

## Supplementum

### Prognostic Value of FFR<sub>CT</sub>: A Systematic Review and Meta-analysis

Nørgaard BL, Gaur S, Fairbairn TA, Douglas PS, Jensen JM, Patel MR, Ihdahid

AR, Ko B, Sellers SL, Weir-McCall JR, Matsuo H, Sand NP, Øvrehus KA, Rogers

C, Mullen S, Nieman K, Parner E, Leipsic J, and Abdulla J

**STable 1.** Search strategy in individual databases and reference screening of included and relevant review papers

**STable 2.** Meta-Analysis Newcastle-Ottawa Quality Scale

**SFigure 1.** Meta-analysis of the primary composite endpoint (death or any MI) and secondary endpoints at 12 months follow-up after exclusion of the ADVANCE registry data

**SFigure 2.** Meta-analysis of the occurrence of revascularization between 3 and 12 months of follow-up

**STable 1.** Search Strategy in Individual Databases and Reference Screening of Included and Relevant Review Papers

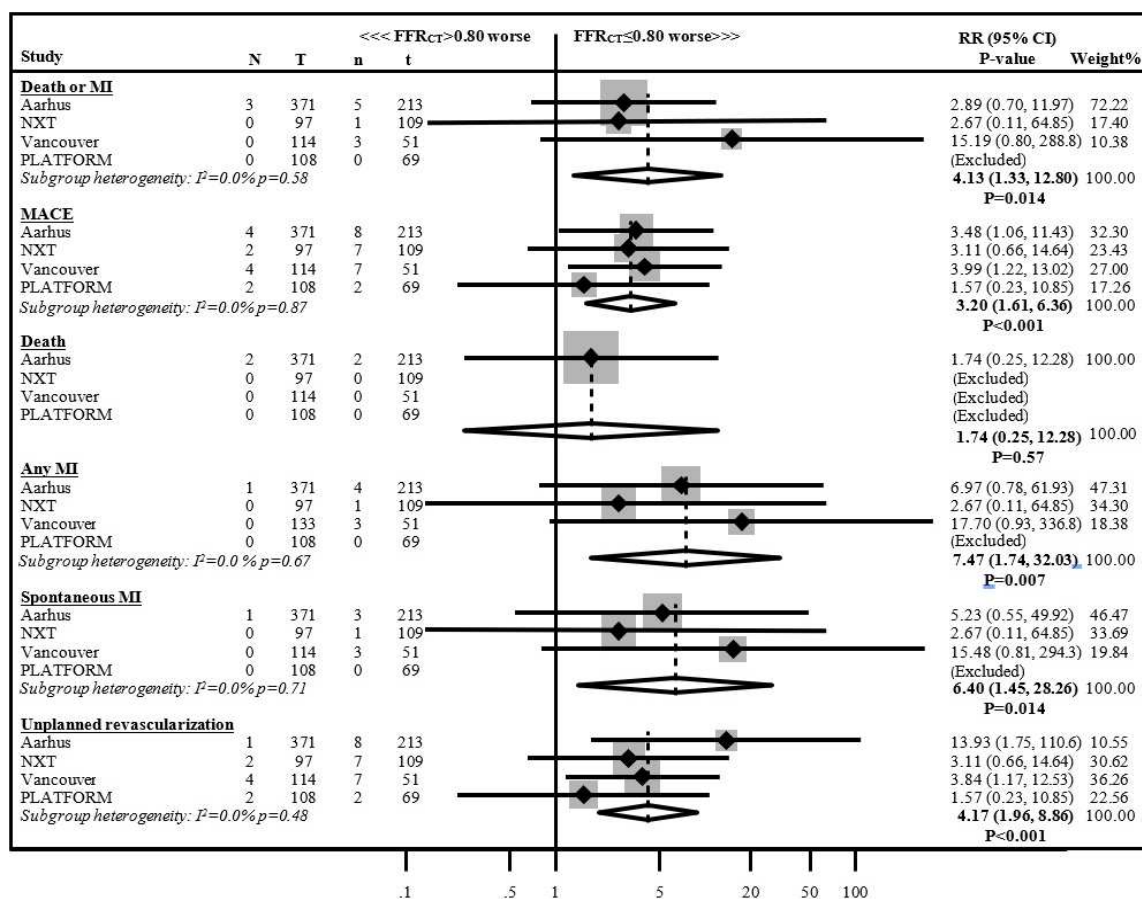
Database	Search strategy and syntaxes	Number of retrieved articles
Pubmed (Medline)	((("computed tomography angiography"[MeSH Terms] OR ("computed"[All Fields] AND "tomography"[All Fields] AND "angiography"[All Fields]) OR "computed tomography angiography"[All Fields]) AND ("heart"[MeSH Terms] OR "heart"[All Fields] OR "coronary"[All Fields]) AND fractional[All Fields] AND flow[All Fields] AND reserve[All Fields] AND ("prognosis"[MeSH Terms] OR "prognosis"[All Fields])) AND ("loattrfull text"[sb] AND ("2010/01/01"[PDAT] : "2020/12/31"[PDAT]) AND English[lang])	162
	((("computed tomography angiography"[MeSH Terms] OR ("computed"[All Fields] AND "tomography"[All Fields] AND "angiography"[All Fields]) OR "computed tomography angiography"[All Fields]) AND ("heart"[MeSH Terms] OR "heart"[All Fields] OR "coronary"[All Fields]) AND fractional[All Fields] AND flow[All Fields] AND reserve[All Fields] AND ("death"[MeSH Terms] OR "death"[All Fields])) AND ("loattrfull text"[sb] AND ("2010/01/01"[PDAT] : "2020/12/31"[PDAT]) AND English[lang])	46
	((("computed tomography angiography"[MeSH Terms] OR ("computed"[All Fields] AND "tomography"[All Fields] AND "angiography"[All Fields]) OR "computed tomography angiography"[All Fields]) AND ("heart"[MeSH Terms] OR "heart"[All Fields] OR "coronary"[All Fields]) AND fractional[All Fields] AND flow[All Fields] AND reserve[All Fields] AND ("myocardial infarction"[MeSH Terms] OR ("myocardial"[All Fields] AND "infarction"[All Fields]) OR "myocardial infarction"[All Fields])) AND ("loattrfull text"[sb] AND ("2010/01/01"[PDAT] : "2020/12/31"[PDAT]) AND English[lang])	62
	((("computed tomography angiography"[MeSH Terms] OR ("computed"[All Fields] AND "tomography"[All Fields] AND "angiography"[All Fields]) OR "computed tomography angiography"[All Fields]) AND ("heart"[MeSH Terms] OR "heart"[All Fields] OR "coronary"[All Fields]) AND fractional[All Fields] AND flow[All Fields] AND reserve[All Fields] AND ("myocardial infarction"[MeSH Terms] OR ("myocardial"[All Fields] AND "infarction"[All Fields]) OR "outcome"[All Fields])) AND ("loattrfull text"[sb] AND ("2010/01/01"[PDAT] : "2019/12/31"[PDAT]) AND English[lang]) AND ("loattrfull text"[sb] AND ("2010/01/01"[PDAT] : "2020/12/31"[PDAT]) AND English[lang])	100

