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## *Reserva Fracionada de Fluxo na Avaliação da Doença Coronariana Multivascular Complexa*

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*Editor da Revista Brasileira de Cardiologia Invasiva*

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Não há conflito de interesses  
relacionados a esta apresentação

Cesar R. Medeiros

## The NEW ENGLAND JOURNAL of MEDICINE

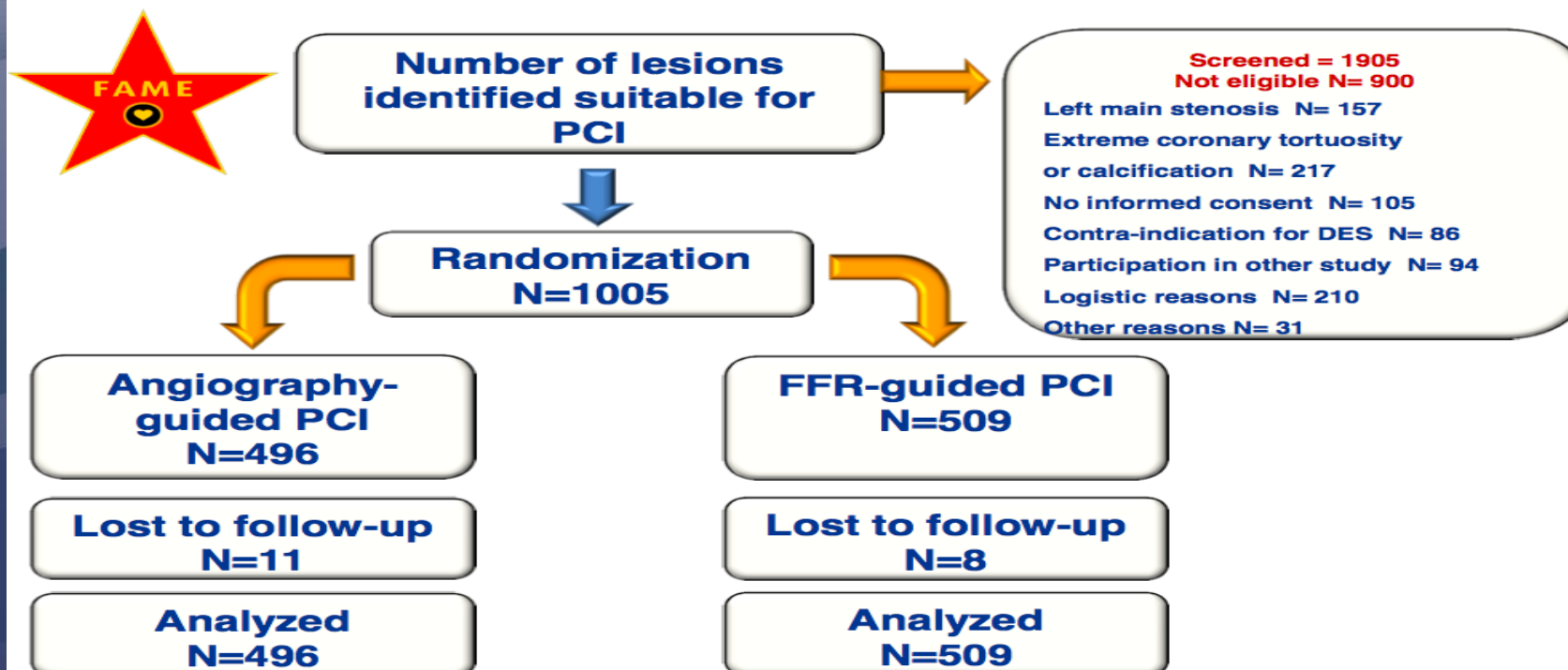
ESTABLISHED IN 1812

JANUARY 15, 2009

VOL. 360 NO. 3

### Fractional Flow Reserve versus Angiography for Guiding Percutaneous Coronary Intervention

Pim A.L. Tonino, M.D., Bernard De Bruyne, M.D., Ph.D., Nico H.J. Pijls, M.D., Ph.D., Uwe Siebert, M.D., M.P.H., Sc.D., Fumiaki Ikeno, M.D., Marcel van 't Veer, M.Sc., Volker Klauss, M.D., Ph.D., Ganesh Manoharan, M.D., Thomas Engström, M.D., Ph.D., Keith G. Oldroyd, M.D., Peter N. Ver Lee, M.D., Philip A. MacCarthy, M.D., Ph.D., and William F. Fearon, M.D., for the FAME Study Investigators\*





