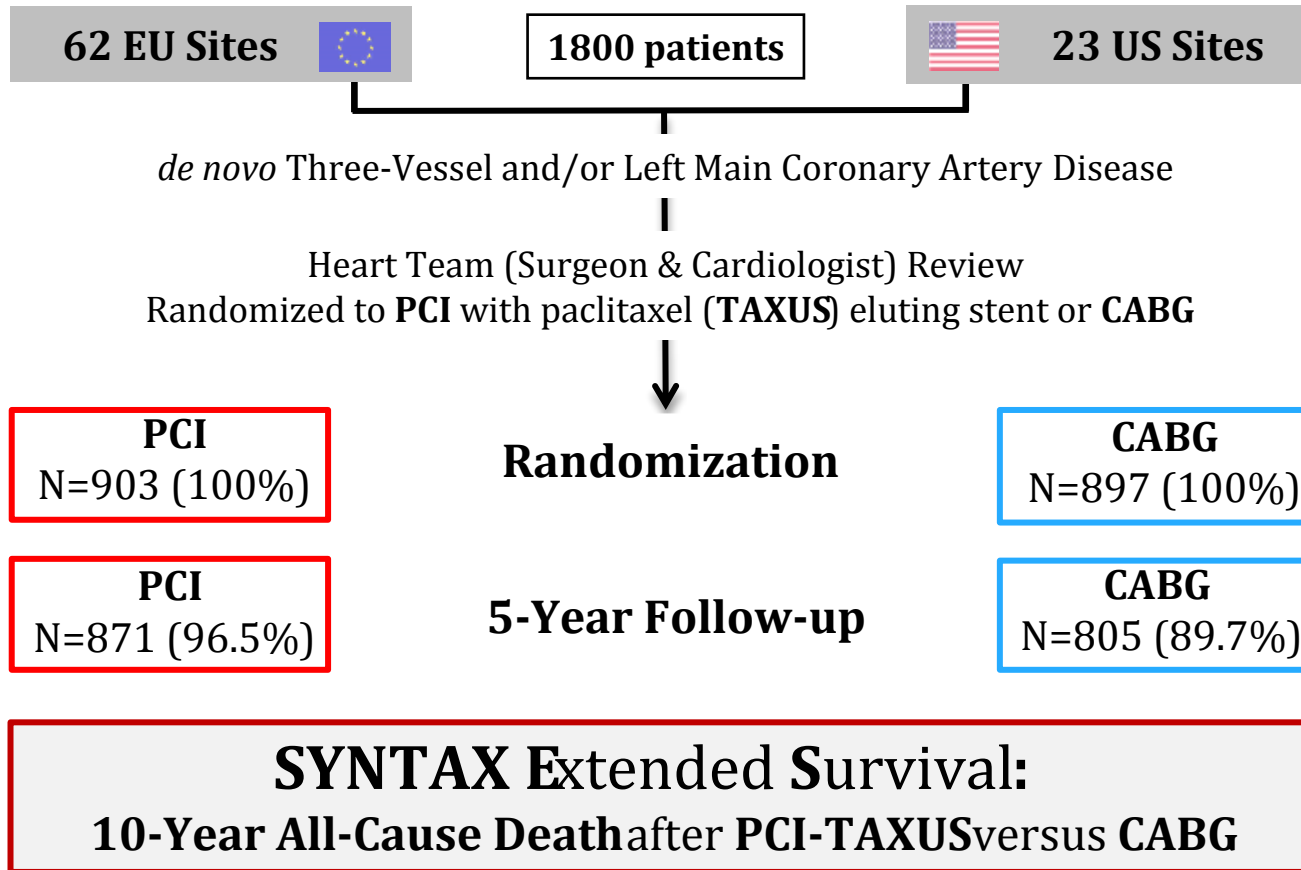


The **SYNTAX** Extended Survival Study Ten-Year Survival in Patients Randomized to Percutaneous Coronary Intervention versus Coronary Artery Bypass Grafting

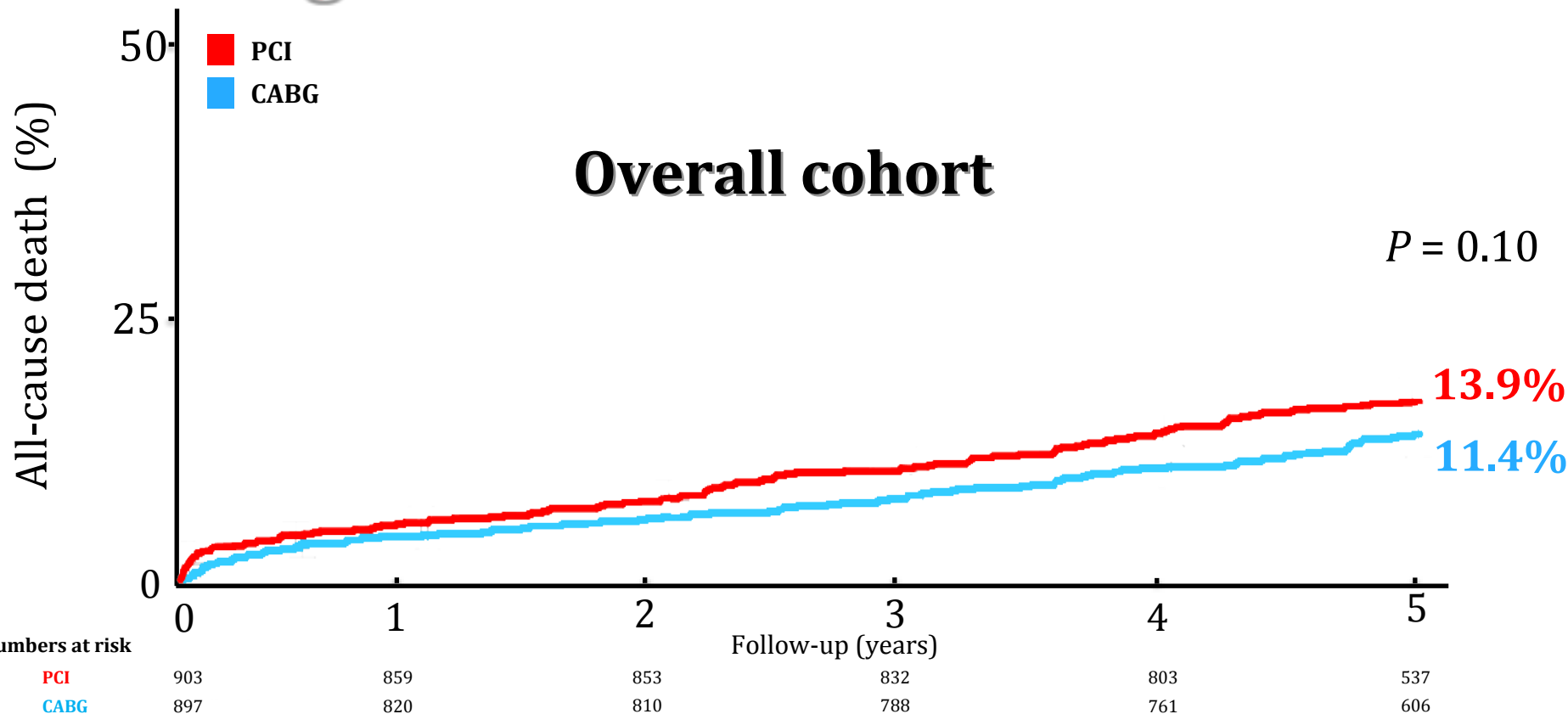
Daniel J.F.M. Thuijs, A. Pieter Kappetein, Patrick W. Serruys, Friedrich-Wilhelm Mohr, Marie-Claude Morice, Michael J. Mack,
David R. Holmes Jr, Nick Curzen, Piroze Davierwala, Thilo Noack, Milan Milojevic, Keith D. Dawkins, Bruno R. da Costa, Peter Jüni, Stuart J. Head,
for the SYNTAXES Investigators

Declaration of Interest

I, (**Daniel J.F.M. Thuijs**) **DO NOT** have a financial interest/arrangement or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of this presentation.

