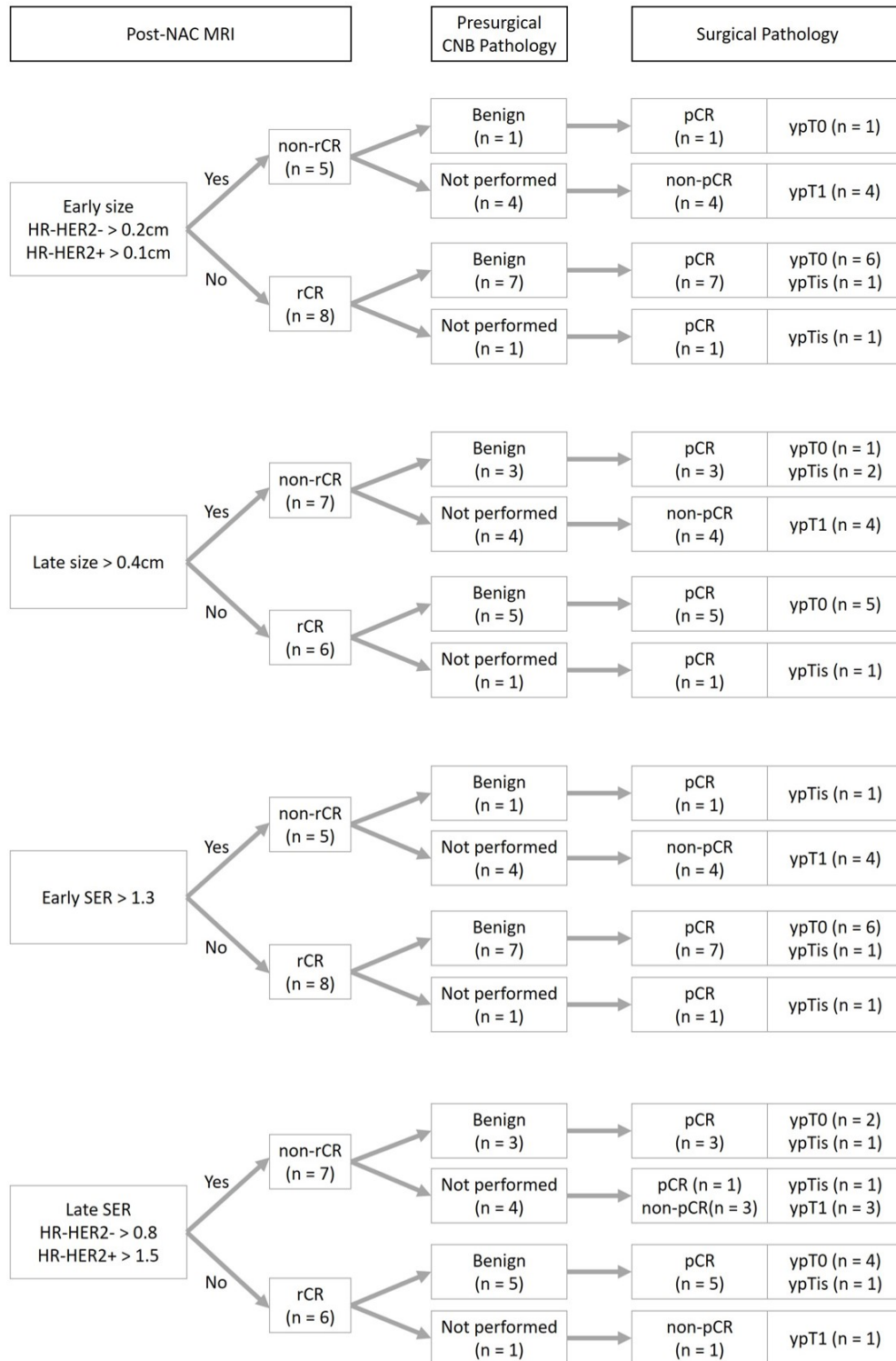


Criteria for identifying residual tumours after neoadjuvant chemotherapy of breast cancers: a magnetic resonance imaging study

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Supplementary Figure. The results of MRI assessments, presurgical needle biopsies, and final surgeries in HR-HER2+ or HR-HER2- patients (n = 13). The HR+HER2+ patients (n = 2) were not included. *NAC* neoadjuvant chemotherapy, *MRI* magnetic resonance imaging, *HR* hormone receptor, *HER2* human epidermal growth factor receptor 2, *CNB* core needle biopsy, *SER* lesion-to-background parenchymal signal enhancement ratio, *rCR* radiological complete response, *pCR* pathological complete response, *ypT* post-NAC T stage



Supplementary Table

Contents

1. parameter definition

2. exploring cutoff values according to parameters in HR-HER2-, HR-HER2+ and HR+HER2+ subtype

1. parameter definition

Correct	Event	TP (true positive)
Correct	Non-Event	TN (true negative)
Incorrect	Event	FP (false positive)
Incorrect	Non-Event	FN (false negative)
Percentages	Correct	(TP+TN)/total
Percentages	Sensitivity	TP/(TP+FN)
Percentages	Specificity	TN/(TN+FP)
Percentages	PPV	TP/(TP+FP)
Percentages	NPV	TN/(TN+FN)

2. exploring cutoff values according to parameters in HR-HER2-, HR-HER2+ and HR+HER2+ subtype

HR- HER2-

MrE_Size: PostMR early phase (cm)

MrE_Size	Correct		Incorrect		Percentages				
	Event	Non-Event	Event	Non-Event	Correct	Sensitivity	Specificity	PPV	NPV
0	54	29	12	2	85.6%	96.4%	70.7%	81.8%	93.5%
0.2	53	30	11	3	85.6%	94.6%	73.2%	82.8%	90.9%
0.3	52	31	10	4	85.6%	92.9%	75.6%	83.9%	88.6%
0.4	51	33	8	5	86.6%	91.1%	80.5%	86.4%	86.8%
0.5	49	33	8	7	84.5%	87.5%	80.5%	86.0%	82.5%
0.6	48	34	7	8	84.5%	85.7%	82.9%	87.3%	81.0%
0.7	42	35	6	14	79.4%	75.0%	85.4%	87.5%	71.4%
0.8	38	38	3	18	78.4%	67.9%	92.7%	92.7%	67.9%
0.9	34	38	3	22	74.2%	60.7%	92.7%	91.9%	63.3%
1	33	39	2	23	74.2%	58.9%	95.1%	94.3%	62.9%
1.1	31	39	2	25	72.2%	55.4%	95.1%	93.9%	60.9%
1.2	31	40	1	25	73.2%	55.4%	97.6%	96.9%	61.5%
1.3	30	40	1	26	72.2%	53.6%	97.6%	96.8%	60.6%
1.4	28	41	0	28	71.1%	50.0%	100.0%	100.0%	59.4%
1.5	24	41	0	32	67.0%	42.9%	100.0%	100.0%	56.2%
1.6	23	41	0	33	66.0%	41.1%	100.0%	100.0%	55.4%
1.7	22	41	0	34	64.9%	39.3%	100.0%	100.0%	54.7%
1.9	20	41	0	36	62.9%	35.7%	100.0%	100.0%	53.2%
2	18	41	0	38	60.8%	32.1%	100.0%	100.0%	51.9%
2.1	17	41	0	39	59.8%	30.4%	100.0%	100.0%	51.3%
2.4	16	41	0	40	58.8%	28.6%	100.0%	100.0%	50.6%
2.5	13	41	0	43	55.7%	23.2%	100.0%	100.0%	48.8%
2.8	12	41	0	44	54.6%	21.4%	100.0%	100.0%	48.2%
3	10	41	0	46	52.6%	17.9%	100.0%	100.0%	47.1%
3.1	8	41	0	48	50.5%	14.3%	100.0%	100.0%	46.1%
3.4	6	41	0	50	48.5%	10.7%	100.0%	100.0%	45.1%
4	4	41	0	52	46.4%	7.1%	100.0%	100.0%	44.1%
4.3	3	41	0	53	45.4%	5.4%	100.0%	100.0%	43.6%
5	2	41	0	54	44.3%	3.6%	100.0%	100.0%	43.2%
5.4	1	41	0	55	43.3%	1.8%	100.0%	100.0%	42.7%
9.4	0	41	0	56	42.3%	0.0%	100.0%	NA	42.3%

MrL_Size: PostMR late phase (cm)

MrL_Size	Correct		Incorrect		Percentages				
	Event	Non-Event	Event	Non-Event	Correct	Sensitivity	Specificity	PPV	NPV
0	56	26	15	0	84.5%	100.0%	63.4%	78.9%	100.0%
0.2	56	27	14	0	85.6%	100.0%	65.9%	80.0%	100.0%
0.4	54	30	11	2	86.6%	96.4%	73.2%	83.1%	93.8%
0.5	52	30	11	4	84.5%	92.9%	73.2%	82.5%	88.2%
0.6	52	32	9	4	86.6%	92.9%	78.0%	85.2%	88.9%
0.7	48	32	9	8	82.5%	85.7%	78.0%	84.2%	80.0%
0.8	42	34	7	14	78.4%	75.0%	82.9%	85.7%	70.8%
0.9	39	34	7	17	75.3%	69.6%	82.9%	84.8%	66.7%
1	37	36	5	19	75.3%	66.1%	87.8%	88.1%	65.5%
1.1	34	37	4	22	73.2%	60.7%	90.2%	89.5%	62.7%
1.2	33	38	3	23	73.2%	58.9%	92.7%	91.7%	62.3%
1.3	32	39	2	24	73.2%	57.1%	95.1%	94.1%	61.9%
1.4	31	40	1	25	73.2%	55.4%	97.6%	96.9%	61.5%
1.5	26	41	0	30	69.1%	46.4%	100.0%	100.0%	57.7%
1.6	24	41	0	32	67.0%	42.9%	100.0%	100.0%	56.2%
1.7	23	41	0	33	66.0%	41.1%	100.0%	100.0%	55.4%
1.9	21	41	0	35	63.9%	37.5%	100.0%	100.0%	53.9%
2	19	41	0	37	61.9%	33.9%	100.0%	100.0%	52.6%
2.1	18	41	0	38	60.8%	32.1%	100.0%	100.0%	51.9%
2.2	17	41	0	39	59.8%	30.4%	100.0%	100.0%	51.3%
2.4	16	41	0	40	58.8%	28.6%	100.0%	100.0%	50.6%
2.5	13	41	0	43	55.7%	23.2%	100.0%	100.0%	48.8%
2.8	12	41	0	44	54.6%	21.4%	100.0%	100.0%	48.2%
3	10	41	0	46	52.6%	17.9%	100.0%	100.0%	47.1%