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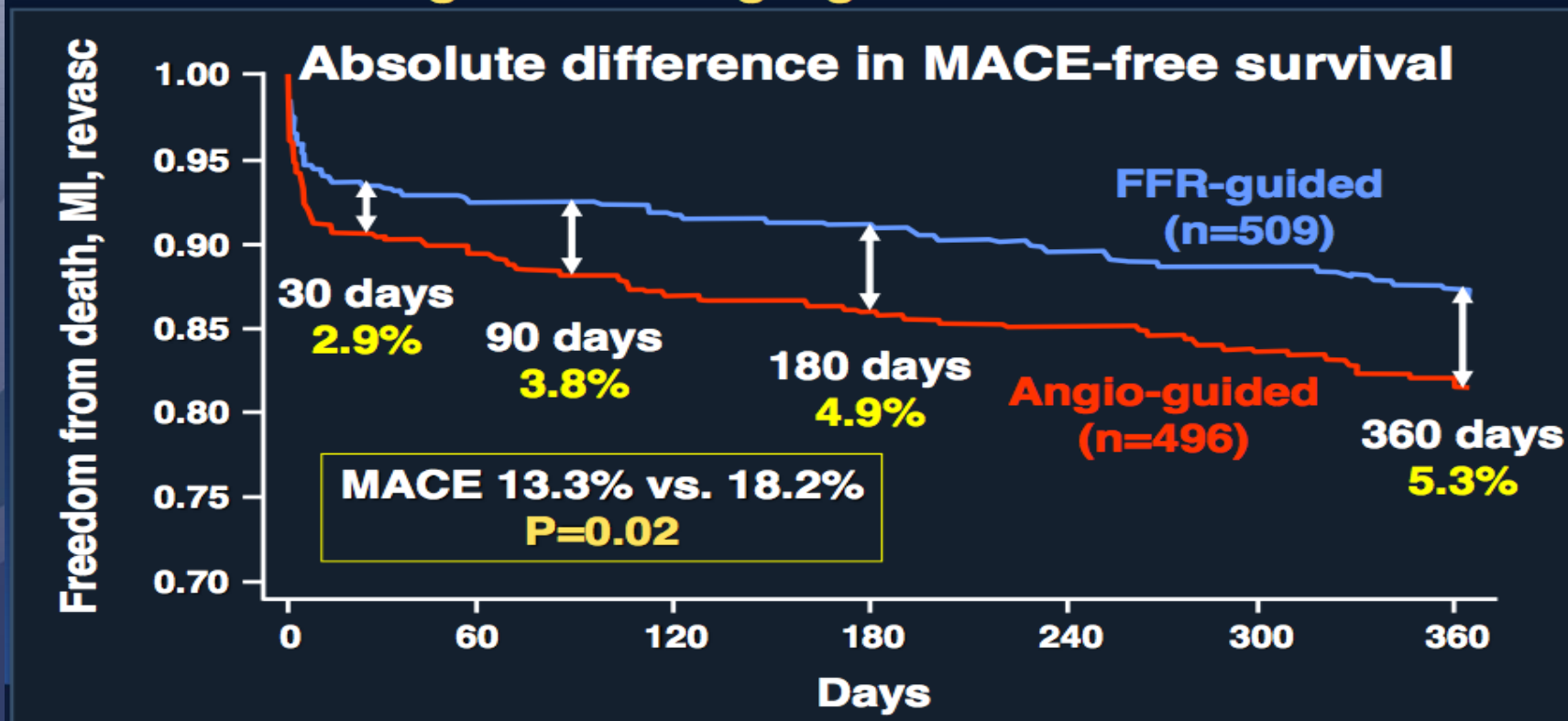
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# FAME Trial

## FAME: Optimizing Complete Revascularization



1005 pts with MVD undergoing PCI with DES were randomized to FFR-guided vs. angio-guided intervention