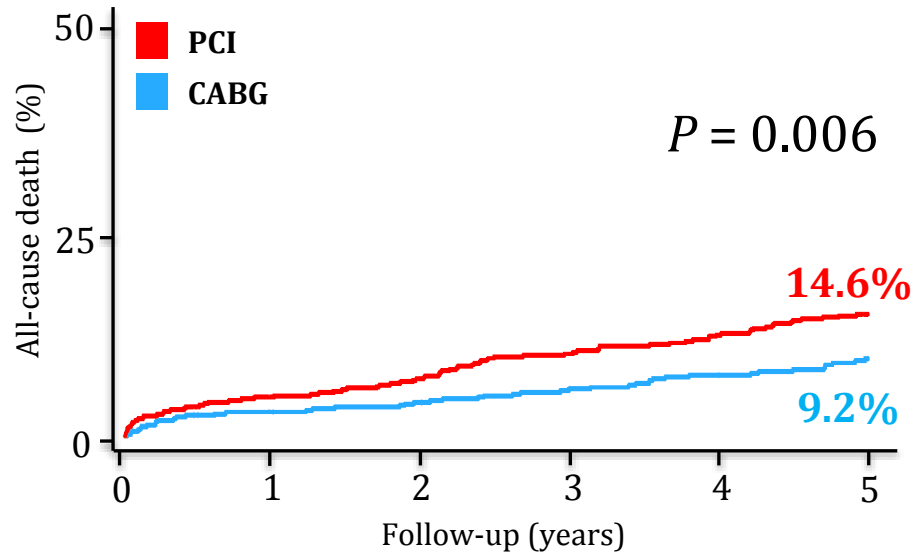


Background – 5-Year all-cause death

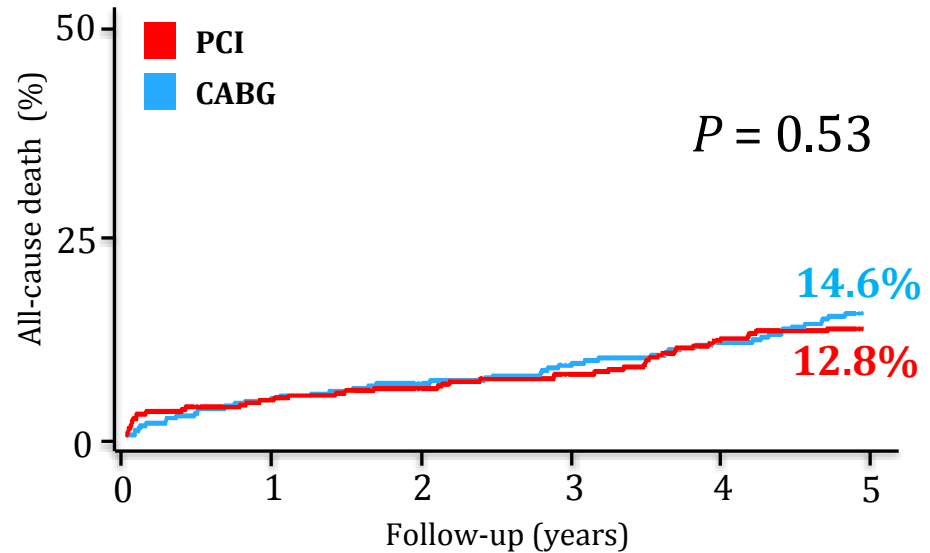


Background – 5-Year all-cause death

Three-Vessel



Left Main

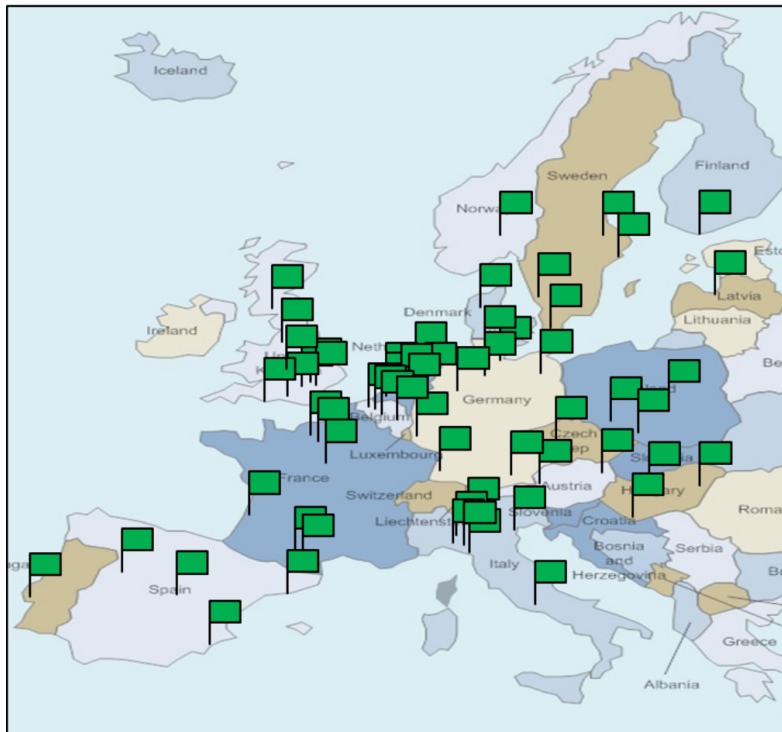


SYNTAX Extended Survival – Primary Endpoint

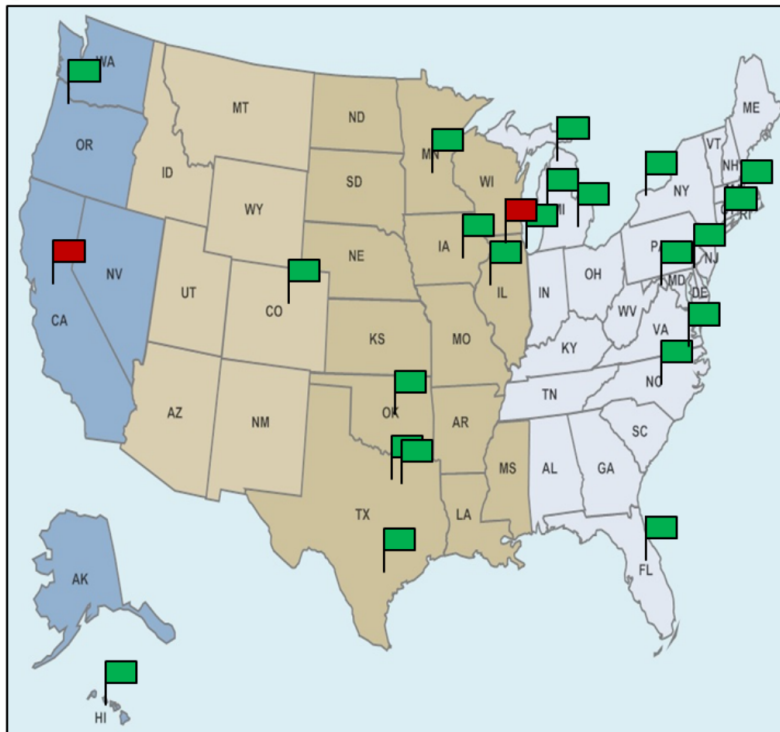
**10-Year All-Cause Death in
patients randomized to
PCI versus CABG**

