

**Supplemental Table 2: Clinical characteristics of patient cohort**

Characteristics	n	Median Cdc7 (IQR)	p-value
Grade			
1	21	1.9 (0.5-5.3)	p<0.001 <sup>†</sup>
2	75	4.7 (1.8-9.0)	
3	75	13.9 (8.6-21.8)	
Lymph Node*			
Negative	91	7.4 (3.0-13.0)	p=0.54 <sup>‡</sup>
Positive	68	8.9 (2.0-16.7)	
Subtype			
Luminal	135	5.2 (1.7-9.4)	p<0.001 <sup>§</sup>
Her2	8	19.6 (13.0-27.4)	
Triple-negative	28	20.6 (12.1-29.8)	
NPI*			
<3.4	29	1.7 (0.5-5.4)	p<0.001 <sup>†</sup>
3.4-5.4	90	8.7 (4.0-14.7)	
>5.4	40	11.8 (6.9-18.5)	
Ploidy status			
Aneuploid	85	9.0 (4.0-14.5)	p=0.019 <sup>‡</sup>
Diploid	81	6.5 (1.9-11.3)	
Cell cycle phenotype			
I	30	1.0 (0.2-3.7)	p<0.001 <sup>§</sup>
II	41	4.1 (2.1-6.8)	
III	100	12.3 (8.6-20.6)	

\* Data not available for 12 patients

† Nonparametric Jonckheere-Terpstra test for trend in median Cdc7 expression across categories of the characteristic

‡ Mann-Whitney test to compare average Cdc7 expression between the two

§ Kruskal-Wallis Analysis of Variance test for variation between categories in average Cdc7 expression