

Supplementary Materials: Independent negative prognostic role of TCF1 expression within Wnt/ β -catenin signaling pathway in primary breast cancer patients.

Concetta Saponaro, Emanuela Scarpi, Francesco Alfredo Zito, Francesco Giotta, Nicola Silvestris and Anita Mangia.

Table S1. Tumor characteristics of 220 invasive breast cancer patients.

Characteristics	n	(%)
<i>Patients Age:</i> median value 54 (range 28-80)		
≤ 54 years	114	(51.8)
> 54 years	106	(48.2)
<i>Histological type</i>		
IDC	187	(85)
ILC	18	(8.2)
Other	15	(6.8)
<i>Histological grade</i>		
G1-2	121	(55)
G3	93	(42.3)
Unknown	6	(2.7)
<i>Tumor size (cm)</i>		
≤2 cm	130	(59.1)
>2 cm	81	(36.8)
Unknown	9	(4.1)
<i>Lymph node status</i>		
Negative	129	(58.6)
Positive	85	(38.6)
Unknown	6	(2.7)
<i>Estrogen receptor</i>		
ER-negative (≤10%)	66	(30)
ER-positive (>10%)	150	(68.2)
Unknown	4	(1.8)
<i>Progesterone receptor</i>		
PgR-negative (≤10%)	97	(44.1)
PgR-positive (>10%)	119	(54.1)
Unknown	4	(1.8)
<i>Ki67</i>		
Negative (≤20%)	126	(57.3)
Positive (>20%)	89	(40.4)
Unknown	5	(2.3)
<i>HER2/neu</i>		
Negative (0,1+)	185	(84.1)
Positive (3+)	28	(12.7)
Unknown	7	(3.2)

Table S2. Relationship between tumor markers and clinicopathological features.

Characteristics	cNHERF1					nNHERF1					β-catenin					FZD 4				
	Negative n	Positive (%)	n	Positive (%)	p-value	Negative n	Positive (%)	n	Positive (%)	p-value	Negative n	Positive (%)	n	Positive (%)	p-value	Negative n	Positive (%)	n	Positive (%)	p-value
Patient age																				
≤ 54years	49	(26.1)	50	(26.6)	0.0865	87	(46)	12	(6.4)	0.9831	39	(20.2)	58	(30)	0.4298	46	(23.8)	51	(26.4)	0.1632
> 54 years	33	(17.5)	56	(29.8)		79	(41.8)	11	(5.8)		44	(22.8)	52	(27)		36	(18.7)	60	(31.1)	
Histological type																				
IDC	69	(36.7)	92	(48.9)	0.7512	141	(74.6)	21	(11.1)	0.2613	69	(35.8)	101	(52.3)	0.0138	65	(33.7)	103	(53.4)	0.0199
ILC	7	(3.7)	9	(4.9)		16	(8.5)	0	/		10	(5.2)	2	(1)		9	(4.7)	5	(2.6)	
Other	6	(3.2)	5	(2.6)		9	(4.8)	2	(1)		4	(2)	7	(3.7)		8	(4.1)	3	(1.5)	
Tumor size																				
≤2 cm	58	(32.2)	47	(26.2)	0.0020	94	(52)	12	(6.6)	0.5055	50	(26.8)	60	(32.2)	0.2420	57	(30.6)	53	(28.5)	0.0010
>2 cm	24	(13.3)	51	(28.3)		64	(35.4)	11	(6)		28	(15)	48	(26)		21	(11.3)	55	(29.6)	
Lymph node status																				
Negative	50	(26.9)	61	(32.8)	0.7486	98	(53.7)	13	(7)	0.7417	51	(27.3)	61	(32.6)	0.3521	49	(26.2)	61	(32.6)	0.5599
Positive	32	(17.2)	43	(23.1)		65	(35)	10	(5.3)		29	(15.5)	46	(24.6)		31	(16.6)	46	(24.6)	
Histological grade																				
G1-2	49	(26.8)	49	(26.8)	0.1294	82	(44.6)	17	(9.2)	0.0386	49	(26)	54	(28,7)	0.0896	56	(30)	47	(25)	0.0004
G3	33	(18)	52	(28.4)		79	(42.9)	6	(3.3)		30	(16)	55	(29,3)		24	(12.8)	60	(32.2)	
Estrogen Receptor																				
ER-negative (≤10%)	26	(14)	31	(16.7)	0.7802	51	(27.3)	7	(3.7)	0.9487	13	(6.9)	48	(25.4)	<0.0001	20	(10.6)	39	(20.6)	0.1141
ER-positive (>10%)	56	(30.1)	73	(39.2)		113	(60.4)	16	(8.6)		67	(35.4)	61	(32.3)		60	(31.7)	70	(37.1)	
Progesterone Receptor																				
PgR-negative (≤10%)	37	(19.9)	49	(26.3)	0.7866	77	(41.2)	10	(5.3)	0.7545	29	(15)	62	(33)	0.0050	34	(18)	54	(28.6)	0.3376
PgR-positive (>10%)	45	(24.2)	55	(29.6)		87	(46.5)	13	(7)		51	(27)	47	(25)		46	(24.3)	55	(29.1)	
HER2/neu																				
Negative (0,1+)	70	(38.2)	89	(48.6)	0.8281	143	(77.8)	17	(9.2)	0.7832	68	(39.3)	94	(54.3)	0.0002	66	(35.5)	96	(51.6)	0.3909
Positive (3+)	10	(5.5)	14	(7.7)		21	(11.4)	3	(1.6)		11	(6.4)	0	/		12	(6.4)	12	(6.4)	
Ki67																				
Negative (≤ 20%)	48	(26)	54	(29.1)	0.4065	91	(49)	12	(6.4)	0.7414	54	(28.7)	52	(27.7)	0.0082	52	(27.6)	55	(29.3)	0.0540
Positive (> 20%)	34	(18.4)	49	(26.5)		72	(38.7)	11	(5.9)		26	(13.8)	56	(29.8)		28	(14.9)	53	(28.2)	

