Introduction/Background The use of trastuzumab in the treatment of HER2-positive breast cancer has changed the natural history of this disease. Trastuzumab was approved as a component of neoadjuvant treatment as well as adjuvant and metastatic. Biosimilars demonstrate chemical similarity and clinical efficacy to a reference product and are an option to provide access to high-quality systemic therapy alternatives.

Methodology This is a retrospective observational study revising patients treated with neoadjuvant therapy with trastuzumab (proposed biosimilar or trastuzumab) between January 2017 (period of introduction of the drug in our institution) - January 2020. All patients were treated with the same trastuzumab biosimilar drug.

Results Twenty-two patients (n=22) were included, with a mean age at diagnosis of 55 years (range 31-84). Fifteen (n=15) patients were treated with proposed biosimilar and 7 patients with trastuzumab. Regarding histologic type, 82% (n=18) of patients had invasive carcinoma of no special type (NST), 5% (n=1) apocrine, 5% (n=1) invasive lobular and 5% (n=1) mucinous carcinomas. Sixteen patients had HER2 positive, hormone receptor (HR) positive tumors and 6 patients a HER2 positive, HR negative tumors. Regarding treatment, 86% of patients were treated with anthracyclines and in 5% (n=1) pertuzumab was used. In the trastuzumab group, 2 patients presented grade 1 toxicity (heart failure); in the proposed biosimilar group, 2 patients presented grade 1 toxicities (heart failure and dyspnea). Infusion reactions were not documented, namely hyperthermia. Axillary pCR was achieved in 86% (n=6) and 53% (n=8) in trastuzumab and proposed biosimilar groups respectively. Breast pCR was achieved in 86% (n=6) and 33% (n=5) in trastuzumab and proposed biosimilar groups respectively. There was no statistically significant difference between the proposed biosimilar versus trastuzumab for toxicities, achievement of axillary and breast pCR.

Conclusion The use of trastuzumab compared with the proposed biosimilar resulted in an equivalent axillary and breast pCR.

Disclosures No disclosure.