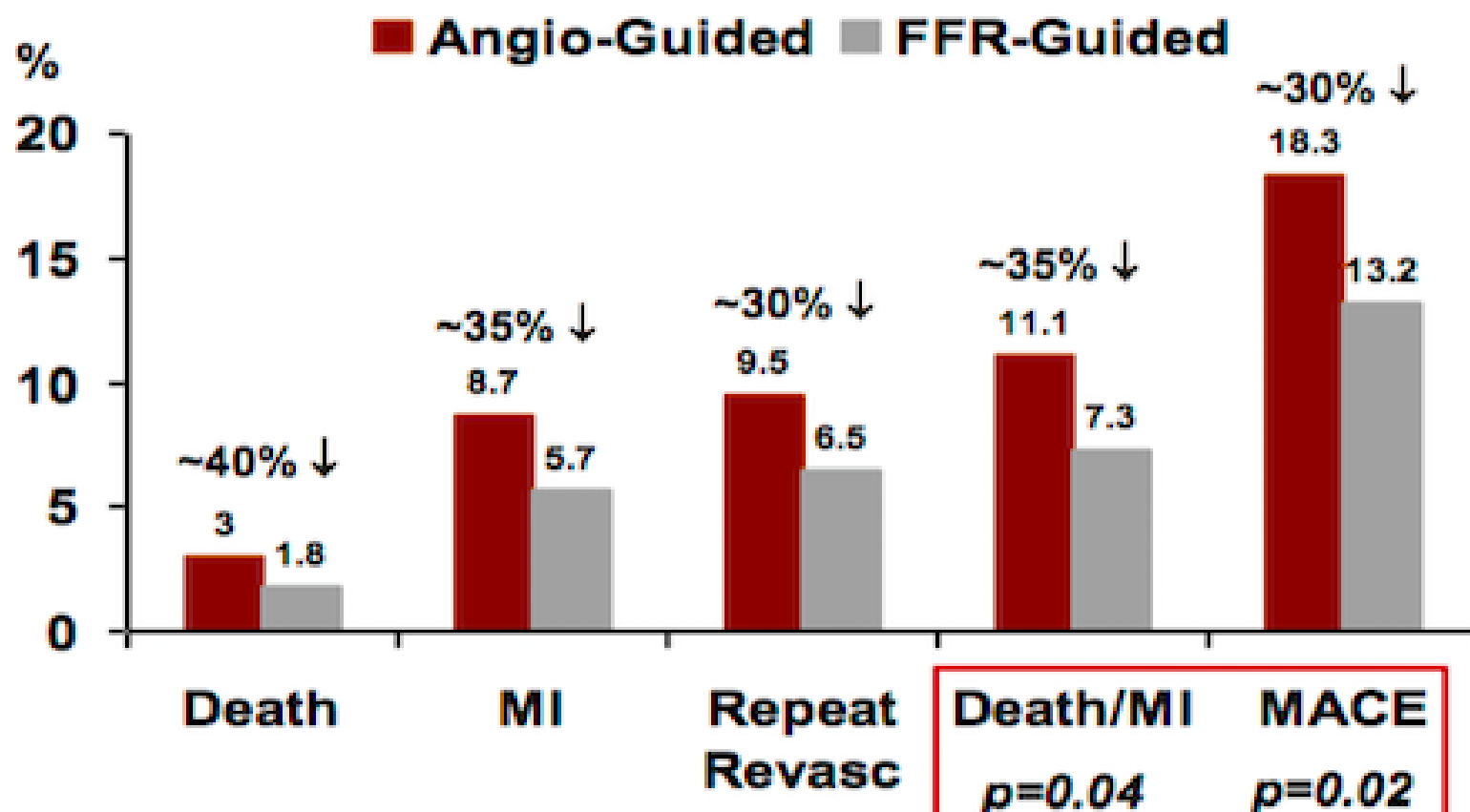


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# FAME Trial

## FAME Study: One Year Outcomes



## FAME - Procedural Characteristics

|                                 | Angio-Guided<br>n = 496 | FFR-Guided<br>n = 509 | P Value          |
|---------------------------------|-------------------------|-----------------------|------------------|
| Indicated lesions / patient     | 2.7 ± 0.9               | 2.8 ± 1.0             | 0.34             |
| <b>Stents / patient</b>         | <b>2.7 ± 1.2</b>        | <b>1.9 ± 1.3</b>      | <b>&lt;0.001</b> |
| Procedure time (min)            | 70 ± 44                 | 71 ± 43               | 0.51             |
| <b>Contrast agent used (ml)</b> | <b>302 ± 127</b>        | <b>272 ± 133</b>      | <b>&lt;0.001</b> |
| <b>Equipment cost (US \$)</b>   | <b>6007</b>             | <b>5332</b>           | <b>&lt;0.001</b> |
| Length of hospital stay (days)  | 3.7 ± 3.5               | 3.4 ± 3.3             | 0.05             |

