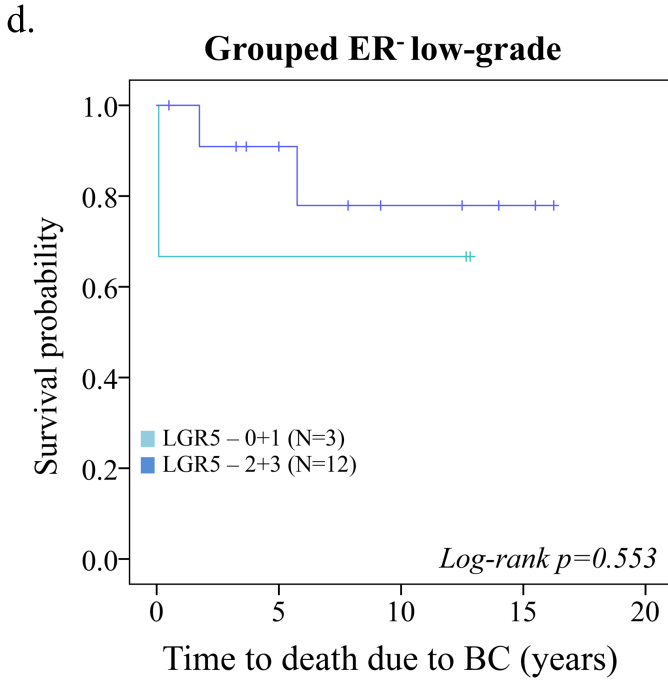
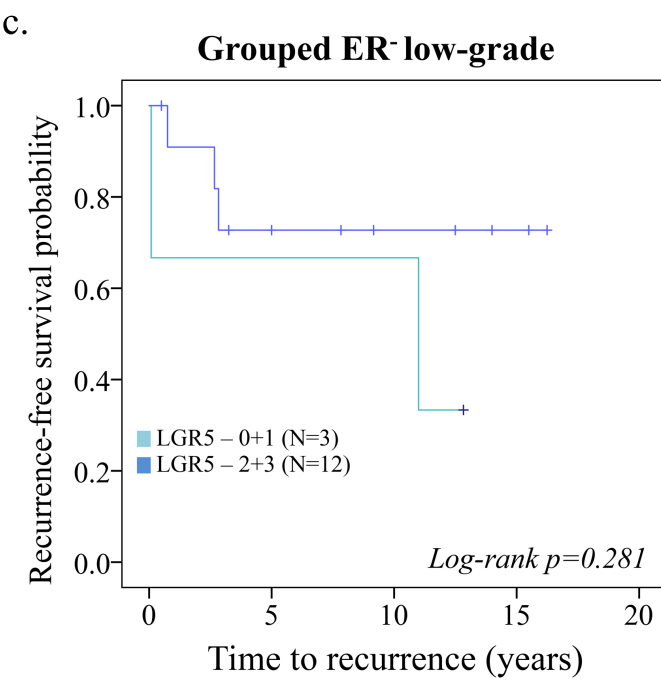