SYNTAX Extended Survival – Sites & Data

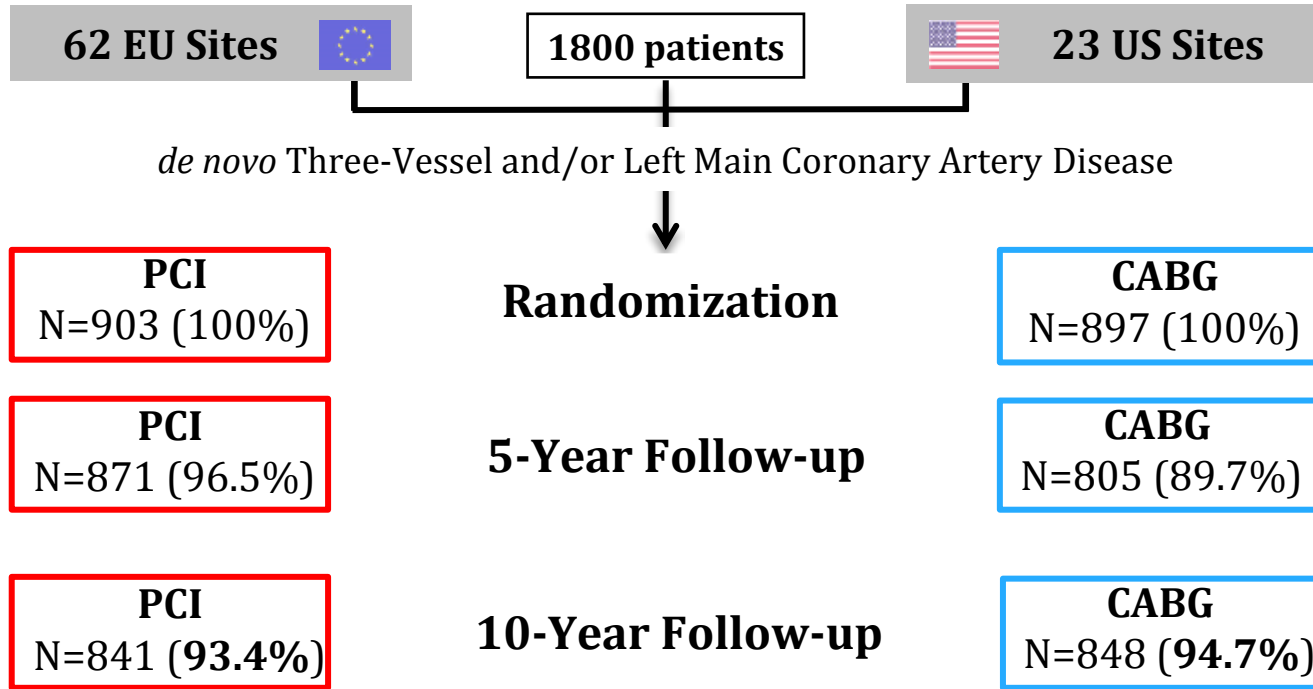
 83 participating sites (**1795 patients**)



 2 sites elected not to participate (**5 patients**)



