2425	487	16.95	–0.22	Dominated	1	1	1	1	1
Quality of life of success after treatment is increased by 10% in base case										
LS–PFMT basic–PFMT extra sessions–TVT	1795		17.89			9	6	6	5	5
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	17.80	–0.08	Dominated	8	7	6	6	6
LS–PFMT basic–TVT	1873	78	17.92	0.04	Extendedly dominated	5	5	5	4	4
LS–PFMT extra sessions–TVT	1938	143	17.96	0.08	1895	67	71	72	72	72
LS–PFMT extra sessions–SNRI–TVT	1965	27	17.84	–0.12	Dominated	11	11	12	12	12
LS–TVT	2425	487	17.70	–0.26	Dominated	0	0	1	1	1

continued

TABLE 104 *Sensitivity analysis associated with quality of life (continued)*

Strategy	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
	Cost (£)	Incremental cost (£)	QALYs	Incremental QALYs	Incremental cost per QALY (£)	10,000	20,000	30,000	40,000	50,000
Base case (Manca[220] and Haywood[219] studies)										
LS–PFMT basic–PFMT extra sessions–TVT	1795		16.31			8	7	7	7	7
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	16.24	–0.07	Dominated	7	7	6	6	6
LS–PFMT basic–TVT	1873	78	16.34	0.04	Extendedly dominated	10	7	6	6	5
LS–PFMT extra sessions–TVT	1938	143	16.37	0.07	2147	64	68	69	69	69
LS–PFMT extra sessions–SNRI–TVT	1965	27	16.27	–0.10	Dominated	10	10	10	10	10
LS–TVT	2425	487	16.20	–0.17	Dominated	1	2	2	2	3
Quality of life of success after treatment is increased by 15% in base case										
LS–PFMT basic–PFMT extra sessions–TVT	1795		18.68			10	8	7		7
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	18.59	–0.09	Dominated	10	9	9		9
LS–PFMT basic–TVT	1873	78	18.71	0.04	Extendedly dominated	5	5	4		4
LS–PFMT extra sessions–TVT	1938	143	18.76	0.08	1789	65	69	69		70
LS–PFMT extra sessions–SNRI–TVT	1965	27	18.63	–0.13	Dominated	9	10	10		10
LS–TVT	2425	487	18.45	–0.30	Dominated	1	1	1		1
Quality of life of failure after treatment is decreased by 5% in base case										
LS–PFMT basic–PFMT extra sessions–TVT	1795		16.29			10	7	6	5	5
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	16.22	–0.07	Dominated	10	9	8	8	7
LS–PFMT basic–TVT	1873	78	16.33	0.03	Extendedly dominated	5	5	5	5	5
LS–PFMT extra sessions–TVT	1938	143	16.36	0.07	2112	60	64	65	66	66
LS–PFMT extra sessions–SNRI–TVT	1965	27	16.25	–0.11	Dominated	15	16	16	16	16
LS–TVT	2425	487	16.15	–0.21	Dominated	0	1	1	1	1

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Strategy	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
	Cost (£)	Incremental cost (£)	QALYs	Incremental QALYs	Incremental cost per QALY (£)	10,000	20,000	30,000	40,000	50,000
Base case (Manca[220] and Haywood[219] studies)										
LS–PFMT basic–PFMT extra sessions–TVT	1795		16.31			8	7	7	7	7
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	16.24	–0.07	Dominated	7	7	6	6	6
LS–PFMT basic–TVT	1873	78	16.34	0.04	Extendedly dominated	10	7	6	6	5
LS–PFMT extra sessions–TVT	1938	143	16.37	0.07	2147	64	68	69	69	69
LS–PFMT extra sessions–SNRI–TVT	1965	27	16.27	–0.10	Dominated	10	10	10	10	10
LS–TVT	2425	487	16.20	–0.17	Dominated	1	2	2	2	3
Quality of life of failure after treatment is decreased by 10% in base case										
LS–PFMT basic–PFMT extra sessions–TVT	1795		16.28			10	7	7	7	7
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	16.20	–0.08	Dominated	10	8	8	8	8
LS–PFMT basic–TVT	1873	78	16.31	0.03	Extendedly dominated	6	5	5	5	5
LS–PFMT extra sessions–TVT	1938	143	16.34	0.07	2078	65	69	69	69	70
LS–PFMT extra sessions–SNRI–TVT	1965	27	16.23	–0.11	Dominated	10	11	11	11	11
LS–TVT	2425	487	16.10	–0.24	Dominated	0	1	1	1	1
Quality of life of failure after treatment is decreased by 15% in base case										
LS–PFMT basic–PFMT extra sessions–TVT	1795		16.26			10	7	6	6	6
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	16.18	–0.08	Dominated	11	10	9	9	9
LS–PFMT basic–TVT	1873	78	16.29	0.03	Extendedly dominated	5	4	4	4	4
LS–PFMT extra sessions–TVT	1938	143	16.33	0.07	2045	65	69	70	70	70
LS–PFMT extra sessions–SNRI–TVT	1965	27	16.21	–0.12	Dominated	9	10	10	10	10
LS–TVT	2425	487	16.05	–0.28	Dominated	0	0	0	0	0

