

**Supplementary table 1 (Supplementary data): Clinicopathological characteristic of breast cancer patients without forkhead box P3 expression**

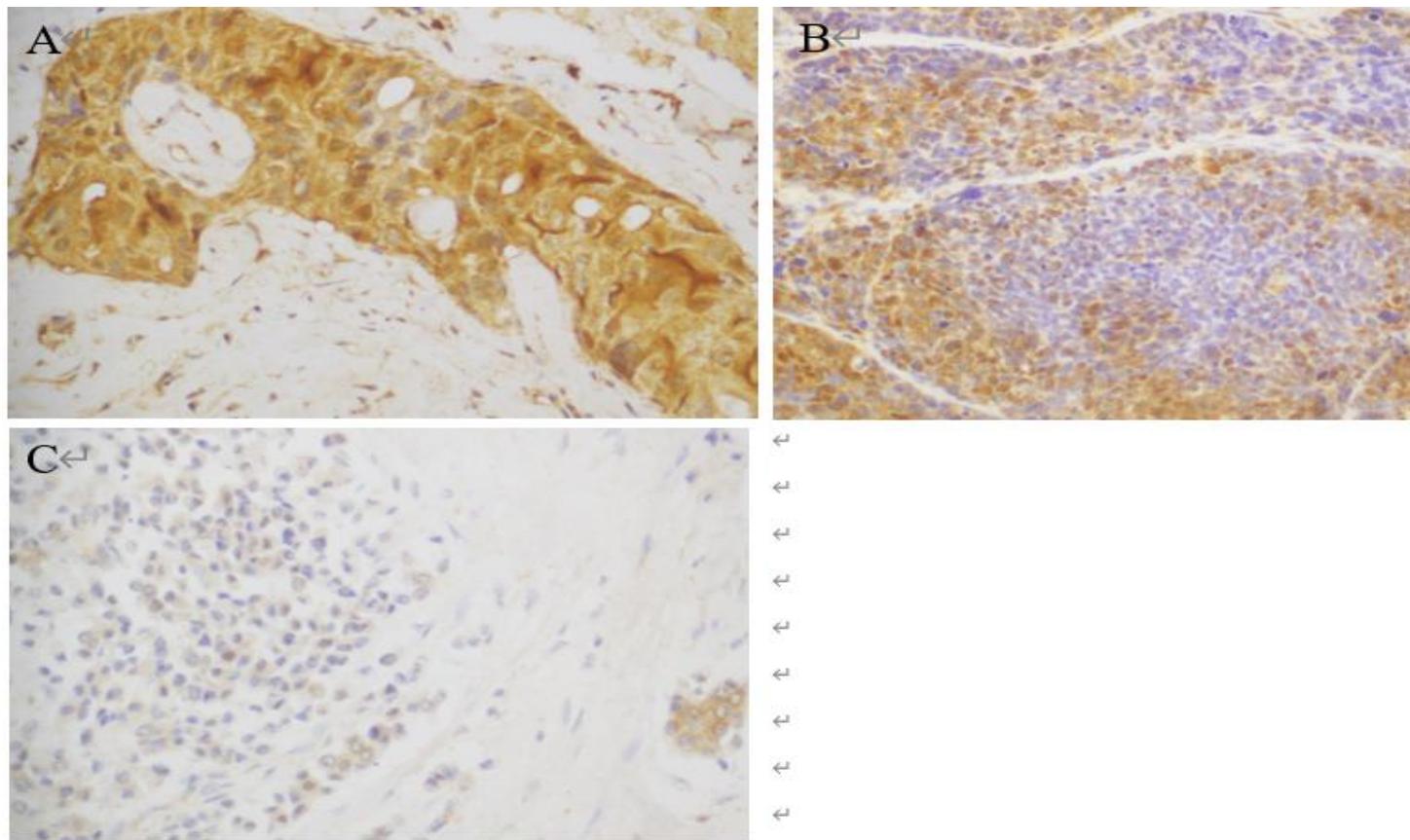
	Histology	Age (Yr)	Grade	Nodes	Metastasis	ER	PR	HER2	TNBC
1	Ductal	28	3	2	+	-	-	-	+
2	Ductal	50	3	2	+	-	-	-	+
3	Ductal	39	3	23	+	-	-	-	+
4	Ductal	48	3	0	-	-	-	-	+
5	Ductal	43	3	0	-	-	-	-	+
6	Ductal	41	3	5	+	-	-	-	+
7	Ductal	55	3	4	+	-	-	-	+
8	Ductal	47	2	8	+	-	-	-	+
9	Mammary	39	UNK	UNK	UNK	-	-	-	+
10	Ductal	35	3	34	+	-	-	-	+
11	Ductal	40	3	13	+	-	-	-	+
12	Ductal	55	3	0	-	-	-	-	+
13	Ductal	50	2	0	-	-	-	-	+
14	Ductal	56	3	1	+	-	-	-	+
15	Ductal	60	2	15	+	-	-	-	+
16	Ductal	44	3	0	-	-	-	-	+

