Hotgen

hs-cTnT/I

—High-sensitive diagnostic parameters for myocardial injury

Mono-test chemiluminescence ✓

Can detect serum, plasma, and whole blood ✓

2020ESC Guidelines for the Management of Acute Coronary Syndrome in Patients without Sustained ST-Segment Elevation Recommend hs-cTn ✓
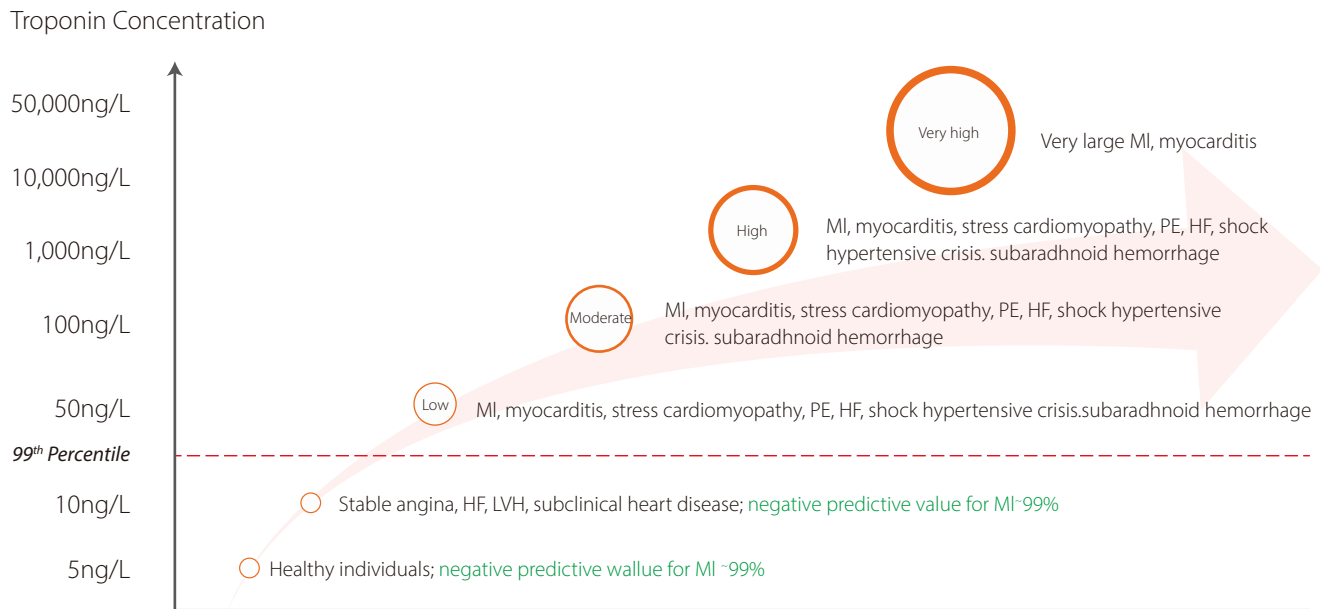
Definition of hs-cTn

hs-cTn should be able to detect cTn in more than 50% of apparently healthy people, and the detection imprecision (expressed as CV) at the 99th percentile value of the upper reference range should be ≤10%.

Advantages of hs-cTn in clinical applications

- Risk stratification for ACS
- Diagnose AMI earlier
- Detect tiny myocardial injuries that were easily missed in the past
- More rational screening of patients at high risk of cardiovascular events
- Optimize clinical treatment decisions and prognosis assessment

Interpretation of elevated hs-cTn

Troponin Concentration

- 50,000ng/L
- 10,000ng/L
- 1,000ng/L
- 100ng/L
- 50ng/L

Very high — Very large MI, myocarditis

High — MI, myocarditis, stress cardiomyopathy, PE, HF, shock hypertensive crisis. subaradhnoid hemorrhage

Moderate — MI, myocarditis, stress cardiomyopathy, PE, HF, shock hypertensive crisis. subaradhnoid hemorrhage

Low — MI, myocarditis, stress cardiomyopathy, PE, HF, shock hypertensive crisis.subaradhnoid hemorrhage

99th Percentile

- 10ng/L — Stable angina, HF, LVH, subclinical heart disease; negative predictive value for MI~99%
- 5ng/L — Healthy individuals; negative predictive wallue for MI ~99%

Detection method of hs-cTnT/I

MQ 60**Smart**

MQ 60**proB**

MQ 60**Plus**

Features:

🦋 **Quick:** Complete in about 17min

🦋 **Precise:** Quality control available, high accuracy, good CV.

🦋 **Economy:** Independent reagent cartridge, no waste or cross-contamination.

🦋 **Limited maintenance:** No liquid circuit in device, low failure rate.

Product Information Sheet

Product Name	Linear Range	Testing Time	Compatible Analyzers
hs-cTnT	[3, 10000] pg/mL	17min	MQ60 smart,MQ60 proB,MQ60 plus
hs-cTnI	[20, 50000] pg/mL	17min	MQ60 smart,MQ60 proB,MQ60 plus

References

1.2019 JACC Recommendations for Institutions Transitioning to High-Sensitivity Troponin Testing.
https://doi.org/10.1016/j.jacc.2018.12.046

2.2020 ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation.European Heart Journal (2020) 00, 1-79.
doi:10.1093/eurheartj/ehaa575