	Total results of Pubmed	370
Web of science	computed tomography angiography and coronary fractional flow reserve and prognosis Refined by: WEB OF SCIENCE CATEGORIES: (CARDIAC CARDIOVASCULAR SYSTEMS) AND DOCUMENT TYPES: (ARTICLE) AND LANGUAGES: (ENGLISH) AND DOCUMENT TYPES: (ARTICLE) Timespan: 2010-2020. Indexes: SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI, CCR-EXPANDED, IC	20
	computed tomography angiography and coronary fractional flow reserve and death Refined by: WEB OF SCIENCE CATEGORIES: (CARDIAC CARDIOVASCULAR SYSTEMS) AND DOCUMENT TYPES: (ARTICLE) AND LANGUAGES: (ENGLISH) Timespan: 2010-2020. Indexes: SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI, CCR-EXPANDED, IC.	47
	computed tomography angiography and coronary fractional flow reserve and myocardial infarction. Refined by: LANGUAGES: (ENGLISH) AND WEB OF SCIENCE CATEGORIES: (CARDIAC CARDIOVASCULAR SYSTEMS) AND DOCUMENT TYPES: (ARTICLE). Timespan: 2010-2020. Indexes: SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI, CCR-EXPANDED, IC.	81
	Total results of Web of science	148
Total results of all electronic search		518
Total results of reference screening of eligible papers and reviews		218
Total results		736
Duplicates		406
Number of retrieved results for evaluation		330

