

## **INTRODUCTION**

Invasive coronary angiography (ICA) is the accepted reference standard for the assessment of coronary artery stenosis because of its unprecedented temporal and spatial resolution and ability to perform therapeutic interventions in the same Session (*Smith et al., 2001*).

The inconvenience for the patient and economic deliberations have strengthened the search for a non-invasive alternative, current multislice computed tomography (MSCT) scanners provide promising results in the assessment of coronary artery disease (CAD), but some segments are not evaluative because of motion artifacts or severe vessel wall calcification (*Ropers et al., 2003*).

To become a clinically accepted tool for the examination of patients with suspected CAD, the main requisite for CT coronary angiography includes the complete visualization of all therapeutic relevant coronary arteries without excluding segments (*Mollet et al., 2004*).

The recently developed 64 slice CT scanner generation provide 0.4 mm nearly isotropic voxels in a rotation time of 0.37 sec, thus increasing temporal & spatial resolution when compared with previous CT scanner types (*Flohr et al., 2004*).

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This suggests a certain improvement regarding diagnostic accuracy and an important future role of CT coronary angiography for reliably excluding residual significant, stenosis in patients with an equivocal clinical presentation thus being more convenient and saving these risky patients from undergoing another cost extensive and invasive coronary angiography procedure (*Becker et al., 2002*).