

## Supplementum

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

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**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

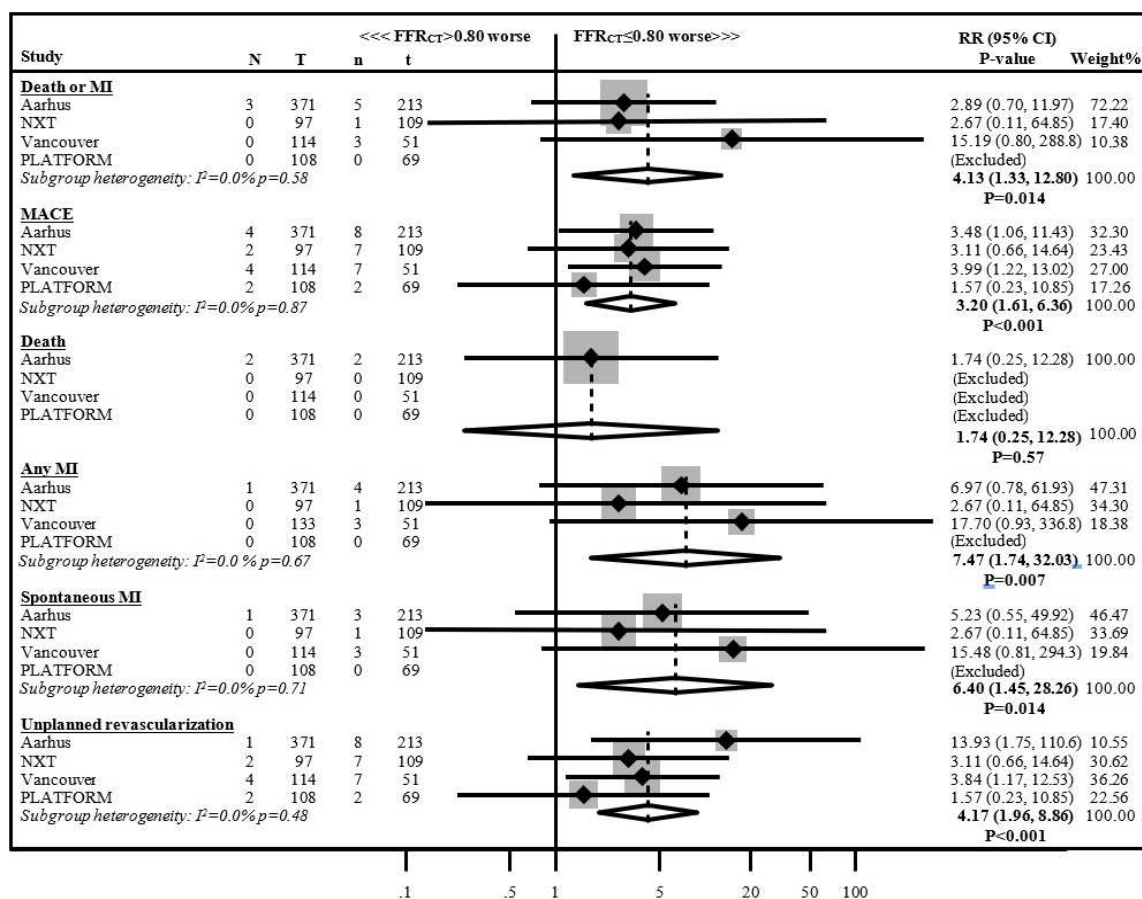
| Database         | Search strategy and syntaxes  | Number of retrieved articles |
|------------------|---|------------------------------|
| Pubmed (Medline) | ((("computed tomography angiography"[MeSH Terms] OR ("computed"[All Fields] AND "tomography"[All Fields] AND "angiography"[All Fields]) OR "computed 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<br>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<br>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 |

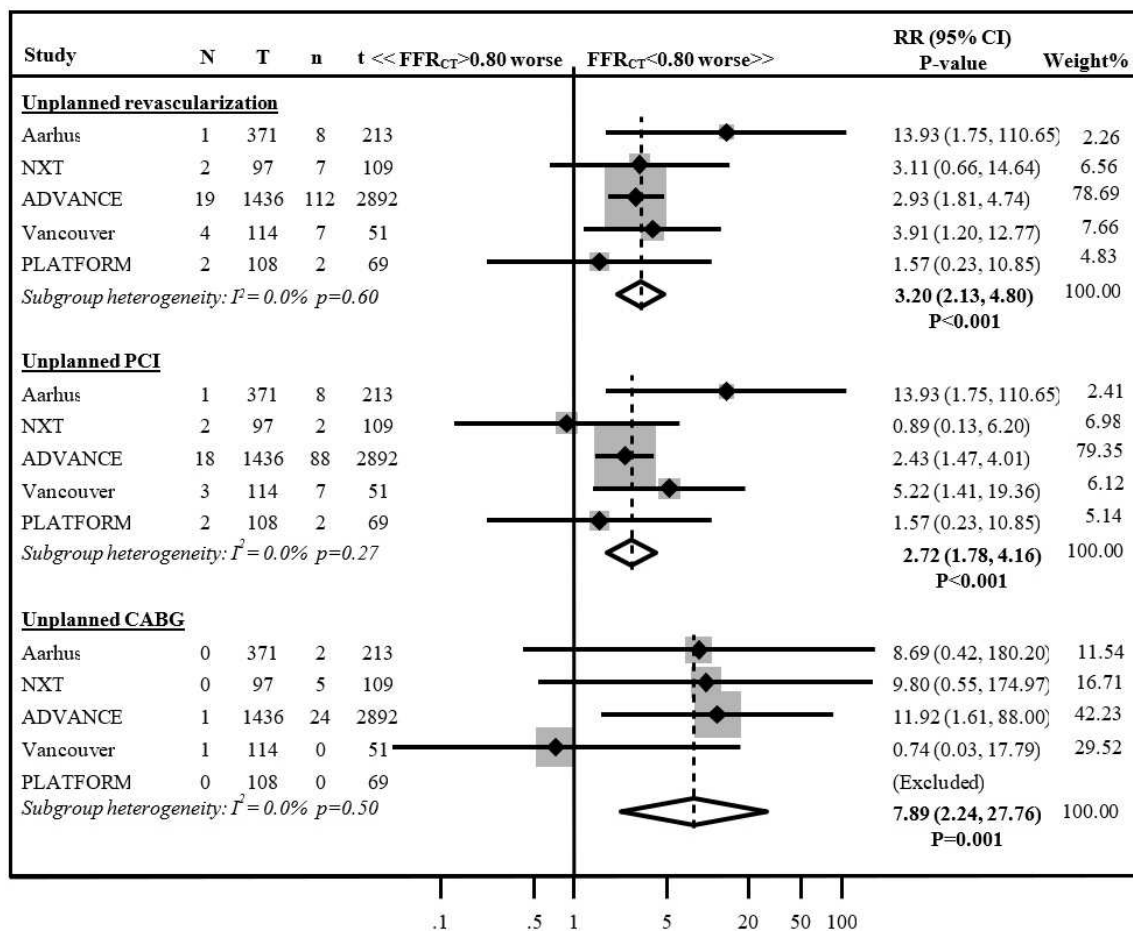
**STable 2.** Meta-Analysis Newcastle-Ottawa Quality Scale

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