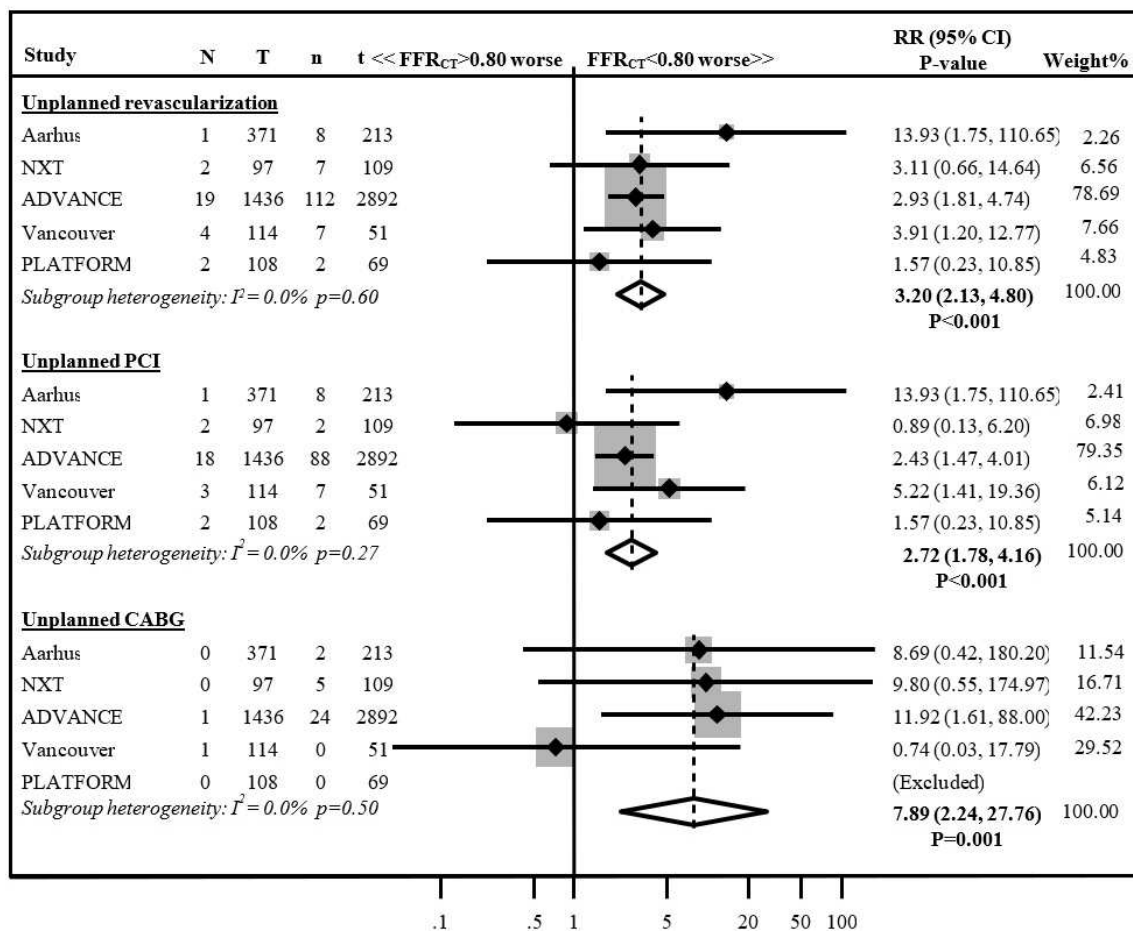
**STable 2.** Meta-Analysis Newcastle-Ottawa Quality Scale

<b>Study</b>	<b>Selection</b>	<b>Comparability</b>	<b>Outcome</b>	<b>Total score</b>
PLATFORM study, Douglas P et al (17), 2016	****	**	**	8
Aarhus study Norgaard BL et al (16), 2018	****	**	**	8
ADVANCE Registry, Patel M et al (18), 2020	****	**	**	8
NXT study, Ihdayhid AR et al (22), 2019	****	**	**	8
Vancouver study, McNabney CG et al (23), 2019	****	**	**	8

**Figure 1.** Meta-analysis of the primary composite endpoint (death or any MI) and secondary endpoints at 12 months follow-up after exclusion of the ADVANCE registry data



FFR<sub>CT</sub> >0.80: N = number of patients with adverse events; T= total number of patients. FFR<sub>CT</sub> ≤0.80: n and t =number of patients with adverse events and total number of patients. Strata with zero events were not included in the analysis. MACE (major adverse cardiac events) was defined as a composite of death, any MI or unplanned revascularization. Abbreviations and acronyms: CI, confidence interval; FFR<sub>CT</sub>, CTA derived fractional flow reserve; MI, myocardial infarction; NXT, “Analysis of Coronary Blood Flow Using CT Angiography: Next Steps” trial; PLATFORM, “Prospective Longitudinal Trial of FFRCT: Outcome and Resource impacts” trial; RR, risk ratio

**SFigure 2.** Meta-analysis of the occurrence of revascularization between 3 and 12 months of follow-up

FFR<sub>CT</sub> > 0.80: N = number of patients in whom unplanned revascularization was performed; T = total number of patients. FFR<sub>CT</sub> ≤ 0.80: n and t = number of patients in whom unplanned revascularization was performed and total number of patients. Strata with zero events were not included in the analysis. Unplanned revascularization was defined as a procedure performed > 3 months from the time of the CTA investigation. Abbreviations and acronyms: ADVANCE, “Assessing Diagnostic Value of Non-invasive FFR<sub>CT</sub> in Coronary Care” study; CABG, coronary artery by-pass grafting; CI, confidence interval; FFR<sub>CT</sub>, CTA derived fractional flow reserve; NXT, “Analysis of Coronary Blood Flow Using CT Angiography: Next Steps” trial; PCI, percutaneous coronary intervention; PLATFORM, “Prospective Longitudinal Trial of FFR<sub>CT</sub>: Outcome and Resource impacts” trial; RR, risk ratio