3.1	8	41	0	48	50.5%	14.3%	100.0%	100.0%	46.1%
3.4	6	41	0	50	48.5%	10.7%	100.0%	100.0%	45.1%
4	4	41	0	52	46.4%	7.1%	100.0%	100.0%	44.1%
4.3	3	41	0	53	45.4%	5.4%	100.0%	100.0%	43.6%
5	2	41	0	54	44.3%	3.6%	100.0%	100.0%	43.2%
5.4	1	41	0	55	43.3%	1.8%	100.0%	100.0%	42.7%
9.4	0	41	0	56	42.3%	0.0%	100.0%	NA	42.3%

MrSerE: Lesion-to-background SER (early)

MrSerE	Correct		Incorrect		Percentages				
	Event	Non-Event	Event	Non-Event	Correct	Sensitivity	Specificity	PPV	NPV
0.54347826	56	1	40	0	58.8%	100.0%	2.4%	58.3%	100.0%
0.69809428	56	2	39	0	59.8%	100.0%	4.9%	58.9%	100.0%
0.72930464	56	3	38	0	60.8%	100.0%	7.3%	59.6%	100.0%
0.76327434	56	4	37	0	61.9%	100.0%	9.8%	60.2%	100.0%
0.79584463	56	5	36	0	62.9%	100.0%	12.2%	60.9%	100.0%
0.85960591	56	6	35	0	63.9%	100.0%	14.6%	61.5%	100.0%
0.8875523	56	7	34	0	64.9%	100.0%	17.1%	62.2%	100.0%
0.92962702	56	8	33	0	66.0%	100.0%	19.5%	62.9%	100.0%
0.95883941	55	8	33	1	64.9%	98.2%	19.5%	62.5%	88.9%
0.96180396	55	9	32	1	66.0%	98.2%	22.0%	63.2%	90.0%
0.965	55	10	31	1	67.0%	98.2%	24.4%	64.0%	90.9%
0.96806812	55	11	30	1	68.0%	98.2%	26.8%	64.7%	91.7%
0.97256858	54	11	30	2	67.0%	96.4%	26.8%	64.3%	84.6%
0.97966632	54	12	29	2	68.0%	96.4%	29.3%	65.1%	85.7%
0.98854337	54	13	28	2	69.1%	96.4%	31.7%	65.9%	86.7%
1.00252951	54	14	27	2	70.1%	96.4%	34.1%	66.7%	87.5%
1.01390645	54	15	26	2	71.1%	96.4%	36.6%	67.5%	88.2%
1.02138643	54	16	25	2	72.2%	96.4%	39.0%	68.4%	88.9%
1.02740864	54	17	24	2	73.2%	96.4%	41.5%	69.2%	89.5%
1.03007519	54	18	23	2	74.2%	96.4%	43.9%	70.1%	90.0%
1.03414314	54	19	22	2	75.3%	96.4%	46.3%	71.1%	90.5%
1.03637612	54	20	21	2	76.3%	96.4%	48.8%	72.0%	90.9%
1.05256065	54	21	20	2	77.3%	96.4%	51.2%	73.0%	91.3%
1.08962264	54	22	19	2	78.4%	96.4%	53.7%	74.0%	91.7%
1.10700637	54	23	18	2	79.4%	96.4%	56.1%	75.0%	92.0%
1.12696942	54	24	17	2	80.4%	96.4%	58.5%	76.1%	92.3%
1.13831089	54	25	16	2	81.4%	96.4%	61.0%	77.1%	92.6%
1.15317559	54	26	15	2	82.5%	96.4%	63.4%	78.3%	92.9%
1.17159337	54	27	14	2	83.5%	96.4%	65.9%	79.4%	93.1%
1.20485175	54	28	13	2	84.5%	96.4%	68.3%	80.6%	93.3%
1.26836435	54	29	12	2	85.6%	96.4%	70.7%	81.8%	93.5%
1.30039788	53	29	12	3	84.5%	94.6%	70.7%	81.5%	90.6%
1.37086093	52	29	12	4	83.5%	92.9%	70.7%	81.3%	87.9%
1.38021638	51	29	12	5	82.5%	91.1%	70.7%	81.0%	85.3%
1.45962733	50	29	12	6	81.4%	89.3%	70.7%	80.6%	82.9%
1.6175359	50	30	11	6	82.5%	89.3%	73.2%	82.0%	83.3%
1.70023148	50	31	10	6	83.5%	89.3%	75.6%	83.3%	83.8%
1.80104031	49	31	10	7	82.5%	87.5%	75.6%	83.1%	81.6%
1.8250774	49	32	9	7	83.5%	87.5%	78.0%	84.5%	82.1%
1.91492865	49	33	8	7	84.5%	87.5%	80.5%	86.0%	82.5%
1.92822967	48	33	8	8	83.5%	85.7%	80.5%	85.7%	80.5%
1.94577554	48	34	7	8	84.5%	85.7%	82.9%	87.3%	81.0%
1.95972115	48	35	6	8	85.6%	85.7%	85.4%	88.9%	81.4%
2.01458333	47	35	6	9	84.5%	83.9%	85.4%	88.7%	79.5%
2.02776025	46	35	6	10	83.5%	82.1%	85.4%	88.5%	77.8%
2.06777317	45	35	6	11	82.5%	80.4%	85.4%	88.2%	76.1%
2.08779631	44	35	6	12	81.4%	78.6%	85.4%	88.0%	74.5%
2.13172805	43	35	6	13	80.4%	76.8%	85.4%	87.8%	72.9%
2.15911731	42	35	6	14	79.4%	75.0%	85.4%	87.5%	71.4%
2.16375087	41	35	6	15	78.4%	73.2%	85.4%	87.2%	70.0%
2.17069701	40	35	6	16	77.3%	71.4%	85.4%	87.0%	68.6%
2.1788953	39	35	6	17	76.3%	69.6%	85.4%	86.7%	67.3%
2.18123275	38	35	6	18	75.3%	67.9%	85.4%	86.4%	66.0%
2.19175515	38	36	5	18	76.3%	67.9%	87.8%	88.4%	66.7%
2.21072797	37	36	5	19	75.3%	66.1%	87.8%	88.1%	65.5%
2.2107438	36	36	5	20	74.2%	64.3%	87.8%	87.8%	64.3%
2.26721763	35	36	5	21	73.2%	62.5%	87.8%	87.5%	63.2%
2.28350515	34	36	5	22	72.2%	60.7%	87.8%	87.2%	62.1%
2.29531873	33	36	5	23	71.1%	58.9%	87.8%	86.8%	61.0%
2.30360721	33	37	4	23	72.2%	58.9%	90.2%	89.2%	61.7%
2.3194707	32	37	4	24	71.1%	57.1%	90.2%	88.9%	60.7%
2.32530864	31	37	4	25	70.1%	55.4%	90.2%	88.6%	59.7%
2.35752577	30	37	4	26	69.1%	53.6%	90.2%	88.2%	58.7%
2.38945006	30	38	3	26	70.1%	53.6%	92.7%	90.9%	59.4%
2.44245927	29	38	3	27	69.1%	51.8%	92.7%	90.6%	58.5%
2.55051813	28	38	3	28	68.0%	50.0%	92.7%	90.3%	57.6%
2.58493353	27	38	3	29	67.0%	48.2%	92.7%	90.0%	56.7%
2.68029529	26	38	3	30	66.0%	46.4%	92.7%	89.7%	55.9%
2.81205674	25	38	3	31	64.9%	44.6%	92.7%	89.3%	55.1%
2.8548124	24	38	3	32	63.9%	42.9%	92.7%	88.9%	54.3%
2.91312559	24	39	2	32	64.9%	42.9%	95.1%	92.3%	54.9%
2.96940195	23	39	2	33	63.9%	41.1%	95.1%	92.0%	54.2%
3.14722222	22	39	2	34	62.9%	39.3%	95.1%	91.7%	53.4%
3.15320911	21	39	2	35	61.9%	37.5%	95.1%	91.3%	52.7%
3.21814672	20	39	2	36	60.8%	35.7%	95.1%	90.9%	52.0%
3.27943615	19	39	2	37	59.8%	33.9%	95.1%	90.5%	51.3%
3.29361702	18	39	2	38	58.8%	32.1%	95.1%	90.0%	50.6%
3.3477918	17	39	2	39	57.7%	30.4%	95.1%	89.5%	50.0%
3.35467565	17	40	1	39	58.8%	30.4%	97.6%	94.4%	50.6%
3.3799448	17	41	0	39	59.8%	30.4%	100.0%	100.0%	51.3%
3.44490075	16	41	0	40	58.8%	28.6%	100.0%	100.0%	50.6%
3.51712329	15	41	0	41	57.7%	26.8%	100.0%	100.0%	50.0%
3.54462243	14	41	0	42	56.7%	25.0%	100.0%	100.0%	49.4%
3.61805054	13	41	0	43	55.7%	23.2%	100.0%	100.0%	48.8%
3.71040724	12	41	0	44	54.6%	21.4%	100.0%	100.0%	48.2%