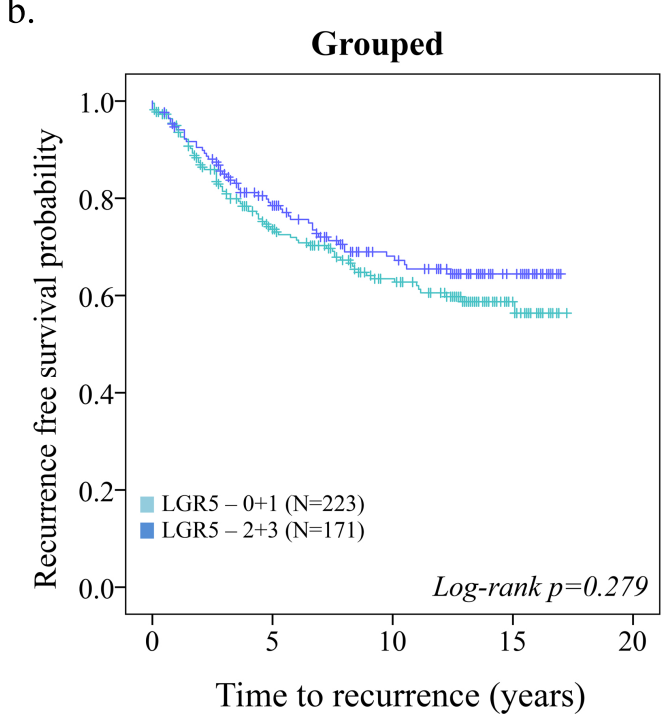
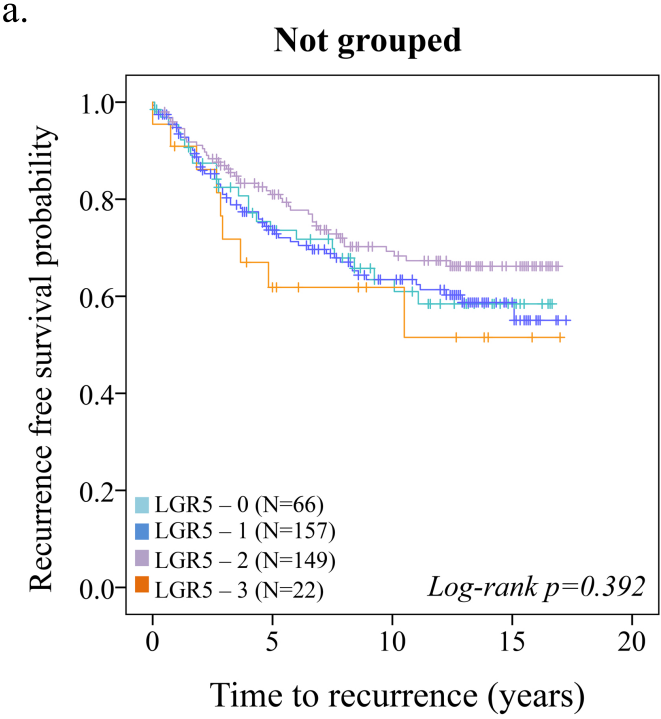
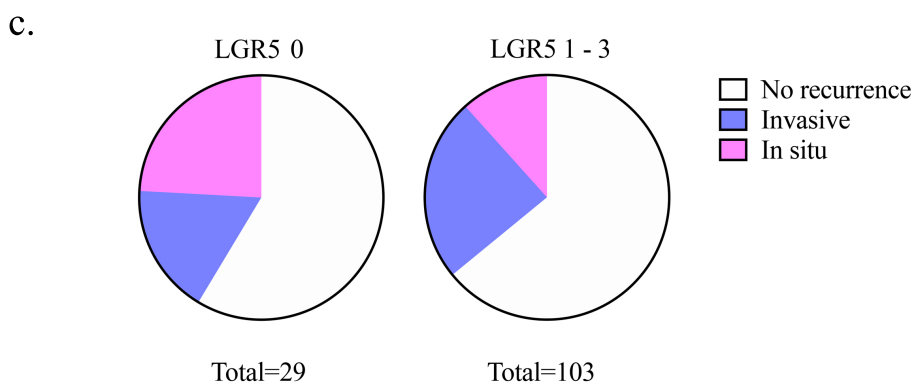
