


Conclusion

 Optical coherence tomography (OCT) is non-inferior to intravascular ultrasound (IVUS) for guiding percutaneous coronary intervention (PCI) in patients with diverse coronary artery lesions.

Impact on clinical practice

 The results add compelling evidence on the relative efficacy and safety of an OCT-guided strategy compared with an IVUS-guided strategy for PCI.

Study objectives

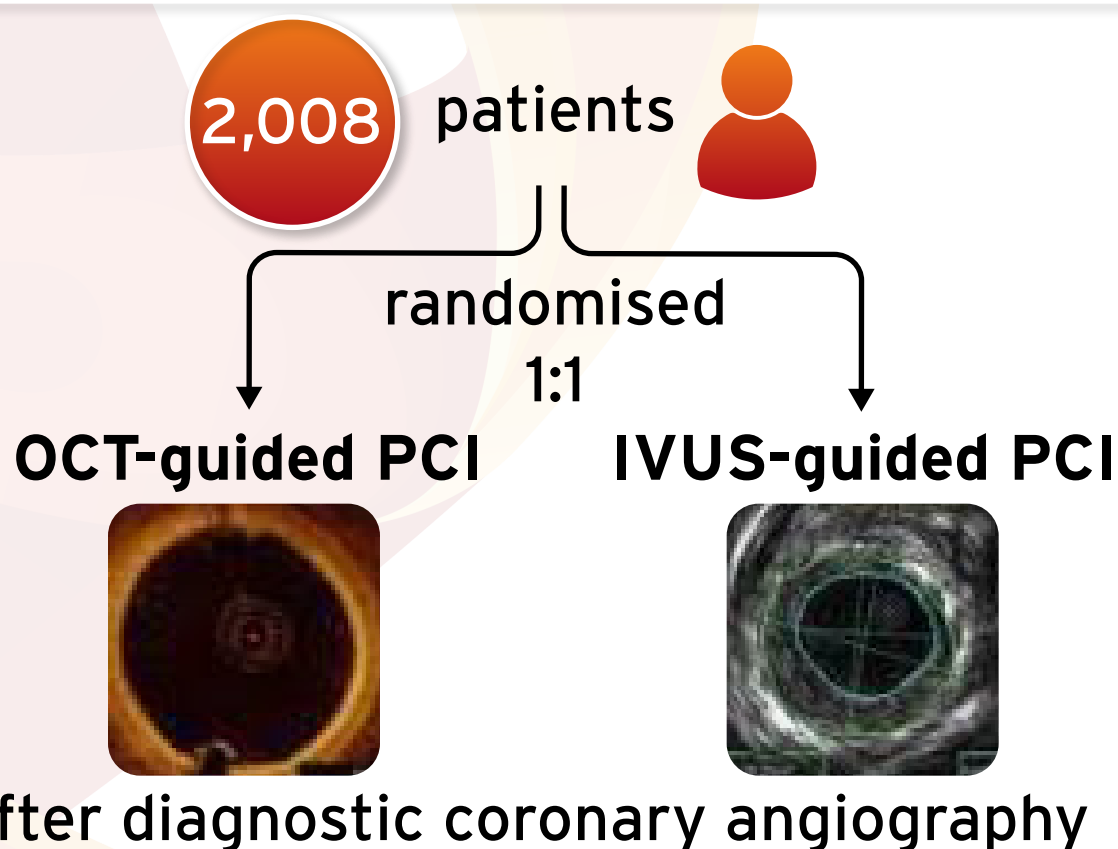
 The OCTIVUS trial was a head-to-head comparison of OCT- and IVUS-guided PCI with regards to clinical outcomes in patients with a broad range of coronary artery lesions.

Study population

Patients

- aged ≥ 19 years
- undergoing PCI with contemporary drug-eluting stents or drug-coated balloons (only for in-stent restenosis) for significant coronary artery lesions

Who and what?



Where?



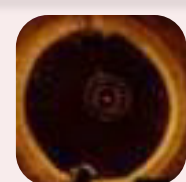
South Korea



9 sites

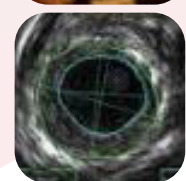
Primary endpoint

Composite of death from cardiac causes, target vessel myocardial infarction or ischaemia-driven target vessel revascularisation at 1 year, which was powered for noninferiority of the OCT group as compared with the IVUS group (noninferiority margin, 3.1 percentage points)



Rate%

2.5%



3.1%

risk difference, -0.6 percentage points
upper boundary of the one-sided
97.5% CI 0.97; $p < 0.001$ for noninferiority

Safety endpoints

Incidence of contrast-induced nephropathy was similar



=



1.4%

1.5%

Incidence of major procedural complications was lower with



vs.



$p = 0.048$

2.2%

3.7%