Patient flow



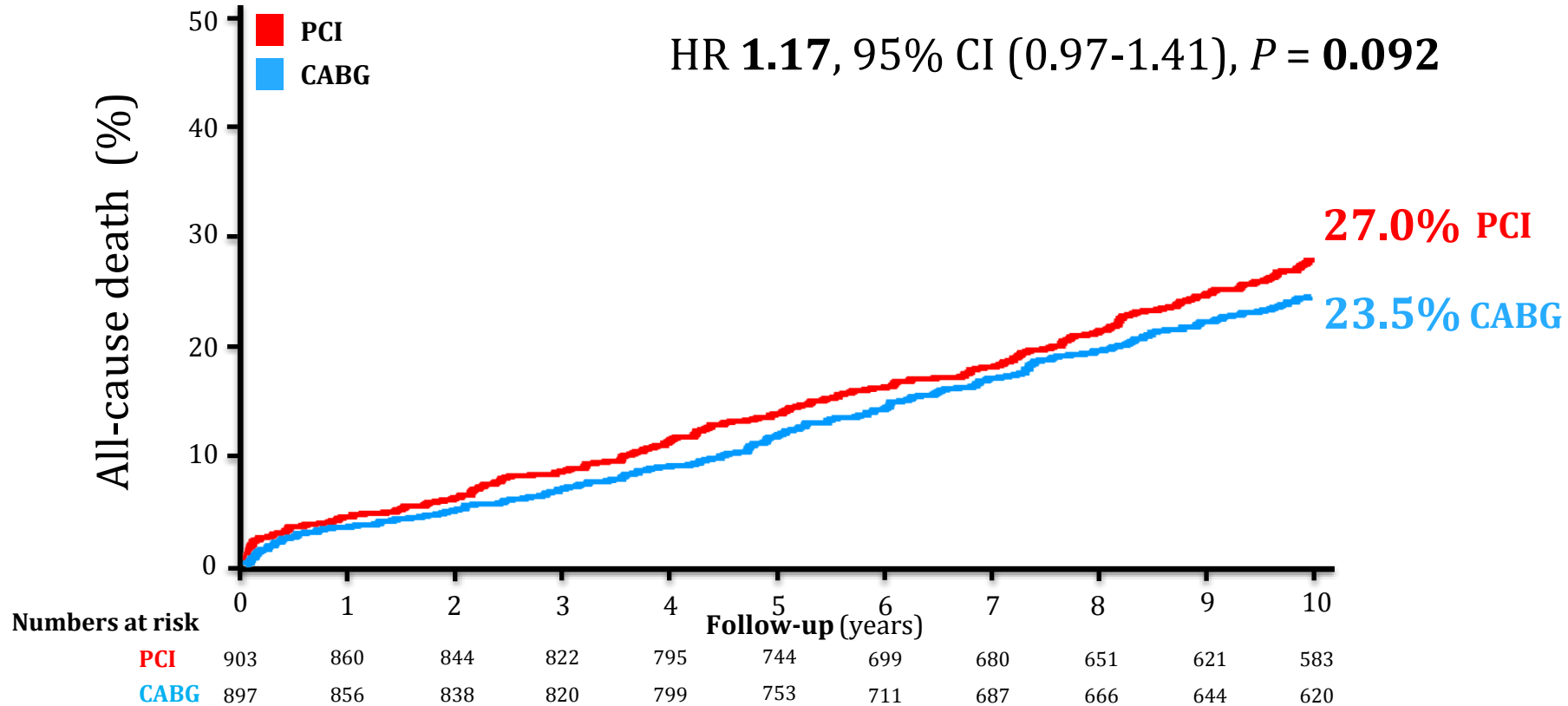
Overall completeness of follow-up: 94%

Patient Characteristics

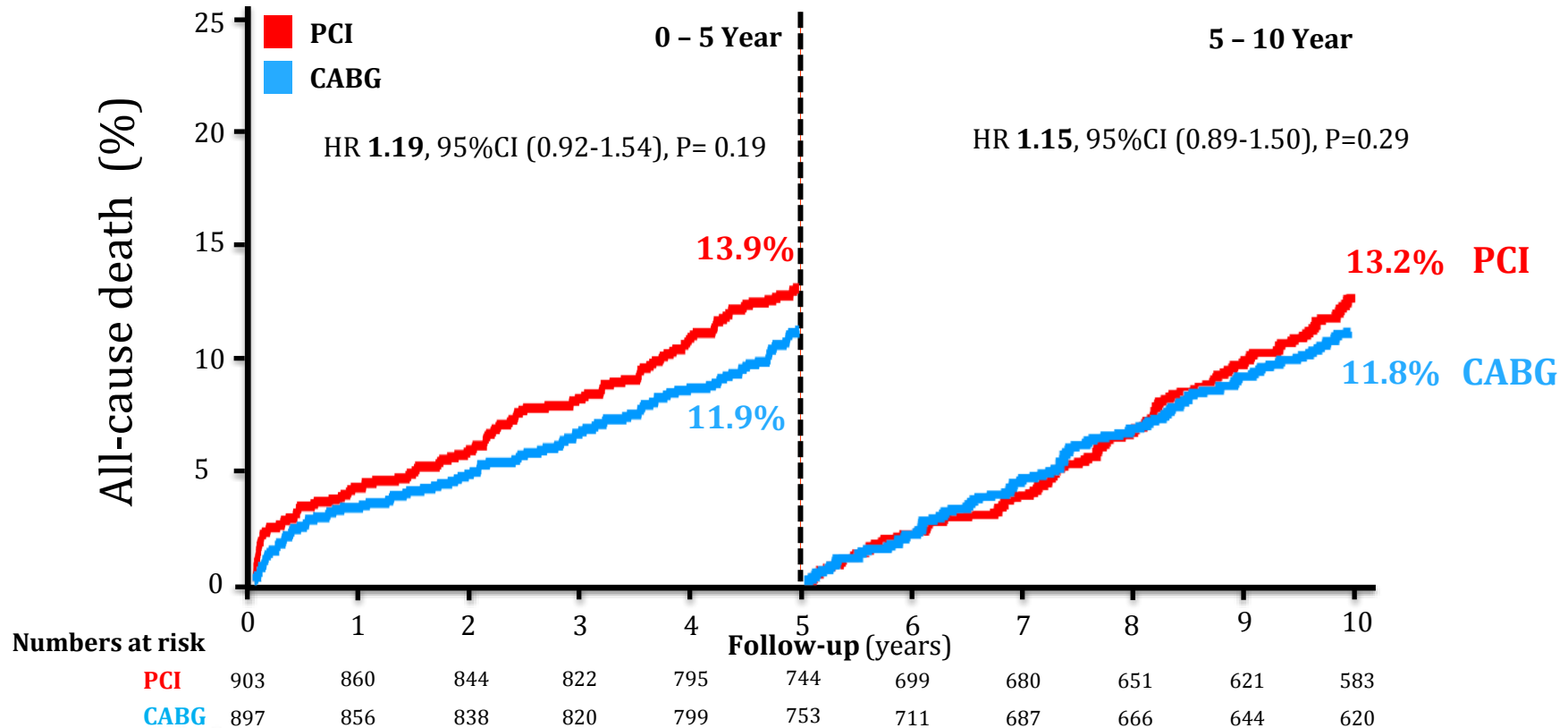
	PCI (N = 903) %	CABG (N = 897) %
Age – mean, years	65.2	65.0
Female sex – %	24	21
Medically treated Diabetes – %	26	25
Insulin	10	10
Previous MI – %	32	34
Previous stroke – %	4	5
Previous TIA – %	4	5
Angina – %		
Stable	57	57
Unstable	29	28
Three-Vessel disease only – %	60	61
Left Main disease, any – %	40	39
EuroSCORE	3.8 ± 2.6	3.8 ± 2.7
SYNTAX score	28.4 ± 11.5	29.1 ± 11.4
Completeness of revascularization – %	57*	63*

