Assessment of eligibility

Baseline evaluation and multimodality imaging including speckle tracking echocardiography, SPECT, and cardiac CT

Randomization - stratified according to presence or absence of coronary artery disease

Empiric LV lead placement

Imaging guided LV lead placement

Pre-discharge pacemaker test and echocardiographic AV and VV optimization

One month pacemaker test and echocardiographic AV and VV optimization

Six months follow-up including echocardiography and cardiac CT