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**213P HIV infection in breast cancer patients from Mozambique:
A prospective cohort study**

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Background: Breast cancer (BC) burden is increasing among women living with HIV (HIV+). Yet, data regarding epidemiology, BC presentation, treatment, and prognosis is still scarce, especially among HIV+ BC patients (pts) from developing countries.

Methods: This prospective cohort included BC patients diagnosed at the Maputo Central Hospital, Mozambique, from Jan-2015 to Mar-2017. Data on demographics, BC risk factors, co-morbidities, treatment, and survival were prospectively collected. Chi2 and t tests were used to compare categorical and continuous variables, respectively. Time-to-event outcomes were estimated using Kaplan-Meier methods. Survival estimates were compared using log-rank test and Cox proportional hazards models. All tests were two-tailed and results were considered significant if p-value was <.05.

Results: Among 205 pts included, 98% were black and 52 (25%) were HIV+. HIV+ pts were younger than HIV- pts (median age: 44.5 vs 51.0 years respectively, p=.002), and most had stage III/IV BC (81% vs 71%, p=.204). Among HIV+ pts, 90% had a CD4+ cells count > 200/μL and 26% were diagnosed at the time of BC.

Immunohistochemistry analysis was performed in 152 pts and showed that HIV+ pts had a higher proportion of triple-negative BC (TNBC) compared to HIV- pts (37.5% vs 20.5%, p=.029). Among pts with early BC (EBC), there were no significant differences in local treatments received; yet, HIV+ pts tended to receive a lower chemotherapy (CT) dose-intensity (DI) compared to HIV- pts (DI < 85%: 69.4% vs 50.0%, p=.057). Median overall survival (OS) was 31.0 months (m) in HIV+ pts and 34.0 m in HIV- pts (unadjusted hazard ratio [HR] 1.52, 95% confidence interval [CI] 0.92 – 2.51). In EBC pts, median disease-free survival was 27.0 m in HIV+ pts and 31.0 m in HIV- pts (HR 1.37, 95% CI 0.81-2.31).

Conclusions: Our results show that in Southeast Africa the proportion of HIV+ women among BC pts can be very high. These pts were diagnosed at a younger age and had a significantly higher proportion of TNBC compared to HIV- pts. They tended to receive lower CT DI, and their survival was worse as compared to HIV- pts, although not statistically different. This highlights the need for better understanding BC biology in HIV+ pts and to provide effective cancer care to this underserved population.

Legal entity responsible for the study: Faculty of Medicine, Eduardo Mondlane University, Mozambique.