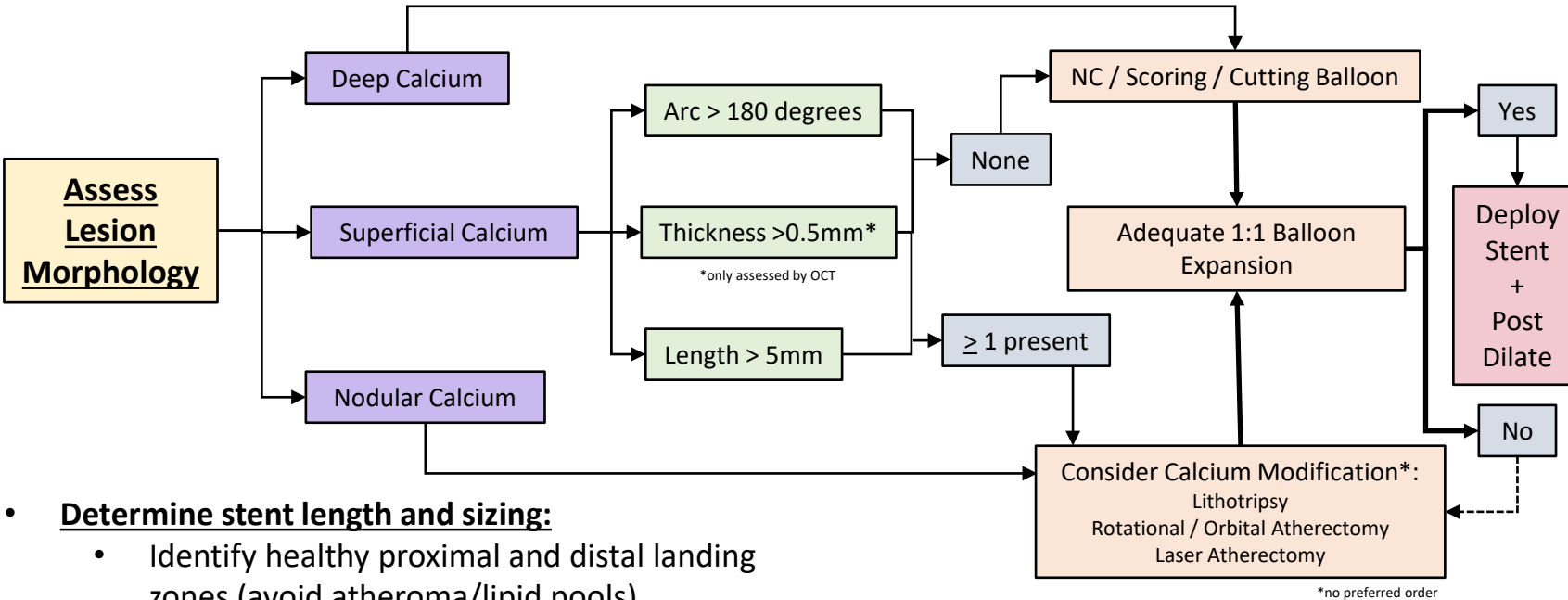


IVUS and OCT for PCI Optimization

Pre-PCI Imaging

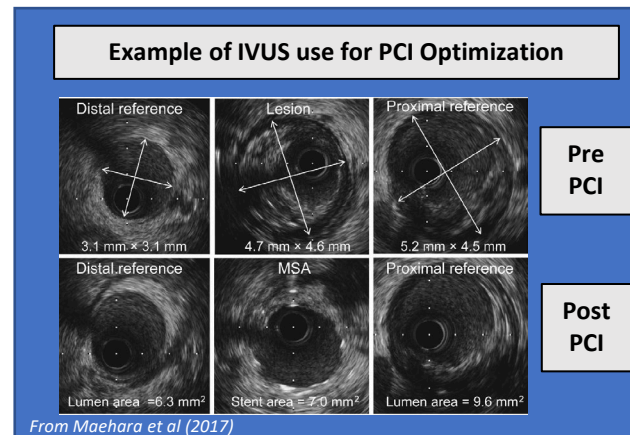


Post-PCI Imaging

- **Measure Minimal Stent Area (MSA) and Optimize Stent expansion:**
 - **Optimal:** MSA $\geq 90\%$ distal ref area
 - **Acceptable:** MSA $\geq 80\%$ distal ref area
 - **MSA $> 5.5 \text{ mm}^2$ by IVUS for non-left main**
 - **MSA $> 4.5 \text{ mm}^2$ by OCT for non-left main**
- **Dissection:**
 - Ensure no stent edge dissections involving media $> 3 \text{ mm}$ in length and/or 90-degree arc in diameter
- **Identify stent malapposition:**
 - Consider post-dilation of proximal edge malapposition (may interfere with re-wiring) and gross malapposition of long segments ($> 3 \text{ mm}$), or malapposition associated with stent under-expansion.
 - Treat with low pressure semi-complaint balloon.

Determine stent length and sizing:

- Identify healthy proximal and distal landing zones (avoid atheroma/lipid pools).
- Determine length between these two zones.
- Measure the proximal and distal reference areas.
- **Size stents to the distal luminal reference area for 1:1 stent sizing per the ULTIMATE trial (which used IVUS).**
- **Pay attention to stent-specific post-dilation limits so that you may post-dilate the stent according to the proximal and distal reference areas.**



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