

## Operations Memo No. 10



VA COOPERATIVE STUDIES PROGRAM # 424

### Clinical Outcomes Utilizing Revascularization and Aggressive DruG Evaluation

Date: July 30, 1999

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Subj: **LVEF Assessment**

To: Study Personnel

Thru: Trial Leadership

Left ventricular systolic function is a major prognostic factor in patients with chronic and acute coronary disease. At the last meeting of the Executive Committee of COURAGE, it was agreed that we should have a pre-randomization LVEF, whenever possible, for patients entered into COURAGE.

A quantitative LVEF can be obtained by radionuclide ventriculography or, as part of ETT or adenosine ECG gated technetium sestamibi SPECT imaging or by contrast ventriculography. Although quantitative echo (Simpson's algorithm) can be obtained in some laboratories, this is not the usual situation.

Estimated ejection fractions obtained by qualitative 2D echocardiography are often inaccurate as has been demonstrated by interobserver and intraobserver studies. Although a quantitative LVEF is preferable prior to randomization, a qualitative 2D echo estimation may be better than no data at all. Missing LVEF data have been the Achilles heel of many multivariate analysis of risk factors.

It is essential that you obtain a quantitative (invasive or non-invasive) measure of left ventricular ejection fraction on all enrolled COURAGE Trial patients. We urge you to comply with this critically important request.