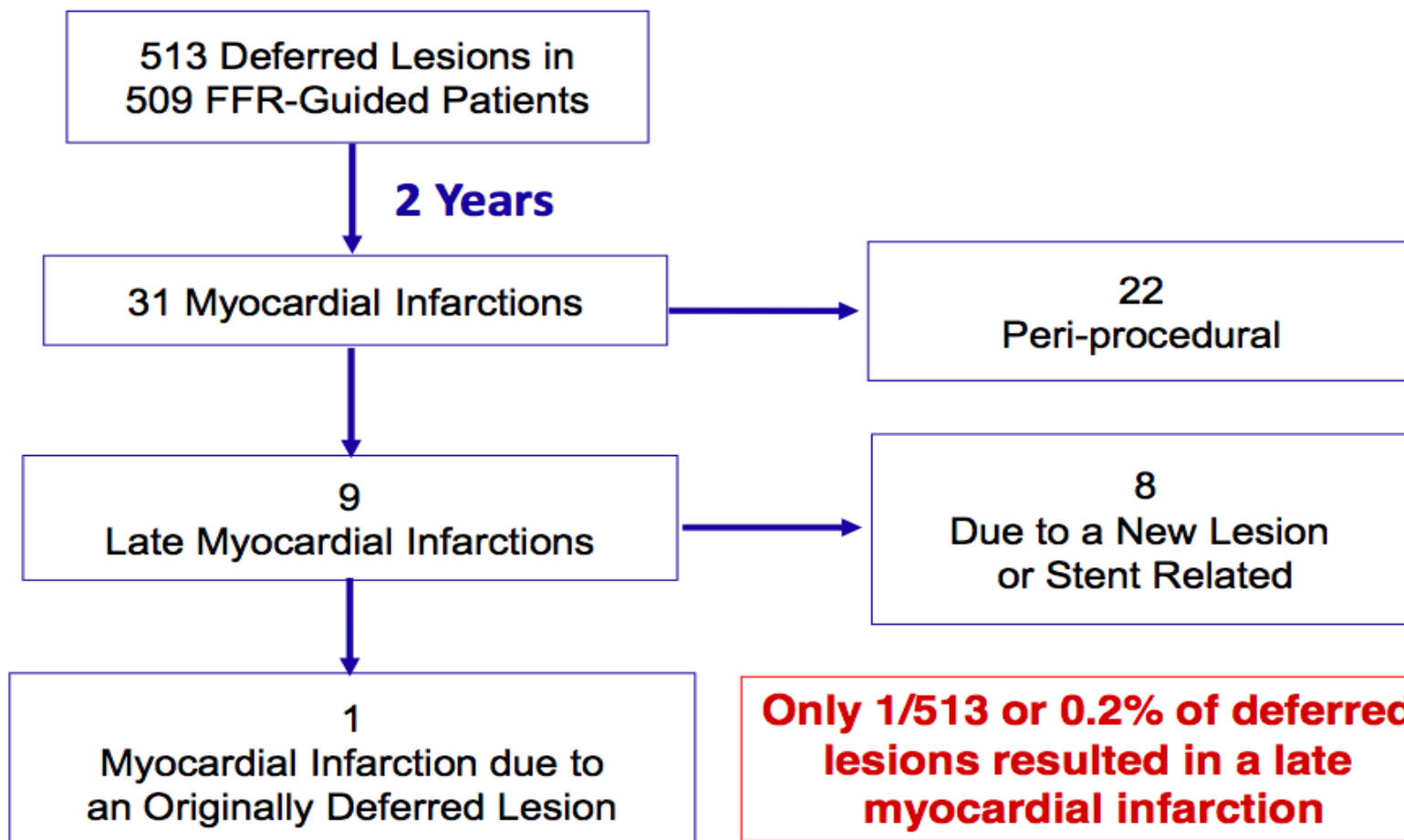


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# FAME Trial

## FAME: Outcome of Deferred Lesions



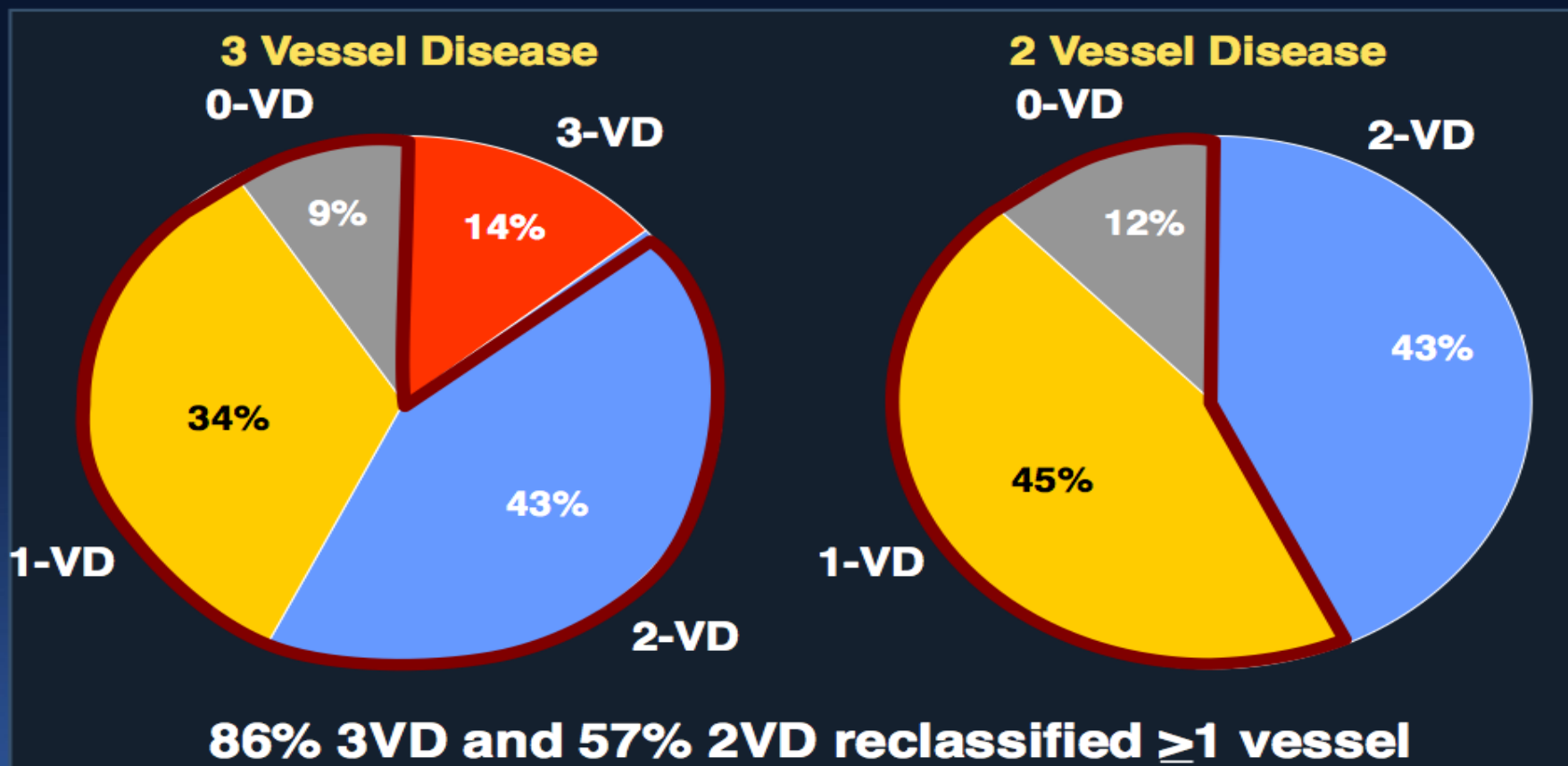


