



# i-STAT hs-TnI CARTRIDGE

## GUIDANCE ON SAVING HS-TNI SAMPLES



### PATIENT INCLUSION CRITERIA

Patients presenting to the emergency department with acute, severe, and prolonged chest pain are eligible for the Method Comparison study. Samples should be drawn within 48 hours of presentation with no more than three samples per patient drawn at least 2 hours apart. Include troponin and serial troponin samples for at least 2-4 patients.

### SAMPLE PROCESSING (FROZEN PLASMA)

To ensure an adequate number of samples are available for the Method Comparison protocol, we recommend banking plasma samples after standard of care testing has been performed. Ensure a broad range of values are selected and bank plasma samples in advance of the scheduled Method Comparison study.

Samples should be processed using your laboratory's recommended procedure. If recommendations do not exist for processing and storing of frozen plasma samples, please follow the steps below for processing and storage:

### NOTES:

- Select the number of samples within the clinically relevant range as determined by the Laboratory Director. Ensure to select samples BELOW and ABOVE the cut-off (99<sup>th</sup> percentile upper reference limit):
  - The cut-off may be the overall 99<sup>th</sup> percentile URL or the sex-specific 99<sup>th</sup> percentile URL.
  - Include troponin and serial troponin samples for at least 2-4 patients.
  - Do not include more than 3 samples from the same patient.
  - Store sufficient volume of plasma for duplicate testing on both the *i-STAT* and comparative method.
1. Centrifuge anticoagulant blood collection tube according to the manufacturer's instructions.
  2. Using a pipette, carefully transfer the plasma to a clean polypropylene tube, making sure to not disturb the buffy coat.
  3. Label the sample with the following:
    - Patient identifier
    - Initial troponin value
    - Sex (when available)
    - Note if samples are serial draws from initial
  4. Store samples in a manner to easily determine the number of samples collected by sex (if applicable).
  5. If aliquots are not planned for testing right away, store at  $\leq -20$  °C (-4°F) for up to three months. Samples should be frozen within 2 hours of collection.

*When ready to test samples that have been frozen, follow the steps below:*

6. Thaw frozen samples at room temperature (18-30 °C or 64-86 °F).
7. Once thawed, mix by gently inverting the sample 10 times.
8. Centrifuge the sample for 1 minute at approximately 9600 g. Transfer the plasma to a clean polypropylene tube, making sure to not disturb the pellet.
9. A sample should be tested on the *i-STAT* and on the comparative method within 30 minutes.
10. Note that some degradation cannot be avoided, and results obtained on frozen samples may differ from those obtained initially on the fresh samples.