## TECHNICAL SPECIFICATION FOR INTRA VASCULAR ULTRASOUND (IVUS)

- 1. System should be latest generation, easy-to-use, Smart High Definition (HD) IVUS imaging and physiology system; designed for peripheral vascular, structural heart and coronary procedures; operable directly from the sterile field with three modality support i.e., (1) Coronary, (2) Peripheral, (3) FFR (including DFR/IFR/RFR).
- 2. IVUS imaging should have dynamic review feature (blood flow, plaque morphology, dissections, and stent opposition).
- 3. Automated Lumen Assessment (ALA) function for Quick measurements. IVUS should give data for Lesion Significance, MLA, MLD & % Stenosis, Plaque Burden, Positive and negative Remodeling of Vessel, Plaque Tissue Type, Lesion Length, Necrotic/Calcified/Lipidic/Fibrotic Plaque, Dissections, Thrombus, Protrusion, Stent Expansion & Apposition, & Placement, Stent Strut Coverage, Thin Cap Fibroatheromas & In Stent Restenosis.
- 4. It should be a truly mobile system. It should be easy to move. Full integration options should be available.
- 5. Should determine FFR/DFR/IFR/RFR value with Optical sensor-based wire to assess Arterial Pressure through Cath Lab transducer system.
- 6. It should have 18" or more color full HD display screen.
- 7. It should have compatibility with Coronary (40 to 60 MHz High-Definition) single rotating or phased array mechanical transducer catheter, Peripheral (10 to 30 MHz) catheter.
- 8. FFR/DFR/IFR/RFR Pressure Guide wire should be one optical sensor pressure wire for entire procedure i.e. for FFR measurement and angioplasty procedure with better torque and push ability.
- 9. It should be provided with ready to use platform with all required cables and accessories to interface with all available Cath labs.
- 10.Operating system: minimum requirement window 7 and above. Archiving Options: internal hard disk with sufficient storage capacity and should have USB drive option for data export.
- 11.It should have automated/manual IVUS catheter pull back system. Fast Pullback 7 different pullback speed (1mm/sec to 8mm/sec or more) for quick vessel imaging with High Quality Images with permanent pull back device option.
- 12. Sterile Field control for both sterile & non-sterile operator.
- 13. Multiple Image Screen Format should be available
- 14. Should be Indian regulatory body certified/CDSCO/BIS/ US FDA/European-CE approved product
- 15. Manufacturer/Supplier should have ISO certification for quality standards
- 16. At the time of supply the intravascular ultrasound system should be of latest generation.
- 17. Ten (10) IVUS Catheters should be provided with the machine.
- 18. Should have local service facility.
- 19. Comprehensive warranty for 5 years and CMC for next five years post warranty.
- 20. Availability of spares & consumables to be ensured for minimum 10 years period.