Primary Endpoint

HR 1.17, 95% CI (0.97-1.41), $P = 0.092$

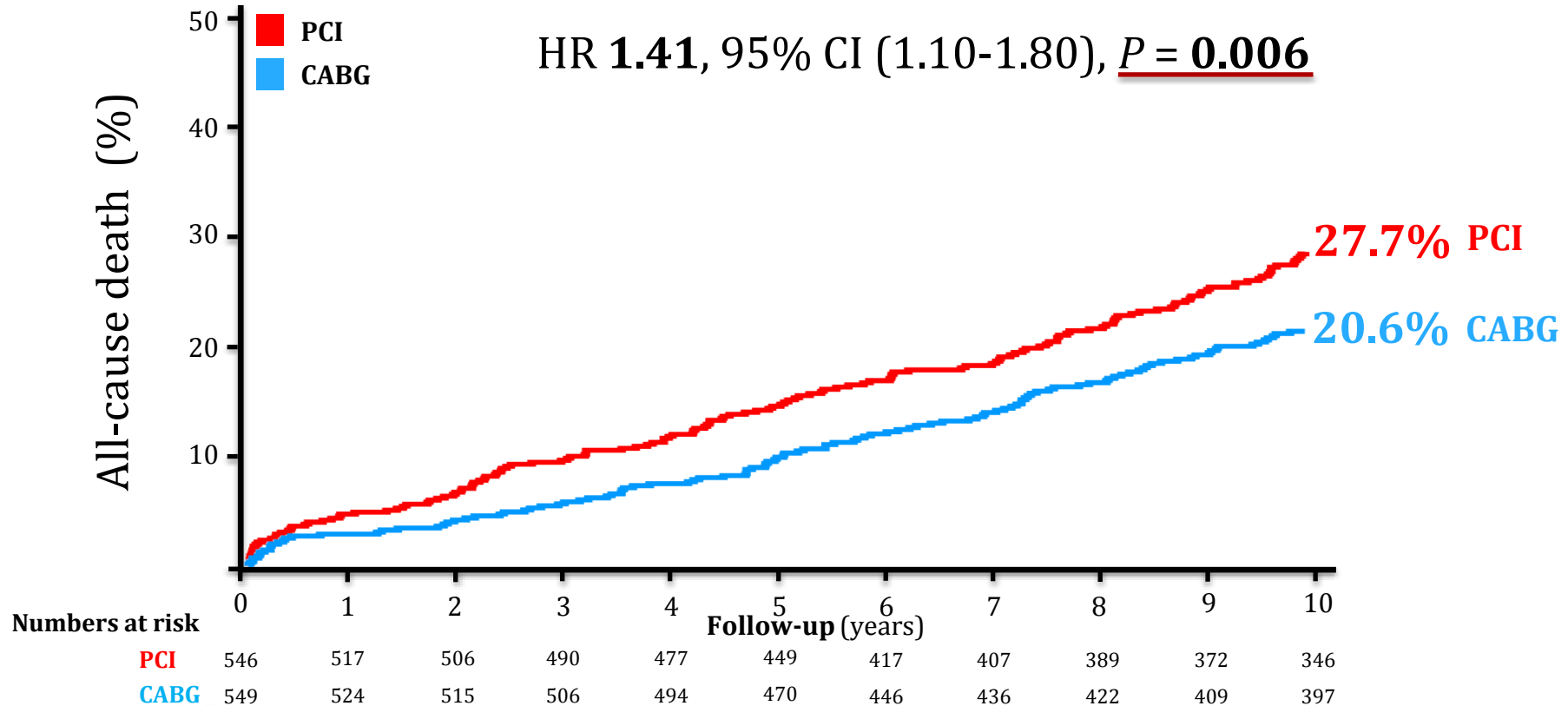


Landmark Analysis



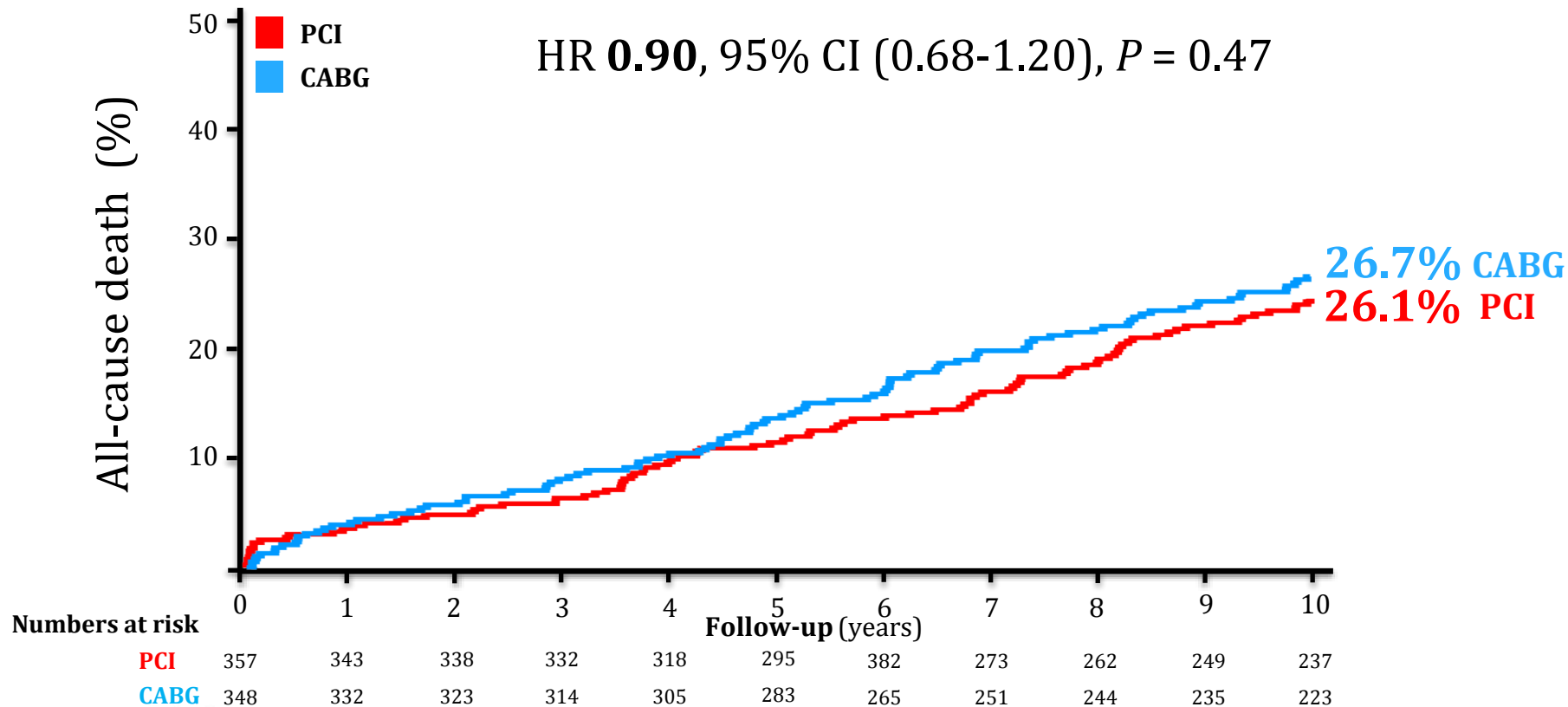
Three-Vessel

HR 1.41, 95% CI (1.10-1.80), $P = 0.006$



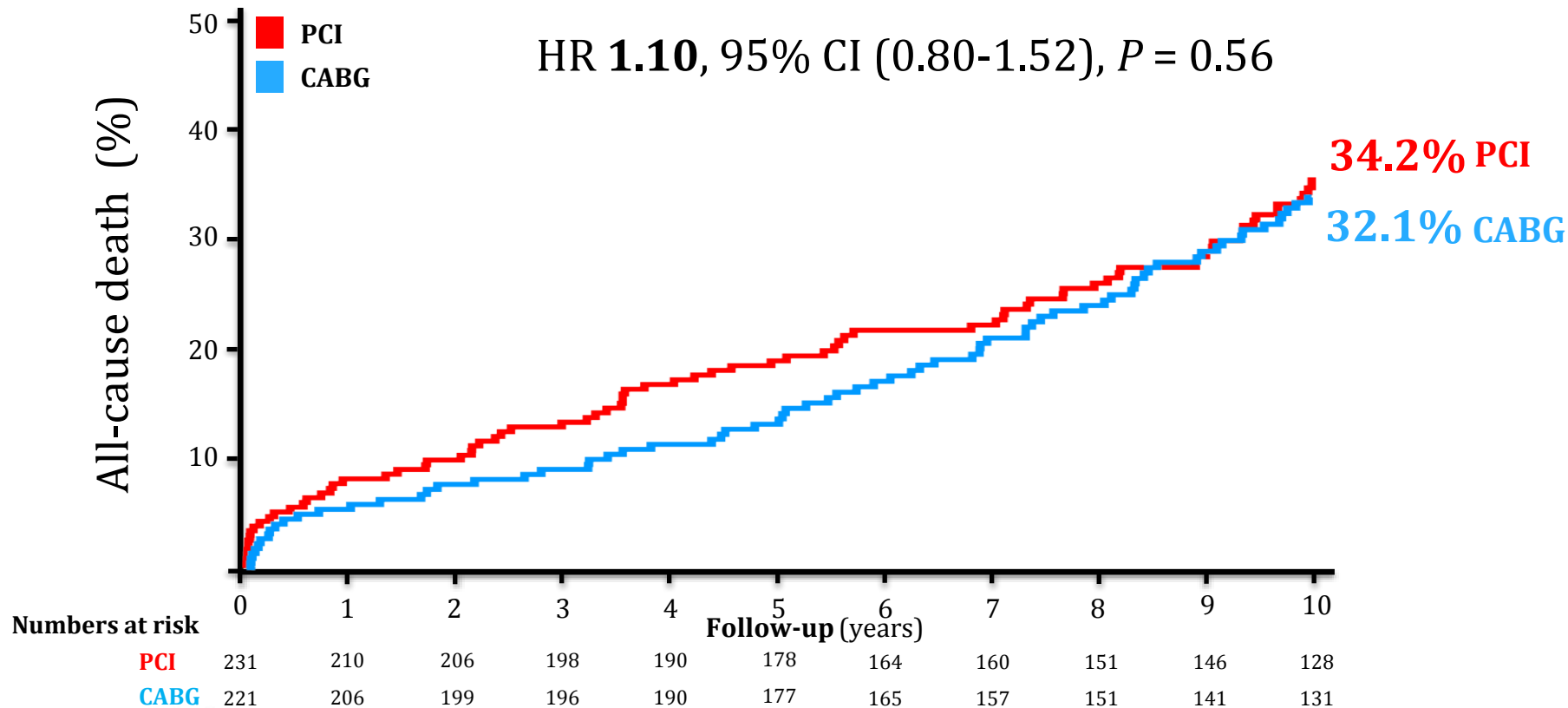
Left Main

HR **0.90**, 95% CI (0.68-1.20), $P = 0.47$



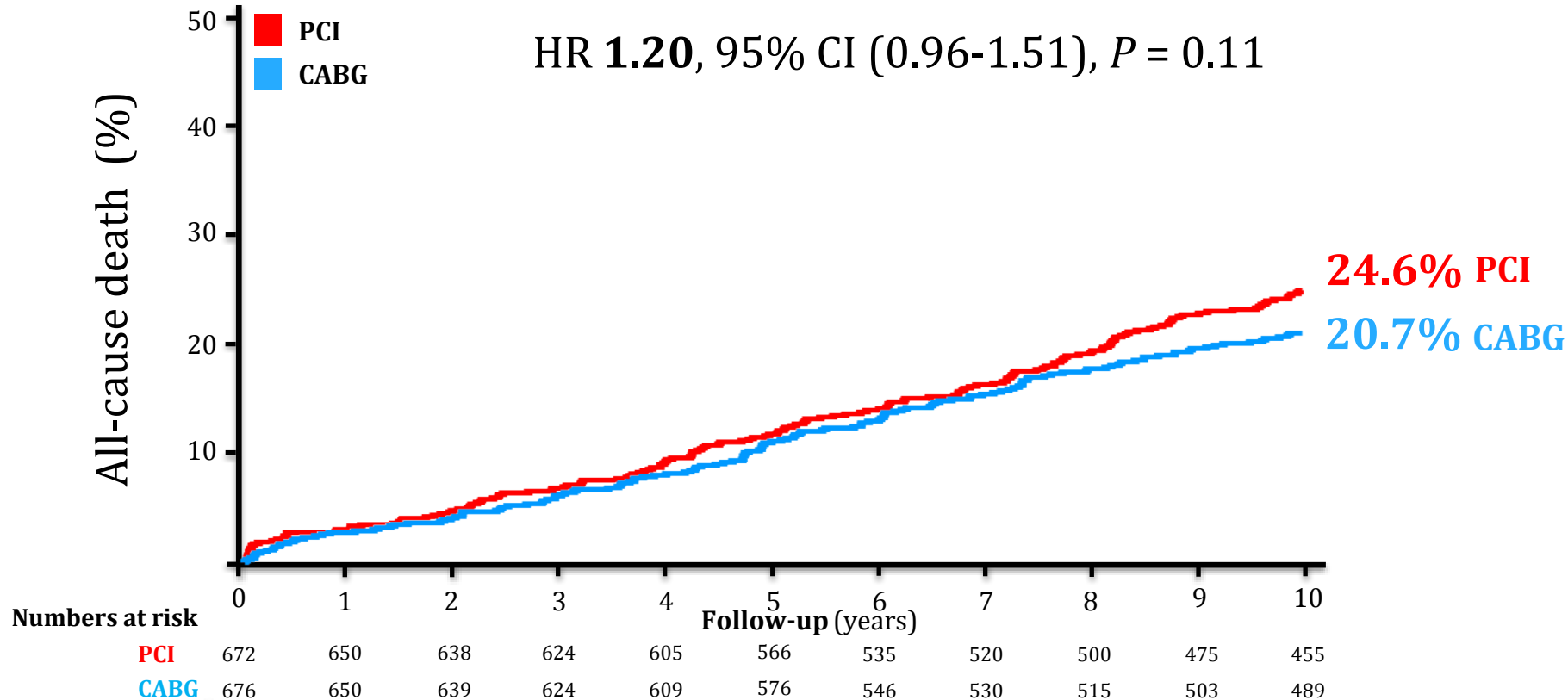
Diabetes

HR 1.10, 95% CI (0.80-1.52), $P = 0.56$

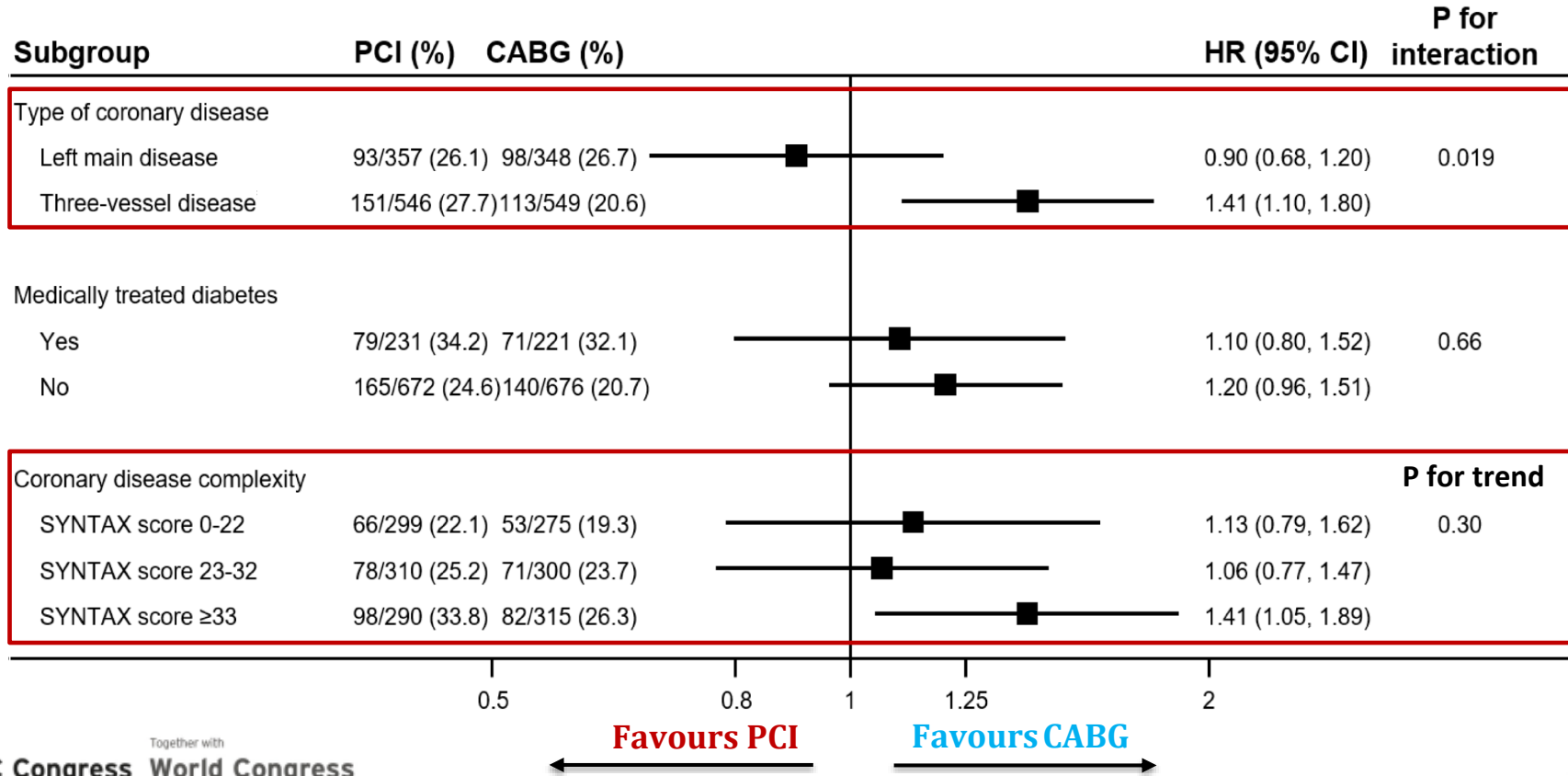


No Diabetes

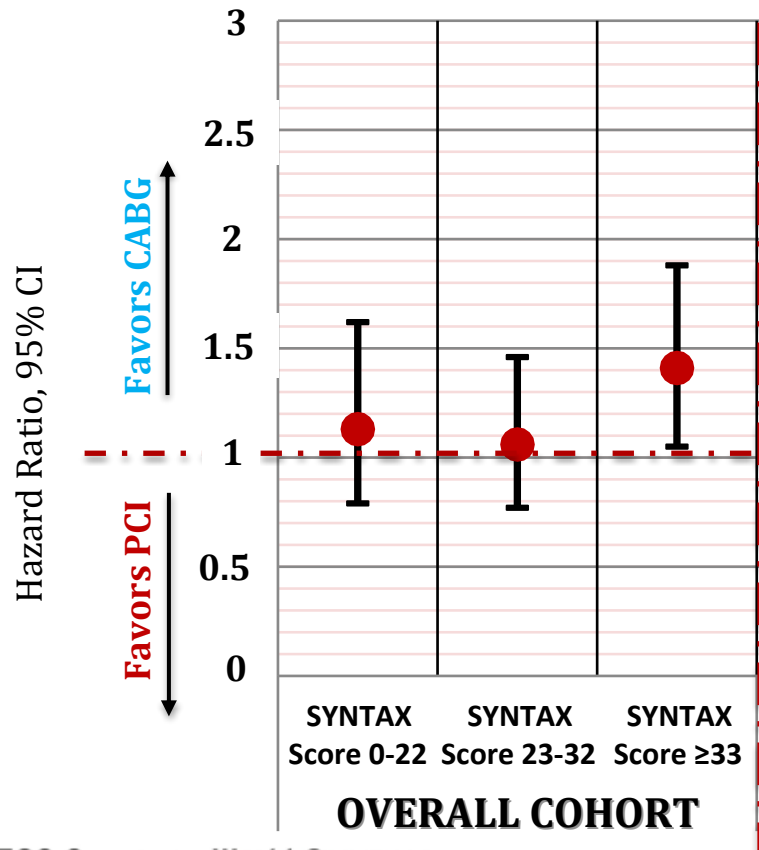
HR 1.20, 95% CI (0.96-1.51), $P = 0.11$



Treatment-by-Subgroup Interaction



SYNTAX SCORES - 10-Year All-Cause Death



Take Home Message

- **First and largest randomised trial** that reports **10-year all-cause death** after **PCI** with drug-eluting stents versus **CABG** in patients with three-vessel and left main disease
- **Completeness of follow-up = 94%**
- **No significant** difference in **all-cause death** between **PCI** and **CABG**, in the overall cohort
- **CABG** versus **PCI** provided a **significant survival benefit** for patients with **Three-Vessel Disease**
- **No treatment-difference** in all-cause death for patients with **Left Main Disease**
- **Contemporaneous** **PCI** vs **CABG** trials should **prolong** follow-up **beyond 5 years**

Thank You and Thanks to all SYNTAXES Investigators

