WHAT IS ST2?
Soluble ST2 is a biomarker of fibrosis and cardiac remodeling that can help assess the risk of hospitalization and death in chronic heart failure patients. ST2 provides significant prognostic guidance without being adversely influenced by typical confounders such as age, BMI, and renal function.

Unlike other cardiac biomarkers, ST2 levels change in response to changes in the patient’s condition which helps clinicians make informed decisions and quickly adjust treatment, if necessary.

WHY IS ST2 TESTING IMPORTANT?
- With more than 6.5 million U.S. adults living with heart failure, ST2 testing can be used to help stratify risk, assess treatment options, monitor progress, and guide in-hospital and post-discharge care.
- Over 80% of patients diagnosed and treated for acute heart failure syndromes in the emergency department are readmitted within the forthcoming year, incurring costly treatments and therapies. ST2 testing can be used to guide in-hospital and post-discharge care.
- High concentrations of sST2 result in cellular death, tissue fibrosis, reduced cardiac function, and an increase in the rate of disease progression.
- In a multimarker panel, ST2 value was one of the strongest predictors of mortality at 30 days and one-year in a reclassification analysis.

WHEN SHOULD I ORDER ST2 TESTING?
- For individuals with acute and chronic heart failure to help monitor disease progression.

WHEN SHOULDN’T I ORDER ST2 TESTING?
- ST2 has not been shown to be useful in the acute diagnosis of heart failure. Natriuretic peptides (BNP or NT-proBNP) should be utilized for this purpose in the context of appropriate clinical suspicion of acute heart failure.

DECISIONS ENABLED BY ST2 TESTING
Elevated ST2 results indicate an increased risk for adverse outcomes and signal the adverse remodeling and progression of disease. Knowledge of ST2 results in a heart failure patient may assist in cardiovascular risk stratification and lead to more aggressive management.

- Low risk: ≤ 35.0 ng/mL
- High risk: > 35.0 ng/mL

WHICH TEST SHOULD I ORDER?
- ST2, Serum (Mayo Test ID: ST2S)
  Specimen Type: Serum
  Container/Tube: Preferred: Red Top
                  Acceptable: Serum gel
  Specimen Volume: 1 mL
  Analytic Time: 1 day
REFERENCES