17	Ductal	33	3	6	+	-	-	-	-	+
18	Ductal	56	3	0	-	-	-	-	-	+
19	Ductal	51	2	1	+	-	-	-	-	+
20	Ductal	27	UNK	UNK	UNK	-	-	-	-	+
21	Metaplastic	55	UNK	3	+	-	-	-	-	+
22	Ductal	56	3	0	-	-	-	-	-	+
23	Ductal	65	3	0	-	-	-	-	-	+
24	Ductal	49	3	0	-	-	-	-	-	+
25	Ductal	64	3	0	-	-	-	-	-	+
26	Mammary	49	2	0	-	-	-	-	-	+
27	Ductal	38	3	0	-	-	-	-	-	+
28	Ductal	34	3	6	+	-	-	-	-	+
29	Ductal	50	3	UNK	UNK	-	-	-	-	+
30	Ductal	53	2	0	-	-	-	-	-	+
31	Ductal	49	2	0	-	-	-	-	-	+
32	Ductal	50	3	2	+	-	-	-	+	-
33	Ductal	43	3	UNK	UNK	+	-	-	-	-
34	Ductal	68	1	0	-	+	-	-	-	-
35	Ductal	62	2	1	+	-	-	+	-	-

36	Mammary	41	UNK	2	+	+	-	-	-
37	Mammary	67	2	1	+	+	+	-	-
38	Ductal	75	3	0	-	-	-	+	-
39	Ductal	60	2	UNK	UNK	+	+	-	-
40	Ductal	44	2	8	+	+	+	-	-
41	Ductal	75	3	0	-	-	-	+	-
42	Ductal	50	3	14	+	+	-	+	-
43	Ductal	58	UNK	UNK	UNK	+	+	-	-
44	Ductal	35	2	3	+	+	+	-	-
45	Ductal	50	UNK	3	+	+	+	-	-
46	Ductal	40	3	0	-	-	-	+	-
47	Ductal	70	2	0	-	+	+	-	-
48	Ductal	39	UNK	0	-	-	-	+	-
49	Ductal	45	2	3	+	-	+	-	-
50	Ductal	43	3	0	-	+	+	-	-
51	Ductal	40	2	4	+	-	+	-	-
52	Ductal	50	3	2	+	-	-	+	-
53	Ductal	65	3	0	-	+	+	-	-
54	Mammary	48	UNK	UNK	UNK	+	+	+	-
55	Ductal	36	2	3	+	+	-	-	-

56	Ductal	38	2	5	+	+	+	-	-	
57	Ductal	35	3	5	+	-	-	+	-	
58	Ductal	59	3	3	+	-	-	+	-	
59	Ductal	43	3	0	-	-	-	+	-	
60	Ductal	45	2	1	+	+	+	+	-	
61	Ductal	36	3	6	+	-	-	+	-	
62	Ductal	50	2	1	+	+	+	+	-	
63	Ductal	45	2	0	N	+	+	-	-	
64	Ductal	61	2	UNK	UNK	+	-	+	-	
65	Ductal	42	2	UNK	UNK	+	+	+	-	
66	Ductal	45	3	9	+	-	-	+	-	
67	Lobular	47	2	7	+	-	+	-	-	
68	Ductal	67	2	3	+	+	+	-	-	
69	Ductal	35	2	0	-	+	+	-	-	
70	Ductal	40	2	2	+	+	+	-	-	
71	Lobular	65	2	12	+	+	+	+	-	
72	Ductal	40	3	19	+	-	-	+	-	
73	Ductal	40	2	0	-	-	-	+	-	
74	Mammary	40	3	2	-	+	+	-	-	
75	Ductal	59	3	18	+	+	-	+	-	

UNK: Indicates missing data; Grade: Nottingham Histologic Score; Nodes: No. of nodes involved; ER: Estrogen receptor; PR: Progesterone receptor; HER2: Human epidermal growth factor receptor; TNBC (+): Triple negative breast cancer; TNBC (-): Hormone-positive breast cancer.



**Supplementary Figure 1 Indoleamine 2,3 dioxygenase immunohistochemical staining.** Indoleamine 2,3 dioxygenase (IDO) expression in breast cancer tissue ( $n = 100$ ) was analyzed by immunohistochemistry. A: High IDO expression was observed in malignant ductal tumor cells; B: Medium expression of IDO was identified in invasive ductal carcinoma cells; C: Low IDO expression was observed in the breast tumor cell. Images were captured at  $40 \times$  magnification.