Filip Casselman , Bernard de Bruyne, Evald Høj Christiansen, Juan M. Ruiz-Nodar, Paul Vermeersch, Werner Schultz, Manel Sabaté, Giulio Guagliumi, Herko Grubitzsch, Karl Stangl, Olivier Darremont, M. Bentala, Peter den Heijer, Istvan Preda, Robert Stoler, Michael J. Mack, Tamás Szerafin, John K. Buckner, Myles S. Guber, Niels Verberkmoes, Ferdi Akca, Ted Feldman, Friedhelm Beyersdorf, Benny Drieghe, Keith Oldroyd, Geoff Berg, Anders Jeppsson, Kimberly Barber, Kevin Wolschleger, John Heiser, Pim van der Harst, Massimo A. Mariani, Hermann Reichenspurner, Christoffer Stark, Mika Laine, Paul C. Ho, John C. Chen, Richard Zelman, Phillip A. Horwitz MD, Agata Krauze, Andrzej Bochenek, Christina Grothusen, Dariusz Dudek, George Heyrich, Piroze Davierwala, Thilo Noack, Victor LeGrand, Philippe Kolh, Pedro Coelho, Stephan Ensminger, Boris Nasser, Richard Ingemansson, Goran Olivecrona, Javier Escaned, Reddy Guera, Sergio Berti, Marie-Claude Morice, Alaide Chieffo, Nicholas Burke, Michael Mooney, Alvise Spolaor, Christian Hagl, Michael Nábauer, Jan Suttorp, Ronald A. Stine, Thomas McGarry, Scott Lucas, Knut Endresen, Andrew Taussig, Kevin Accola, Umberto Canosi, Ivan Horvath, Louis Cannon, John D. Talbott, Chris W. Akins, Robert Kramer, Michael Aschermann, William Killinger, Inga Narbutė, David R. Holmes Jr., Francesco Burzotta, Ad J.J.C. Bogers, Felix Zijlstra, Helene Eltchaninoff, Jacques Berland, Giulio Stefanini, Ignacio Cruz Gonzalez, Uta Hoppe, Radosław Stefan