

# Streamline C

Streamlining Staging of Colorectal Cancer with Whole Body MRI

## CASE REPORT FORMS

### WB-MRI IMAGING BOOKLET

Patient Initials	<input type="text"/> <input type="text"/> <input type="text"/>
Trial Number	<input type="text" value="S"/> <input type="text" value="T"/> <input type="text" value="C"/> – <input type="text"/> <input type="text"/> <input type="text"/>

**Please send ORIGINAL forms to:**

Streamline C Trial Coordinator  
CR UK & UCL Cancer Trials Centre  
90 Tottenham Court Road  
London W1T 4TJ

General enquires: **020 7679 9891**

Telephone Registration: **020 7679 9880** *(between 9.00am and 5.00pm)*

Fax Registration: **020 7679 9871**

E-mail: **[CTC.streamlineC@ucl.ac.uk](mailto:CTC.streamlineC@ucl.ac.uk)**

## Additional instructions for completing forms

### WB-MRI Imaging Guidance

To be completed by the trial radiologist when reporting the WB-MRI.  
See table below for definitions for T, N and M staging.

#### Definitions

##### Primary Tumor (T)

- TX** Primary tumor cannot be assessed
- T0** No evidence of primary tumor
- Tis** Carcinoma in situ: intraepithelial or invasion of lamina propria<sup>1</sup>
- T1** Tumor invades submucosa
- T2** Tumor invades muscularis propria
- T3** Tumor invades through the muscularis propria into pericolorectal tissues
- T4a** Tumor penetrates to the surface of the visceral peritoneum<sup>2</sup>
- T4b** Tumor directly invades or is adherent to other organs or structures<sup>2,3</sup>

##### Regional Lymph Nodes (N)<sup>4</sup>

- NX** Regional lymph nodes cannot be assessed
- N0** No regional lymph node metastasis
- N1** Metastasis in 1–3 regional lymph nodes
- N1a** Metastasis in one regional lymph node
- N1b** Metastasis in 2–3 regional lymph nodes
- N1c** Tumor deposit(s) in the subserosa, mesentery, or nonperitonealized pericolic or perirectal tissues without regional nodal metastasis
- N2** Metastasis in 4 or more regional lymph nodes
- N2a** Metastasis in 4–6 regional lymph nodes
- N2b** Metastasis in 7 or more regional lymph nodes

##### Distant Metastasis (M)

- M0** No distant metastasis
- M1** Distant metastasis
- M1a** Metastasis confined to one organ or site (for example, liver, lung, ovary, nonregional node)
- M1b** Metastases in more than one organ/site or the peritoneum

ANATOMIC STAGE/PROGNOSTIC GROUPS					
Stage	T	N	M	Dukes*	MAC*
0	Tis	N0	M0	—	—
I	T1	N0	M0	A	A
	T2	N0	M0	A	B1
IIA	T3	N0	M0	B	B2
IIB	T4a	N0	M0	B	B2
IIC	T4b	N0	M0	B	B3
IIIA	T1–T2	N1/N1c	M0	C	C1
	T1	N2a	M0	C	C1
IIIB	T3–T4a	N1/N1c	M0	C	C2
	T2–T3	N2a	M0	C	C1/C2
	T1–T2	N2b	M0	C	C1
IIIC	T4a	N2a	M0	C	C2
	T3–T4a	N2b	M0	C	C2
	T4b	N1–N2	M0	C	C3
IVA	Any T	Any N	M1a	—	—
IVB	Any T	Any N	M1b	—	—

NOTE: cTNM is the clinical classification, pTNM is the pathologic classification. The y prefix is used for those cancers that are classified after neoadjuvant pretreatment (for example, ypTNM). Patients who have a complete pathologic response are ypT0N0cM0 that may be similar to Stage Group 0 or I. The r prefix is to be used for those cancers that have recurred after a disease-free interval (rTNM).  
\* Dukes B is a composite of better (T3 N0 M0) and worse (T4 N0 M0) prognostic groups, as is Dukes C (any TN1 M0 and Any T N2 M0). MAC is the modified Astler-Coller classification.