3.72154964	11	41	0	45	53.6%	19.6%	100.0%	100.0%	47.7%
3.72386224	10	41	0	46	52.6%	17.9%	100.0%	100.0%	47.1%
3.77081192	9	41	0	47	51.5%	16.1%	100.0%	100.0%	46.6%
3.88263763	8	41	0	48	50.5%	14.3%	100.0%	100.0%	46.1%
4.4291642	7	41	0	49	49.5%	12.5%	100.0%	100.0%	45.6%
4.58542141	6	41	0	50	48.5%	10.7%	100.0%	100.0%	45.1%
4.915	5	41	0	51	47.4%	8.9%	100.0%	100.0%	44.6%
5.02927722	4	41	0	52	46.4%	7.1%	100.0%	100.0%	44.1%
5.11569149	3	41	0	53	45.4%	5.4%	100.0%	100.0%	43.6%
5.26149425	2	41	0	54	44.3%	3.6%	100.0%	100.0%	43.2%
5.34678299	1	41	0	55	43.3%	1.8%	100.0%	100.0%	42.7%
7.29642058	0	41	0	56	42.3%	0.0%	100.0%	NA	42.3%

MrSerL: Lesion-to-background SER (late)

MrSerL	Correct		Incorrect		Percentages				
	Event	Non-Event	Event	Non-Event	Correct	Sensitivity	Specificity	PPV	NPV
0.65033784	56	1	40	0	58.8%	100.0%	2.4%	58.3%	100.0%
0.71527778	56	2	39	0	59.8%	100.0%	4.9%	58.9%	100.0%
0.72189349	56	3	38	0	60.8%	100.0%	7.3%	59.6%	100.0%
0.88482075	56	4	37	0	61.9%	100.0%	9.8%	60.2%	100.0%
0.88629738	56	5	36	0	62.9%	100.0%	12.2%	60.9%	100.0%
0.89071038	55	5	36	1	61.9%	98.2%	12.2%	60.4%	83.3%
0.96013168	55	6	35	1	62.9%	98.2%	14.6%	61.1%	85.7%
0.968	55	7	34	1	63.9%	98.2%	17.1%	61.8%	87.5%
0.96844521	55	8	33	1	64.9%	98.2%	19.5%	62.5%	88.9%
0.97962382	55	9	32	1	66.0%	98.2%	22.0%	63.2%	90.0%
0.97989276	54	9	32	2	64.9%	96.4%	22.0%	62.8%	81.8%
0.98768473	54	10	31	2	66.0%	96.4%	24.4%	63.5%	83.3%
0.99179537	54	11	30	2	67.0%	96.4%	26.8%	64.3%	84.6%
0.99834071	54	12	29	2	68.0%	96.4%	29.3%	65.1%	85.7%
0.99889868	54	13	28	2	69.1%	96.4%	31.7%	65.9%	86.7%
1.02497809	54	14	27	2	70.1%	96.4%	34.1%	66.7%	87.5%
1.03524673	54	15	26	2	71.1%	96.4%	36.6%	67.5%	88.2%
1.0361991	54	16	25	2	72.2%	96.4%	39.0%	68.4%	88.9%
1.05216693	54	17	24	2	73.2%	96.4%	41.5%	69.2%	89.5%
1.05474665	54	18	23	2	74.2%	96.4%	43.9%	70.1%	90.0%
1.07093822	53	18	23	3	73.2%	94.6%	43.9%	69.7%	85.7%
1.08	53	19	22	3	74.2%	94.6%	46.3%	70.7%	86.4%
1.10779596	53	20	21	3	75.3%	94.6%	48.8%	71.6%	87.0%
1.1122291	53	21	20	3	76.3%	94.6%	51.2%	72.6%	87.5%
1.13010753	53	22	19	3	77.3%	94.6%	53.7%	73.6%	88.0%
1.14096186	53	23	18	3	78.4%	94.6%	56.1%	74.6%	88.5%
1.1723356	53	24	17	3	79.4%	94.6%	58.5%	75.7%	88.9%
1.17573964	53	25	16	3	80.4%	94.6%	61.0%	76.8%	89.3%
1.20591233	53	26	15	3	81.4%	94.6%	63.4%	77.9%	89.7%
1.2074928	52	26	15	4	80.4%	92.9%	63.4%	77.6%	86.7%
1.23667712	52	27	14	4	81.4%	92.9%	65.9%	78.8%	87.1%
1.28153565	51	27	14	5	80.4%	91.1%	65.9%	78.5%	84.4%
1.31318681	51	28	13	5	81.4%	91.1%	68.3%	79.7%	84.8%
1.46085011	50	28	13	6	80.4%	89.3%	68.3%	79.4%	82.4%
1.53846154	50	29	12	6	81.4%	89.3%	70.7%	80.6%	82.9%
1.60465116	49	29	12	7	80.4%	87.5%	70.7%	80.3%	80.6%
1.62455304	48	29	12	8	79.4%	85.7%	70.7%	80.0%	78.4%
1.64071637	48	30	11	8	80.4%	85.7%	73.2%	81.4%	78.9%
1.64220183	47	30	11	9	79.4%	83.9%	73.2%	81.0%	76.9%
1.66361974	46	30	11	10	78.4%	82.1%	73.2%	80.7%	75.0%
1.67409949	46	31	10	10	79.4%	82.1%	75.6%	82.1%	75.6%
1.67763158	45	31	10	11	78.4%	80.4%	75.6%	81.8%	73.8%
1.68041237	44	31	10	12	77.3%	78.6%	75.6%	81.5%	72.1%
1.68230818	44	32	9	12	78.4%	78.6%	78.0%	83.0%	72.7%
1.68658699	43	32	9	13	77.3%	76.8%	78.0%	82.7%	71.1%
1.71275168	42	32	9	14	76.3%	75.0%	78.0%	82.4%	69.6%
1.77463863	41	32	9	15	75.3%	73.2%	78.0%	82.0%	68.1%
1.79509632	40	32	9	16	74.2%	71.4%	78.0%	81.6%	66.7%
1.83136531	39	32	9	17	73.2%	69.6%	78.0%	81.3%	65.3%
1.83659109	38	32	9	18	72.2%	67.9%	78.0%	80.9%	64.0%
1.88789683	37	32	9	19	71.1%	66.1%	78.0%	80.4%	62.7%
1.89448819	37	33	8	19	72.2%	66.1%	80.5%	82.2%	63.5%
1.89970501	37	34	7	19	73.2%	66.1%	82.9%	84.1%	64.2%
1.91875	36	34	7	20	72.2%	64.3%	82.9%	83.7%	63.0%
1.92947368	35	34	7	21	71.1%	62.5%	82.9%	83.3%	61.8%
1.93510929	34	34	7	22	70.1%	60.7%	82.9%	82.9%	60.7%
1.94023904	34	35	6	22	71.1%	60.7%	85.4%	85.0%	61.4%
1.95302013	33	35	6	23	70.1%	58.9%	85.4%	84.6%	60.3%
2.00977199	32	35	6	24	69.1%	57.1%	85.4%	84.2%	59.3%
2.02723083	31	35	6	25	68.0%	55.4%	85.4%	83.8%	58.3%
2.08108108	30	35	6	26	67.0%	53.6%	85.4%	83.3%	57.4%
2.08336689	29	35	6	27	66.0%	51.8%	85.4%	82.9%	56.5%
2.09867173	28	35	6	28	64.9%	50.0%	85.4%	82.4%	55.6%
2.12016386	28	36	5	28	66.0%	50.0%	87.8%	84.8%	56.3%
2.17551463	27	36	5	29	64.9%	48.2%	87.8%	84.4%	55.4%
2.20685901	26	36	5	30	63.9%	46.4%	87.8%	83.9%	54.5%
2.21086262	25	36	5	31	62.9%	44.6%	87.8%	83.3%	53.7%
2.2140056	24	36	5	32	61.9%	42.9%	87.8%	82.8%	52.9%
2.21947054	23	36	5	33	60.8%	41.1%	87.8%	82.1%	52.2%
2.22570726	23	37	4	33	61.9%	41.1%	90.2%	85.2%	52.9%
2.28246319	22	37	4	34	60.8%	39.3%	90.2%	84.6%	52.1%
2.31334459	21	37	4	35	59.8%	37.5%	90.2%	84.0%	51.4%
2.32785661	21	38	3	35	60.8%	37.5%	92.7%	87.5%	52.1%
2.33542977	20	38	3	36	59.8%	35.7%	92.7%	87.0%	51.4%
2.35182534	19	38	3	37	58.8%	33.9%	92.7%	86.4%	50.7%
2.42398649	18	38	3	38	57.7%	32.1%	92.7%	85.7%	50.0%
2.42978723	17	38	3	39	56.7%	30.4%	92.7%	85.0%	49.4%
2.46713852	16	38	3	40	55.7%	28.6%	92.7%	84.2%	48.7%
2.46794572	15	38	3	41	54.6%	26.8%	92.7%	83.3%	48.1%
2.50455927	14	38	3	42	53.6%	25.0%	92.7%	82.4%	47.5%
2.54775059	14	39	2	42	54.6%	25.0%	95.1%	87.5%	48.1%
2.58223938	13	39	2	43	53.6%	23.2%	95.1%	86.7%	47.6%
2.59341951	12	39	2	44	52.6%	21.4%	95.1%	85.7%	47.0%

2.6519411	11	39	2	45	51.5%	19.6%	95.1%	84.6%	46.4%
2.65326021	10	39	2	46	50.5%	17.9%	95.1%	83.3%	45.9%
2.81408898	9	39	2	47	49.5%	16.1%	95.1%	81.8%	45.3%
2.8484589	9	40	1	47	50.5%	16.1%	97.6%	90.0%	46.0%
2.86087866	8	40	1	48	49.5%	14.3%	97.6%	88.9%	45.5%
2.93694196	7	40	1	49	48.5%	12.5%	97.6%	87.5%	44.9%
2.98645216	6	40	1	50	47.4%	10.7%	97.6%	85.7%	44.4%
3.13879599	5	40	1	51	46.4%	8.9%	97.6%	83.3%	44.0%
3.22093023	4	40	1	52	45.4%	7.1%	97.6%	80.0%	43.5%
3.23469388	3	40	1	53	44.3%	5.4%	97.6%	75.0%	43.0%
3.28313671	2	40	1	54	43.3%	3.6%	97.6%	66.7%	42.6%
3.57936508	1	40	1	55	42.3%	1.8%	97.6%	50.0%	42.1%
3.71049596	0	40	1	56	41.2%	0.0%	97.6%	0.0%	41.7%
4.13732098	0	41	0	56	42.3%	0.0%	100.0% NA		42.3%

