Abstract No. **15**
Category: **Prevention**
Title: **Comparison of patients' phenotypes, guideline-directed recommendations compliance and rates of cardiotoxicity between Caribbean and United States cardio-oncology programs**
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Abstract:

Background: Little is known about cardio-oncology patients' characteristics, cancer therapy-induced cardiotoxicity and patterns of guideline-directed interventions in Latin America. Although structuring registries remains a challenge, once established, they may offer an opportunity to better understand the relationship between ethnicity, socioeconomic factors, and outcomes in this rapidly evolving field.

Methods: We compared patients' phenotypes, adherence to American Society of Clinical Oncology (ASCO) Guidelines and patterns of cardiotoxicity in a cardio-oncology service of a tertiary care center in the Dominican Republic (DR) to that of a similar program in the US Midwest. Subjects being considered for or treated with potentially cardiotoxic drugs were included in the cohort.

Results: A total of 473 consecutive pts., 255 (54%) from the DR and 218 (46%) from the US constitute the study group. DR vs. US: X age 54± 13/53 ± 13 yrs.; female 78/85% ($p<0.05$); breast cancer 63/69% ($p=0.17$); HTN 47/36% ($p<0.05$); DM 14/18% ($p=0.25$); smoking 14/11% ($p=0.32$); BMI ? 30 38/31% ($p=0.10$); ? 2 risk factors 32/26% ($p=0.13$); treated with anthracyclines + taxanes 35/39% ($p=0.39$); monoclonal antibodies + taxanes or platins 11/16% ($p=0.17$); developed cardiotoxicity 13/7% ($p< 0.01$) [see Table I]; adherence to ASCO Guidelines shown in Table II.

Conclusion: Compared with the US, Caribbean cancer patients have a similar prevalence of cardiovascular (CV) risk factors and twice as high likelihood of developing drug-induced left ventricular dysfunction despite the use of baseline "cardioprotective" therapies. Although biomarkers and echocardiography utilization varied between centers, compliance with guideline-directed recommendations was otherwise similar. These findings underline the relevance of cardio-oncology programs in nations of high CV risk and limited resources. Further research is needed to ascertain regional variations of cardiotoxicity.