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## FAME Trial

### FAME : “Downgrading” Multivessel Disease with FFR





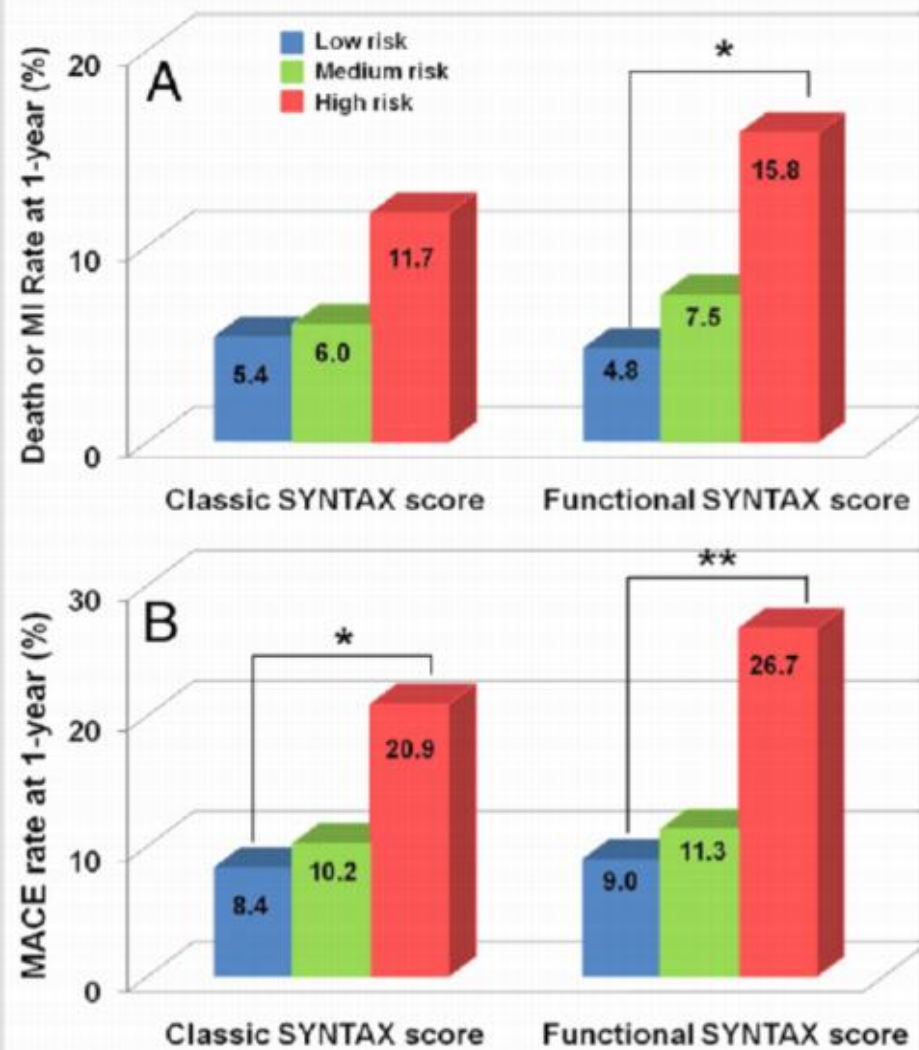
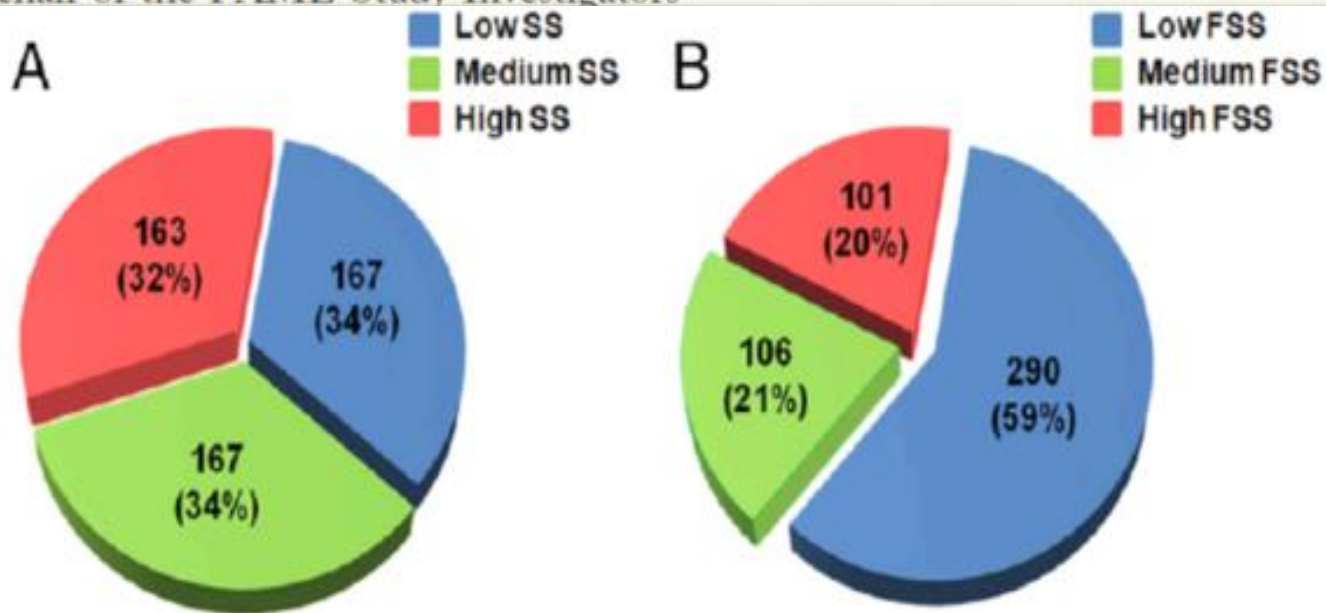


