



Laboratory Medicine in the Era of Disruptive Technology

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## **Establishment of reference value of cardiac troponin I**

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The cardiac troponin 99th percentile of a normal, healthy reference population (upper reference limit [URL]) is a critical part of the diagnostic criteria supporting the presence or absence of acute myocardial infarction. The establishment of an accurate 99th percentile, either by manufacturers or individual laboratories, is important and difficult in clinical practice. Studies have shown that the method by which the population is selected influences the absolute value of the 99th percentile, and have indicated that there are age, sex, and race differences. Using a Beckman Coulter AccuTnI+3 assay, we established the stated 99th percentile in a large population of healthy adults who were representative of the Busan and Gyeongnam population in the Republic of Korea. Through this multicenter study using a large population of healthy adults, mainly over 40 years old, we can check the process of establishing the 99th percentile cutoff value.