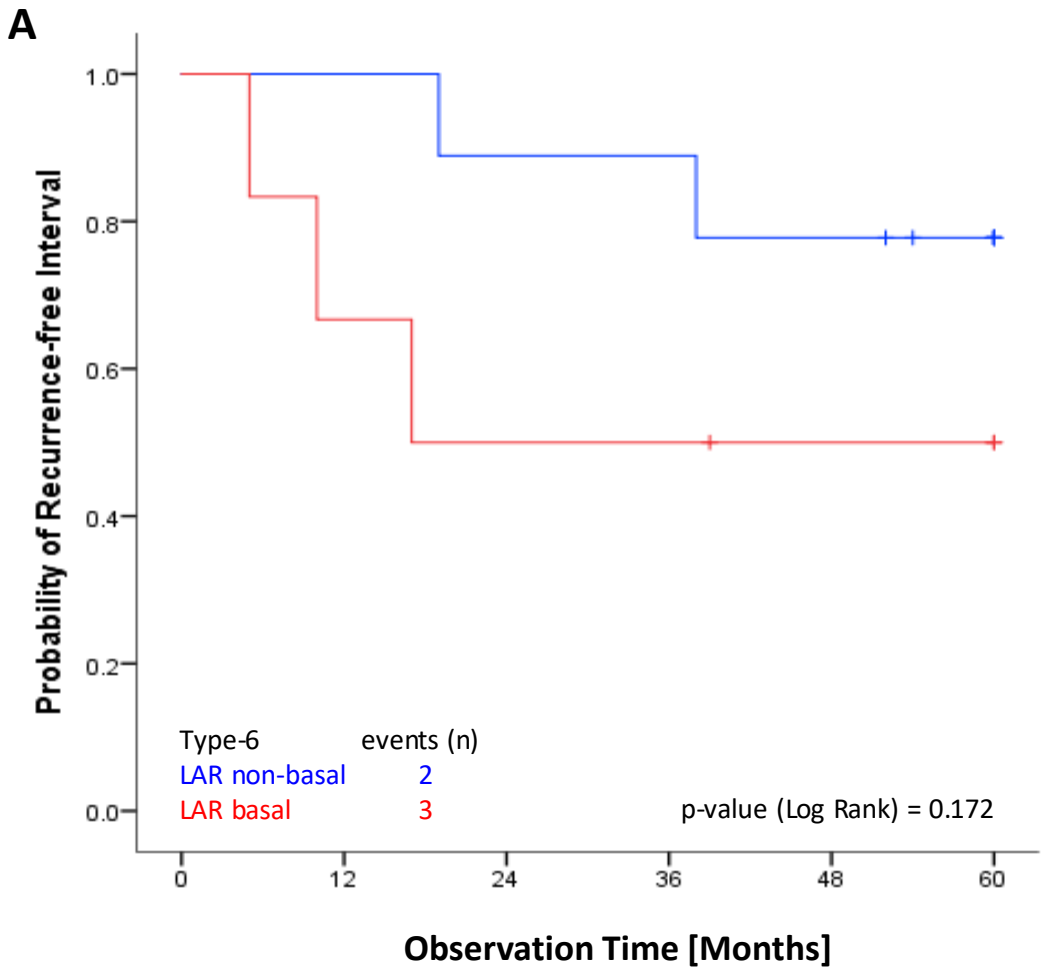
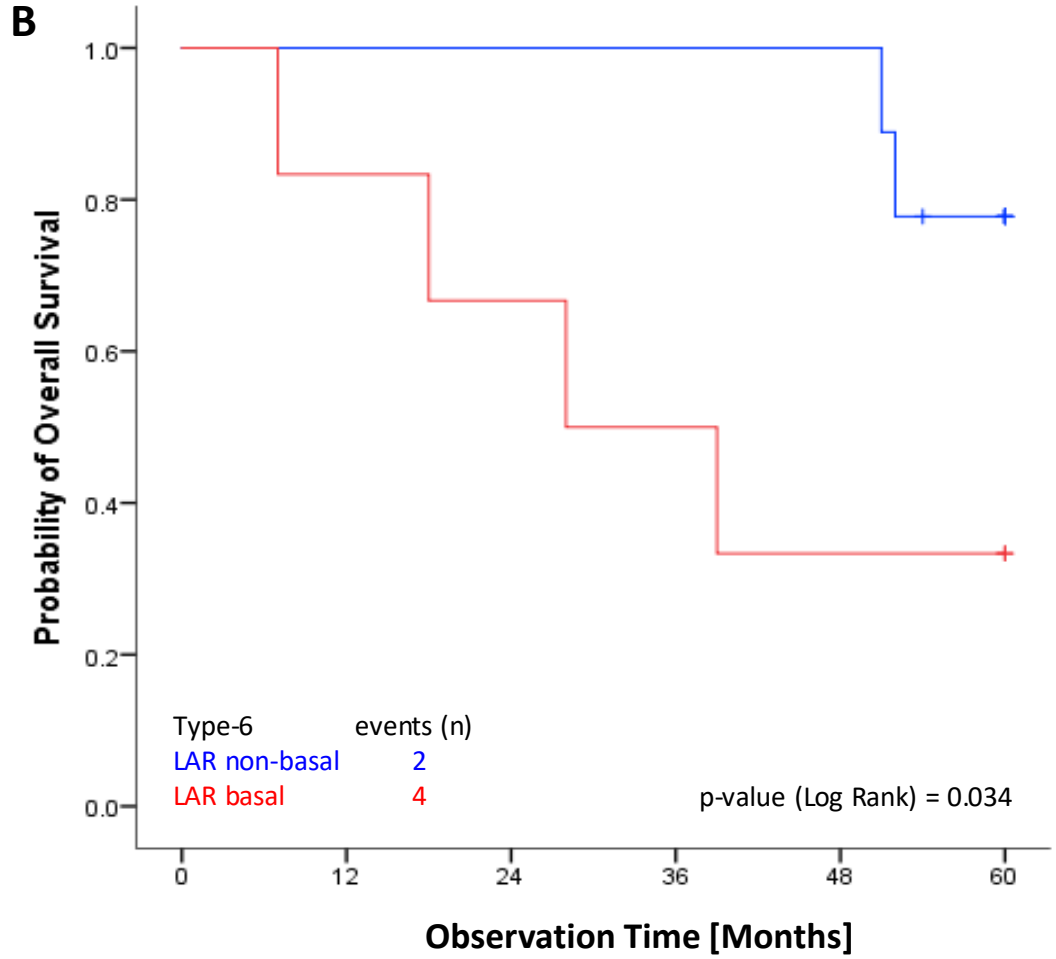