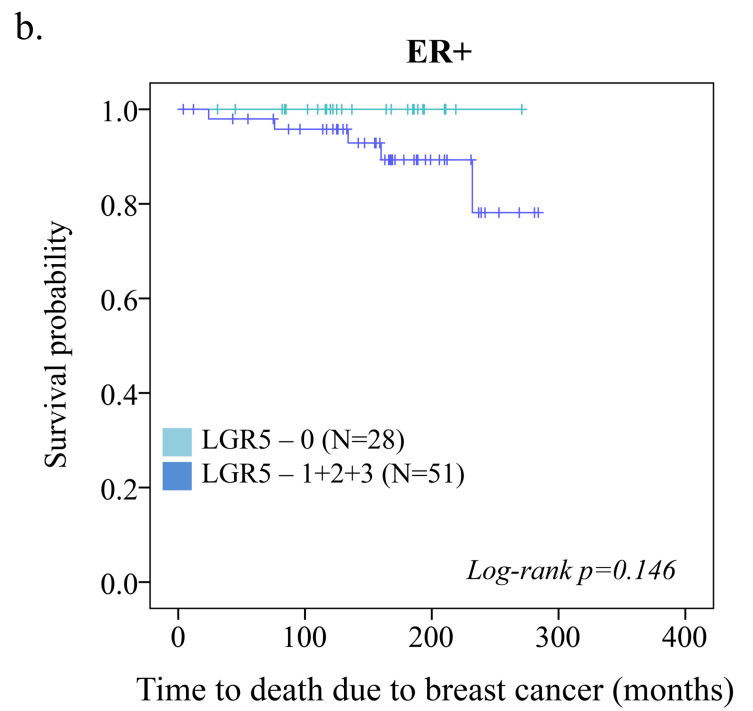
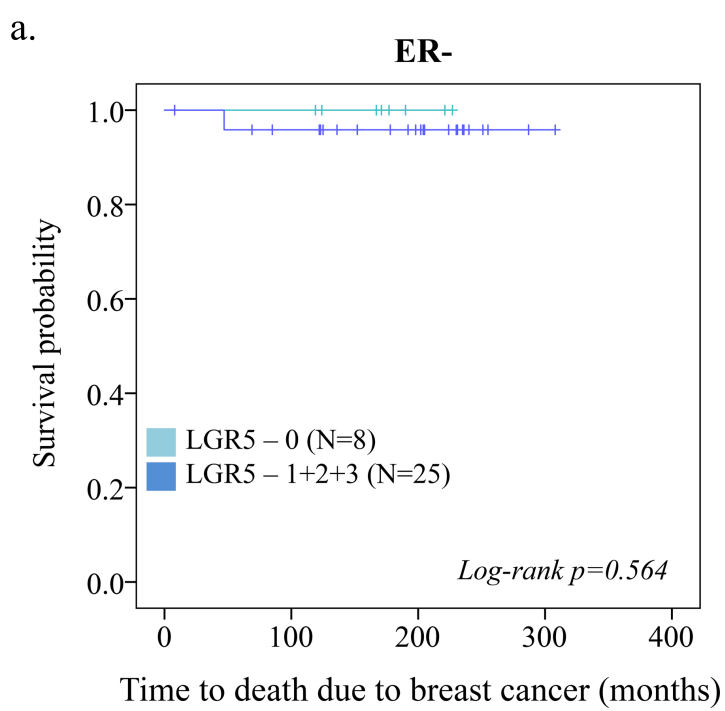