Kiesz, Bartłomiej Góra, Anders Ahlsson, Matthias Corbascio, Thomas V. Bilfinger, Didier Carrie, Didier Tchétché, Karl-Eugen Hauptman, Elisabeth Stahle, Stefan James, Sigrid Sandner, Günther Laufer, Irene Lang, Adam Witkowski, Vinod Thourani, Harry Suryapranata, Simon Redwood, Charles Knight, Philip MacCarthy, Nick Curzen, Adam de Belder, Adrian Banning, Anthony Gershlick

Complete study details in today's issue of *The Lancet*

Doctopic: Primary Research

Percutaneous coronary intervention versus coronary artery bypass grafting in patients with three-vessel or left main coronary artery disease: 10-year follow-up of the multicentre randomised controlled SYNTAX trial



Daniel J F M Thuijs, A Pieter Kappetein, Patrick W Serruys, Friedrich-Wilhelm Mohr, Marie-Claude Morice, Michael J Mack, David R Holmes Jr, Nick Curzen, Piroze Davierwala, Thilo Noack, Milan Milojevic, Keith D Dawkins, Bruno R da Costa, Peter Jüni, Stuart J Head, for the SYNTAX Extended Survival Investigators*

Summary

Background The Synergy between PCI with Taxus and Cardiac Surgery (SYNTAX) trial was a non-inferiority trial that compared percutaneous coronary intervention (PCI) using first-generation paclitaxel-eluting stents with coronary artery bypass grafting (CABG) in patients with de-novo three-vessel and left main coronary artery disease, and reported results up to 5 years. We now report 10-year all-cause death results.

