EMBARGOED UNTIL: 22 May 2018 12:20 CEST

FFR-guided PCI vs. medical therapy to reduce cardiac death and myocardial infarction

FAME 2, DANAMI-3-PRIMULTI, and COMPARE-ACUTE: a pooled, patient-level analysis of FFR-guided PCI vs. medical therapy to reduce cardiac death and myocardial infarction

Results from the first patient-level pooled analysis of all existing trials comparing FFR-guided PCI with contemporary stents versus medical therapy demonstrates improved hard outcomes.

Paris, France, 22 May 2018. Ongoing controversy exists today regarding the role of percutaneous coronary intervention (PCI) for stable coronary lesions to improve hard outcomes. Stable lesions include both patients with stable coronary artery disease as well as non-culprit lesions in haemodynamically stabilised acute coronary syndrome (ACS) patients. Three randomised controlled trials have compared fractional flow reserve (FFR)-guided PCI using modern drug-eluting stents versus medical therapy for stable lesions: FAME 2, DANAMI-3-PRIMULTI, and COMPARE-ACUTE.

What are the new insights gained from these trials?
Each study demonstrated a clinical benefit in favour of FFR-guided PCI, including (urgent) revascularisation in the primary endpoint. However, each trial by itself was not powered for the endpoint of cardiac death or myocardial infarction. For this reason, a pooled, patient-level analysis including 2,400 patients was performed to address adequately whether FFR-guided modern PCI reduces cardiac death or myocardial infarction versus medical therapy.

What new data are being presented?
This is the first pooled analysis on a patient level which includes all existing trials comparing FFR-guided PCI with contemporary stents versus medical therapy. In addition, this analysis extended follow-up for both the FAME 2 and DANAMI-3-PRIMULTI trials.

“Our results,” Frederik M. Zimmermann explained, “show for the first time that modern PCI, when guided by FFR, reduces so-called “hard endpoints” – the composite outcome of cardiac death or myocardial infarction – when compared to an initial strategy using medical therapy. Importantly, we found a relative risk reduction of approximately 30% when using FFR-guided treatment, which corresponded to an estimated absolute risk reduction of ~4.5% at 5 years. Our analyses also favoured FFR-guided PCI when examining the composite of all-cause death or myocardial infarction. Differences between groups were driven by a reduction in myocardial infarction. No differences were observed for deaths from cardiac causes or deaths from any cause”.

Press Release
What role do innovation, devices or technology play in these results?
This pooled analysis demonstrates that key technology innovations (pressure wire fractional flow reserve to guide PCI and contemporary drug-eluting stents) have enabled PCI to improve patient outcomes.

What is the take-home message for the clinician?
“In patients with stable coronary lesions, contemporary PCI – i.e., guided by FFR – reduces the risk of future myocardial infarction or cardiac death independently of its impact on symptoms.”

For the public?
“Medicine has two broad goals: making you feel better now and avoiding problems in the future. Widening narrowed heart arteries with stents has long been used to treat symptoms and stop ongoing heart attacks. However, whether stents can help avoid problems in the distant future has remained controversial. Pressure measurements inside the heart arteries can identify coronary arteries that should be widened. Our results show for the first time that stents reduce the chances of having a future heart attack in clinically stable patients with such arteries”.

KEY DATA
- 2,400 patients in pooled, patient-level analysis from FAME 2, DANAMI-3-PRIMULTI, and COMPARE-ACUTE trials
- FFR-guided modern PCI versus optimal medical therapy
- 30% approximate relative risk reduction of the composite of cardiac death or myocardial infarction using FFR-guided treatment, corresponding to an estimated absolute risk reduction of ~4.5% at 5 years.

CONTACT INFORMATION:
Frederik M. Zimmermann, MD
Department of Cardiology
Catharina Hospital Eindhoven, Michelangelolaan 2, 5623 EJ Eindhoven, the Netherlands
+31 (0)40-2397004
E-mail: frederik.zimmermann@catharinaziekenhuis.nl

Nico H.J. Pijls, MD, PhD
Professor of Cardiology
Department of Cardiology
Catharina Hospital Eindhoven, Michelangelolaan 2, 5623 EJ Eindhoven, the Netherlands
+31 (0)40-2397004
E-mail: nico.pijls@xs4all.nl

CORRESPONDING SESSION
EuroPCR 2018 session: Tuesday 22 May - Main Arena 12:20-14:00 (Presentation 13:05-13:15)
HELP FOR JOURNALISTS TO COVER EUROPCCR 2018

For any press-related inquiries, please contact
EuroPCR Press Coordinator, Isabelle Uzielli: iuzielli@europcr.com

Register and attend EuroPCR 2018 as a journalist
Press registration for EuroPCR is open to accredited journalists, free of charge. Journalists must hold a valid press card and/or provide a letter of assignment from a recognised publication. To register as press go to

EuroPCR press releases
EuroPCR press releases can be found at
https://www.pcronline.com/News/PCR-Press-Releases

Attend press briefings
For the press briefing schedule check

EuroPCR abstracts
Abstracts are available online at

NOTES TO EDITORS

What is EuroPCR?
EuroPCR is the world-leading Course in interventional cardiovascular medicine, and the official annual meeting of the European Association for Percutaneous Cardiovascular Interventions (EAPCI), a branch of the European Society of Cardiology (ESC).

In addition to this flagship course in Paris, PCR offers a large range of many other educational meetings and resources for the continuing education of the interventional cardiovascular community. These include major annual Courses across the globe, E-Learning with high-profile PCR Webinars, Courses specifically dedicated to valvular heart disease, tailor-made PCR Seminars on specific topics, online resources and medical publications such as EuroIntervention, the official journal of the EAPCI.

For more information, please visit: https://www.pcronline.com/Courses/EuroPCR/EuroPCR-2018 and follow us on Twitter https://twitter.com/PCRonline using the hashtag #EuroPCR
Gateways to all PCR activities are available on www.pcronline.com

For further information, please contact Célia Vilà: cvila@europa-group.com