

SUPPLEMENTAL MATERIAL TABLE OF CONTENTS

Appendix A. Initial search criteria used for MEDLINE.

Appendix B. Checklist MOOSE Guidelines for Meta-Analyses and Systematic Reviews of Observational Studies.

Appendix C. PRISMA 2009 Checklist.

Appendix D. Study quality score for each individual study.

Appendix E. Tables presenting study design, characteristics, diagnostic criteria for a negative test result, follow-up duration, absolute numbers for death, cardiac death, myocardial infarction, revascularization and unstable angina if reported or annualized event rates for the occurrence of cardiac death and myocardial infarction after a negative test result and total event rate for each study including references.

Appendix F. Annualized event rates for cardiac death and myocardial infarction after a negative test result. The annualized event rates (AER) per individual study and pooled AER per modality are presented in Forest plots.

Appendix G. Annualized event rates for cardiac death and myocardial infarction after a negative test result stratified for study design and follow-up duration.

Appendix H. Meta-regression results regarding Figure 2. Table shows that differences in annualized event rates (AER) after a negative test result between modalities and overall heterogeneity become smaller after adjustment for total AER and proportion of patients with pre-existing coronary artery disease.

Appendix A: Search criteria Medline

Search terms / MESH

- Exercise test
- Bicycle ergometry test
- Electrocardiography
- Magnetic resonance imaging
- Single photon emission computed tomography
- Positron emission tomography
- Stress echocardiography
- Computed tomography
- X-ray
- Prognosis
- Coronary artery disease

Search limitations

- Language: English
- Publication dates: January 1990 – April 2015

Initial search strategy Medline

- computed tomography, x ray [MESH] AND prognosis [MESH] AND coronary artery disease (exploded)
- ((imaging, magnetic resonance[MeSH Terms]) AND prognosis[MeSH Terms]) AND coronary artery disease (exploded term).
- ((exercise test[MeSH Terms]) AND electrocardiography[MeSH Terms]) AND prognosis [MeSH Terms] AND coronary artery disease
- ((bicycle ergometry test[MeSH Terms]) AND electrocardiography[MeSH Terms]) AND prognosis [MeSH Terms] AND coronary artery disease
- ((positron emission tomography[MeSH Terms]) AND prognosis[MeSH Terms]) AND coronary artery disease
- ((single photon emission tomography[MeSH Terms]) AND prognosis[MeSH Terms]) AND coronary artery disease
- ((stress echocardiography[MeSH Terms]) AND prognosis[MeSH Terms]) AND coronary artery disease
- (prognosis [MeSH Terms] AND coronary artery disease AND stress echocardiography)

Appendix B

MOOSE Guidelines for Meta-Analyses and Systematic Reviews of Observational Studies*

| | |
|------------------------|--|
| Title | Identify the study as a meta-analysis (or systematic review) |
| Abstract | Use the journal's structured format |
| Introduction | Present <ul style="list-style-type: none">✓ • The clinical problem✓ • The hypothesis✓ • A statement of objectives that includes the study population, the condition of interest, the exposure or intervention, and the outcome(s) considered |
| Sources | Describe <ul style="list-style-type: none">✓ • Qualifications of searchers (eg, librarians and investigators)✓ • Search strategy, including time period included in the synthesis and keywords✓ • Effort to include all available studies, including contact with authors✓ • Databases and registries searched✓ • Search software used, name and version, including special features used (eg, explosion)✓ • Use of hand searching (eg, reference lists of obtained articles)✓ • List of citations located and those excluded, including justification✓ • Method of addressing articles published in languages other than English✓ • Method of handling abstracts and unpublished studies✓ • Description of any contact with authors |
| Study Selection | Describe <ul style="list-style-type: none">✓ • Types of study designs considered✓ • Relevance or appropriateness of studies gathered for assessing the hypothesis to be tested✓ • Rationale for the selection and coding of data (eg, sound clinical principles or convenience)✓ • Documentation of how data were classified and coded (eg, multiple raters, blinding, and interrater reliability)✓ • Assessment of confounding (eg, comparability of cases and controls in studies where appropriate)✓ • Assessment of study quality, including blinding of quality assessors; stratification or regression on possible predictors of study results✓ • Assessment of heterogeneity✓ • Statistical methods (eg, complete description of fixed or random effects models, justification of whether the chosen models account for predictors of study results, dose-response models, or cumulative meta-analysis) in sufficient detail to be replicated |
| Results | Present <ul style="list-style-type: none">✓ • A graph summarizing individual study estimates and the overall estimate✓ • A table giving descriptive information for each included study✓ • Results of sensitivity testing (eg, subgroup analysis)✓ • Indication of statistical uncertainty of findings |
| Discussion | Discuss <ul style="list-style-type: none">✓ • Strengths and weaknesses✓ • Potential biases in the review process (eg, publication bias)✓ • Justification for exclusion (eg, exclusion of non-English-language citations)✓ • Assessment of quality of included studies✓ • Consideration of alternative explanations for observed results✓ • Generalization of the conclusions (ie, appropriate for the data presented and within the domain of the literature review)✓ • Guidelines for future research✓ • Disclosure of funding source |

