Klingenhebien, T., Zabel, M., D’Agostino, R., Cohen, R. Hohnlooser, S. 
Predictive value of T-wave alternans for arrhythmic events in patients with 
congestive heart failure. 

Measurement of microvolt level T-wave alternans in the surface electrocardiogram is a novel way to 
assess the risk of ventricular arrhythmias. Seven tests of arrhythmic risk, including T-wave alternans, 
were undertaken in 107 consecutive patients with congestive heart failure and no history of sustained 
ventricular arrhythmias; the patients were followed up for arrhythmic events during the next 18 
months. Of the patients with events, 11 had positive and two indeterminate T-wave alternans results; 
there were no arrhythmic events among patients with negative T-wave alternans results. Of the seven 
tests, only T-wave alternans was a significant (p=0.0036) and independent predictor of arrhythmic 
events.