HR- HER2+

MrE_Size: PostMR early phase (cm)

MrE_Size	Correct		Incorrect		Percentages				
	Event	Non-Event	Event	Non-Event	Correct	Sensitivity	Specificity	PPV	NPV
0.1	26	34	28	2	66.7%	92.9%	54.8%	48.1%	94.4%
0.2	25	35	27	3	66.7%	89.3%	56.5%	48.1%	92.1%
0.3	25	40	22	3	72.2%	89.3%	64.5%	53.2%	93.0%
0.4	24	44	18	4	75.6%	85.7%	71.0%	57.1%	91.7%
0.5	23	47	15	5	77.8%	82.1%	75.8%	60.5%	90.4%
0.6	19	48	14	9	74.4%	67.9%	77.4%	57.6%	84.2%
0.8	18	49	13	10	74.4%	64.3%	79.0%	58.1%	83.1%
0.9	17	50	12	11	74.4%	60.7%	80.6%	58.6%	82.0%
1	17	51	11	11	75.6%	60.7%	82.3%	60.7%	82.3%
1.1	16	52	10	12	75.6%	57.1%	83.9%	61.5%	81.3%
1.2	14	55	7	14	76.7%	50.0%	88.7%	66.7%	79.7%
1.4	13	56	6	15	76.7%	46.4%	90.3%	68.4%	78.9%
1.5	9	57	5	19	73.3%	32.1%	91.9%	64.3%	75.0%
1.7	8	57	5	20	72.2%	28.6%	91.9%	61.5%	74.0%
1.8	8	58	4	20	73.3%	28.6%	93.5%	66.7%	74.4%
1.9	7	59	3	21	73.3%	25.0%	95.2%	70.0%	73.8%
2	6	61	1	22	74.4%	21.4%	98.4%	85.7%	73.5%
2.7	5	61	1	23	73.3%	17.9%	98.4%	83.3%	72.6%
2.9	4	61	1	24	72.2%	14.3%	98.4%	80.0%	71.8%
3.5	4	62	0	24	73.3%	14.3%	100.0%	100.0%	72.1%
3.9	3	62	0	25	72.2%	10.7%	100.0%	100.0%	71.3%
4.7	2	62	0	26	71.1%	7.1%	100.0%	100.0%	70.5%
4.9	1	62	0	27	70.0%	3.6%	100.0%	100.0%	69.7%
5	0	62	0	28	68.9%	0.0%	100.0% NA		68.9%

MrL_Size: PostMR late phase (cm)

MrL_Size	Correct		Incorrect		Percentages				
	Event	Non-Event	Event	Non-Event	Correct	Sensitivity	Specificity	PPV	NPV
0	27	29	33	1	62.2%	96.4%	46.8%	45.0%	96.7%
0.3	26	31	31	2	63.3%	92.9%	50.0%	45.6%	93.9%
0.4	26	38	24	2	71.1%	92.9%	61.3%	52.0%	95.0%
0.5	25	40	22	3	72.2%	89.3%	64.5%	53.2%	93.0%
0.6	24	40	22	4	71.1%	85.7%	64.5%	52.2%	90.9%
0.7	22	42	20	6	71.1%	78.6%	67.7%	52.4%	87.5%
0.8	21	42	20	7	70.0%	75.0%	67.7%	51.2%	85.7%
0.9	20	43	19	8	70.0%	71.4%	69.4%	51.3%	84.3%
1	18	44	18	10	68.9%	64.3%	71.0%	50.0%	81.5%
1.2	16	47	15	12	70.0%	57.1%	75.8%	51.6%	79.7%
1.3	16	49	13	12	72.2%	57.1%	79.0%	55.2%	80.3%
1.4	14	51	11	14	72.2%	50.0%	82.3%	56.0%	78.5%
1.5	9	52	10	19	67.8%	32.1%	83.9%	47.4%	73.2%
1.7	8	52	10	20	66.7%	28.6%	83.9%	44.4%	72.2%
1.9	7	53	9	21	66.7%	25.0%	85.5%	43.8%	71.6%
2	6	57	5	22	70.0%	21.4%	91.9%	54.5%	72.2%
2.1	6	58	4	22	71.1%	21.4%	93.5%	60.0%	72.5%
2.5	6	60	2	22	73.3%	21.4%	96.8%	75.0%	73.2%
2.7	5	60	2	23	72.2%	17.9%	96.8%	71.4%	72.3%
2.8	5	61	1	23	73.3%	17.9%	98.4%	83.3%	72.6%
2.9	4	61	1	24	72.2%	14.3%	98.4%	80.0%	71.8%
3.5	4	62	0	24	73.3%	14.3%	100.0%	100.0%	72.1%
4	3	62	0	25	72.2%	10.7%	100.0%	100.0%	71.3%
4.7	2	62	0	26	71.1%	7.1%	100.0%	100.0%	70.5%
4.9	1	62	0	27	70.0%	3.6%	100.0%	100.0%	69.7%
5	0	62	0	28	68.9%	0.0%	100.0% NA		68.9%

MrSerE: Lesion-to-background SER (early)

MrSerE	Correct		Incorrect		Percentages				
	Event	Non-Event	Event	Non-Event	Correct	Sensitivity	Specificity	PPV	NPV
0.73229572	28	1	61	0	32.2%	100.0%	1.6%	31.5%	100.0%
0.74043261	28	2	60	0	33.3%	100.0%	3.2%	31.8%	100.0%
0.80313837	28	3	59	0	34.4%	100.0%	4.8%	32.2%	100.0%

