Supplementary Materials

Using Whole Slide Gray Value Map to Predict HER2 Expression and FISH Status in Breast Cancer

Table S1. HER2 IHC classification performance of GrayMap methods by cross-validation classification in subgroup of 0/1+, 2+ and 3+.

	Fold	precision	recall	f1-score	support
	1	1	0.333	0.5	3
	2	1	0.75	0.857	8
	3	1	1	1	7
0/1+	4	0.667	0.4	0.5	5
	5	1	0.333	0.5	3
	Avg.	0.933	0.563	0.671	
	Std.	0.149	0.299	0.240	
	1	0.943	1	0.971	33
	2	0.941	1	0.97	32
	3	0.968	1	0.984	30
2+	4	0.906	0.967	0.935	30
	5	0.941	1	0.97	32
	Avg.	0.940	0.993	0.966	
	Std.	0.022	0.015	0.018	
	1	1	1	1	10
	2	1	1	1	6
	3	1	0.889	0.941	9
3+	4	1	1	1	10
	5	1	1	1	10
	Avg.	1.000	0.978	0.988	
	Std.	0.000	0.050	0.026	

Table S2. HER2 FISH prediction performance of GrayMap methods on subgroup of 0/1+, 2+ and 3+.

	precision	recall	f1	jaccard	accuracy	specificity
0/1+	1.000 ± 0.000	0.333 ± 0.250	0.500 ± 0.333	0.333 ± 0.250	0.941 ± 0.056	1.000 ± 0.000
2+	0.868 ± 0.072	0.836 ± 0.067	0.852 ± 0.050	0.742 ± 0.075	0.895 ± 0.034	0.928 ± 0.045
3+	1.000 ± 0.000	1.000 ± 0.000	1.000 ± 0.000	1.000 ± 0.000	1.000 ± 0.000	---