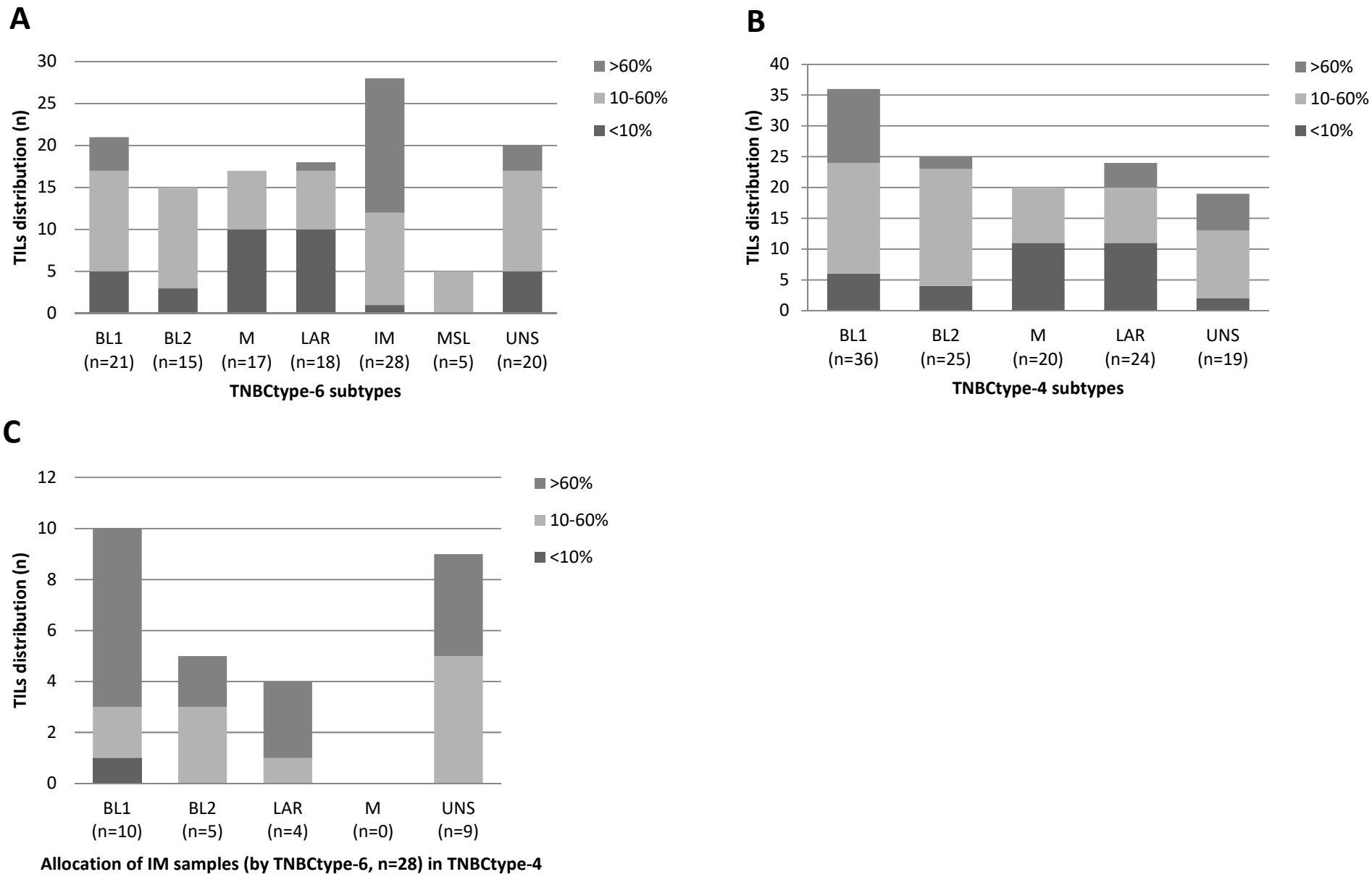




