

Newport ED High Sensitivity 0 and 2 Hour Troponin Chest Pain Algorithm

Algorithm only applies to patients with an initial concern for ACS except:

- STEMI/ Transfers with ACS
- Renal Failure
- Non-ACS alternative diagnosis subsequently made during evaluation

REFERENCE RANGES:

Female: 2-15 ng/L

Male: 2-20 ng/L

Delta (Δ) = Difference between the 0- and 2-hour troponin

DISPOSITION PLANNING:

Green \rightarrow Discharge

Yellow \rightarrow CDU (inpatient medicine if meets CDU exclusions and/or at capacity)

Red \rightarrow Cardiology consult \rightarrow Disposition per Cardiology/inpatient medicine

HEART SCORE:

0 to 3 points = low risk (0.6% to 1.7% risk of MACE)

4 to 6 points = intermediate risk (16.6% risk);

7 to 10 points = high risk (50.1% risk).

Chest Pain consistent with possible ACS

Onset > 3 hours ago + Troponin < 2 ng/L

Onset < 3 hours ago or unknown

0 and 2 hr Troponin < 15F or 20M ng/L and Δ < 5 ng/L

Any Troponin > 15F or 20M ng/L or Δ 5-19 ng/L

Any Troponin \geq 50 ng/L or Δ \geq 20 ng/L

Δ 7-19 ng/L and HEART Score \leq 3

> 15F or 20M ng/L or HEART Score \geq 4

NOTE: Patients who meet exclusion criteria or admitted to the hospital will not follow this algorithm but rather undergo a 0, 3, 6 – hour algorithm