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28637 – ANALYSIS OF OVERALL SURVIVAL AND DISEASE-FREE SURVIVAL IN PATIENTS UNDERGOING NEOADJUVANT CHEMOTHERAPY: REAL-WORLD DATA FROM BRAZIL

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Introduction: Neoadjuvant chemotherapy (NACT), traditionally used for locally advanced disease, is now employed for patients with early breast cancer (BC) of aggressive subtypes (HER-2-positive and triple-negative). Breast cancer remains one of the leading causes of mortality among women worldwide, requiring innovative therapeutic approaches to improve treatment outcomes. NACT has emerged as a promising strategy, particularly for aggressive breast cancer types, offering the possibility of reducing tumor size prior to surgery. This study focuses on assessing pathological complete response (pCR) after NACT in a public referral center in Brazil, exploring its association with overall survival (OS) and disease-free survival (DFS). **Objectives:** This study aimed to characterize pCR and its relationship with OS and DFS among BC patients who NACT at a Brazilian public referral center, as well as to explore the association between pCR and BC subtypes. **Methodology:** This study employed a retrospective cohort based on Real-World Data (RWD) from a referral center for the treatment of female cancers in Brazil (Hospital Pérola Byington - HPB). As it involved analysis of the institution's secondary database, the present study was approved by the ethics committee. The recommendations of ISPE/ISPOR were followed for the development of an exploratory real-world study. Data from women diagnosed and treated in the specified healthcare environment between January 2011 and December 2020 were included. This study was submitted to and approved by the HPB Research Ethics Committee (approval number: CAAE 39097520.4.2001.0069). **Results:** Our cohort consisted of 1,601 individuals, of whom 364 (22.7%) achieved pCR (ypT0 ypN0). Patients who achieved pCR showed significantly higher OS rates (89% vs. 61%, p<0.001) and better DFS (90% vs. 66%, p<0.001), except in the luminal A subtype, where pCR did not correlate with improved OS or DFS. **Conclusion**: Our study demonstrated that data on pCR rates in patients undergoing neoadjuvant NACT BC in real-life settings are consistent with clinical trial data, and that pCR was associated with increases in OS and DFS in a RWD study. Furthermore, it showed that despite limited access to appropriate treatments for HER-2+ and TNBC patients, and although pCR rates for these subtypes were lower than those reported in randomized clinical trials, the OS and DFS of patients with pCR were still better.