#### Notes

- <sup>1</sup> Tis includes cancer cells confined within the glandular basement membrane (intraepithelial) or mucosal lamina propria (intramucosal) with no extension through the muscularis mucosae into the submucosa.
- <sup>2</sup> Direct invasion in T4 includes invasion of other organs or other segments of the colorectum as a result of direct extension through the serosa, as confirmed on microscopic examination (for example, invasion of the sigmoid colon by a carcinoma of the cecum) or, for cancers in a retroperitoneal or subperitoneal location, direct invasion of other organs or structures by virtue of extension beyond the muscularis propria (that is, a tumor on the posterior wall of the descending colon invading the left kidney or lateral abdominal wall; or a mid or distal rectal cancer with invasion of prostate, seminal vesicles, cervix, or vagina).
- <sup>3</sup> Tumor that is adherent to other organs or structures, grossly, is classified cT4b. However, if no tumor is present in the adhesion, microscopically, the classification should be pT1–4a depending on the anatomical depth of wall invasion. The V and L classifications should be used to identify the presence or absence of vascular or lymphatic invasion, whereas the PN site-specific factor should be used for perineural invasion.
- <sup>4</sup> A satellite peritumoral nodule in the pericolorectal adipose tissue of a primary carcinoma without histologic evidence of residual lymph node in the nodule may represent discontinuous spread, venous invasion with extravascular spread (V1/2), or a totally replaced lymph node (N1/2). Replaced nodes should be counted separately as positive nodes in the N category, whereas discontinuous spread or venous invasion should be classified and counted in the Site-Specific Factor category Tumor Deposits (TD).

**If you have any questions about how to complete this form please contact the Streamline C Trial Coordinator on: 020 7679 9891**

**Streamline C**

Trial  
Number

<b>S</b>	<b>T</b>	<b>C</b>	—			
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Patient  
Initials

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Site

## WB-MRI Imaging Booklet 1/12

### Diffusion and T1 sequences

Images available? - Please tick

**Diffusion:**

Yes

☐

No

☐
**T1:**

Yes

☐

No

☐
*(If neither sequence is available move to WB-MRI Imaging Booklet 5/12 - Diffusion, T1 and T2 sequence)*

Total time to report diffusion and T1 images *(not including CRF completion time)* (Minutes)

Diffusion weighted image sequences quality- Please tick

Good

☐

Adequate

☐

Poor

☐

T1 sequence quality- Please tick

Good

☐

Adequate

☐

Poor

☐

Primary tumour identified?

Yes

☐

No

☐
*If no, skip to N stage below*

### Primary Tumour

Location- please tick

R

☐

S

☐

D

☐

T

☐

A

☐

C

☐

Max dimension (cm)

### T Stage

Confidence- Please tick

1- low

☐

2-adequate

☐

3-equivocal

☐

4-good

☐

5-excellent

☐

Stage- Please tick

Equivocal

☐

Most likely  
stage(s)

T1

☐

T3

☐

T2

☐

T4

☐

### N Stage

Confidence- Please tick

1- low

☐

2-adequate

☐

3-equivocal

☐

4-good

☐

5-excellent

☐

Stage- Please tick

Equivocal

☐

Most likely  
stage(s)

N0

☐

N2

☐

N1

☐

NX

☐

**Streamline C**

 Trial  
Number

<b>S</b>	<b>T</b>	<b>C</b>	—			
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 Patient  
Initials

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## WB-MRI Imaging Booklet 2/12

### Diffusion and T1 sequences

#### *Tumour Metastasis and/or Additional Tumours*

Overall confidence within main classification as negative, equivocal or positive <i>- Please tick</i>	Negative 1- definitely not present 2- probably not present		Equivocal 3- possibility not present 4- possibly present		Positive 5- probably present 6- definitely present	
	Negative		Equivocal		Positive	
	1	2	3	4	5	6
1. All sites <i>(tick diagnostic confidence)</i>						
2. Non-skeletal– all sites <i>(tick diagnostic confidence)</i>						
3. Skeletal– all sites <i>(tick diagnostic confidence)</i>						

**Streamline C**

 Trial  
Number

<b>S</b>	<b>T</b>	<b>C</b>	—			
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 Patient  
Initials

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## WB-MRI Imaging Booklet 3/12

### Diffusion and T1 sequences

#### Non Skeletal sites

Are all Non Skeletal sites negative (1-Definitely not present) for metastasis or additional tumours?

 Yes ☐ do not complete table below

 No ☐ tick confidence for every site

<b>Confidence within main classification as negative, equivocal or positive</b> <i>-Please tick</i>	<b>Negative</b> 1- definitely not present 2- probably not present		<b>Equivocal</b> 3- possibility not present 4- possibly present		<b>Positive</b> 5- probably present 6- definitely present		Size of largest organ deposit (mm)	Size of second largest organ deposit (mm) <i>(if not applicable put N/A)</i>	Number of <b>additional</b> deposits ≥6mm <i>(if ≤10, state number. If &gt;10 state, &gt;10) (if not applicable put N/A)</i>	Number of <b>additional</b> deposits <6mm <i>(if ≤10, state number. If &gt;10 state, &gt;10) (if not applicable put N/A)</i>				
	<b>Negative</b>		<b>Equivocal</b>		<b>Positive</b>									
	1	2	3	4	5	6								
Brain														
Lung (L)														
Lung (R)														
Pleura (L)														
Pleura (R)														
Liver (left lobe)														
Liver (right lobe)														
Spleen														
Adrenal (L)														
Adrenal (R)														
Kidney (L)														
Kidney (R)														
Pancreas														
Mesentery/ peritoneum														
Bowel														
Soft tissue neck/ chest														
Soft tissue abdomen/pelvis														
Nodal <i>(Please state)</i>														
Other <i>(Please state)</i>														

