Clinical Summary

Duration of antiplatelet therapy after complex percutaneous coronary intervention in patients at high bleeding risk: a MASTER DAPT trial sub-analysis

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Valgimigli et al. for the MASTER DAPT Investigators

Patients undergoing percutaneous coronary intervention (PCI) with severe coronary artery disease (CAD) and challenging lesion subsets require complex procedures and remain at increased risk of short and long-term adverse ischaemic events.

MASTER DAPT was an investigator-initiated, randomised, open-label trial conducted in patients at high bleeding risk after the implantation of an Ultimaster™/Ultimaster™ Tansei™ DES.

The trial compared abbreviated (1 month) dual antiplatelet therapy (DAPT) with non-abbreviated (3-12 month) DAPT.

The primary results showed that 1 month of DAPT was non-inferior to treatment continuation for at least 2 additional months for the occurrence of net adverse clinical events (NACE) and major adverse cardiac and cerebral events (MACCE) and reduced major or clinically relevant non-major bleeding (MCB) in the overall high bleeding risk population.

What was the aim of the study?

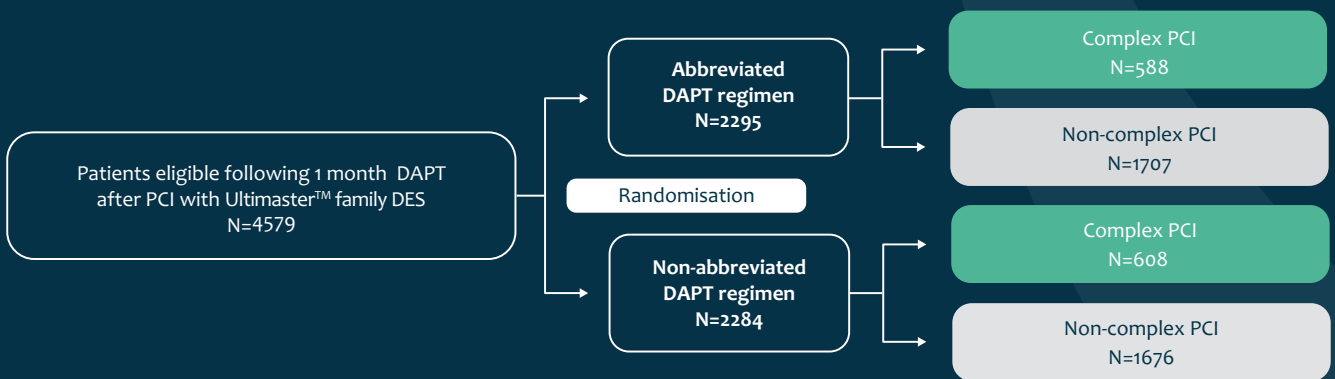
The aim of this prespecified subgroup analysis was to assess the consistency of the treatment effects of 1-month vs. a more prolonged DAPT duration based on PCI and patient (complex PCI and/or acute coronary syndrome (ACS)) complexity.

Complex PCI was defined as 3-vessels treated, ≥ 3 stents implanted, ≥3 lesions treated, bifurcation with two stents implanted, total stent length > 60 mm, or chronic total occlusion (CTO).

1195 Complex PCI

How was the study completed?

Patients randomized to an abbreviated or a non-abbreviated DAPT regimen were grouped according to the presence of complex PCI features and/or ACS.



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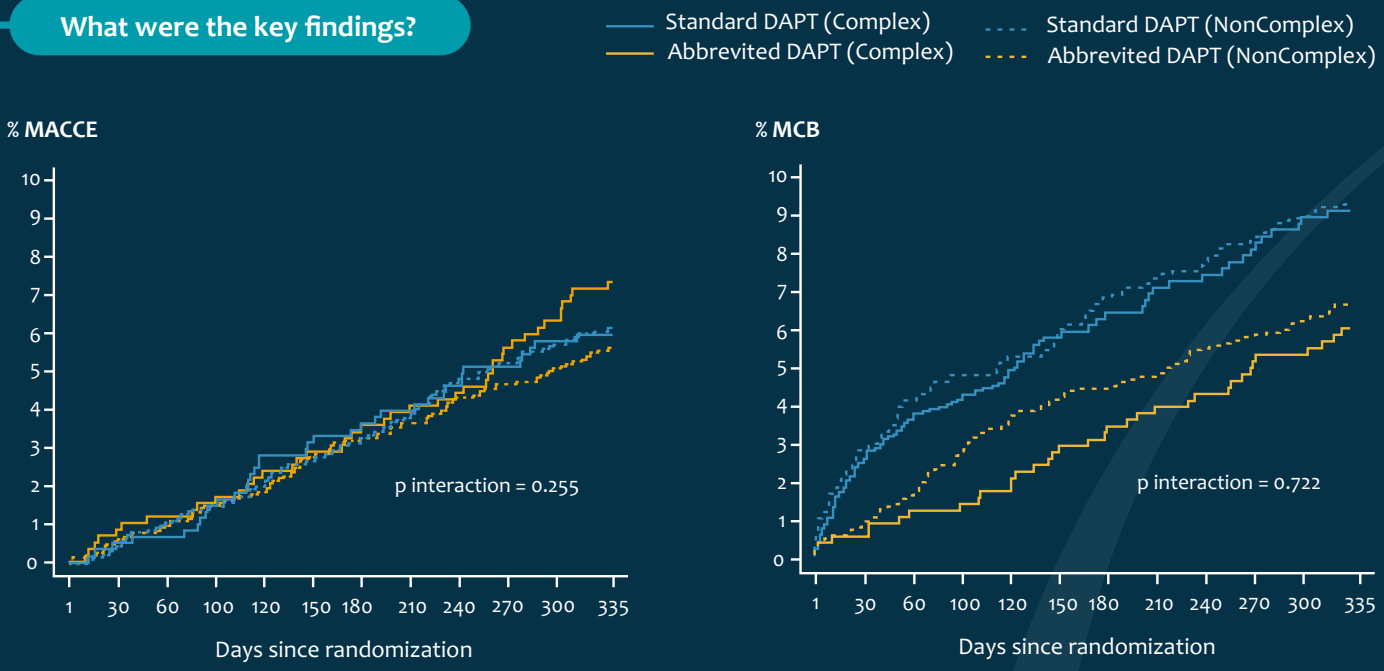
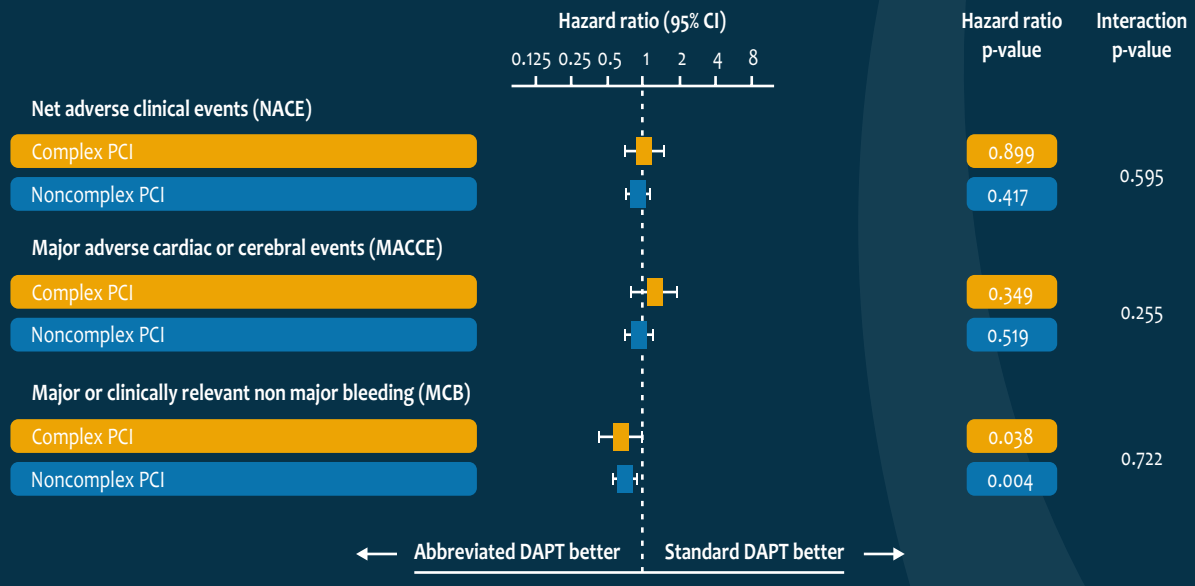
What were the key findings?



No interaction between the three ranked primary endpoints and complex PCI and/or ACS.

1 Clinical endpoints at 11 months after randomization



Take home message

In high bleeding risk patients undergoing PCI without recurrent ischemic events in the first 30 days after coronary intervention, PCI complexity and/or ACS does not justify a DAPT regimen longer than one month.

What did the authors conclude?

One-month DAPT after PCI with the Ultimaster™ Family DES in high bleeding risk patients was associated with:

- Similar net adverse clinical events (NACE)
- Similar major adverse cardiac or cerebral events (MACCE)
- Lower bleeding rates (MCB)

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MASTER DAPT

MAnagement of high bleeding risk patients post bioresorbable polymer coated **STE**nt implantation with an abb**R**eviated versus prolonged **DAPT** regimen

An investigator-initiated trial sponsored by the European Cardiovascular Research Institute (ECRI)

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