

Supplementary Table 6: Clinico-pathological parameters of cryoconserved breast cancer specimens in relation to *DKK3* mRNA expression

Parameter	n ^a	<i>DKK3</i> high ^b	<i>DKK3</i> low ^b	P-value ^c
Total	30	15 (50.0%)	15 (50.0%)	-
Age at diagnosis				
<63 years	14	10 (71.4%)	4 (28.6%)	0.066
≥63 years	16	5 (31.3%)	11 (68.7%)	
Tumor size ^d				
pT1	14	8 (57.2%)	6 (42.8%)	0.715
pT2-3	16	7 (43.7%)	9 (56.3%)	
Lymph node status ^d				
pN0	17	7 (41.2%)	10 (58.2%)	0.462
pN1-3	12	7 (58.3%)	5 (41.7%)	
Histological tumor grade ^e				
G1-2	8	7 (87.5%)	1 (12.5%)	0.035
G3	22	8 (36.4%)	14 (63.6%)	
Oestrogen receptor status				
negative (IRS ^f 0-2)	16	4 (25.0%)	12 (75.0%)	0.009
positive (IRS ^f 3-12)	14	11 (78.6%)	3 (21.4%)	
Progesterone receptor status				
negative (IRS ^f 0-2)	15	5 (33.3%)	10 (66.7%)	0.066
positive (IRS ^f 3-12)	15	10 (66.7%)	5 (33.3%)	
HER2 status ^g				
negative	24	11 (45.8%)	13 (54.2%)	0.651
positive	6	4 (66.7%)	2 (33.3%)	

^aOnly female patients with primary, unilateral, invasive breast cancer were included. ^bExpression was dichotomized into “*DKK3* high” and “*DKK3* low” based on the median *DKK3* expression. ^cFisher’s exact test. Significant P-values are marked in bold face. ^dAccording to TNM classification by Sobin and Wittekind [1]. ^eAccording to Bloom and Richardson, as modified by Elston and Ellis [2]. ^fImmunoreactive score (IRS) according to Remmele and Stegner [3]. ^gOverexpression of the *ERBB2* gene (Her-2/neu) was diagnosed analogously to the threshold of the DAKO-Score system based on IHC assay. Uncertain cases were additionally validated by FISH assay. Percentages may not sum-up to 100% due to rounding.

1. Sobin LH, Fleming ID. TNM Classification of Malignant Tumors, fifth edition (1997). Union Internationale Contre le Cancer and the American Joint Committee on Cancer. Cancer. 1997;80(9):1803-4. PubMed PMID: 9351551;
2. Elston CW, Ellis IO. Pathological prognostic factors in breast cancer. I. The value of histological grade in breast cancer: experience from a large study with long-term follow-up. Histopathology. 1991;19(5):403-10. PubMed PMID: 1757079;
3. Remmele W, Stegner HE. Recommendation for uniform definition of an immunoreactive score (IRS) for immunohistochemical estrogen receptor detection (ER-ICA) in breast cancer tissue. Pathologie. 1987;8(3):138-40. PubMed PMID: 3303008;