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# Syntax Score Funcional

## Functional SYNTAX Score for Risk Assessment in Multivessel Coronary Artery Disease

Chang-Wook Nam, MD, PhD,\*† Fabio Mangiacapra, MD,‡ Robert Entjes, MD,§ In-Sung Chung, MD, PhD,† Jan-Willem Sels, MD,§ Pim A. L. Tonino, MD, PhD,§ Bernard De Bruyne, MD, PhD,‡ Nico H. J. Pijls, MD, PhD,§ William F. Fearon, MD on behalf of the FAME Study Investigators



## Articles

### Fractional flow reserve versus angiography for guidance of PCI in patients with multivessel coronary artery disease (FAME): 5-year follow-up of a randomised controlled trial


Lokien X van Nunen, MD<sup>†</sup>, Frederik M Zimmermann, MD<sup>†</sup>, Pim A L Tonino, PhD, Prof Emanuele Barbato, PhD, Prof Andreas Baumbach, MD, Thomas Engstrøm, PhD, Prof Volker Klauss, PhD, Prof Philip A MacCarthy, PhD, Ganesh Manoharan, MD, Prof Keith G Oldroyd, MD, Peter N Ver Lee, MD, Marcel van't Veer, PhD, Prof William F Fearon, MD, Bernard De Bruyne, PhD, Prof Nico H J Pijls, PhD  for the FAME Study Investigators

Table 1. Outcomes at 5 Years by Type of PCI Guidance

|                        | Angiography<br>(n = 496) | FFR<br>(n = 509) | P Value |
|------------------------|--------------------------|------------------|---------|
| MACE                   | 31%                      | 28%              | .31     |
| All-Cause Mortality/MI | 20%                      | 17%              | .24     |
| Cardiac Mortality/MI   | 16%                      | 13%              | .21     |

