# Ten-year all-cause death after percutaneous or surgical revascularization for men and women with multivessel or left main coronary artery disease: insights from the SYNTAX extended survival study

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**Funding Acknowledgement:** Type of funding source: Public Institution(s). Main funding source(s): Erasmus University Medical Centre, Rotterdam, Netherlands, reference: MEC-2016-716

**Background:** In patients with complex coronary artery disease (CAD), women favored coronary artery bypass grafting surgery (CABG) compared to percutaneous coronary intervention (PCI) at 5 years in the SYNTAX trial, whereas mortality rates after PCI and CABG were not different in men. On the other hand, poor outcomes of women undergoing PCI were not observed in the PRECOMBAT and BEST trials.
The long-term optimal revascularization strategy according to gender has not been fully evaluated.
**Purpose:** In the SYNTAX Extended Survival (SYNTAXES) study, no significant difference existed in all-cause death between PCI and CABG at 10 years. This study aimed to assess treatment effect of PCI and CABG for 10-year all-cause death according to gender.
**Methods:** The SYNTAXES study evaluated vital status up to 10 years in 1,800 patients with de novo three-vessel disease (3VD) and/or left main coronary artery disease (LMCAD) randomized to treatment with CABG or PCI in the SYNTAX trial, and the pre-specified primary endpoint was all-cause death at 10 years. In this prespecified analysis, all-cause death at 10 years according to gender in patients undergoing PCI or CABG was evaluated.
**Results:** Of 1800 patients, 402 (22.3%) were women and 1398 (77.7%) were men. In women, the rate of mortality was significantly higher in the PCI arm at 5 years than in the CABG arm (19.3% vs. 10.3%; Log-rank p=0.010, Figure A), but the rates of mortality were not different at 10 years between the PCI and CABG arms (33.0% vs. 32.5%; Log-rank p=0.600, Figure A). In men, the mortality rate tended to be higher in the PCI arm at 10 years than in the CABG arm (27.0% vs. 22.5%; Log-rank p=0.082, Figure B), although the mortality rates were not different at 5 years between the PCI and CABG arms (12.4% vs. 12.3%; Log-rank p=0.957, Figure B).
**Conclusion:** The efficacy of CABG observed at 5 years disappeared at 10 years in women, whereas the efficacy of CABG became apparent after 5 years in men.

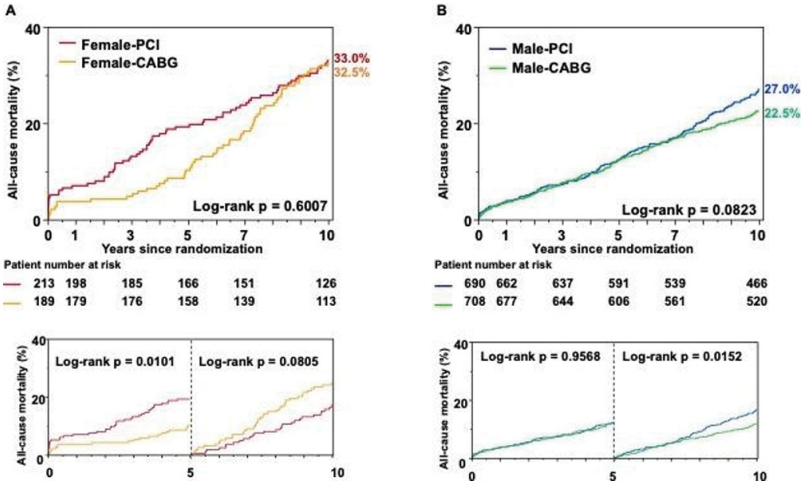


Figure 1