**CURRENT STATUS OF INTRAVASCULAR IMAGING**

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Diagnostic angiography has been the mainstay of confirmatory diagnosis of vascular atherosclerosis. Being a luminogram its ability to determine the presence and extent of atherosclerosis is limited by changes in the vessel wall that is adjacent to the atherosclerotic plaque. More over, the angiography does not delineate the physiological, molecular and physical characteristics of the plaque. Lack of such a data restricts physician's ability to individualize the treatment of atherosclerotic vascular disease in patients. Intravascular imaging modalities like intravascular ultrasound and Optical Coherence Tomography are currently widely used in catheterization laboratories. They provide additional data on the morphological characteristics of the vessel wall and intraluminal structures. Integrating newer technology like virtual histology and infrared spectroscopy to existing intravascular imaging platforms is a novel method that can enhance diagnostic capability of traditional intravascular imaging techniques. Hybrid use of different existing technologies and integrating novel techniques that delineate tissue characteristics would added value in vascular imaging.