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See Online/Comment

Together with

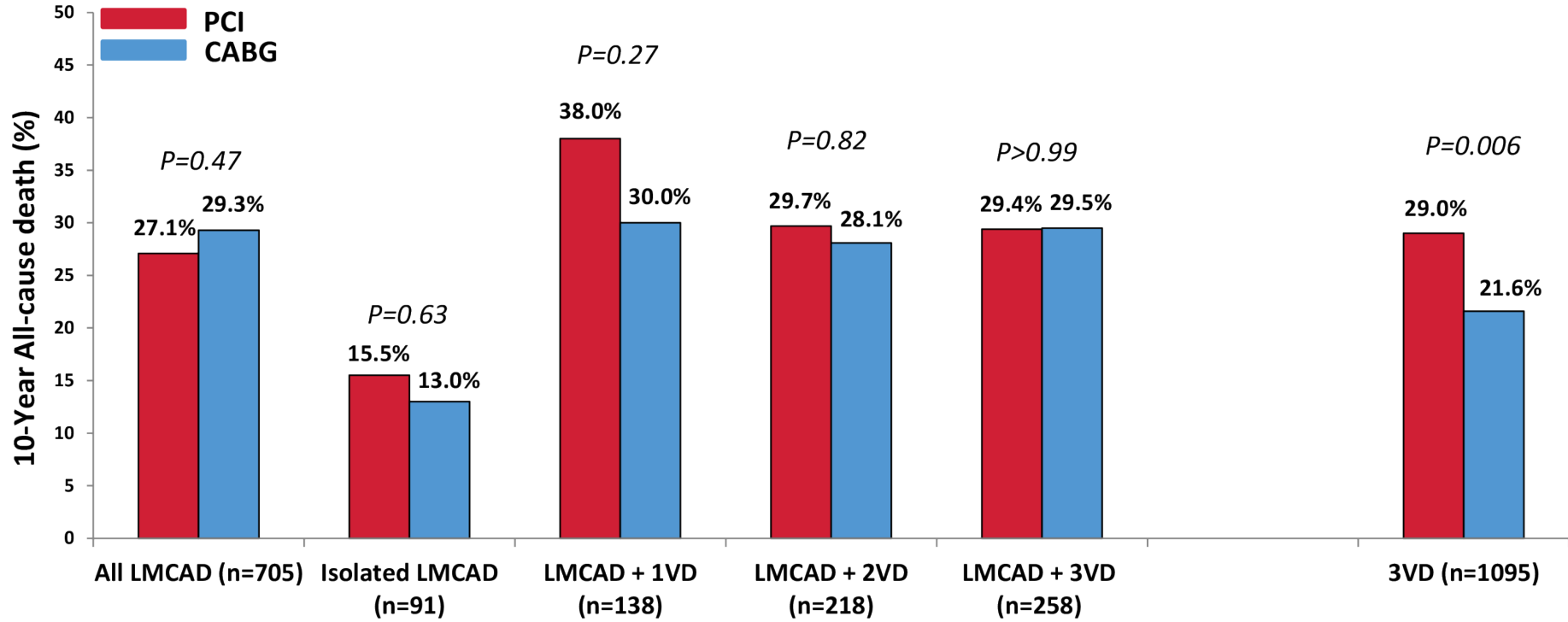
ESC Congress
Paris 2019

World Congress
of Cardiology



Back-up slides

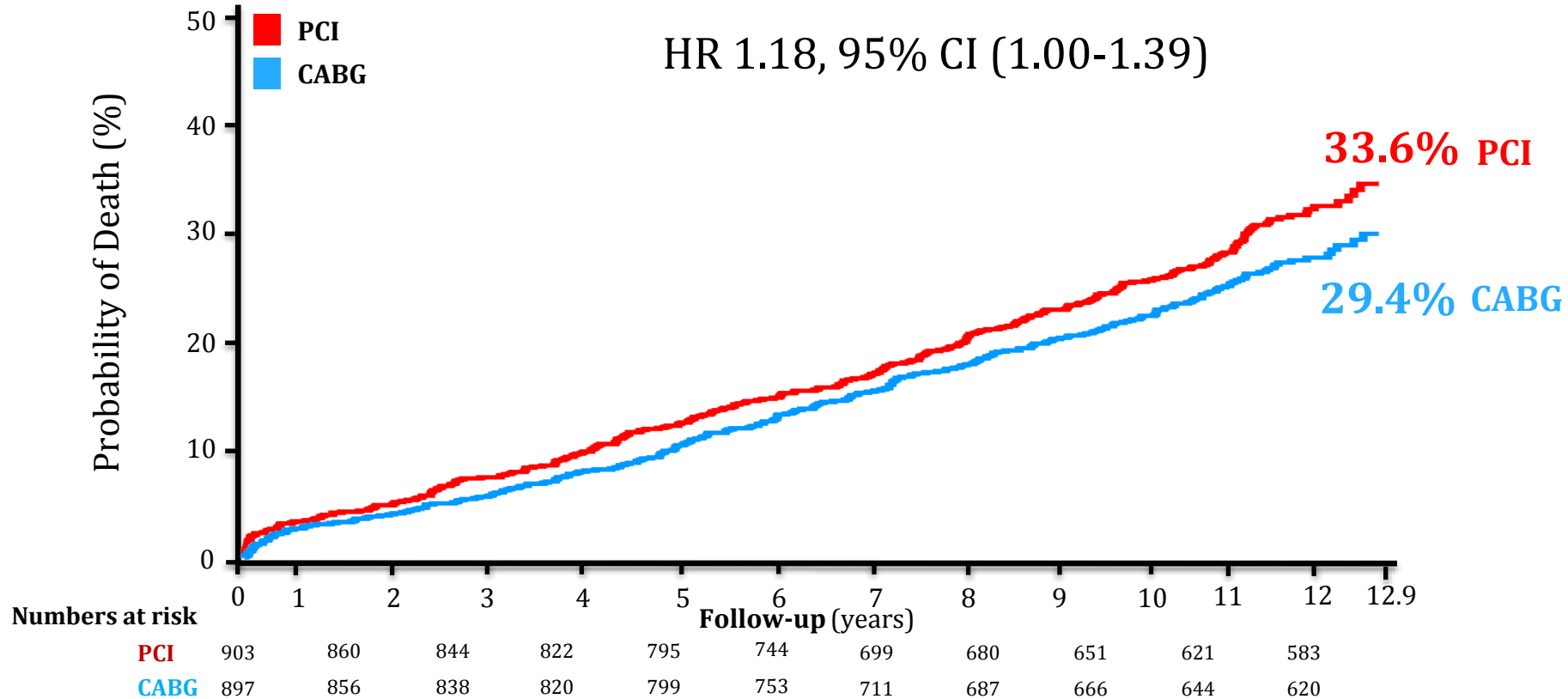
Exploratory Analysis



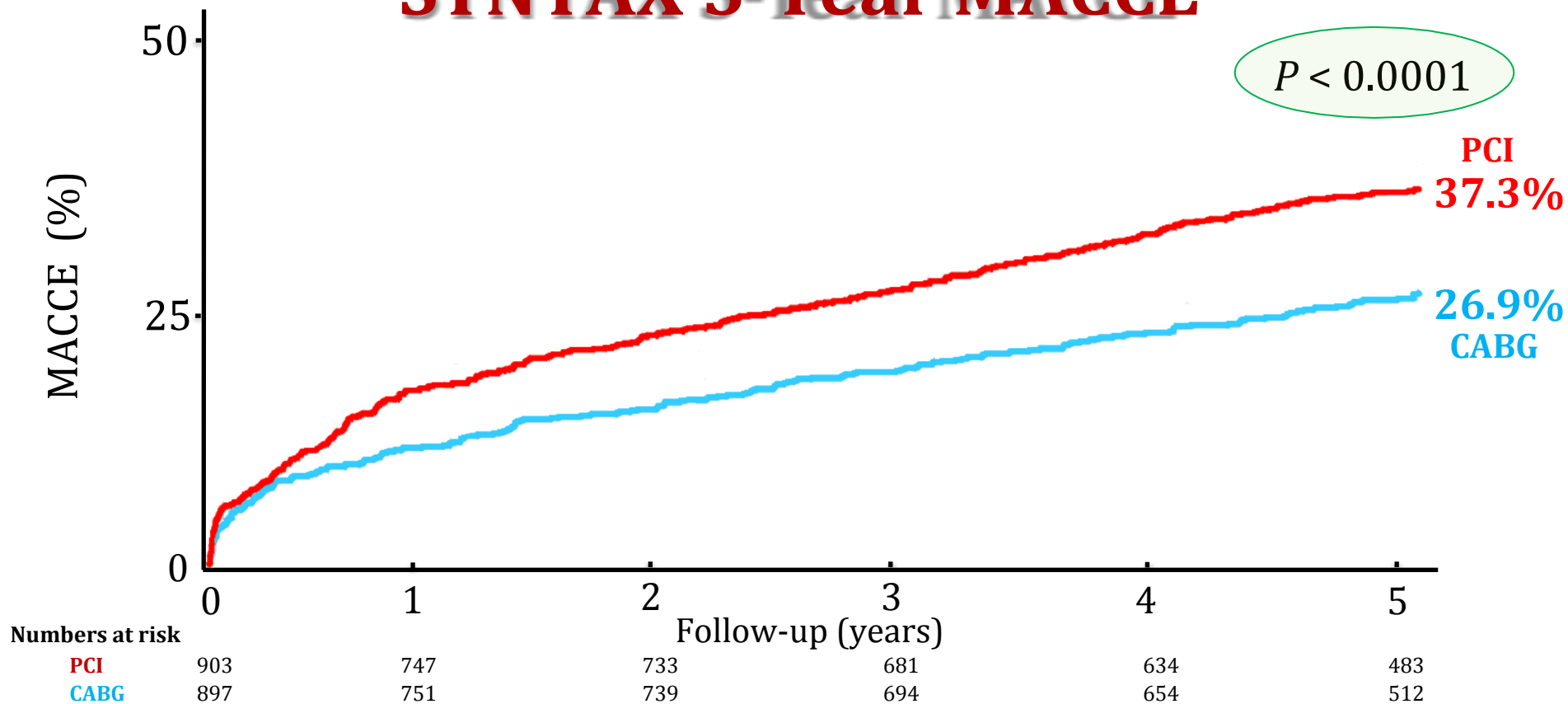
Together with

Secondary Endpoint

HR 1.18, 95% CI (1.00-1.39)



SYNTAX 5-Year MACCE



5-Year All-Cause Death

Three-Vessel

Left Main