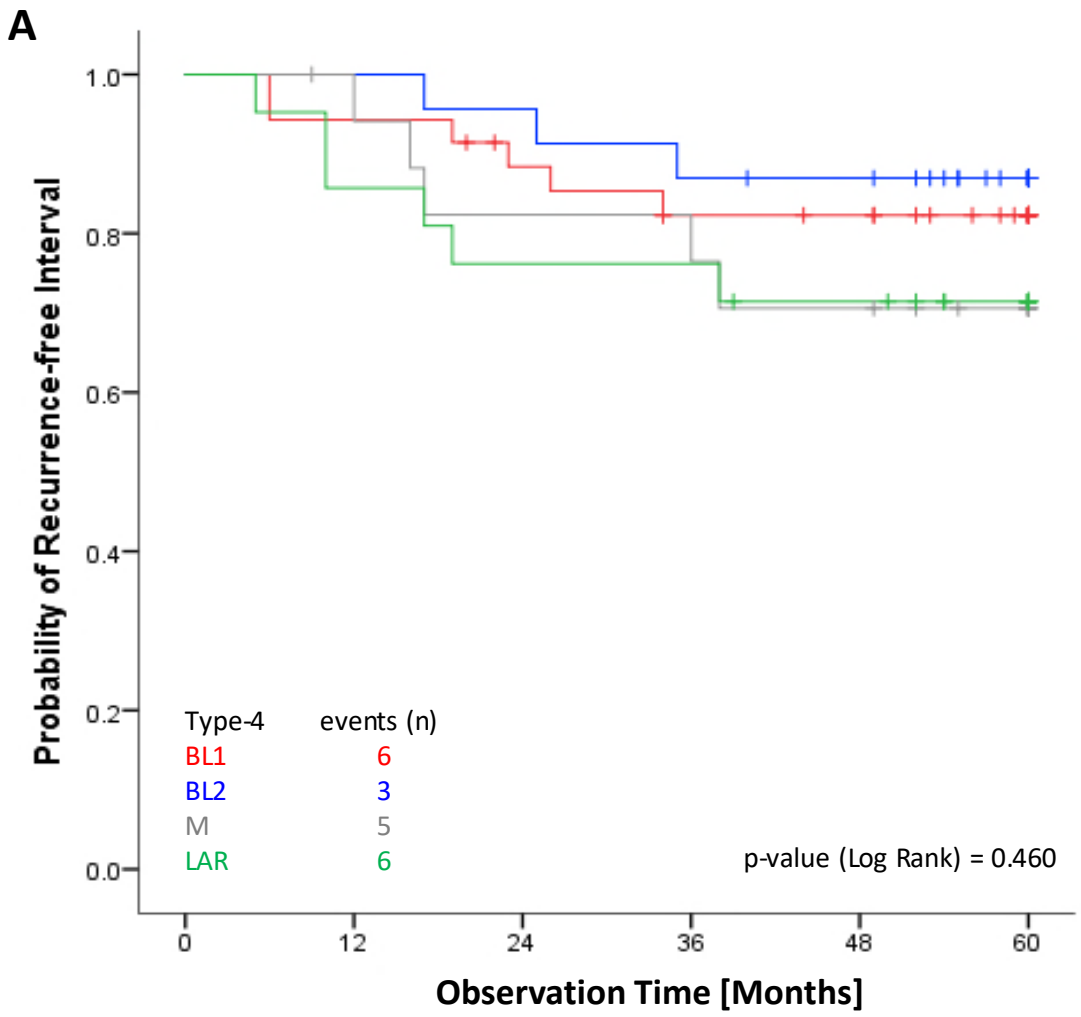
No. at risk	15	13	11	11	9	5
LAR non-basal	9	9	8	8	7	4
LAR basal	6	4	3	3	2	1