*Modified from Stroup DF, Berlin JA, Morton SC, Olkin I, Williamson GD, Rennie D, et al. Meta-analysis of observational studies in epidemiology: a proposal for reporting. Meta-analysis Of Observational Studies in Epidemiology (MOOSE) group. JAMA 2000;283:2008–12. Copyrighted © 2000, American Medical Association. All rights reserved.



PRISMA 2009 Checklist

| Section/topic | # | Checklist item | Reported on page # |
|------------------------------------|----|---|--------------------|
| TITLE | | | |
| Title | 1 | Identify the report as a systematic review, meta-analysis, or both. | 1 |
| ABSTRACT | | | |
| Structured summary | 2 | Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number. | 2,3 |
| INTRODUCTION | | | |
| Rationale | 3 | Describe the rationale for the review in the context of what is already known. | 5 |
| Objectives | 4 | Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS). | 5 |
| METHODS | | | |
| Protocol and registration | 5 | Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number. | With the editor |
| Eligibility criteria | 6 | Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale. | 6,7 |
| Information sources | 7 | Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched. | 6,7 |
| Search | 8 | Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated. | 6, Appendix 1 |
| Study selection | 9 | State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis). | 6,7, Fig. 1 |
| Data collection process | 10 | Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators. | 8,9 |
| Data items | 11 | List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made. | 8,9 |
| Risk of bias in individual studies | 12 | Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis. | 8,9 |
| Summary measures | 13 | State the principal summary measures (e.g., risk ratio, difference in means). | 8,9 |
| Synthesis of results | 14 | Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis. | 9 |



PRISMA 2009 Checklist

| Section/topic | # | Checklist item | Reported on page # |
|-------------------------------|----|--|--------------------------|
| Risk of bias across studies | 15 | Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies). | 8,9 |
| Additional analyses | 16 | Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified. | 8,9 |
| RESULTS | | | |
| Study selection | 17 | Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram. | 9, Fig 1 |
| Study characteristics | 18 | For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations. | Appendix E |
| Risk of bias within studies | 19 | Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12). | Appendix E |
| Results of individual studies | 20 | For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot. | Appendix E Appendix F |
| Synthesis of results | 21 | Present results of each meta-analysis done, including confidence intervals and measures of consistency. | Fig 2-3, Appendix F-G |
| Risk of bias across studies | 22 | Present results of any assessment of risk of bias across studies (see Item 15). | Fig 2-3, Appendix F-G |
| Additional analysis | 23 | Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]). | Fig 2-3, Appendix F-G |
| DISCUSSION | | | |
| Summary of evidence | 24 | Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers). | 11-14 |
| Limitations | 25 | Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias). | 11-14 |
| Conclusions | 26 | Provide a general interpretation of the results in the context of other evidence, and implications for future research. | 11-14 |
| FUNDING | | | |
| Funding | 27 | Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review. | 15 |

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(6): e1000097. doi:10.1371/journal.pmed1000097

For more information, visit: www.prisma-statement.org.

Appendix D: Study Quality

| CCTA | Representative | Patient characteristics | Outcome | Confirmation outcome | Follow up time | Follow up completeness | Total |
|-------------|----------------|-------------------------|---------|----------------------|----------------|------------------------|-------|
| Abidov | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Aggarwal | 0 | 0 | 1 | 1 | 1 | 0 | 3 |
| Aldrovandi | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| Andreini | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Carrigan | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| Chen | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Cho | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| Chong | 0 | 0 | 1 | 1 | 1 | 0 | 3 |
| Chow | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Christiaens | 0 | 0 | 1 | 0 | 0 | 1 | 2 |
| Danciu | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Dedic | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| Gilard | 1 | 1 | 1 | 0 | 1 | 1 | 5 |
| Gopal | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| Grutta, la | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| Hadamitzky | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Hansen | 0 | 1 | 1 | 1 | 1 | 1 | 5 |
| