Introduction:
A biomarker is defined as a measurable indicator of some biological state or condition. Combined with a good clinical evaluation, they can enable an early and safe diagnostic, thus a faster management for the patient. Cardiac biomarker testing is not indicated in routine in the emergency department (ED) because of low utility and high possibility of false-positive results. However, current rates of testing are unknown. The aim of our study was to evaluate the importance of measuring cardiac biomarkers especially Troponins, D-dimer, and B-type natriuretic peptide in our daily practice, and to identify the latest recommendations for a better use of these biomarkers in the diagnostic and therapeutic approaches.

Methods:
We conducted a prospective observational study, over a 13 months periods performed in the ED of the university hospital center Ibn Rochd, Casablanca, Morocco, including all patients admitted during our study period and having a blood test for at least one biological marker. The dataset was analyzed by SPSS statistics 21.0.

Results:
A total of 182 patients was enrolled. Troponins were tested in 85.3% patients (High sensitive in 49.5% and troponin I TnI in 35.8%), D-dimer in 30.9%, BNP 19% and NT pro BNP in 9.5% of cases. The diagnostic impact was significant in 94.4% of cases for troponins, 84.6% of cases for D-dimer and 87.5% for BNP. The therapeutic impact was considered important in 80.6% cases for troponins, 69.2% for D-dimer and 87.5% for BNP.

Conclusion:
Cardiac biomarkers have an important role in the ED, not only do they confirm the diagnosis (including the role of troponins in ACS) but also eliminate others( with a strong negative predictive value of D-dimer for thromboembolic disease) and prove the cardiopulmonary origin of acute dyspnea (the significant place of BNP in confirming the diagnosis of acute heart failure).