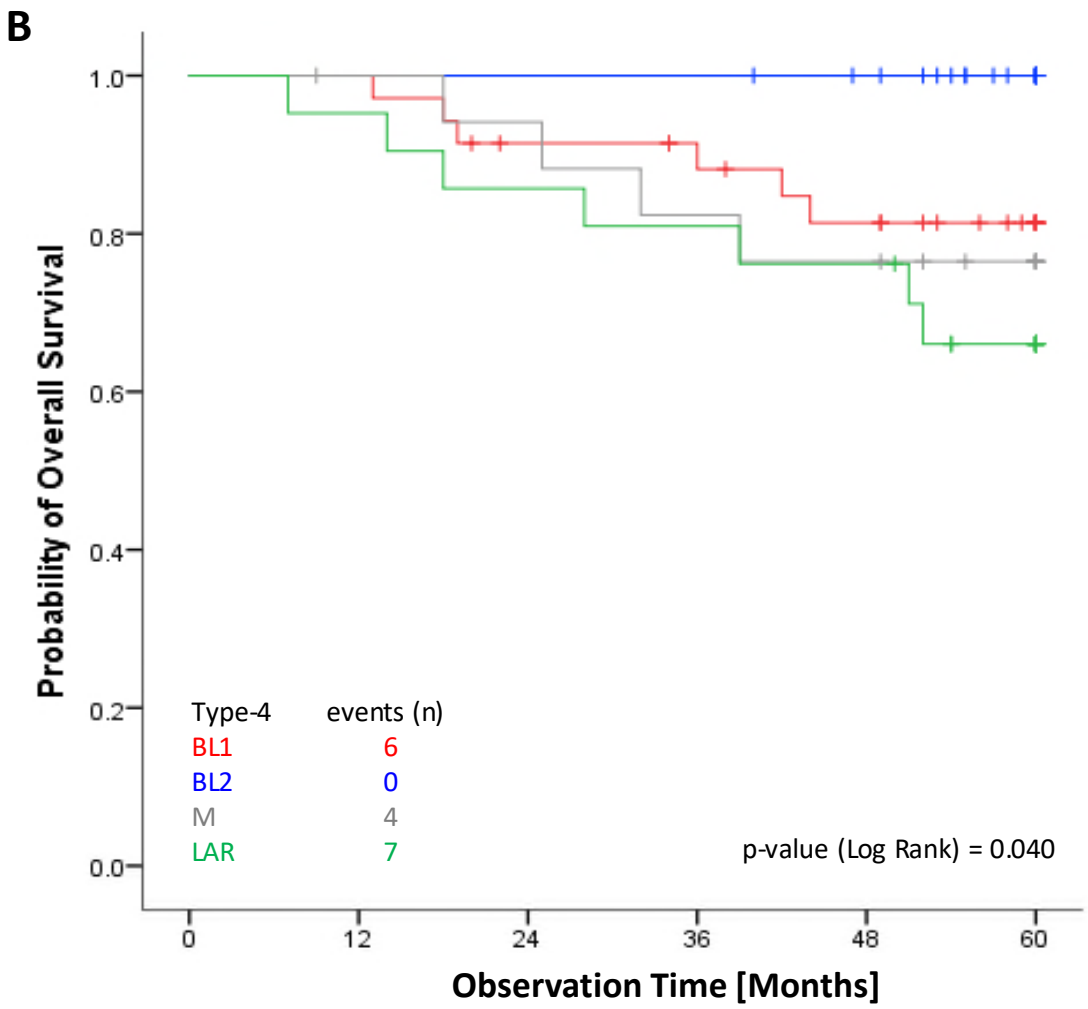
No. at risk	15	14	13	12	11	6
LAR non-basal	9	9	9	9	9	5
LAR basal	6	5	4	3	2	1