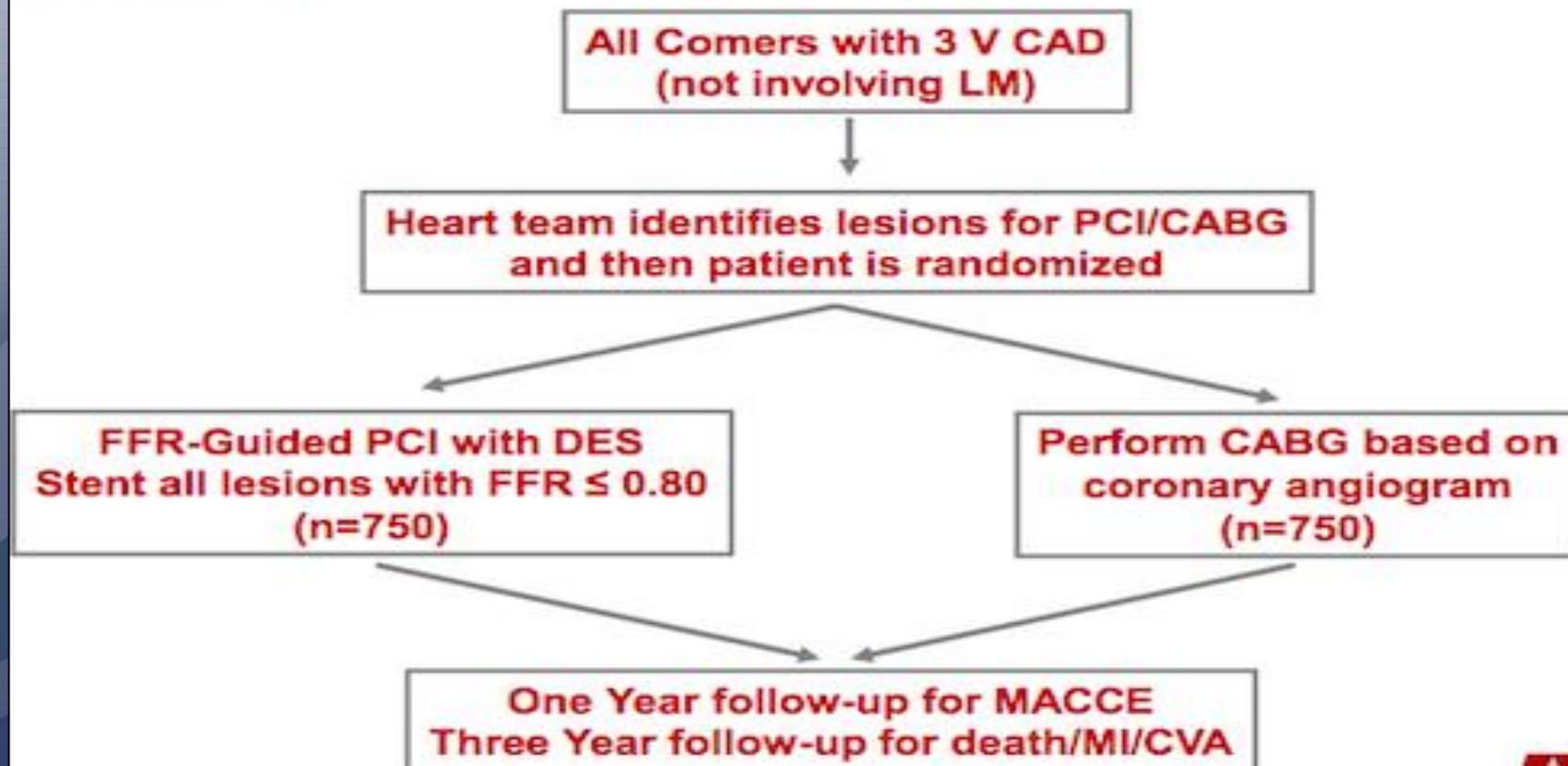


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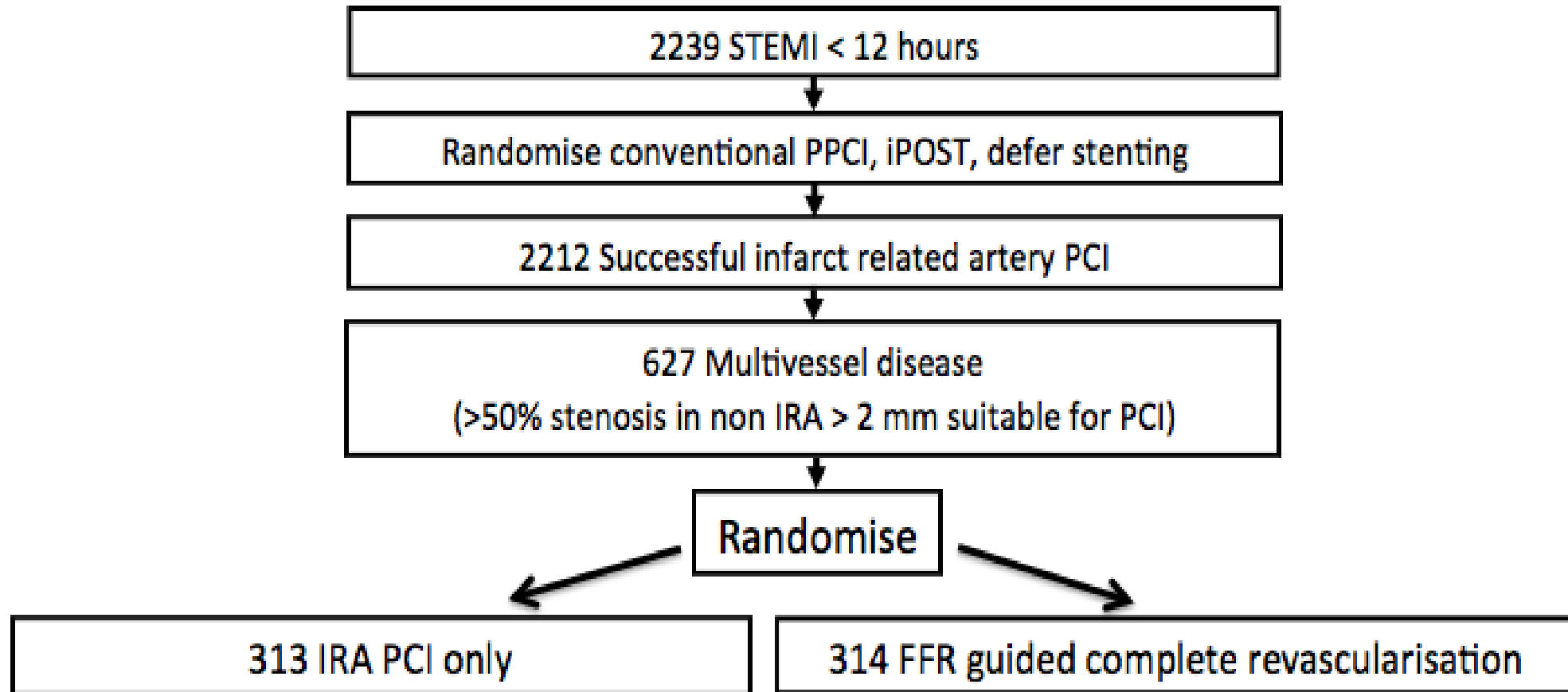
# FAME 3