continued

Characteristics	LRP5					LRP6					TCF1				
	Negative		Positive		<i>p-value</i>	Negative		Positive		<i>p-value</i>	Negative		Positive		<i>p-value</i>
	n	(%)	n	(%)		n	(%)	n	(%)		n	(%)	n	(%)	
Patient age															
≤ 54 years	37	(20.6)	54	(30)	0.9771	45	(26.6)	44	(26)	0.0175	45	(23)	59	(30)	0.9014
> 54 years	36	(20)	53	(29.4)		26	(15.4)	54	(32)		39	(20)	53	(27)	
Histological type															
IDC	61	(33.9)	96	(53.3)	0.4697	59	(35)	89	(52.6)	0.1696	74	(37.8)	94	(48)	0.1396
ILC	7	(3.9)	6	(3.3)		5	(3)	6	(3.5)		3	(1.5)	12	(6.1)	
Other	5	(2.8)	5	(2.8)		7	(4.1)	3	(1.8)		7	(3.6)	6	(3)	
Tumor size															
≤2 cm	54	(31)	51	(29.3)	0.0009	51	(31.3)	49	(30)	0.0089	50	(26.5)	64	(33.8)	0.8714
>2 cm	18	(10.3)	51	(29.3)		19	(11.7)	44	(27)		32	(17)	43	(22.7)	
Lymph node status															
Negative	42	(24.1)	63	(36.2)	0.6486	42	(25.6)	59	(36)	0.7187	50	(26.3)	60	(31.6)	0.5640
Positive	30	(17.2)	39	(22.5)		28	(17)	35	(21.4)		33	(17.4)	47	(24.7)	
Histological grade															
G1-2	50	(28.7)	42	(24.1)	0.0002	47	(28.7)	40	(24.4)	0.0010	49	(25.8)	56	(29.5)	0.2778
G3	22	(12.7)	60	(34.5)		22	(13.4)	55	(33.5)		33	(17.4)	52	(27.3)	
Estrogen Receptor															
ER-negative (≤10%)	19	(10.8)	38	(21.6)	0.1571	12	(7.2)	39	(23.5)	0.0012	20	(10.4)	42	(21.9)	0.0432
ER-positive (>10%)	53	(30.1)	66	(37.5)		58	(35)	57	(34.3)		62	(32.3)	68	(35.4)	
Progesterone Receptor															
PgR-negative (≤10%)	27	(15.3)	53	(30.1)	0.0778	23	(13.8)	53	(31.9)	0.0043	34	(17.7)	57	(29.7)	0.1552
PgR-positive (>10%)	45	(25.6)	51	(29)		47	(28.3)	43	(26)		48	(25)	53	(27.6)	
HER2/neu															
Negative (0,1+)	58	(33.3)	94	(54)	0.0619	60	(36.1)	84	(50.6)	0.7376	63	(33.3)	100	(53)	0.0670
Positive (3+)	13	(7.5)	9	(5.2)		10	(6)	12	(7.3)		15	(8)	11	(5.8)	
Ki67															
Negative (≤ 20%)	51	(29.1)	51	(29.1)	0.0049	47	(28.5)	47	(28.5)	0.0235	42	(22)	66	(34.5)	0.1979
Positive (> 20%)	21	(12)	52	(29.8)		23	(14)	48	(29)		40	(21)	43	(22.5)	