Supplementary Fig. 1. LAR non-basal and LAR-basal Kaplan-Meier plots for RFI **(A)** and OS **(B)** classified by TNBCtype-6, the tables present the effective sample size for each interval.



Supplementary Fig. 2. Distributions of TILs within TNBC subtype (n = 124).
A within the TNBCtype-6 subtypes
B within the TNBCtype-4 subtypes
C Allocation of IM samples (by TNBCtype-6, n=28) in TNBCtype-4



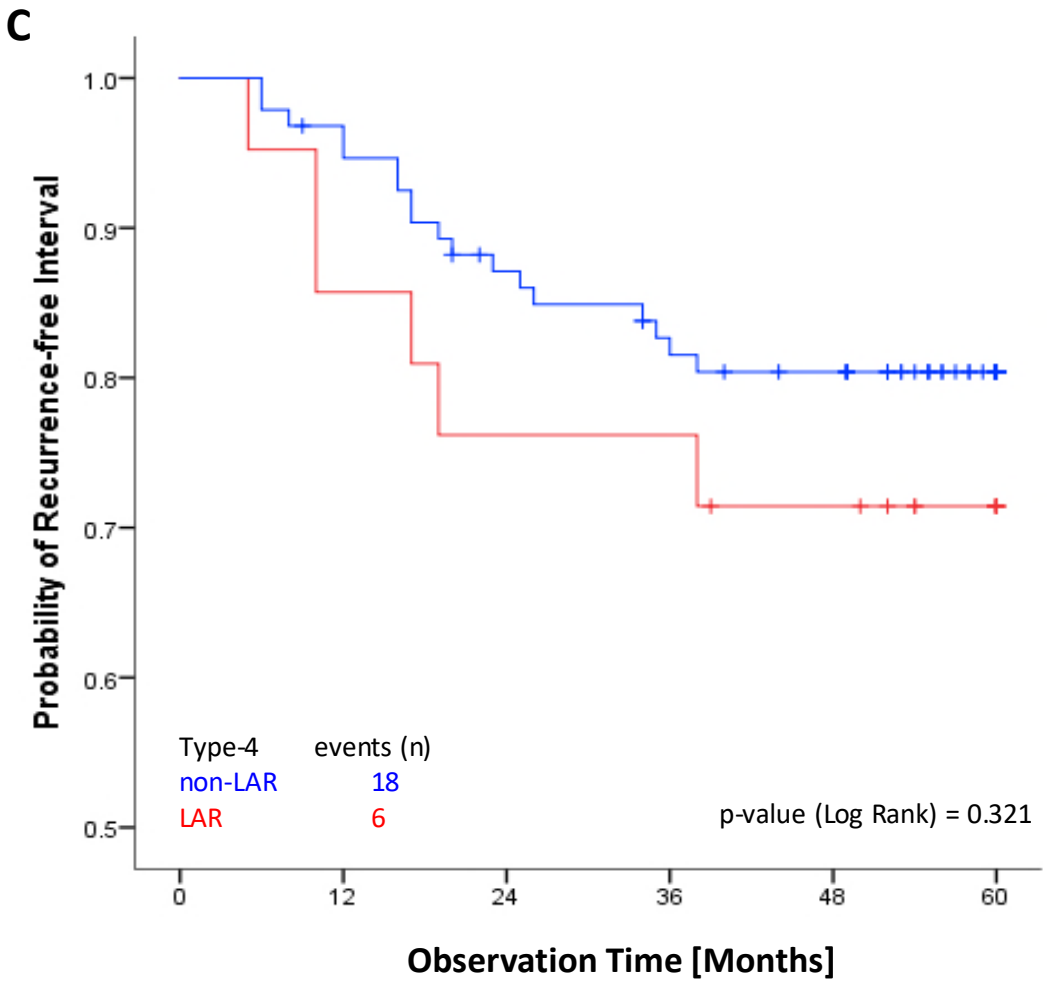


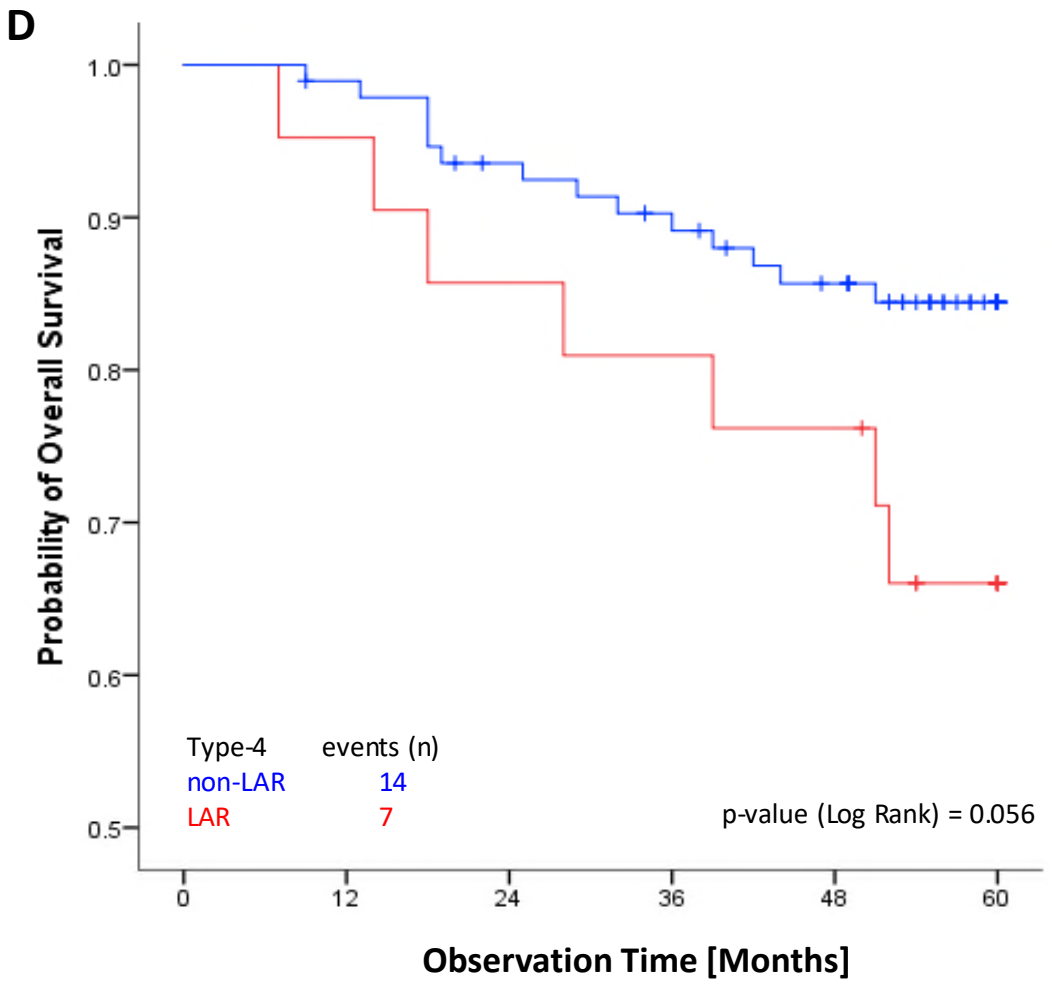
No. at risk	97	91	81	74	69	47
BL1	35	33	29	25	24	17
BL2	23	23	22	20	19	11
M	18	17	14	13	12	9
LAR	21	18	16	16	14	10

No. at risk	97	95	85	82	74	51
BL1	35	35	30	28	24	17
BL2	23	23	23	23	21	13
M	18	17	14	14	13	10
LAR	21	20	18	17	16	11

Supplementary Fig. 3. TNBCtype-4 Kaplan-Meier plots, the tables present the effective sample size for each interval.

A, B: all subdivided stable subtypes RFI (A) and OS (B)