0.85235921	28	4	58	0	35.6%	100.0%	6.5%	32.6%	100.0%
0.86666667	28	5	57	0	36.7%	100.0%	8.1%	32.9%	100.0%
0.88995215	28	6	56	0	37.8%	100.0%	9.7%	33.3%	100.0%
0.90132036	28	7	55	0	38.9%	100.0%	11.3%	33.7%	100.0%
0.90861423	28	8	54	0	40.0%	100.0%	12.9%	34.1%	100.0%
0.91207258	28	9	53	0	41.1%	100.0%	14.5%	34.6%	100.0%
0.93038822	28	10	52	0	42.2%	100.0%	16.1%	35.0%	100.0%
0.94070081	28	11	51	0	43.3%	100.0%	17.7%	35.4%	100.0%
0.94097222	28	12	50	0	44.4%	100.0%	19.4%	35.9%	100.0%
0.96033403	28	13	49	0	45.6%	100.0%	21.0%	36.4%	100.0%
0.96722505	28	14	48	0	46.7%	100.0%	22.6%	36.8%	100.0%
0.97254151	28	15	47	0	47.8%	100.0%	24.2%	37.3%	100.0%
0.98539435	27	15	47	1	46.7%	96.4%	24.2%	36.5%	93.8%
0.99953596	27	16	46	1	47.8%	96.4%	25.8%	37.0%	94.1%
1.00679852	27	17	45	1	48.9%	96.4%	27.4%	37.5%	94.4%
1.00788644	27	18	44	1	50.0%	96.4%	29.0%	38.0%	94.7%
1.01697217	27	19	43	1	51.1%	96.4%	30.6%	38.6%	95.0%
1.02249806	27	20	42	1	52.2%	96.4%	32.3%	39.1%	95.2%
1.04861111	27	21	41	1	53.3%	96.4%	33.9%	39.7%	95.5%
1.05626327	27	22	40	1	54.4%	96.4%	35.5%	40.3%	95.7%
1.06462585	27	23	39	1	55.6%	96.4%	37.1%	40.9%	95.8%
1.08531469	27	24	38	1	56.7%	96.4%	38.7%	41.5%	96.0%
1.089838	27	25	37	1	57.8%	96.4%	40.3%	42.2%	96.2%
1.0912	27	26	36	1	58.9%	96.4%	41.9%	42.9%	96.3%
1.0976801	27	27	35	1	60.0%	96.4%	43.5%	43.5%	96.4%
1.12529928	27	28	34	1	61.1%	96.4%	45.2%	44.3%	96.6%
1.13662457	27	29	33	1	62.2%	96.4%	46.8%	45.0%	96.7%
1.20144628	27	30	32	1	63.3%	96.4%	48.4%	45.8%	96.8%
1.22770398	27	31	31	1	64.4%	96.4%	50.0%	46.6%	96.9%
1.24012006	26	31	31	2	63.3%	92.9%	50.0%	45.6%	93.9%
1.25413534	26	32	30	2	64.4%	92.9%	51.6%	46.4%	94.1%
1.34912187	26	33	29	2	65.6%	92.9%	53.2%	47.3%	94.3%
1.35621521	25	33	29	3	64.4%	89.3%	53.2%	46.3%	91.7%
1.3718048	25	34	28	3	65.6%	89.3%	54.8%	47.2%	91.9%
1.39849624	25	35	27	3	66.7%	89.3%	56.5%	48.1%	92.1%
1.41333333	25	36	26	3	67.8%	89.3%	58.1%	49.0%	92.3%
1.45472062	24	36	26	4	66.7%	85.7%	58.1%	48.0%	90.0%
1.4640411	24	37	25	4	67.8%	85.7%	59.7%	49.0%	90.2%
1.48255814	24	38	24	4	68.9%	85.7%	61.3%	50.0%	90.5%
1.5	24	39	23	4	70.0%	85.7%	62.9%	51.1%	90.7%
1.71376281	24	40	22	4	71.1%	85.7%	64.5%	52.2%	90.9%
1.7185261	24	41	21	4	72.2%	85.7%	66.1%	53.3%	91.1%
1.72035139	23	41	21	5	71.1%	82.1%	66.1%	52.3%	89.1%
1.72812846	23	42	20	5	72.2%	82.1%	67.7%	53.5%	89.4%
1.73112209	23	43	19	5	73.3%	82.1%	69.4%	54.8%	89.6%
1.74562584	23	44	18	5	74.4%	82.1%	71.0%	56.1%	89.8%
1.77871148	22	44	18	6	73.3%	78.6%	71.0%	55.0%	88.0%
1.78716645	22	45	17	6	74.4%	78.6%	72.6%	56.4%	88.2%
1.79499011	22	46	16	6	75.6%	78.6%	74.2%	57.9%	88.5%
1.81463112	21	46	16	7	74.4%	75.0%	74.2%	56.8%	86.8%
1.83275261	20	46	16	8	73.3%	71.4%	74.2%	55.6%	85.2%
1.84267913	20	47	15	8	74.4%	71.4%	75.8%	57.1%	85.5%
1.90349819	20	48	14	8	75.6%	71.4%	77.4%	58.8%	85.7%
1.9040404	20	49	13	8	76.7%	71.4%	79.0%	60.6%	86.0%
1.94574096	20	50	12	8	77.8%	71.4%	80.6%	62.5%	86.2%
2.09027778	20	51	11	8	78.9%	71.4%	82.3%	64.5%	86.4%
2.10784939	20	52	10	8	80.0%	71.4%	83.9%	66.7%	86.7%
2.11422414	19	52	10	9	78.9%	67.9%	83.9%	65.5%	85.2%
2.21338506	19	53	9	9	80.0%	67.9%	85.5%	67.9%	85.5%
2.23391304	18	53	9	10	78.9%	64.3%	85.5%	66.7%	84.1%
2.28843474	17	53	9	11	77.8%	60.7%	85.5%	65.4%	82.8%
2.37558442	17	54	8	11	78.9%	60.7%	87.1%	68.0%	83.1%
2.38088012	17	55	7	11	80.0%	60.7%	88.7%	70.8%	83.3%
2.42731887	16	55	7	12	78.9%	57.1%	88.7%	69.6%	82.1%
2.48684211	15	55	7	13	77.8%	53.6%	88.7%	68.2%	80.9%
2.50484653	14	55	7	14	76.7%	50.0%	88.7%	66.7%	79.7%
2.52373887	14	56	6	14	77.8%	50.0%	90.3%	70.0%	80.0%
2.64129032	13	56	6	15	76.7%	46.4%	90.3%	68.4%	78.9%
2.81043745	12	56	6	16	75.6%	42.9%	90.3%	66.7%	77.8%
2.84210526	11	56	6	17	74.4%	39.3%	90.3%	64.7%	76.7%
2.94699647	11	57	5	17	75.6%	39.3%	91.9%	68.8%	77.0%
3.09090909	10	57	5	18	74.4%	35.7%	91.9%	66.7%	76.0%
3.09097222	9	57	5	19	73.3%	32.1%	91.9%	64.3%	75.0%
3.10046368	8	57	5	20	72.2%	28.6%	91.9%	61.5%	74.0%
3.24074074	8	58	4	20	73.3%	28.6%	93.5%	66.7%	74.4%
3.24349442	7	58	4	21	72.2%	25.0%	93.5%	63.6%	73.4%
3.26987952	6	58	4	22	71.1%	21.4%	93.5%	60.0%	72.5%
3.28061224	6	59	3	22	72.2%	21.4%	95.2%	66.7%	72.8%
3.29191797	6	60	2	22	73.3%	21.4%	96.8%	75.0%	73.2%
3.30882353	6	61	1	22	74.4%	21.4%	98.4%	85.7%	73.5%
3.36605317	5	61	1	23	73.3%	17.9%	98.4%	83.3%	72.6%
3.53604436	4	61	1	24	72.2%	14.3%	98.4%	80.0%	71.8%
3.58419753	3	61	1	25	71.1%	10.7%	98.4%	75.0%	70.9%
3.92924126	2	61	1	26	70.0%	7.1%	98.4%	66.7%	70.1%
3.94477086	1	61	1	27	68.9%	3.6%	98.4%	50.0%	69.3%
4.5746321	0	61	1	28	67.8%	0.0%	98.4%	0.0%	68.5%
5.63157895	0	62	0	28	68.9%	0.0%	100.0% NA		68.9%

MrSerL: Lesion-to-background SER (late)

MrSerL	Correct		Incorrect		Percentages				
	Event	Non-Event	Event	Non-Event	Correct	Sensitivity	Specificity	PPV	NPV
0.63573668	28	1	61	0	32.2%	100.0%	1.6%	31.5%	100.0%
0.72011057	28	2	60	0	33.3%	100.0%	3.2%	31.8%	100.0%
0.79032258	28	3	59	0	34.4%	100.0%	4.8%	32.2%	100.0%
0.79306072	28	4	58	0	35.6%	100.0%	6.5%	32.6%	100.0%
0.86521483	28	5	57	0	36.7%	100.0%	8.1%	32.9%	100.0%
0.88482633	28	6	56	0	37.8%	100.0%	9.7%	33.3%	100.0%

0.90266729	28	7	55	0	38.9%	100.0%	11.3%	33.7%	100.0%
0.90509554	28	8	54	0	40.0%	100.0%	12.9%	34.1%	100.0%
0.91651432	28	9	53	0	41.1%	100.0%	14.5%	34.6%	100.0%
0.93935719	28	10	52	0	42.2%	100.0%	16.1%	35.0%	100.0%
0.95783133	27	10	52	1	41.1%	96.4%	16.1%	34.2%	90.9%
0.98103976	27	11	51	1	42.2%	96.4%	17.7%	34.6%	91.7%
0.99569429	27	12	50	1	43.3%	96.4%	19.4%	35.1%	92.3%
0.9973545	27	13	49	1	44.4%	96.4%	21.0%	35.5%	92.9%
0.99817784	27	14	48	1	45.6%	96.4%	22.6%	36.0%	93.3%
1.00100908	27	15	47	1	46.7%	96.4%	24.2%	36.5%	93.8%
1.00814111	27	16	46	1	47.8%	96.4%	25.8%	37.0%	94.1%
1.01567398	27	17	45	1	48.9%	96.4%	27.4%	37.5%	94.4%
1.01886792	27	18	44	1	50.0%	96.4%	29.0%	38.0%	94.7%
1.01956703	27	19	43	1	51.1%	96.4%	30.6%	38.6%	95.0%
1.05365355	27	20	42	1	52.2%	96.4%	32.3%	39.1%	95.2%
1.05857988	27	21	41	1	53.3%	96.4%	33.9%	39.7%	95.5%
1.07121484	27	22	40	1	54.4%	96.4%	35.5%	40.3%	95.7%
1.10904007	27	23	39	1	55.6%	96.4%	37.1%	40.9%	95.8%
1.11515152	27	24	38	1	56.7%	96.4%	38.7%	41.5%	96.0%
1.12125639	27	25	37	1	57.8%	96.4%	40.3%	42.2%	96.2%
1.12868217	27	26	36	1	58.9%	96.4%	41.9%	42.9%	96.3%
1.15707621	27	27	35	1	60.0%	96.4%	43.5%	43.5%	96.4%
1.17888563	27	28	34	1	61.1%	96.4%	45.2%	44.3%	96.6%
1.18265541	27	29	33	1	62.2%	96.4%	46.8%	45.0%	96.7%
1.18685955	27	30	32	1	63.3%	96.4%	48.4%	45.8%	96.8%
1.19529719	27	31	31	1	64.4%	96.4%	50.0%	46.6%	96.9%
1.21535064	27	32	30	1	65.6%	96.4%	51.6%	47.4%	97.0%
1.2185008	27	33	29	1	66.7%	96.4%	53.2%	48.2%	97.1%
1.22700297	27	34	28	1	67.8%	96.4%	54.8%	49.1%	97.1%
1.46973094	26	34	28	2	66.7%	92.9%	54.8%	48.1%	94.4%
1.48845382	26	35	27	2	67.8%	92.9%	56.5%	49.1%	94.6%
1.49510033	26	36	26	2	68.9%	92.9%	58.1%	50.0%	94.7%
1.516	25	36	26	3	67.8%	89.3%	58.1%	49.0%	92.3%
1.51620029	25	37	25	3	68.9%	89.3%	59.7%	50.0%	92.5%
1.54411765	24	37	25	4	67.8%	85.7%	59.7%	49.0%	90.2%
1.56622024	23	37	25	5	66.7%	82.1%	59.7%	47.9%	88.1%
1.56728972	23	38	24	5	67.8%	82.1%	61.3%	48.9%	88.4%
1.56864654	22	38	24	6	66.7%	78.6%	61.3%	47.8%	86.4%
1.59550562	21	38	24	7	65.6%	75.0%	61.3%	46.7%	84.4%
1.63853503	21	39	23	7	66.7%	75.0%	62.9%	47.7%	84.8%
1.68765957	20	39	23	8	65.6%	71.4%	62.9%	46.5%	83.0%
1.69539615	20	40	22	8	66.7%	71.4%	64.5%	47.6%	83.3%
1.71251499	20	41	21	8	67.8%	71.4%	66.1%	48.8%	83.7%
1.72759857	20	42	20	8	68.9%	71.4%	67.7%	50.0%	84.0%
1.77482447	20	43	19	8	70.0%	71.4%	69.4%	51.3%	84.3%
1.83120205	20	44	18	8	71.1%	71.4%	71.0%	52.6%	84.6%
1.85518814	20	45	17	8	72.2%	71.4%	72.6%	54.1%	84.9%
1.85565419	19	45	17	9	71.1%	67.9%	72.6%	52.8%	83.3%
1.86544462	18	45	17	10	70.0%	64.3%	72.6%	51.4%	81.8%
1.87107172	17	45	17	11	68.9%	60.7%	72.6%	50.0%	80.4%
1.87829111	17	46	16	11	70.0%	60.7%	74.2%	51.5%	80.7%
1.94043887	16	46	16	12	68.9%	57.1%	74.2%	50.0%	79.3%
1.95376791	16	47	15	12	70.0%	57.1%	75.8%	51.6%	79.7%
1.96314908	15	47	15	13	68.9%	53.6%	75.8%	50.0%	78.3%
2.07794944	15	48	14	13	70.0%	53.6%	77.4%	51.7%	78.7%
2.08273749	15	49	13	13	71.1%	53.6%	79.0%	53.6%	79.0%
2.10956175	15	50	12	13	72.2%	53.6%	80.6%	55.6%	79.4%
2.13066826	14	50	12	14	71.1%	50.0%	80.6%	53.8%	78.1%
2.13358779	14	51	11	14	72.2%	50.0%	82.3%	56.0%	78.5%
2.18458781	13	51	11	15	71.1%	46.4%	82.3%	54.2%	77.3%
2.18546196	13	52	10	15	72.2%	46.4%	83.9%	56.5%	77.6%
2.25089286	13	53	9	15	73.3%	46.4%	85.5%	59.1%	77.9%
2.27263875	12	53	9	16	72.2%	42.9%	85.5%	57.1%	76.8%
2.32739212	12	54	8	16	73.3%	42.9%	87.1%	60.0%	77.1%
2.38488576	11	54	8	17	72.2%	39.3%	87.1%	57.9%	76.1%
2.40294985	10	54	8	18	71.1%	35.7%	87.1%	55.6%	75.0%
2.41672727	9	54	8	19	70.0%	32.1%	87.1%	52.9%	74.0%
2.44410256	8	54	8	20	68.9%	28.6%	87.1%	50.0%	73.0%
2.44752093	7	54	8	21	67.8%	25.0%	87.1%	46.7%	72.0%
2.44758735	6	54	8	22	66.7%	21.4%	87.1%	42.9%	71.1%
2.45207101	6	55	7	22	67.8%	21.4%	88.7%	46.2%	71.4%
2.48453608	6	56	6	22	68.9%	21.4%	90.3%	50.0%	71.8%
2.6496199	5	56	6	23	67.8%	17.9%	90.3%	45.5%	70.9%
2.740553	5	57	5	23	68.9%	17.9%	91.9%	50.0%	71.3%
2.81826321	4	57	5	24	67.8%	14.3%	91.9%	44.4%	70.4%
2.82761194	3	57	5	25	66.7%	10.7%	91.9%	37.5%	69.5%
2.87229862	2	57	5	26	65.6%	7.1%	91.9%	28.6%	68.7%
2.89291883	2	58	4	26	66.7%	7.1%	93.5%	33.3%	69.0%
3.28316611	2	59	3	26	67.8%	7.1%	95.2%	40.0%	69.4%
3.28534031	1	59	3	27	66.7%	3.6%	95.2%	25.0%	68.6%
3.30438066	1	60	2	27	67.8%	3.6%	96.8%	33.3%	69.0%
3.49430797	0	60	2	28	66.7%	0.0%	96.8%	0.0%	68.2%
3.57142857	0	61	1	28	67.8%	0.0%	98.4%	0.0%	68.5%
3.68801653	0	62	0	28	68.9%	0.0%	100.0%	NA	68.9%