## FAME 3 Trial:





## DANAMI3-TRIAL PROGRAM



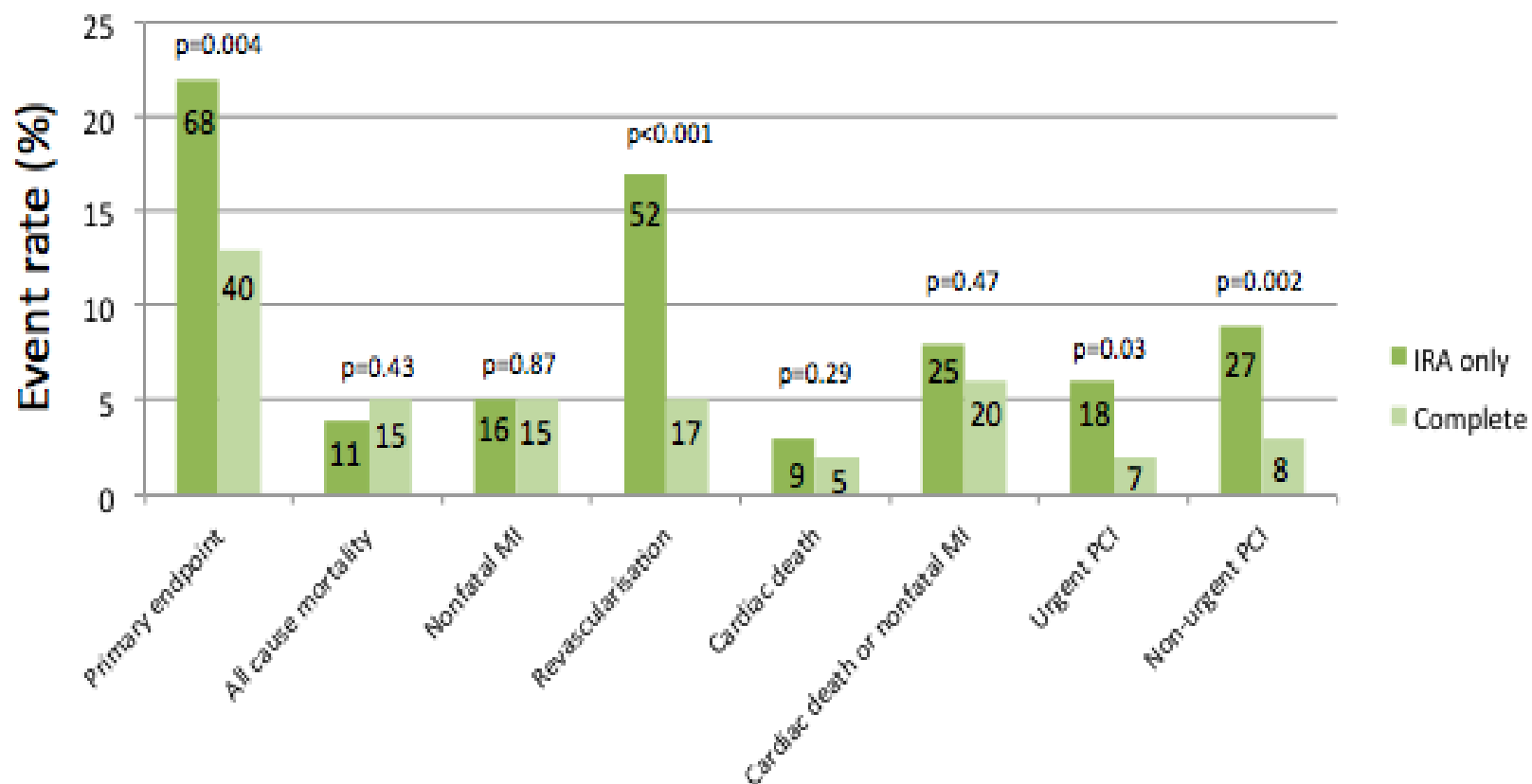


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# FFR em Multivasculares com IAM – Danami 3 - Primulti

## Endpoints



## *FFR em Multivasculares - Conclusões*

- Em pacientes multivasculares, a intervenção coronariana percutânea guiada pelo FFR melhora a evolução clínica e reduz a utilização de recursos, quando comparada à guiada apenas por angiografia.
- Em pacientes multivasculares, o FFR permite uma reclassificação da doença e do Syntax score, podendo mudar o prognóstico e a modalidade de revascularização.
- Em pacientes multivasculares com infarto agudo do miocárdio, o FFR identifica e guia a abordagem das lesões não culpadas, reduzindo a necessidade de reintervenções.