continued

TABLE 104 *Sensitivity analysis associated with quality of life (continued)*

Strategy	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
	Cost (£)	Incremental cost (£)	QALYs	Incremental QALYs	Incremental cost per QALY (£)	10,000	20,000	30,000	40,000	50,000
Quality of life of success after treatment is increased by 5% and quality of life of failure after treatment is decreased by 5% in base case										
LS–PFMT basic–PFMT extra sessions–TVT	1795		17.08			9	8	7	7	7
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	17.00	–0.08	Dominated	10	8	8	7	7
LS–PFMT basic–TVT	1873	78	17.12	0.04	Extendedly dominated	6	6	6	6	5
LS–PFMT extra sessions–TVT	1938	143	17.15	0.07	1982	66	69	70	70	71
LS–PFMT extra sessions–SNRI–TVT	1965	27	17.04	–0.12	Dominated	9	9	9	10	10
LS–TVT	2425	487	16.90	–0.25	Dominated	0	0	0	1	1
Quality of life of success after treatment is increased by 10% and quality of life of failure after treatment is decreased by 10% in base case										
LS–PFMT basic–PFMT extra sessions–TVT	1795		17.86			9	7	7	7	7
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	17.76	–0.09	Dominated	10	9	8	8	8
LS–PFMT basic–TVT	1873	78	17.89	0.03	Extendedly dominated	6	4	4	4	4
LS–PFMT extra sessions–TVT	1938	143	17.93	0.08	1841	66	70	70	70	70
LS–PFMT extra sessions–SNRI–TVT	1965	27	17.80	–0.13	Dominated	9	10	10	10	10
LS–TVT	2425	487	17.60	–0.33	Dominated	0	0	0	0	0
Quality of life of success after treatment is increased by 15% and quality of life of failure after treatment is decreased by 15% in base case										
LS–PFMT basic–PFMT extra sessions–TVT	1795		18.63		Dominated	7	6	6	6	6
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	18.53	–0.10	Extendedly dominated	12	10	10	10	10
LS–PFMT basic–TVT	1873	78	18.66	0.03	1718	4	4	4	4	4
LS–PFMT extra sessions–TVT	1938	143	18.71	0.08	Dominated	69	71	71	72	72
LS–PFMT extra sessions–SNRI–TVT	1965	27	18.57	–0.14	Dominated	8	8	8	9	9
LS–TVT	2425	487	18.30	–0.41		0	0	0	0	0

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TABLE 105 *Sensitivity analysis associated with discount rates*

Strategy	Deterministic result					Probability cost-effective for different threshold values for society's willingness to pay for a QALY (%)				
	Cost (£)	Incremental cost (£)	QALYs	Incremental QALYs	Incremental cost per QALY (£)	10,000	20,000	30,000	40,000	50,000
Base case (discount rates of cost and benefits was 3.5%)										
LS–PFMT basic–PFMT extra sessions–TVT	1795		16.31			8	7	7	7	7
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1803	8	16.24	–0.07	Dominated	7	7	6	6	6
LS–PFMT basic–TVT	1873	78	16.34	0.04	Extendedly dominated	10	7	6	6	5
LS–PFMT extra sessions–TVT	1938	143	16.37	0.07	2147	64	68	69	69	69
LS–PFMT extra sessions–SNRI–TVT	1965	27	16.27	–0.10	Dominated	10	10	10	10	10
LS–TVT	2425	487	16.20	–0.17	Dominated	1	2	2	2	3
Discount rates of cost and benefits was 1%										
LS–PFMT basic–TVT	2462		24.03			16	11	10	10	9
LS–PFMT basic–PFMT extra sessions–TVT	2512	50	24.00	–0.04	Dominated	9	8	8	8	8
LS–PFMT extra sessions–TVT	2548	85	24.06	0.03	2928	40	43	43	44	44
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	2551	3	23.91	–0.15	Dominated	10	10	10	10	10
LS–PFMT extra sessions–SNRI–TVT	2612	64	23.96	–0.10	Dominated	19	19	19	19	19
LS–TVT	2899	351	23.86	–0.20	Dominated	6	8	9	9	9
Discount rates of cost and benefits was 6%										
LS–PFMT basic–PFMT extra sessions–SNRI–TVT	1360		11.85			2	2	2	2	2
LS–PFMT basic–PFMT extra sessions–TVT	1364	4	11.91	0.05	80	7	5	4	3	3
LS–PFMT basic–TVT	1504	140	11.93	0.03	Extendedly dominated	8	5	4	4	4
LS–PFMT extra sessions–TVT	1565	200	11.96	0.06	3554	77	83	83	84	84
LS–PFMT extra sessions–SNRI–TVT	1571	7	11.87	–0.09	Dominated	6	6	6	6	6
LS–TVT	2146	581	11.80	–0.16	Dominated	0	0	0	0	0