Streamline C

Trial  
Number

**S** **T** **C** –

Patient  
Initials

## WB-MRI Imaging Booklet 4/12

### Diffusion and T1 sequences

#### Skeletal sites

Are all Skeletal sites negative (1-Definitely not present) for metastasis or additional tumours?

Yes ☐ do not complete table below

No ☐ tick confidence for every site

Confidence within main classification as negative, equivocal or positive <i>-Please tick</i>	Negative 1- definitely not present 2- probably not present		Equivocal 3- possibility not present 4- possibly present		Positive 5- probably present 6- definitely present		Size of largest organ deposit (mm)	Size of second largest organ deposit (mm) (if not applicable put N/A)	Number of <b>additional</b> deposits ≥6mm (if ≤10, state number. If >10 state, >10) (if not applicable put N/A)	Number of <b>additional</b> deposits <6mm (if ≤10, state number. If >10 state, >10) (if not applicable put N/A)
	Negative		Equivocal		Positive					
	1	2	3	4	5	6				
Skull										
Cervical spine										
Thoracic spine										
Lumber spine										
Pelvis										
Sternum										
Clavicle/Scapula (L)										
Clavicle/Scapula (R)										
Ribs (L)										
Ribs (R)										
Other (Please State)										

**Streamline C**

Trial  
Number

<b>S</b>	<b>T</b>	<b>C</b>	—			
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Patient  
Initials

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## WB-MRI Imaging Booklet 5/12

### Diffusion T1 and T2 sequences

Images available?— Please Tick **T2:** Yes ☐ No ☐
*(If sequence is not available move to WB-MRI Imaging Booklet 9/12 - Diffusion, T1, T2 and contrast enhanced sequence)*

Additional time to report T2 images *(not including CRF completion time)* (Minutes)

T2 sequence quality— Please tick Good ☐ Adequate ☐ Poor ☐

Primary tumour identified? Yes ☐ No ☐ *If no, skip to N stage below*

### Primary Tumour

Location— please tick R ☐ S ☐ D ☐ T ☐ A ☐ C ☐

Max dimension (cm)

### T Stage

Confidence— Please tick 1— low ☐ 2—adequate ☐ 3—equivocal ☐ 4—good ☐ 5—excellent ☐

Stage— Please tick Equivocal ☐ Most likely stage(s) \_\_\_\_\_

T1 ☐ T3 ☐

T2 ☐ T4 ☐

### N Stage

Confidence— Please tick 1— low ☐ 2—adequate ☐ 3—equivocal ☐ 4—good ☐ 5—excellent ☐

Stage— Please tick Equivocal ☐ Most likely stage(s) \_\_\_\_\_

N0 ☐ N2 ☐

N1 ☐ NX ☐

Streamline C

Trial  
Number

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Patient  
Initials

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## WB-MRI Imaging Booklet 6/12

### Diffusion T1 and T2 sequences

#### *Tumour Metastasis and/or Additional Tumours*

Overall confidence within main classification as negative, equivocal or positive <i>-Please tick</i>	Negative 1- definitely not present 2- probably not present		Equivocal 3- possibility not present 4- possibly present		Positive 5- probably present 6- definitely present	
	Negative		Equivocal		Positive	
	1	2	3	4	5	6
1. All sites <i>(tick diagnostic confidence)</i>						
2. Non-skeletal– all sites <i>(tick diagnostic confidence)</i>						
3. Skeletal– all sites <i>(tick diagnostic confidence)</i>						



**Streamline C**

 Trial  
Number

<b>S</b>	<b>T</b>	<b>C</b>	—			
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 Patient  
Initials

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## WB-MRI Imaging Booklet 7/12

### Diffusion T1 and T2 sequences

#### Non Skeletal sites

Are all Non Skeletal sites negative (1-Definitely not present) for metastasis or additional tumours?