HR+HER2+

MrE_Size: PostMR early phase (cm)

MrE_Size	Correct		Incorrect		Percentages				
	Event	Non-Event	Event	Non-Event	Correct	Sensitivity	Specificity	PPV	NPV
0	51	20	22	10	68.9%	83.6%	47.6%	69.9%	66.7%
0.2	47	23	19	14	68.0%	77.0%	54.8%	71.2%	62.2%
0.3	44	27	15	17	68.9%	72.1%	64.3%	74.6%	61.4%
0.4	41	28	14	20	67.0%	67.2%	66.7%	74.5%	58.3%

0.5	41	29	13	20	68.0%	67.2%	69.0%	75.9%	59.2%
0.6	38	30	12	23	66.0%	62.3%	71.4%	76.0%	56.6%
0.7	37	32	10	24	67.0%	60.7%	76.2%	78.7%	57.1%
0.8	33	34	8	28	65.0%	54.1%	81.0%	80.5%	54.8%
0.9	33	36	6	28	67.0%	54.1%	85.7%	84.6%	56.3%
1	30	38	4	31	66.0%	49.2%	90.5%	88.2%	55.1%
1.1	26	38	4	35	62.1%	42.6%	90.5%	86.7%	52.1%
1.2	25	38	4	36	61.2%	41.0%	90.5%	86.2%	51.4%
1.3	20	38	4	41	56.3%	32.8%	90.5%	83.3%	48.1%
1.4	20	39	3	41	57.3%	32.8%	92.9%	87.0%	48.8%
1.5	19	39	3	42	56.3%	31.1%	92.9%	86.4%	48.1%
1.6	16	39	3	45	53.4%	26.2%	92.9%	84.2%	46.4%
1.7	15	40	2	46	53.4%	24.6%	95.2%	88.2%	46.5%
1.8	14	40	2	47	52.4%	23.0%	95.2%	87.5%	46.0%
1.9	12	40	2	49	50.5%	19.7%	95.2%	85.7%	44.9%
2	11	40	2	50	49.5%	18.0%	95.2%	84.6%	44.4%
2.1	10	40	2	51	48.5%	16.4%	95.2%	83.3%	44.0%
2.3	8	40	2	53	46.6%	13.1%	95.2%	80.0%	43.0%
2.4	6	40	2	55	44.7%	9.8%	95.2%	75.0%	42.1%
2.5	5	40	2	56	43.7%	8.2%	95.2%	71.4%	41.7%
2.8	4	40	2	57	42.7%	6.6%	95.2%	66.7%	41.2%
3.5	3	40	2	58	41.7%	4.9%	95.2%	60.0%	40.8%
3.9	2	40	2	59	40.8%	3.3%	95.2%	50.0%	40.4%
5	2	41	1	59	41.7%	3.3%	97.6%	66.7%	41.0%
5.5	0	41	1	61	39.8%	0.0%	97.6%	0.0%	40.2%
6	0	42	0	61	40.8%	0.0%	100.0% NA		40.8%

MrL Size: PostMR late phase (cm)

MrL_Size	Correct		Incorrect		Percentages					
	Event	Non-Event	Event	Non-Event	Correct	Sensitivity	Specificity	PPV	NPV	
0	54	14	28	7	66.0%	88.5%	33.3%	65.9%	66.7%	
0.2	53	15	27	8	66.0%	86.9%	35.7%	66.3%	65.2%	
0.3	47	17	25	14	62.1%	77.0%	40.5%	65.3%	54.8%	
0.4	44	20	22	17	62.1%	72.1%	47.6%	66.7%	54.1%	
0.6	41	22	20	20	61.2%	67.2%	52.4%	67.2%	52.4%	
0.7	40	23	19	21	61.2%	65.6%	54.8%	67.8%	52.3%	
0.8	36	24	18	25	58.3%	59.0%	57.1%	66.7%	49.0%	
1	32	30	12	29	60.2%	52.5%	71.4%	72.7%	50.8%	
1.1	28	30	12	33	56.3%	45.9%	71.4%	70.0%	47.6%	
1.2	27	34	8	34	59.2%	44.3%	81.0%	77.1%	50.0%	
1.3	22	34	8	39	54.4%	36.1%	81.0%	73.3%	46.6%	
1.5	21	35	7	40	54.4%	34.4%	83.3%	75.0%	46.7%	
1.6	19	36	6	42	53.4%	31.1%	85.7%	76.0%	46.2%	
1.8	17	36	6	44	51.5%	27.9%	85.7%	73.9%	45.0%	
1.9	15	36	6	46	49.5%	24.6%	85.7%	71.4%	43.9%	
2	13	38	4	48	49.5%	21.3%	90.5%	76.5%	44.2%	
2.1	12	38	4	49	48.5%	19.7%	90.5%	75.0%	43.7%	
2.2	11	38	4	50	47.6%	18.0%	90.5%	73.3%	43.2%	
2.3	9	38	4	52	45.6%	14.8%	90.5%	69.2%	42.2%	
2.4	7	38	4	54	43.7%	11.5%	90.5%	63.6%	41.3%	
2.5	6	39	3	55	43.7%	9.8%	92.9%	66.7%	41.5%	
2.8	5	39	3	56	42.7%	8.2%	92.9%	62.5%	41.1%	
3.5	4	39	3	57	41.7%	6.6%	92.9%	57.1%	40.6%	
3.8	3	39	3	58	40.8%	4.9%	92.9%	50.0%	40.2%	
3.9	2	39	3	59	39.8%	3.3%	92.9%	40.0%	39.8%	
5	2	40	2	59	40.8%	3.3%	95.2%	50.0%	40.4%	
5.5	0	40	2	61	38.8%	0.0%	95.2%	0.0%	39.6%	
6	0	41	1	61	39.8%	0.0%	97.6%	0.0%	40.2%	
11	0	42	0	61	40.8%	0.0%	100.0% NA		40.8%	

MrSerE: Lesion-to-background SER (early)

