

## **IVUS – guided wire re-entry technique in complex CTO PCI**

**Tse-Min Lu, MD. PhD. FACC**

*Division of Cardiology, Taipei Veterans General Hospital*

*School of Medicine, National Yang-Ming University*

Intravascular ultrasound (IVUS) is a useful tool in the PCI treatment of complex CTO. The purpose of the use of IVUS in CTO PCI includes (1) to confirm the vessel size, (2) to confirm that the wire is in the true lumen or not, (3) to confirm where is the transition point/entry point of true to false lumen, and (4) to identify in which direction the true lumen is present. Furthermore, in difficult and complex CTO PCI, IVUS-guided wire re-entry technique is a useful strategy and even the last resort. In general, IVUS-guided wiring technique may include side-branch IVUS guidance wire re-entry and co-axial IVUS guidance wire re-entry. Herein, we present our Taipei VGH's experiences of IVUS-guided wiring in complex CTO PCI and present the tips and tricks of IVUS-guided wire re-entry technique under the guidance of side-branch.