Supplementary figure 1. The distribution of tumour stroma ratios within the study cohorts. A: distribution of TSR scores versus stromal percentage for the whole cohort. B. Box plot to illustrate the distribution of TSR scores between luminal and TNBC. C: TSR scores for TNBC ; D TSR scores for luminal histological types. (C: TNBC other includes apocrine, micropapillary; D: Luminal other: includes micropapillary, mixed, mucinous).

| | TNBC | | | | | | | Luminal | | | | | | |
| | | TSR (cut 2) | | | TILs (cut 30) | | | | TSR (cut 0.74) | | | TILs Cut (10) | | |
	Total	low	high	X^2 p value	low	high	X^2 p value	Total	low	high	X^2 p value	low	high	X^2 p value
Age														
≤55	105(43)	55(36)	50(54)	7.5	55(42)	50(45)	0.28	139 (34)	60(30)	79(39)	4.1	104(32)	35(44)	4.61
>55	138(57)	96(64)	42(46)	0.006	77(58)	61(55)	0.596	264(66)	142(70)	122(61)	0.043	221(68)	43(55)	0.032
Size														
≤20mm	113(47)	69(46)	44(48)	0.08	58(44)	55(50)	0.67	294(73)	158(78)	136(68)	5.3	237(73)	57(74)	0.04
>20mm	129(53)	81(54)	48(52)	0.782	73(56)	56(50)	0.412	108(27)	44(22)	64(32)	0.021	88(27)	20(26)	0.844
Grade														
1 & 2	12(5)	10(7)	2(2)	2.46	11(8)	1(1)	7.03	321(80)	179(89)	142(71)	18.7	273(84)	48(62)	18.7
3	232(95)	141(93)	91(98)	0.117	122(92)	110(99)	0.008	80(20)	23(11)	57(29)	<0.001	51(16)	29(38)	<0.001
LN status														
Neg	156(65)	94(63)	62(68)	0.74	87(66)	69(63)	0.35	282(70)	151(75)	131(65)	4.4	228(70)	54(69)	0.03
Pos	85(35)	56(37)	29(32)	0.389	44(34)	41(37)	0.551	121(30)	51(25)	70(35)	0.036	97(30)	24(31)	0.873
TILs (*)														
≤30/ ≤10	133(55)	92(61)	41(44)	6.58				325(81)	180(89)	145(72)	18.59			
>30/ >10	111(45)	59(39)	52(56)	0.010				78(19)	22(11)	56(28)	<0.001			
Hist type														
Ductal	221(91)	136(90)	85(91)	1.25	114(86)	107(96)	9.08							
Meta	17(7)	10(7)	7(8)	0.536	13(10)	4(4)	0.011							
Other	6(2)	5(3)	1(1)		6(4)	0(0)								
Ductal								286(71)	123(61)	163(81)	23.88	219(67)	67(86)	10.5
Lobular								31(8)	25(12)	6(3)	<0.001	28(9)	3(4)	0.015
Tubular								29(7)	16(8)	13(7)		26(8)	3(4)	
Other								57(14)	38(19)	19(9)		52(16)	5(6)	

Supplementary table 1. Association of tumour stroma ratio (TSR) with clinico-pathological variables using the X^2 test.*TILs cut point ≤30% for TNBC and ≤10% for luminal. Meta: metaplastic carcinoma.

Overall Survival		Univariate			Multivariable (n=238, events n= 66)		
Variables		HR	95%CI	p	HR	95%CI	p
TSR/TILS 4 group (vs low/low)							
low/high	59 vs 92	0.53	0.29 - 0.99	0.047	0.61	0.32 – 1.14	0.119
high/low	41 vs 92	0.56	0.28 – 1.13	0.107	0.44	0.18 – 1.06	0.067
high/high	52 vs 92	0.49	0.25 – 0.94	0.033	0.45	0.23 – 0.87	0.018
Age ≤55 vs >55	105 vs 138	0.48	0.29 – 0.80	0.004	0.42	0.25 – 0.72	0.001
Size ≤20 vs >20	113 vs 129	0.54	0.33 – 0.89	0.016	0.53	0.31 – 0.90	0.019
Grade 1,2 vs 3	12 vs 232	1.46	0.63 – 3.38	0.379			
LN neg vs pos	156 vs 85	0.43	0.27 – 0.70	0.001	0.47	0.28 – 0.79	0.004
Chemo yes vs no	174 vs 58	0.49	0.30 – 0.81	0.006			
Breast Cancer Specific Survival		Univariate			Multivariable (n=238, events n= 46)		
Variables	n	HR	95%CI	p	HR	95%CI	p
TSR/TILS 4 group (vs low/low)							
low/high	59 vs 92	0.45	0.21 – 0.95	0.036	0.53	0.25 – 1.13	0.098
high/low	41 vs 92	0.29	0.10 – 0.82	0.019	0.31	0.09 – 1.04	0.057
high/high	52 vs 92	0.36	0.16 – 0.82	0.016	0.31	0.13 – 0.72	0.006
Age ≤55 vs >55	105 vs 138	0.50	0.27 – 0.91	0.022	0.44	0.23 – 0.83	0.012
Size ≤20 vs >20	113 vs 129	0.45	0.24 – 0.85	0.013	0.48	0.25 – 0.94	0.031
Grade 1,2 vs 3	12 vs 232	1.48	0.53 – 4.14	0.453			
LN neg vs pos	156 vs 85	0.31	0.17 – 0.55	<0.001	0.33	0.18 – 0.62	0.001
Chemo yes vs no	174 vs 58	0.69	0.37 – 1.30	0.253			

Supplementary Table 2. Univariate and multivariate analysis for OS and BCSS in TNBC.

Abbreviations: n, sample number; HR, hazard ratio; CI, confidence interval; p, probability value).