 Yes ☐ do not complete table below

 No ☐ tick confidence for every site

Confidence within main classification as negative, equivocal or positive <i>-Please tick</i>	Negative 1- definitely not present 2- probably not present		Equivocal 3- possibility not present 4- possibly present		Positive 5- probably present 6- definitely present		Size of largest organ deposit (mm)	Size of second largest organ deposit (mm) (if not applicable put N/A)	Number of <b>additional</b> deposits ≥6mm (if ≤10, state number. If >10 state, >10) (if not applicable put N/A)	Number of <b>additional</b> deposits <6mm (if ≤10, state number. If >10 state, >10) (if not applicable put N/A)				
	Negative		Equivocal		Positive									
	1	2	3	4	5	6								
Brain														
Lung (L)														
Lung (R)														
Pleura (L)														
Pleura (R)														
Liver (left lobe)														
Liver (right lobe)														
Spleen														
Adrenal (L)														
Adrenal (R)														
Kidney (L)														
Kidney (R)														
Pancreas														
Mesentery/ peritoneum														
Bowel														
Soft tissue neck/ chest														
Soft tissue abdomen/pelvis														
Nodal (Please state)														
Other (Please state)														

**Streamline C**

Trial  
Number

<b>S</b>	<b>T</b>	<b>C</b>	—			
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Patient  
Initials

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## WB-MRI Imaging Booklet 8/12

### Diffusion T1 and T2 sequences

#### Skeletal sites

Are all Skeletal sites negative (1-Definitely not present) for metastasis or additional tumours?

Yes ☐ *do not complete table below*

No ☐ *tick confidence for every site*

Confidence within main classification as negative, equivocal or positive <i>-Please tick</i>	<b>Negative</b> 1- definitely not present 2- probably not present		<b>Equivocal</b> 3- possibility not present 4- possibly present		<b>Positive</b> 5- probably present 6- definitely present		Size of largest organ deposit (mm)	Size of second largest organ deposit (mm) (if not applicable put N/A)	Number of <b>additional</b> deposits ≥6mm (if ≤10, state number. If >10 state, >10) (If not applicable put N/A)	Number of <b>additional</b> deposits <6mm (if ≤10, state number. If >10 state, >10) (if not applicable put N/A)				
	<b>Negative</b>		<b>Equivocal</b>		<b>Positive</b>									
	1	2	3	4	5	6								
Skull														
Cervical spine														
Thoracic spine														
Lumber spine														
Pelvis														
Sternum														
Clavicle/Scapula (L)														
Clavicle/Scapula (R)														
Ribs (L)														
Ribs (R)														
Other (Please State)														

**Streamline C**

 Trial  
Number

<b>S</b>	<b>T</b>	<b>C</b>	—			
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 Patient  
Initials

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## WB-MRI Imaging Booklet 9/12

### Final report - All sequences: Diffusion T1 and T2 and contrast enhanced

Images available?- Please Tick

**Contrast enhanced:** Yes ☐ No ☐
*(If sequence is not available do not complete the rest of the form. Note there is a comment box at the end of this form for your use)*

Additional time to report contrast enhanced images (not including CRF completion time) (Minutes)

Post contrast image quality- Please tick

 Good ☐

 Adequate ☐

 Poor ☐

Primary tumour identified?

 Yes ☐

 No ☐
*If no, skip to N stage below*

#### Primary Tumour

Location- please tick

 R ☐

 S ☐

 D ☐

 T ☐

 A ☐

 C ☐

Max dimension (cm)

#### T Stage

Confidence- Please tick

 1-low ☐

 2-adequate ☐

 3-equivocal ☐

 4-good ☐

 5-excellent ☐

Stage- Please tick

 Equivocal ☐

Most likely stage(s) \_\_\_\_\_

 T1 ☐

 T3 ☐

 T2 ☐

 T4 ☐

#### N Stage

Confidence- Please tick

 1-low ☐

 2-adequate ☐

 3-equivocal ☐

 4-good ☐

 5-excellent ☐

Stage- Please tick

 Equivocal ☐

Most likely stage(s) \_\_\_\_\_

 N0 ☐

 N2 ☐

 N1 ☐

 NX ☐

**Streamline C**

 Trial  
Number

<b>S</b>	<b>T</b>	<b>C</b>	–			
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 Patient  
Initials

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## WB-MRI Imaging Booklet 10/12

### Final report - All sequences: Diffusion T1 and T2 and contrast enhanced

#### Primary Tumour

Extramural tumour depth (mm)