MrSerE	Correct		Incorrect		Percentages					
	Event	Non-Event	Event	Non-Event	Correct	Sensitivity	Specificity	PPV	NPV	
0.34389562	61	1	41	0	60.2%	100.0%	2.4%	59.8%	100.0%	
0.55216693	60	1	41	1	59.2%	98.4%	2.4%	59.4%	50.0%	
0.74828375	60	2	40	1	60.2%	98.4%	4.8%	60.0%	66.7%	
0.7626539	59	2	40	2	59.2%	96.7%	4.8%	59.6%	50.0%	
0.80233528	59	3	39	2	60.2%	96.7%	7.1%	60.2%	60.0%	
0.86610169	59	4	38	2	61.2%	96.7%	9.5%	60.8%	66.7%	
0.87216495	59	5	37	2	62.1%	96.7%	11.9%	61.5%	71.4%	
0.89464286	59	6	36	2	63.1%	96.7%	14.3%	62.1%	75.0%	
0.91417278	59	7	35	2	64.1%	96.7%	16.7%	62.8%	77.8%	
0.91809524	59	8	34	2	65.0%	96.7%	19.0%	63.4%	80.0%	
0.94228356	59	9	33	2	66.0%	96.7%	21.4%	64.1%	81.8%	
0.94619883	59	10	32	2	67.0%	96.7%	23.8%	64.8%	83.3%	
0.95106589	59	11	31	2	68.0%	96.7%	26.2%	65.6%	84.6%	
0.97624818	59	12	30	2	68.9%	96.7%	28.6%	66.3%	85.7%	
0.98041237	58	12	30	3	68.0%	95.1%	28.6%	65.9%	80.0%	
0.9826969	57	12	30	4	67.0%	93.4%	28.6%	65.5%	75.0%	
0.98329854	57	13	29	4	68.0%	93.4%	31.0%	66.3%	76.5%	
0.99524376	57	14	28	4	68.9%	93.4%	33.3%	67.1%	77.8%	
1.00621891	56	14	28	5	68.0%	91.8%	33.3%	66.7%	73.7%	
1.01033386	56	15	27	5	68.9%	91.8%	35.7%	67.5%	75.0%	
1.01699926	56	16	26	5	69.9%	91.8%	38.1%	68.3%	76.2%	
1.02889667	55	16	26	6	68.9%	90.2%	38.1%	67.9%	72.7%	
1.04904632	55	17	25	6	69.9%	90.2%	40.5%	68.8%	73.9%	
1.05865922	55	18	24	6	70.9%	90.2%	42.9%	69.6%	75.0%	
1.09379128	55	19	23	6	71.8%	90.2%	45.2%	70.5%	76.0%	
1.11808118	54	19	23	7	70.9%	88.5%	45.2%	70.1%	73.1%	
1.14941691	53	19	23	8	69.9%	86.9%	45.2%	69.7%	70.4%	
1.15785609	52	19	23	9	68.9%	85.2%	45.2%	69.3%	67.9%	
1.198	52	20	22	9	69.9%	85.2%	47.6%	70.3%	69.0%	
1.20748299	52	21	21	9	70.9%	85.2%	50.0%	71.2%	70.0%	
1.2132964	51	21	21	10	69.9%	83.6%	50.0%	70.8%	67.7%	
1.22439024	50	21	21	11	68.9%	82.0%	50.0%	70.4%	65.6%	
1.24113475	50	22	20	11	69.9%	82.0%	52.4%	71.4%	66.7%	
1.25651042	49	22	20	12	68.9%	80.3%	52.4%	71.0%	64.7%	
1.25929204	49	23	19	12	69.9%	80.3%	54.8%	72.1%	65.7%	
1.27564392	49	24	18	12	70.9%	80.3%	57.1%	73.1%	66.7%	
1.34486546	49	25	17	12	71.8%	80.3%	59.5%	74.2%	67.6%	
1.37180185	48	25	17	13	70.9%	78.7%	59.5%	73.8%	65.8%	
1.38544799	48	26	16	13	71.8%	78.7%	61.9%	75.0%	66.7%	
1.39806678	48	27	15	13	72.8%	78.7%	64.3%	76.2%	67.5%	

1.41266376	47	27	15	14	71.8%	77.0%	64.3%	75.8%	65.9%
1.41919192	47	28	14	14	72.8%	77.0%	66.7%	77.0%	66.7%
1.50304878	46	28	14	15	71.8%	75.4%	66.7%	76.7%	65.1%
1.53409091	45	28	14	16	70.9%	73.8%	66.7%	76.3%	63.6%
1.54002463	45	29	13	16	71.8%	73.8%	69.0%	77.6%	64.4%
1.57950907	44	29	13	17	70.9%	72.1%	69.0%	77.2%	63.0%
1.59695817	43	29	13	18	69.9%	70.5%	69.0%	76.8%	61.7%
1.60319767	43	30	12	18	70.9%	70.5%	71.4%	78.2%	62.5%
1.60883036	42	30	12	19	69.9%	68.9%	71.4%	77.8%	61.2%
1.61132966	41	30	12	20	68.9%	67.2%	71.4%	77.4%	60.0%
1.61758691	40	30	12	21	68.0%	65.6%	71.4%	76.9%	58.8%
1.62225587	40	31	11	21	68.9%	65.6%	73.8%	78.4%	59.6%
1.65443629	40	32	10	21	69.9%	65.6%	76.2%	80.0%	60.4%
1.66248257	39	32	10	22	68.9%	63.9%	76.2%	79.6%	59.3%
1.70845481	38	32	10	23	68.0%	62.3%	76.2%	79.2%	58.2%
1.71078431	37	32	10	24	67.0%	60.7%	76.2%	78.7%	57.1%
1.72467903	36	32	10	25	66.0%	59.0%	76.2%	78.3%	56.1%
1.74256506	36	33	9	25	67.0%	59.0%	78.6%	80.0%	56.9%
1.74269341	35	33	9	26	66.0%	57.4%	78.6%	79.5%	55.9%
1.77043765	35	34	8	26	67.0%	57.4%	81.0%	81.4%	56.7%
1.81781377	34	34	8	27	66.0%	55.7%	81.0%	81.0%	55.7%
1.83435048	33	34	8	28	65.0%	54.1%	81.0%	80.5%	54.8%
1.85701107	32	34	8	29	64.1%	52.5%	81.0%	80.0%	54.0%
1.86839968	31	34	8	30	63.1%	50.8%	81.0%	79.5%	53.1%
1.90133333	31	35	7	30	64.1%	50.8%	83.3%	81.6%	53.8%
1.91928975	30	35	7	31	63.1%	49.2%	83.3%	81.1%	53.0%
1.93886861	29	35	7	32	62.1%	47.5%	83.3%	80.6%	52.2%
1.93910256	28	35	7	33	61.2%	45.9%	83.3%	80.0%	51.5%
2.01179245	27	35	7	34	60.2%	44.3%	83.3%	79.4%	50.7%
2.0245614	26	35	7	35	59.2%	42.6%	83.3%	78.8%	50.0%
2.03221188	25	35	7	36	58.3%	41.0%	83.3%	78.1%	49.3%
2.03580563	24	35	7	37	57.3%	39.3%	83.3%	77.4%	48.6%
2.10877404	23	35	7	38	56.3%	37.7%	83.3%	76.7%	47.9%
2.15561759	23	36	6	38	57.3%	37.7%	85.7%	79.3%	48.6%
2.16647264	22	36	6	39	56.3%	36.1%	85.7%	78.6%	48.0%
2.18330733	21	36	6	40	55.3%	34.4%	85.7%	77.8%	47.4%
2.23047977	20	36	6	41	54.4%	32.8%	85.7%	76.9%	46.8%
2.27232143	19	36	6	42	53.4%	31.1%	85.7%	76.0%	46.2%
2.27944372	18	36	6	43	52.4%	29.5%	85.7%	75.0%	45.6%
2.28733766	18	37	5	43	53.4%	29.5%	88.1%	78.3%	46.3%
2.29125413	18	38	4	43	54.4%	29.5%	90.5%	81.8%	46.9%
2.31786543	18	39	3	43	55.3%	29.5%	92.9%	85.7%	47.6%
2.34519573	18	40	2	43	56.3%	29.5%	95.2%	90.0%	48.2%
2.37343533	17	40	2	44	55.3%	27.9%	95.2%	89.5%	47.6%
2.46930423	16	40	2	45	54.4%	26.2%	95.2%	88.9%	47.1%
2.47402597	15	40	2	46	53.4%	24.6%	95.2%	88.2%	46.5%
2.56454491	14	40	2	47	52.4%	23.0%	95.2%	87.5%	46.0%
2.62469237	13	40	2	48	51.5%	21.3%	95.2%	86.7%	45.5%
2.64260563	12	40	2	49	50.5%	19.7%	95.2%	85.7%	44.9%
2.72140575	11	40	2	50	49.5%	18.0%	95.2%	84.6%	44.4%
2.7902439	10	40	2	51	48.5%	16.4%	95.2%	83.3%	44.0%
2.79057592	9	40	2	52	47.6%	14.8%	95.2%	81.8%	43.5%
2.80732314	8	40	2	53	46.6%	13.1%	95.2%	80.0%	43.0%
3.07796917	7	40	2	54	45.6%	11.5%	95.2%	77.8%	42.6%
3.08176944	6	40	2	55	44.7%	9.8%	95.2%	75.0%	42.1%
3.13043478	5	40	2	56	43.7%	8.2%	95.2%	71.4%	41.7%
3.19496855	5	41	1	56	44.7%	8.2%	97.6%	83.3%	42.3%
3.39520958	4	41	1	57	43.7%	6.6%	97.6%	80.0%	41.8%
3.5183763	3	41	1	58	42.7%	4.9%	97.6%	75.0%	41.4%
3.59411362	2	41	1	59	41.7%	3.3%	97.6%	66.7%	41.0%
3.60223368	2	42	0	59	42.7%	3.3%	100.0%	100.0%	41.6%
3.78670635	1	42	0	60	41.7%	1.6%	100.0%	100.0%	41.2%
4.10933941	0	42	0	61	40.8%	0.0%	100.0%	NA	40.8%

MrSerL: Lesion-to-background SER (late)

