Abstract:

With the redefinition of myocardial infarction in 2000, cardiology associations ESC and ACC require the use of the 99th percentile of a healthy population at a coefficient of variation (CV) of less than 10 % for Troponin values in diagnosing myocardial infarction. With a new Troponin T high sensitive (TnThs) assay as an advancement, it is now possible to fulfill these requirements. A panel of experts from laboratories and cardiologists discussed how to use this new assay in daily routine. Their experience confirms the excellent correlation between the upper measuring range of the new, highly sensitive Troponin T high sensitive test and the values obtained for Troponin T (4th generation). The Troponin T high sensitive test will identify more patients with myocardial infarction when using Troponin Ths above the 99th percentile (14 pg/mL). To diagnose myocardial infarction, one Troponin T value above the 99th percentile, a rise or fall within hours, and symptoms of ischemia need to be applied. Patients with elevated Troponin T levels but without myocardial infarction are supposed to have myocardial damage due to other reasons and have a rather poor prognosis. If one of the criteria is not fulfilled, a myocardial infarction is less probable and differential diagnosis needs to be conducted.