Additional Figure 1

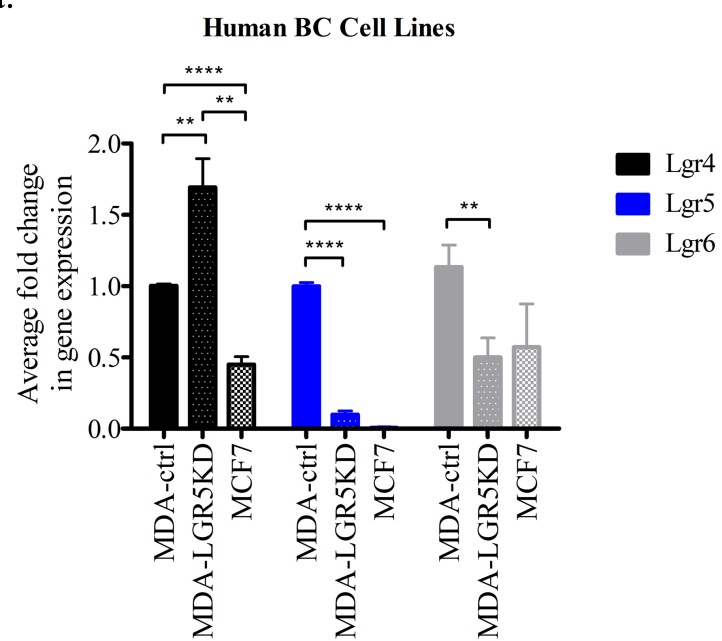


Additional Figure 2

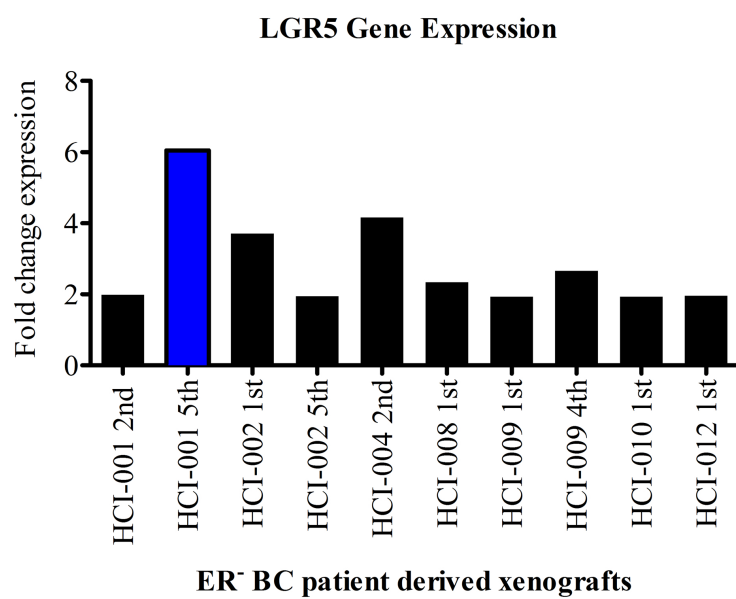


Additional Figure 3

a.



b.



Additional Table 1 Cox regression analyses for recurrence free survival in women with ER+ primary breast cancer

Variable	HR	(95% CI)	P value	HR	(95% CI)	P value
	Univariable			Multivariable		
Tumor size						
≤20 vs >20	2.16	(1.50-3.11)	0.000	1.18	(0.77-1.82)	0.45
Nodal metastasis						
- vs +	3.33	(2.28-4.89)	0.000	2.36	(1.53-3.62)	0.000
NHG						
1, 2 vs 3	3.30	(2.78-4.60)	0.000	2.69	(1.78-4.06)	0.000
LGR5						
low vs high	0.64	(0.43-0.95)	0.028	0.75	(0.49-1.15)	0.18

Abbreviations: HR, hazard ratio; NHG, Nottingham histologic score

LGR5, Leucine-rich repeat-containing G-protein coupled receptor 5. Bold indicates P-value <0.05

Additional Table 2 Cox regression analyses for recurrence free survival (RFS) in women with high-grade ER- primary breast cancer

Variable	HR	(95% CI)	P value	HR	(95% CI)	P value
	Univariable			Multivariable		
Tumor size						
≤20 vs >20	1.54	(0.66-3.58)	0.311	2.26	(0.77-6.65)	0.14
Nodal metastasis						
- vs +	2.50	(1.04-6.04)	0.041	2.91	(1.07-7.88)	0.036
LGR5						
low vs high	3.36	(1.29-8.77)	0.013	2.64	(0.94-7.43)	0.065

Abbreviations: HR, hazard ratio; CI, confidence intervals; NHG, Nottingham histologic score

LGR5, Leucine-rich repeat-containing G-protein coupled receptor 5. Bold indicates P-value <0.05

Additional Table 3 Cox regression analyses for breast cancer specific survival (BCSS) in women with high-grade ER- primary breast cancer

Variable	HR	(95% CI)	P value	HR	(95% CI)	P value
	Univariable			Multivariable		
Tumor size						
≤20 vs >20	2.12	(0.79-5.69)	0.134	3.21	(0.84-12.29)	0.088
Nodal metastasis						
- vs +	4.20	(1.48-11.94)	0.007	4.71	1.38-16.18	0.014
LGR5						
low vs high	4.03	(1.29-12.55)	0.016	3.08	(0.89-10.60)	0.075

Abbreviations: HR, hazard ratio; CI, confidence intervals; NHG, Nottingham histologic score

LGR5, Leucine-rich repeat-containing G-protein coupled receptor 5. Bold indicates P-value <0.05