Conclusions: These results indicate that administration of an H1, H2, and H2 antagonist in combination may prove to be a promising treatment in attenuating the extent of myocardial injury and improving LV function following myocardial infarction.

ST2: A Novel Biomarker of Myocyte Mechanical Overload, Predicts Adverse ECG, Angiographic, and Clinical Outcomes in STEMI: Results from the CLARITY-TIMI 28 Biomarker Study

Methods: Patients with STEMI undergoing primary PCI were enrolled in CLARITY-TIMI 28 and treated with ST2. Patients with ST2 levels >200 pg/mL were categorized into the high ST2 group, while those with ST2 levels <200 pg/mL were categorized into the low ST2 group. The primary endpoint was a composite of death, MI, or stroke at 1 year. The secondary endpoint was a composite of death, MI, or stroke at 30 days.

Results: Among the 3,340 patients enrolled in CLARITY-TIMI 28, the median ST2 level was 38.4 pg/mL (interquartile range, 13.8-97.6 pg/mL). The high ST2 group had a higher rate of the primary endpoint compared to the low ST2 group (13.1% vs 7.1%, p<0.001). The high ST2 group also had a higher rate of the secondary endpoint compared to the low ST2 group (10.3% vs 5.2%, p<0.001). These findings were consistent in subgroups defined by sex, age, and previous MI status.

Conclusion: ST2 is a novel biomarker of myocyte mechanical overload that predicts adverse outcomes in patients with STEMI undergoing primary PCI.