Appendix 28

Additional trials identified by an update search (29 June 2009)

	Reference	Sample size	Intervention
1	Borello-France DF, Downey PA, Zyczynski H, Rause CR. Continence and quality-of-life outcomes 6 months following an intensive pelvic-floor muscle exercise programme for female stress urinary incontinence: a randomized trial comparing low- and high-frequency maintenance exercise. *Phys Ther* 2008;**88**(12):1545–53.	*N* = 36, SUI	Basic vs intensive PFMT
2	Castro RA, Arruda RM, Zanetti MR, Santos PD, Sartori MG, Girao MJ. Single-blind, randomized, controlled trial of pelvic floor muscle training, electrical stimulation, vaginal cones, and no active treatment in the management of stress urinary incontinence. *Clinics (São Paulo, Brazil)* 2008;**5**(4):465–72.	*N* = 118, USI	PFMT vs ES vs VC vs NT
3	Demirturk F, Akbayrak T, Karakaya IC, Yuksel I, Kirdi *N*, Demirturk F, *et al*. Interferential current versus biofeedback results in urinary stress incontinence. *Swiss Med Wkly* 2008;**138**(21–2):317–21.	*N* = 41, USI	PFMT + BF vs ES (interferential current)
4	Harvey MA, Johnston SL. A randomized, single-blind prospective trial comparing pelvic floor physiotherapy with biofeedback versus weighted vaginal cones in the treatment of female genuine stress urinary incontinence: a pilot study [abstract no. 318]. *Int Urogynecol J* 2006;**17**(Suppl. 2):235–36.	*N* = 44, SUI or USI	PFMT + BF vs VC
5	Wells T, Mayer R, Brink C, Brown R. Pelvic muscle exercise: a controlled clinical trial. 1999.	*N* = 286, baseline UI 173/242 (71%), MUI 48/242 (20%), UUI 21/242 (9%)	PFMT vs PFMT with resistive device vs attention control (no treatment with clinic visits) vs control (no treatment with no visits); unpublished manuscript
6	Wells TJ. 'Curiouser and curiouser …'. *J Wound Ostomy Continence Nurs* 2003;**30**(6):300–4.		Related to Wells (1999), above; inaugural lecture script, with one paragraph on the above trial
7	Erdinc A, Gurates B, Celik H, Polat A, Kumru S, Simsek M. The efficacy of venlafaxine in the treatment of women with stress urinary incontinence. *Arch Gynecol Obstet* 2009;**279**(3):343–8.	*N* = 40, SUI	Venlafaxine (5-HT and NA reuptake inhibitor) vs placebo
8	Klarskov *N*, Scholfield D, Soma K, Darekar A, Mills I, Lose G. Measurement of urethral closure function in women with stress urinary incontinence. *J Urol* 2009;**181**(6):2628–33; discussion 2633.	*N* = 17 (crossover), SUI or SUI-predominant MUI	Esreboxetine (highly SNRI) vs placebo

	Reference	Sample size	Intervention
9	Lin AT, Sun MJ, Tai HL, Chuang YC, Huang ST, Wang *N*, *et al*. Duloxetine versus placebo for the treatment of women with stress predominant urinary incontinence in Taiwan: a double-blind, randomized, placebo-controlled trial. *BMC Urol* 2008;**8**:2.	*N* = 121, predominant symptom of SUI	Duloxetine vs placebo
10	Schagen van Leeuwen JH, Lange RR, Jonasson AF, Chen WJ, Viktrup L. Efficacy and safety of duloxetine in elderly women with stress urinary incontinence or stress-predominant mixed urinary incontinence. *Maturitas* 2008;**60**(2):138–47.	*N* = 265, SUI or SUI-predominant MUI	Duloxetine vs placebo
11	Cardozo L, Drutz H, Baygani S, Bump R. Duloxetine response and onset of action in women with severe stress urinary incontinence (SUI) awaiting continence surgery [abstract number 210]. *Int Urogynecol J* 2003;**14**(Suppl. 1):63–4.	*N* = 109, USI (severe)	Duloxetine vs placebo; related to Cardozo 2004,[137] already included the review
12	Sherburn M, Bø K, Galea M. Investigation of 2D real-time ultrasound as a measurement tool in a randomised controlled trial of pelvic floor muscle training in older women [abstract no. 91]. *Neurourol Urodyn* 2008;**27**(7):676–8.	*N* = 76, older women	PFMT vs BT; related to Sherburn 2007,[182] already included in the review

Feedback

The HTA programme and the authors would like to know your views about this report.

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We look forward to hearing from you.

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