

PREVENT-SCD Published

Preliminary results of PREVENT-SCD were originally presented at AHA in 2009. This important trial further confirms the predictive value of MTWA in patients with LV dysfunction. **Patients with an abnormal MTWA result were 4.4 times more likely to experience a lethal ventricular tachyarrhythmia and almost 8 times more likely to die of cardiac causes.**

The negative predictive value was 100% at one year, 98.6% at two years, and 97.0% at three years, indicating that patients with a normal or negative MTWA test are at low risk for experiencing sudden death. In the sub-group of patients with non-ischemic cardiomyopathy, the negative predictive value was 100 percent out to three years. Unlike MASTER, a small percentage of patients had an ICD (25%).

These results are an important confirmation of the value of MTWA testing and further demonstrate that, in trials not dominated by ICD shocks as the endpoint, the data supports the predictive value of MTWA for SCD.

Additional notes:

- Of 280 patients tested, 29% were negative for MTWA – very similar to the breakout for other studies like Bloomfield, Chow and ALPHA.
- Unlike Ikeda et al, most patients were treated with beta blockers and ACEI/ARB, making this group more similar to a U.S. population in terms of pharmacologic optimization. Medications were not withheld prior to testing.
- Interestingly, the patients who were ineligible for the MTWA test were also at higher risk. Most of these were due to atrial fibrillation, but others were due to inability to exercise or being pacemaker dependent. In the real world, some of these patients could have been tested via pharmacologic testing or AV sequential pacing thereby reducing the number of truly ineligible patients, but those methodologies were not used in this study.

The full paper can be found at: <http://www.springerlink.com/content/r243743418357826/>.