Parameter	Categorisation	n <sup>a</sup> analysable	%
Age at diagnosis:	median 58 years (range 26-90)		
	≤58 years	409	51.7
	>58 years	382	48.3
Tumour size <sup>b</sup>	pT1	209	26.4
	pT2	468	59.2
	рТЗ	83	10.5
	pT4	28	3.5
	unknown	3	0.4
Lymph node status <sup>b</sup>	pN0	375	47.4
	pN1-3	403	51.0
	unknown	13	1.6
Oestrogen receptor status	negative (IRS <sup>c</sup> 0-2)	176	22.3
	positive (IRS <sup>c</sup> 3-12)	577	73.0
	unknown	38	4.8
Progesterone receptor status	negative (IRS <sup>c</sup> 0-2)	246	31.1
	positive (IRS <sup>c</sup> 3-12)	504	63.7
	unknown	41	5.2
HER2 status <sup>d</sup>	negative	600	75.9
	positive	102	12.8
	unknown	89	11.3

## Supplementary Table 4: Clinico-pathological parameters of 791 breast cancer specimens obtained from *The Cancer Genome Atlas* platform.

<sup>a</sup>Only female patients with primary, invasive breast cancer were included. <sup>b</sup>According to TNM classification by Sobin and Wittekind [1]. <sup>c</sup>Immunoreactive score (IRS) according to Remmele and Stegner [2]. <sup>d</sup>Overexpression of the *ERBB2* gene (Her-2/neu) was diagnosed analogously to the threshold of the DAKO-Score system based on IHC 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. Remmele W, Stegner HE. Recommendation for uniform definition of an immunoreactive score (IRS) for immunohistochemical estrogen receptor detection (ER-ICA) in breast cancer tissue. Pathologe. 1987;8(3):138-40. PubMed PMID: 3303008;