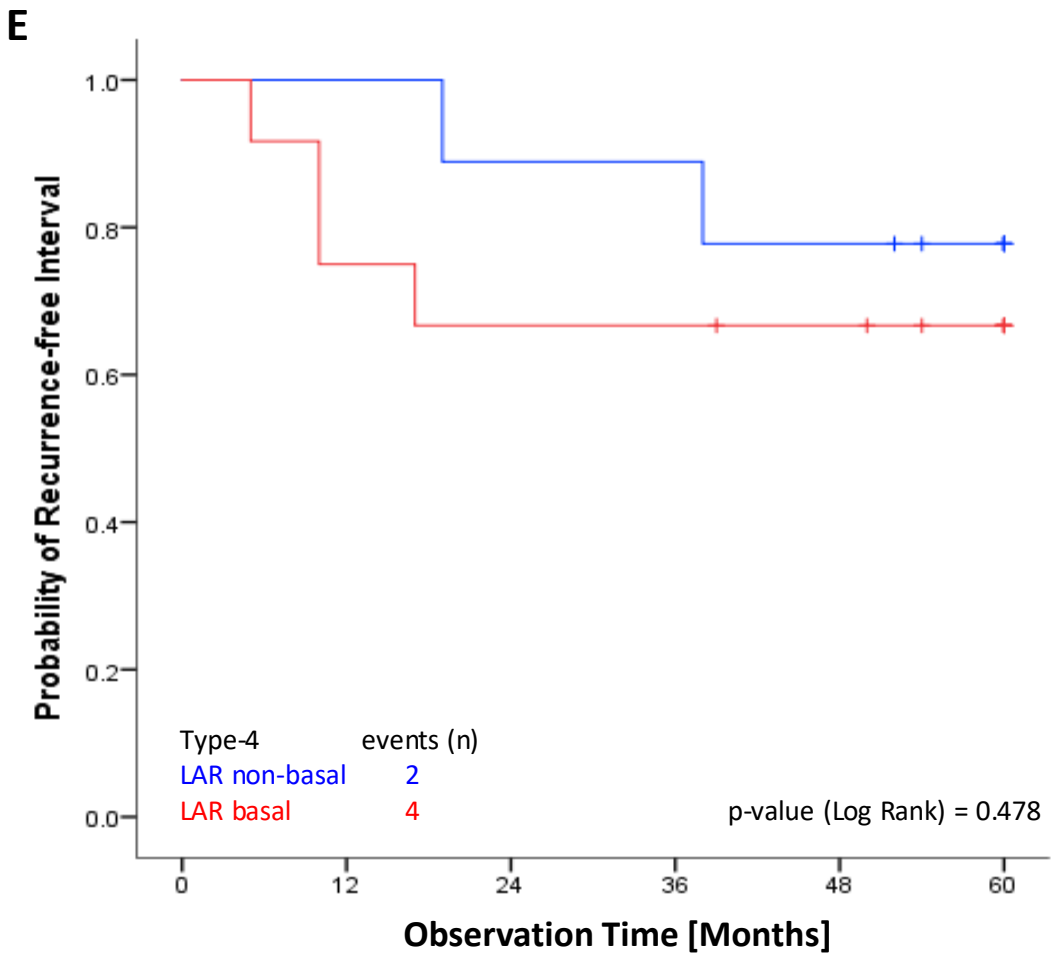


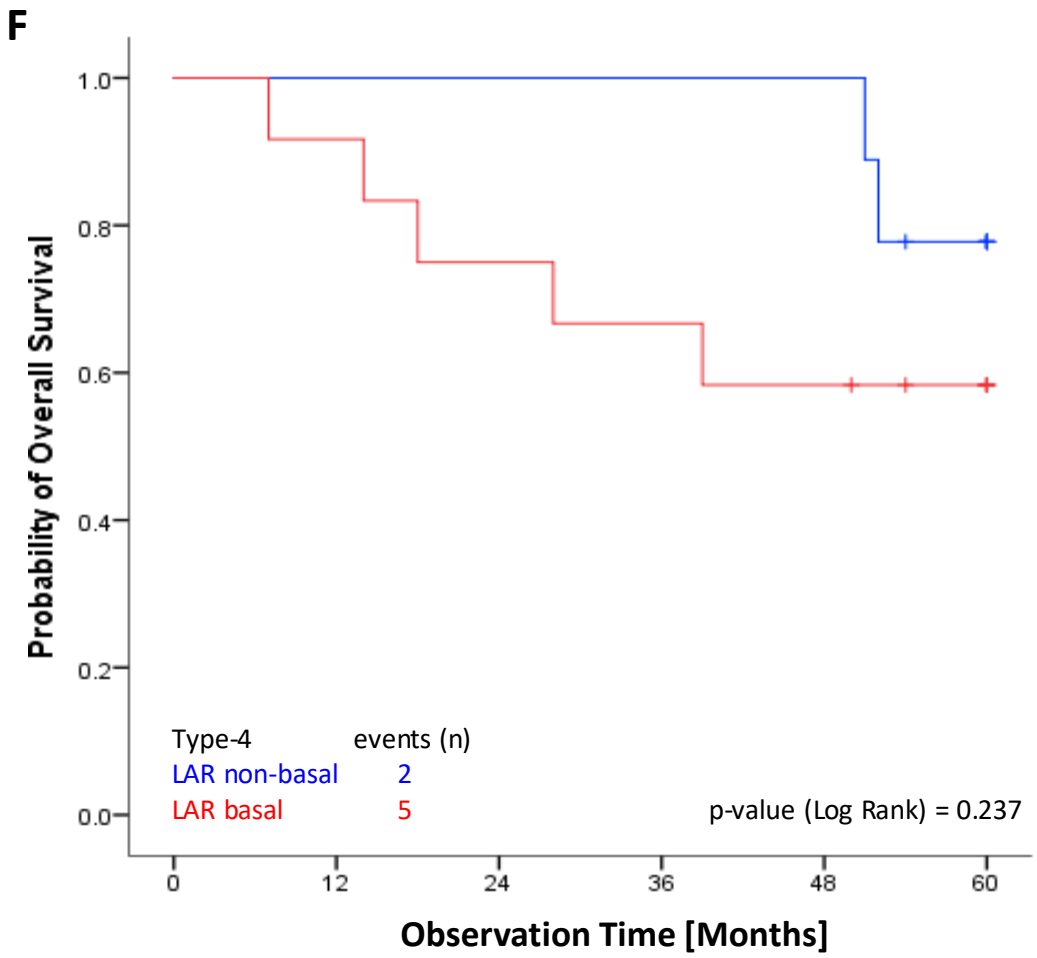
No. at risk	115	108	95	89	83	60
non-LAR	94	90	79	73	69	50
LAR	21	18	16	16	14	10

No. at risk	115	112	103	97	89	64
non-LAR	94	92	85	80	73	53
LAR	21	20	18	17	16	11

Supplementary Fig. 3. TNBCtype-4 Kaplan-Meier plots, the tables present the effective sample size for each interval (No. at risk).

