Supplementary File 10: Microarray data relating to one test only

No narrative synthesis was prepared for this section of the report due to time constraints the relatively low relevance of the data to the decision problem.

Note: Ahn 2013 also reported other data relating to Oncotype-DX versus Mammaprint and appears in the main report.

Table 1 Study characteristics

Author, year, Number patients	**Cohorts**	**Country**	**O-DX**	**EP**	**MMP**	**PRO**	**Other tests**	**Population**	**Nodal Status**	**Endo/Chemo**
Ahn 2013[1] a)N=186 b)N=82	Gananam Severance Hospital (1997-2007)	Korea	O-DX		MMP			100% ER+ 12% HER2+ a) all patients b) subset with RS 19-30	a)47.8% LN+ (% LN>3 NR) b)43.9% LN+ (LN>3 NR)	a)84% ET 13% CT b) 94% ET 82% CT
O-DX only										
Cockburn 2016[2] a) N=230 b) N=132	NCBI Gene Expression Omnibus: a) GSE17705 (MD Anderson) b) GSE6532	a)USA b) UK, Sweden	O-DX			Excluded*		100% ER+ 100% HER2-	a) 39.6% LN+ (LN>3 NR) b) 67.4% LN+ (LN>3 NR)	100% ET CT NR
Loi 2007[3] N=249	John Radcliffe Hospital, UK; Guys Hospital, UK; Uppsala University Hospital, Sweden (GSE6532)	UK, Sweden	O-DX					100% HR+ HER2- NR	LN0 47% (% LN>3 NR) **SG:** a) LN0 100% b) LN+ 100%	ET 100% CT 0%
Naoi, 2013[4] N=459	Osaka University Hospital; public databases (GSE17705, GSE12093)	Japan, NR	O-DX					100%ER+ HER2- NR	LN0 100% (% LN>3 NR)	100% ET 0% CT
MMP only										

Bianchini, 2013[5] N= 683	GSE6532, GSE9195, GSE17705, GSE12093	NR			MMP			100% ER+ 95% HER2-	38% LN+ (LN>3 NR)	100% ET CT NR
Zemmour, 2015[6] N=197	TRANSBIG**	France, Sweden UK			MMP			ER+ 69% HER2- 94%	LN0 100%	ET 0% CT 0%

Table 2 Data from microarray studies for one test only

Reference; N	**Cohorts**	**Population**	**Nodal status**	**Endo / chemo**	**% pts per group**			**Outcome**	**Test**	**Outcomes HR (95% CI) unless stated otherwise**		
					Low	**Inter**	**High**			**0-5 yr**	**0-10 yr**	**5-10yr**
O-DX only												
Ahn 2013[1] a)N=186	Gananam Severance Hospital	100% ER+ 12% HER2+ a) all patients	a)47.8% LN+ (% LN>3 NR)	a)84% ET 13% CT	27	82	77	OS	**O-DX**		HR NR, P=0.361	
Cockburn 2016[2] a) N=230	NCBI Gene Expression Omnibus: a) GSE17705 - training	100% ER+ 100% HER2-	a) 39.6% LN+ (LN>3 NR)	100% ET CT NR	-	-	-	DRFS	**O-DX**		HR (O-DX continuous): 1.74 (0.99 to 3.07, p=0.055)*	
b) N=132			a) LN0 (n=139)		-	-	-				HR (O-DX continuous): 3.58)1.38 to 9.27, p=0.012)*	

			a) LN+ (n=91)		-	-	-				HR (O-DX continuous): 1.16 (0.57 to 2.34, p=0.68)*	
	b) GSE6532		b) LN0 (n=43)		-	-	-				HR (O-DX continuous): 0.36 (95% CI NR) p=0.0001*	
			b) LN+)N=89)		-	-	-				HR (O-DX continuous): HR 0.82 (95% CI NR)P=0.306*	
Loi 2007[3] N=249 a) 118 b) 131	John Radcliffe Hospital, UK; Guys Hospital, UK; Uppsala University Hospital, Sweden	HR+ 100% HER2- NR	LN0 47%	ET 100% CT 0%	30		70	TDM	**O-DX**		**Rates Inter/Low vs High:** 81% vs 60% **AUC:** 0.69	
			a) LN0 100%		34		66				**Rates Inter/Low vs High:** 84% vs 64%	
			b) LN+ 100%		27		73				**Rates Inter/Low vs High:** 78% vs 57%	
Naoi, 2013[4] N=459	Osaka University Hospital; public databases (GSE17705, GSE12093)	100%ER+ HER2- NR	LN0 100%	100% ET 0% CT	62	18	20	RFS	**O-DX**		**Low vs Intermediate:** HR NR, p=0.0014 **Low vs High:** HR NR, p<0.01	
Jonsdottir, 2014[7] N=94	NR - Norway		a-i) 100% ER+, HER2- NR	a-i) NR	-	-	-		**O-DX**	**HR NR** **14 year Rates:** low: 83%; Inter: 81%; High: 61%, p=0.293		
Gyorffy 2015[8] b-i) N=113	b) University Hospitals (Frankfurt & Hamburg)		SG b-i): 100% ER+; HER2- NR	**SG b-i): ER+, LN0**	NR	-	-	-		**O-DX**	2.21 (0.80 to 6.11, p=0.116)	

MMP only												
Bianchini, 2013[5] N= 683	GSE6532, GSE9195, GSE17705, GSE12093	100% ER+ 95% HER2-	38% LN+	100% ET	NR	NR	NR	DRFS	**MMP**	HR: 3.59 (2.02 to 6.30) p<0.0001	HR: 2.93 (1.91 to 4.49) p<0.0001	HR: 2.30 (1.16 to 4.56) p=0.017
Zemmour, 2015[6] N=197	TRANSBIG**	ER+ 69% HER2- 94%	LN0 100%	ET 0% CT 0%	-	-	-		**MMP**	**Year (5 or 10) NR** 15.19 (2.08 to 110.88, p<0.001) **Sens:** 97% **Spec:** 34% **Accuracy:** 45% **5 year multivariate HR:**[a] 17.03 (95% CI 2.31 to 125.55, p=0.005)		

[a] multivariate analysis adjusted for age, tumour size, tumour grade, ER status, HER2 status.

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