## **Supplementary Table 2** - Representativeness of Study Participants.

Representativeness of the population object of the present study.

Abbreviations: BC, breast cancer; pCR, pathologic complete response.

Cancer type/Subtype/Stage/Condition	HER2-positive breast cancer (HER2+ BC)
Considerations related to:	
Sex	HER2+ BC, as all other subtypes of breast cancer, is a predominantly female disease and is rare in men. Male breast cancer represents only between 0.5 and 1% of all BCs diagnosed each year. HER2+ BC incidence is around 15-20% among all BC subtypes in the overall largely female population. The proportion of male BC patients with HER2+ BC is around 10-15%.
Age	The median age at the time of all BC diagnoses is around 60, while in HER2+ it is closer to 50-55.
pCR rates	pCR rates after neoadjuvant treatment in HER2+ BC ranges from approximately 30 to 50% across studies.
Overall representativeness of this study	The age distribution of our study is similar to the average age distribution of HER2+ BC in the literature, median age of approximately 50.  In our study no gender disparity has been applied in terms of eligibility criteria. However, no male patients have been enrolled, probably due to the extremely low prevalence of male BC within HER2+ phenotype.  In our study, pCR rates was almost 35%, thus well comparing with available literature.