C, D: summarized groups LAR versus non-LAR subtypes RFI (C) and OS (D)





No. at risk	21	18	16	16	14	10
LAR non-basal	9	9	8	8	7	5
LAR basal	12	9	8	8	7	5

No. at risk	21	20	18	17	16	7
LAR non-basal	9	9	9	9	9	6
LAR basal	12	11	9	8	7	1

Supplementary Fig. 3. TNBCtype-4 Kaplan-Meier plots, the tables present the effective sample size for each interval-

E, F: LAR non-basal and LAR basal for RFI (E) and OS (F)

Supplementary Table 1. pCR rates [%] of patients treated with neoadjuvant chemotherapy

pCR definitions	all NACT n=200	TNBC n=54	non-TNBC n=146	TNBC subtyping n=33	TNBC basal n=27	TNBC non-basal n=6	TNBC LAR n=4	TNBC non-LAR n=29
ypT0 ypN0 [%]	23.5	44.4	15.8	42.4	44.4	33.3	25.0	44.8
ypT0/Tis ypN0 [%]	31.5	48.1	25.3	48.5	48.2	50.0	50.0	48.2
ypT0/Tis ypN any [%]	40.0	57.4	33.6	60.6	63.0	50.0	50.0	62.0

Supplementary Table 2. Distribution of Molecular subtypes and PAM50 intrinsic types (A, B) and excluding unclassifiable subtypes (C).

A

sample ID	TNBCtype-6	TNBCtype-4	PAM50 intrinsic type
1	M	M	basal-like
2	BL1	BL1	basal-like
3	BL1	BL1	basal-like
4	BL1	BL1	basal-like
5	BL2	BL2	basal-like
6	UNS	UNS	basal-like
7	BL2	BL2	basal-like
8	IM	BL1	basal-like
9	BL1	BL1	basal-like
10	BL1	BL1	basal-like
11	IM	BL1	basal-like
12	BL2	BL2	basal-like
13	BL1	BL1	basal-like
14	BL1	BL1	basal-like
15	BL1	BL1	basal-like
16	BL1	BL1	basal-like
17	IM	BL1	basal-like
18	UNS	UNS	basal-like
19	IM	BL1	basal-like
20	IM	BL1	basal-like
21	IM	UNS	basal-like
22	UNS	UNS	basal-like
23	M	M	basal-like
24	BL2	BL2	basal-like
25	M	M	basal-like
26	BL2	BL2	basal-like
27	BL1	BL1	basal-like
28	M	M	basal-like
29	BL1	BL1	basal-like
30	MSL	LAR	basal-like
31	UNS	UNS	basal-like
32	IM	BL2	basal-like
33	IM	UNS	basal-like
34	UNS	BL2	basal-like
35	UNS	BL1	basal-like
36	BL1	BL1	basal-like
37	BL2	BL2	basal-like
38	LAR	LAR	basal-like
39	LAR	LAR	HER2 enriched
40	BL2	BL2	basal-like
41	BL1	BL1	basal-like
42	UNS	UNS	basal-like
43	LAR	LAR	basal-like
44	M	M	basal-like
45	IM	BL1	basal-like
46	LAR	LAR	HER2 enriched
47	IM	UNS	basal-like
48	M	M	basal-like
49	UNS	UNS	basal-like
50	LAR	LAR	HER2 enriched
51	BL1	BL1	basal-like
52	MSL	M	basal-like
53	IM	LAR	basal-like
54	M	M	basal-like
55	MSL	BL2	basal-like
56	IM	BL1	basal-like
57	UNS	UNS	basal-like
58	BL1	BL1	basal-like
59	BL2	BL2	HER2 enriched

