

FGFR1 is an adverse outcome indicator for luminal A breast cancers

Supplementary Materials

Supplementary Table S1: Antibodies used for IHC analysis

Markers	Company	Clone	Dilution	Antigen retrieval	Incubation condition (min, °C)	Assessment	Cutoff
ER	Neomarkers	SP1	Pre-diluted	EDTA pH8	32,37	N	1%
PR	Ventana	IE2	Pre-diluted	EDTA pH8	32,37	N	20%
Ki67	Ventana	41912	Pre-diluted	EDTA pH8	32,37	N	20%
EGFR	Ventana	3C6	Pre-diluted	EDTA pH8	32,37	M	5%
HER2	Ventana	4B5	Pre-diluted	EDTA pH8	16,37	M	3+
CK5/6	Dako	D5/16 B4	1:40	EDTA pH8	32,37	C,M	5%
CK14	Neomarkers	LL002	1:100	EDTA pH8	32,37	C,M	5%
c-kit	Dako	104D2	1:300	EDTA pH8	32,37	C,M	5%
P63	Ventana	4A4	Pre-diluted	EDTA pH8	32,37	N	5%
SYN	Novocastra	27G12	1:50	EDTA pH8	32,37	C,M	1%
CG	Biogene	MU-126-UC	1:200	EDTA pH8	32,37	C,M	1%
SOX2	Ventana	SP76	Pre-diluted	EDTA pH8	32,37	N	1%
p-cadherin	BD transduction lab	56/p-cad	1:200	EDTA pH8	32,37	C,M	10%
FGFR1	Ventana	D8E4	1:200	EDTA pH8	32, 37	C, M	1%

'N': nuclear; 'C': cytoplasmic; 'M': membranous.

Supplementary Table S2: Association of FGFR1 expression of clinic-pathological features and biomarkers expression in luminal cancers

Clinico-pathological features	FGFR1 (%)				
	Negative	Positive	Total	<i>p</i> -value	
Grade	1	135 (89.4)	16 (10.6)	151	0.005
	2	328 (84.8)	59 (15.2)	387	
	3	227 (79.4)	59 (20.6)	286	
FF	Absence	509 (85.1)	89 (14.9)	598	0.086
	Presence	165 (80.5)	40 (19.5)	205	
LVI	Absence	482 (85.8)	80 (14.2)	562	0.031
	Presence	174 (79.5)	45 (20.5)	219	
pN	0	364 (86.9)	55 (13.1)	419	0.004
	1	194 (81.5)	44 (18.5)	238	
	2	80 (84.2)	15 (15.8)	95	
	3	41 (70.7)	17 (29.3)	58	

pT	1	309 (87.5)	44 (12.5)	353	0.001
	2	332 (81.0)	78 (19.0)	410	
	3	27 (77.1)	8 (22.9)	35	
	4	6 (60.0)	4 (40.0)	10	
Molecular	Lum A	454 (89.0)	56 (11.0)	510	< 0.001
	Lum B	238 (75.1)	79 (24.9)	317	
Age	Mean	54.9	52.8	54.5	0.113
	SD	12.88	12.15	12.78	
	Range	22-97	28-91		
Tumor size	Mean	2.52	2.93	2.59	0.001
	SD	1.468	1.581	1.494	
	Range	0.2-13.9	0.3-9.5		
Biomarker					
ER	Neg	53 (88.3)	7 (11.7)	60	0.311
	Pos	639 (83.3)	128 (16.7)	767	
PR	< 20%	165 (77.1)	49 (22.9)	214	0.003
	≥ 20%	523 (85.8)	86 (14.2)	609	
HER2	Neg	611 (84.6)	111 (15.4)	722	0.053
	Pos	81 (77.1)	24 (22.9)	105	
Ki67	< 20%	547 (87.3)	82 (12.7)	629	< 0.001
	≥ 20%	140 (72.9)	52 (27.1)	192	
c-kit	Neg	595 (83.7)	116 (16.3)	711	0.739
	Pos	89 (82.4)	19(17.6)	108	
P63	Neg	668 (84.0)	127 (16.0)	795	0.077
	Pos	20(71.4)	8 (28.6)	28	
CK5/6	Neg	658 (83.7)	128 (16.3)	786	0.729
	Pos	31 (81.6)	7 (18.4)	38	
CK14	Neg	661 (83.8)	128 (16.2)	789	0.766
	Pos	27 (81.8)	6 (18.2)	33	
P-cadherin	Neg	602 (84.9)	107 (15.1)	709	0.011
	Pos	78 (75.0)	26 (25.0)	104	
CG	Neg	651 (84.5)	119 (15.5)	770	0.007
	Pos	35 (70.0)	15 (30.0)	50	
SYN	Neg	601 (85.4)	103 (14.6)	704	0.001
	Pos	89 (73.6)	32 (26.4)	121	
Sox2	Neg	280 (82.8)	58 (17.2)	338	0.013
	Pos	55 (70.5)	23 (29.5)	78	