MrSerL	Correct		Incorrect		Percentages					
	Event	Non-Event	Event	Non-Event	Correct	Sensitivity	Specificity	PPV	NPV	
0.40951572	61	1	41	0	60.2%	100.0%	2.4%	59.8%	100.0%	
0.73084112	60	1	41	1	59.2%	98.4%	2.4%	59.4%	50.0%	
0.81752874	59	1	41	2	58.3%	96.7%	2.4%	59.0%	33.3%	
0.91709464	58	1	41	3	57.3%	95.1%	2.4%	58.6%	25.0%	
0.93632959	58	2	40	3	58.3%	95.1%	4.8%	59.2%	40.0%	
0.96314103	57	2	40	4	57.3%	93.4%	4.8%	58.8%	33.3%	
0.96418129	57	3	39	4	58.3%	93.4%	7.1%	59.4%	42.9%	
0.96767677	56	3	39	5	57.3%	91.8%	7.1%	58.9%	37.5%	
0.984375	56	4	38	5	58.3%	91.8%	9.5%	59.6%	44.4%	
0.98575499	56	5	37	5	59.2%	91.8%	11.9%	60.2%	50.0%	
0.99127676	56	6	36	5	60.2%	91.8%	14.3%	60.9%	54.5%	
0.99412393	56	7	35	5	61.2%	91.8%	16.7%	61.5%	58.3%	
1.00460035	55	7	35	6	60.2%	90.2%	16.7%	61.1%	53.8%	
1.00571429	55	8	34	6	61.2%	90.2%	19.0%	61.8%	57.1%	
1.00578947	55	9	33	6	62.1%	90.2%	21.4%	62.5%	60.0%	
1.00909091	55	10	32	6	63.1%	90.2%	23.8%	63.2%	62.5%	
1.01393095	54	10	32	7	62.1%	88.5%	23.8%	62.8%	58.8%	
1.04171882	54	11	31	7	63.1%	88.5%	26.2%	63.5%	61.1%	
1.09298999	54	12	30	7	64.1%	88.5%	28.6%	64.3%	63.2%	
1.11770335	53	12	30	8	63.1%	86.9%	28.6%	63.9%	60.0%	
1.12869565	53	13	29	8	64.1%	86.9%	31.0%	64.6%	61.9%	
1.13383459	53	14	28	8	65.0%	86.9%	33.3%	65.4%	63.6%	
1.13559322	52	14	28	9	64.1%	85.2%	33.3%	65.0%	60.9%	
1.17308607	52	15	27	9	65.0%	85.2%	35.7%	65.8%	62.5%	
1.21466131	52	16	26	9	66.0%	85.2%	38.1%	66.7%	64.0%	
1.2352071	52	17	25	9	67.0%	85.2%	40.5%	67.5%	65.4%	
1.24067389	52	18	24	9	68.0%	85.2%	42.9%	68.4%	66.7%	
1.27035831	51	18	24	10	67.0%	83.6%	42.9%	68.0%	64.3%	
1.2932579	51	19	23	10	68.0%	83.6%	45.2%	68.9%	65.5%	
1.30973451	51	20	22	10	68.9%	83.6%	47.6%	69.9%	66.7%	
1.31068648	51	21	21	10	69.9%	83.6%	50.0%	70.8%	67.7%	
1.32523468	50	21	21	11	68.9%	82.0%	50.0%	70.4%	65.6%	
1.37605178	50	22	20	11	69.9%	82.0%	52.4%	71.4%	66.7%	
1.39803171	50	23	19	11	70.9%	82.0%	54.8%	72.5%	67.6%	
1.40612648	50	24	18	11	71.8%	82.0%	57.1%	73.5%	68.6%	
1.42307692	50	25	17	11	72.8%	82.0%	59.5%	74.6%	69.4%	
1.42546584	50	26	16	11	73.8%	82.0%	61.9%	75.8%	70.3%	
1.44942592	50	27	15	11	74.8%	82.0%	64.3%	76.9%	71.1%	
1.51616162	49	27	15	12	73.8%	80.3%	64.3%	76.6%	69.2%	
1.51863354	48	27	15	13	72.8%	78.7%	64.3%	76.2%	67.5%	
1.53495935	47	27	15	14	71.8%	77.0%	64.3%	75.8%	65.9%	

1.54975845	46	27	15	15	70.9%	75.4%	64.3%	75.4%	64.3%
1.57057869	45	27	15	16	69.9%	73.8%	64.3%	75.0%	62.8%
1.59441805	45	28	14	16	70.9%	73.8%	66.7%	76.3%	63.6%
1.60127389	44	28	14	17	69.9%	72.1%	66.7%	75.9%	62.2%
1.61266748	43	28	14	18	68.9%	70.5%	66.7%	75.4%	60.9%
1.62763466	43	29	13	18	69.9%	70.5%	69.0%	76.8%	61.7%
1.66273932	42	29	13	19	68.9%	68.9%	69.0%	76.4%	60.4%
1.66987741	41	29	13	20	68.0%	67.2%	69.0%	75.9%	59.2%
1.67039764	40	29	13	21	67.0%	65.6%	69.0%	75.5%	58.0%
1.67807263	39	29	13	22	66.0%	63.9%	69.0%	75.0%	56.9%
1.69149498	38	29	13	23	65.0%	62.3%	69.0%	74.5%	55.8%
1.69236209	38	30	12	23	66.0%	62.3%	71.4%	76.0%	56.6%
1.70446233	38	31	11	23	67.0%	62.3%	73.8%	77.6%	57.4%
1.7194781	38	32	10	23	68.0%	62.3%	76.2%	79.2%	58.2%
1.73563218	37	32	10	24	67.0%	60.7%	76.2%	78.7%	57.1%
1.73616734	36	32	10	25	66.0%	59.0%	76.2%	78.3%	56.1%
1.74873354	35	32	10	26	65.0%	57.4%	76.2%	77.8%	55.2%
1.77521614	35	33	9	26	66.0%	57.4%	78.6%	79.5%	55.9%
1.8126195	35	34	8	26	67.0%	57.4%	81.0%	81.4%	56.7%
1.81524725	34	34	8	27	66.0%	55.7%	81.0%	81.0%	55.7%
1.82891832	33	34	8	28	65.0%	54.1%	81.0%	80.5%	54.8%
1.83423913	32	34	8	29	64.1%	52.5%	81.0%	80.0%	54.0%
1.86377001	31	34	8	30	63.1%	50.8%	81.0%	79.5%	53.1%
1.8643617	31	35	7	30	64.1%	50.8%	83.3%	81.6%	53.8%
1.86544046	30	35	7	31	63.1%	49.2%	83.3%	81.1%	53.0%
1.86790698	30	36	6	31	64.1%	49.2%	85.7%	83.3%	53.7%
1.92784314	30	37	5	31	65.0%	49.2%	88.1%	85.7%	54.4%
1.93788438	29	37	5	32	64.1%	47.5%	88.1%	85.3%	53.6%
1.99300699	28	37	5	33	63.1%	45.9%	88.1%	84.8%	52.9%
1.9956976	28	38	4	33	64.1%	45.9%	90.5%	87.5%	53.5%
2.01329535	27	38	4	34	63.1%	44.3%	90.5%	87.1%	52.8%
2.03382664	26	38	4	35	62.1%	42.6%	90.5%	86.7%	52.1%
2.04479167	25	38	4	36	61.2%	41.0%	90.5%	86.2%	51.4%
2.06115108	24	38	4	37	60.2%	39.3%	90.5%	85.7%	50.7%
2.06932271	23	38	4	38	59.2%	37.7%	90.5%	85.2%	50.0%
2.07041276	22	38	4	39	58.3%	36.1%	90.5%	84.6%	49.4%
2.10196906	21	38	4	40	57.3%	34.4%	90.5%	84.0%	48.7%
2.11041504	20	38	4	41	56.3%	32.8%	90.5%	83.3%	48.1%
2.11151737	19	38	4	42	55.3%	31.1%	90.5%	82.6%	47.5%
2.11742424	18	38	4	43	54.4%	29.5%	90.5%	81.8%	46.9%
2.12643678	17	38	4	44	53.4%	27.9%	90.5%	81.0%	46.3%
2.13280866	16	38	4	45	52.4%	26.2%	90.5%	80.0%	45.8%
2.14138817	16	39	3	45	53.4%	26.2%	92.9%	84.2%	46.4%
2.21293574	15	39	3	46	52.4%	24.6%	92.9%	83.3%	45.9%
2.26040268	14	39	3	47	51.5%	23.0%	92.9%	82.4%	45.3%
2.31325301	13	39	3	48	50.5%	21.3%	92.9%	81.3%	44.8%
2.31698895	12	39	3	49	49.5%	19.7%	92.9%	80.0%	44.3%
2.32931727	11	39	3	50	48.5%	18.0%	92.9%	78.6%	43.8%
2.34206471	10	39	3	51	47.6%	16.4%	92.9%	76.9%	43.3%
2.40509091	9	39	3	52	46.6%	14.8%	92.9%	75.0%	42.9%
2.46341463	9	40	2	52	47.6%	14.8%	95.2%	81.8%	43.5%
2.52654545	8	40	2	53	46.6%	13.1%	95.2%	80.0%	43.0%
2.52718676	7	40	2	54	45.6%	11.5%	95.2%	77.8%	42.6%
2.55264798	6	40	2	55	44.7%	9.8%	95.2%	75.0%	42.1%
2.58847737	5	40	2	56	43.7%	8.2%	95.2%	71.4%	41.7%
2.6437659	4	40	2	57	42.7%	6.6%	95.2%	66.7%	41.2%
2.67032967	3	40	2	58	41.7%	4.9%	95.2%	0.6	0.4081633
2.93348891	2	40	2	59	40.8%	3.3%	95.2%	0.5	0.4040404
2.98765432	1	40	2	60	39.8%	1.6%	95.2%	0.3333333	0.4
2.996139	1	41	1	60	40.8%	1.6%	97.6%	0.5	0.4059406
3.36710834	0	41	1	61	39.8%	0.0%	97.6%	0	0.4019608
3.49182764	0	42	0	61	40.8%	0.0%	100.0%	NA	0.407767