sample ID	TNBCtype-6	TNBCtype-4	PAM50 intrinsic ttype
60	BL2	BL2	basal-like
61	LAR	LAR	basal-like
62	UNS	UNS	basal-like
63	IM	LAR	basal-like
64	IM	LAR	basal-like
65	UNS	BL1	basal-like
66	M	M	basal-like
67	BL2	BL2	basal-like
68	BL1	BL1	basal-like
69	IM	UNS	basal-like
70	LAR	LAR	basal-like
71	LAR	LAR	HER2 enriched
72	IM	BL2	basal-like
73	M	M	basal-like
74	UNS	M	basal-like
75	M	M	basal-like
76	BL1	BL1	basal-like
77	LAR	LAR	basal-like
78	MSL	BL2	HER2 enriched
79	IM	UNS	basal-like
80	LAR	LAR	Luminal A
81	BL2	BL2	basal-like
82	BL2	BL2	basal-like
83	IM	UNS	basal-like
84	LAR	LAR	HER2 enriched
85	M	M	basal-like
86	UNS	UNS	basal-like
87	M	M	basal-like
88	UNS	BL1	basal-like
89	IM	BL1	basal-like
90	LAR	LAR	basal-like
91	UNS	BL1	basal-like
92	M	M	basal-like
93	IM	UNS	basal-like
94	UNS	UNS	HER2 enriched
95	BL2	BL2	basal-like
96	M	M	basal-like
97	M	M	basal-like
98	IM	UNS	basal-like
99	BL2	BL2	basal-like
100	LAR	LAR	HER2 enriched
101	IM	UNS	basal-like
102	UNS	M	basal-like
103	UNS	BL1	basal-like
104	BL2	BL2	HER2 enriched
105	MSL	BL2	Luminal A
106	LAR	LAR	basal-like
107	IM	LAR	basal-like
108	LAR	LAR	Luminal A
109	LAR	LAR	basal-like
110	M	M	basal-like
111	IM	BL1	basal-like
112	LAR	LAR	basal-like
113	IM	BL2	basal-like
114	BL1	BL1	basal-like
115	BL1	BL1	basal-like
116	LAR	LAR	HER2 enriched
117	BL2	BL2	basal-like
118	BL1	BL1	basal-like
119	BL1	BL1	basal-like
120	IM	BL2	basal-like
121	UNS	LAR	basal-like
122	M	M	basal-like
123	UNS	BL2	HER2 enriched
124	IM	BL1	basal-like

B

	TNBCtype-6	PAM50 intrinsic	
		basal-like	non basal-like
	n=124 (100 %)	n=109 (88 %)	n=15 (12 %)
BL1	21 (17 %)	21 (19 %)	0 (0 %)
BL2	16 (13 %)	14 (13 %)	2 (13 %)
M	17 (14 %)	17 (16 %)	0 (0 %)
LAR	18 (15 %)	9 (8 %)	9 (60 %)
IM	27 (22 %)	27 (25 %)	0 (0 %)
MSL	5 (4 %)	3 (3 %)	2 (13 %)
UNS	20 (16 %)	18 (16 %)	2 (13 %)

	TNBCtype-4	PAM50 intrinsic types	
		basal-like	non basal-like
	n=124 (100 %)	n=109 (88 %)	n=15 (12 %)
BL1	36 (29 %)	36 (33 %)	0 (0 %)
BL2	25 (20 %)	20 (18 %)	5 (33 %)
M	20 (16 %)	20 (18 %)	0 (0 %)
LAR	24 (20 %)	15 (14 %)	9 (60 %)
UNS	19 (15 %)	18 (17 %)	1 (7 %)

C

	TNBCtype-6	PAM50 intrinsic	
		basal-like	non basal-like
	n=104 (100 %)	n=91 (88 %)	n=13 (12 %)
BL1	21 (20 %)	21 (23 %)	0 (0 %)
BL2	16 (15 %)	14 (15 %)	2 (15 %)
M	17 (16 %)	17 (19 %)	0 (0 %)
LAR	18 (17 %)	9 (10 %)	9 (69 %)
IM	27 (26 %)	27 (30 %)	0 (0 %)
MSL	5 (5 %)	3 (3 %)	2 (15 %)

	TNBCtype-4	PAM50 intrinsic types	
		basal-like	non basal-like
	n=105 (100 %)	n=91 (87 %)	n=14 (13 %)
BL1	36 (34 %)	36 (39 %)	0 (0 %)
BL2	25 (24 %)	20 (22 %)	5 (36 %)
M	20 (19 %)	20 (22 %)	0 (0 %)
LAR	24 (23 %)	15 (16 %)	9 (64 %)

Supplementary Table 3. Multivariate analysis of RFI and OS for TNBC patients with chemotherapy and available TNBCtype-4 subtyping (n = 115)

Parameters	Recurrence-free intervall (24 events)						Overall survival (21 events)					
	Univariate analysis			Multivariate analysis			Univariate analysis			Multivariate analysis		
	HR	**95% CI**	**P value**	**HR**	**95% CI**	**P value**	**HR**	**95% CI**	**P value**	**HR**	**95% CI**	**P value**
Age at diagnosis in years												
≤ 50	1.24	0.53 -2.93	0.618				1.22	0.44-3.36	0.705			
51-75 (reference group)												
> 75	1.16	0.32-4.15	0.082				3.48	1.20-10.04	0.021			
Tumour size at time of diagnosis												
< 2cm (reference group)												
≥ 2 cm	4.03	1.20-13.50	0.024	3.33	0.96-11.58	0.058	5.46	1.27-23.44	0.022	4.00	0.89-17.89	0.070
Nodal status at time of diagnosis												
negative (reference group)												
positive	2.74	1.13-6.60	0.025	2.09	0.84-5.18	0.109	4.73	1.59-14.07	0.005	3.42	1.12-10.49	0.031
Tumour differentiation												
G1, G2 (reference group)												
G3	0.49	0.22-1.09	0.082				0.63	0.27-1.49	0.293			
TNBCtype-4												
non LAR (reference group)												
LAR	1.58	0.63-4.00	0.327	1.74	0.69-4.40	0.238	2.36	0.95-5.84	0.064	2.62	1.05-6.50	0.038

Abbreviation: CI Confidence Interval, HR Hazard Ratio, LAR Luminal Androgen Receptor