*Skip table below if no Primary Tumour is seen*

Overall confidence within main classification as negative, equivocal or positive <i>-Please tick</i>	<b>Negative</b> 1- definitely not present 2- probably not present		<b>Equivocal</b> 3- possibility not present 4- possible present		<b>Positive</b> 5- probably present 6- definitely present	
	Negative		Equivocal		Positive	
	1	2	3	4	5	6
Resection margin threatened <i>(Tick confidence)</i>						
Extra Mural Vascular invasion <i>(Tick confidence)</i>						

#### Tumour Metastasis and/or Additional Tumours

Overall Confidence within main classification as negative, equivocal or positive <i>-Please tick</i>	<b>Negative</b> 1- definitely not present 2- probably not present		<b>Equivocal</b> 3- possibility not present 4- possibly present		<b>Positive</b> 5- probably present 6- definitely present	
	Negative		Equivocal		Positive	
	1	2	3	4	5	6
1. All sites <i>(tick diagnostic confidence)</i>						
2. Non-skeletal – all sites <i>(tick diagnostic confidence)</i>						
3. Skeletal – all sites <i>(tick diagnostic confidence)</i>						

**Streamline C**

 Trial  
Number

<b>S</b>	<b>T</b>	<b>C</b>	–			
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 Patient  
Initials

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## WB-MRI Imaging Booklet 11/12

### Final report – All sequences: Diffusion, T1, T2 and contrast enhanced

#### Non Skeletal sites

Are all Non Skeletal sites negative (1-Definitely not present) for metastasis or additional tumours?

 Yes ☐ do not complete table below

 No ☐ tick confidence for every site

Confidence within main classification as negative, equivocal or positive <i>-Please tick</i>	Negative 1- definitely not present 2- probably not present		Equivocal 3- possibility not present 4- possibly present		Positive 5- probably present 6- definitely present		Size of largest organ deposit (mm)	Size of second largest organ deposit (mm) (if not applicable put N/A)	Number of <u>additional</u> deposits ≥6mm (if ≤10, state number. If >10 state, >10) (if not applicable put N/A)	Number of <u>additional</u> deposits <6mm (if ≤10, state number. If >10 state, >10) (if not applicable put N/A)
	Negative		Equivocal		Positive					
	1	2	3	4	5	6				
Brain										
Lung (L)										
Lung (R)										
Pleura (L)										
Pleura (R)										
Liver (left lobe)										
Liver (right lobe)										
Spleen										
Adrenal (L)										
Adrenal (R)										
Kidney (L)										
Kidney (R)										
Pancreas										
Mesentery/ peritoneum										
Bowel										
Soft tissue neck/ chest										
Soft tissue abdomen/ pelvis										
Nodal (Please state)										
Other (Please state)										

**Streamline C**

 Trial  
Number

<b>S</b>	<b>T</b>	<b>C</b>	–			
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 Patient  
Initials

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## WB-MRI Imaging Booklet 12/12

### Final report – All sequences: Diffusion, T1, T2 and contrast enhanced

#### Skeletal sites

Are all Skeletal sites negative (1-Definitely not present) for metastasis or additional tumours?

 Yes ☐ do not complete table below

 No ☐ tick confidence for every site

Confidence within main classification as negative, equivocal or positive <i>-Please tick</i>	Negative 1- definitely not present 2- probably not present		Equivocal 3- possibility not present 4- possibly present		Positive 5- probably present 6- definitely present		Size of largest organ deposit (mm)	Size of second largest organ deposit (mm) <i>(if not applicable put N/A)</i>	Number of <b>additional</b> deposits ≥6mm <i>(if ≤10, state number. If &gt;10 state, &gt;10) (if not applicable put N/A)</i>	Number of <b>additional</b> deposits <6mm <i>(if ≤10, state number. If &gt;10 state, &gt;10) (If not applicable put N/A)</i>
	Negative		Equivocal		Positive					
	1	2	3	4	5	6				
Skull										
Cervical spine										
Thoracic spine										
Lumber spine										
Pelvis										
Sternum										
Clavicle/Scapula (L)										
Clavicle/Scapula (R)										
Ribs (L)										
Ribs (R)										
Other <i>(Please State)</i> _____										

#### Additional Comments (e.g. 2nd primary)

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 Completed  
by:

--

Signature:

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 CRFs should only be completed by appropriately qualified  
personnel detailed on the site delegation log

 Date  
completed:

D	D	M	M	Y	Y	Y	Y

 Please return to: **Streamline C** Trial Coordinator, CR UK & UCL Cancer Trials Centre, 90 Tottenham Court Road, London, W1T 4TJ  
 CRF Template V1– 19 Oct 2010 Modified for **Streamline C** on 01/07/14 v3.0

For Office use only

Date form received: \_\_\_\_\_

Date form entered: \_\_\_\_\_

Initials: \_\_\_\_\_