Abstract No.   **17**
Category: **Prevention**
Title: **Validation Of The CARPREG II Risk Score In Pregnant Women With Heart Disease**
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Abstract:

Headers Background: The ability to predict the risk of possible complications during pregnancy is essential to define a follow-up plan and a guided management approach to positively impact these outputs. The objective is to validate the CARPREG II risk score in predicting the risk of cardiovascular outcomes in women with heart disease in our environment.

Methods and Outcomes: Prospective cohort study from 2016 to 2018 in which 168 pregnant women with heart disease were included. For validating the scoring system, its discriminative capacity and calibration were analyzed. The average age was 26±6.7 years. The main diagnoses were congenital heart disease (32.7%), arrhythmias (28.5%), and valvular heart disease (14.3%). In 13.8% of the patients, a primary cardiac event occurred—the main one being pulmonary edema (6%)—; in 7% a secondary cardiac event; and in 50%, maternal-fetal events. The overall mortality rate was 2.41%. The incidence of primary cardiac event was 0% in CARPREG 0, 6% in CARPREG 1, and 27% in CARPREG > 1 (p=0.001). Calibration of the model was adequate (Hosmer Lemershow >0.05), and its discrimination for primary cardiac event outcome was good (AUC-ROC 0.8) (Figure 1). When comparing the score of the model with the modified World Health Organization (mWHO) classification, there is evidence of a similar discriminative capacity (AUC-ROC CARPREG II 0.76 95% CI 0.63–0.89, AUC-ROC mWHO 0.79 95% CI 0.70–0.89, p=0.36) (Figure 2).

Conclusions: The CARPREG II risk index is useful for predicting risk in our environment, and it has a discriminative capacity similar to the mWHO classification.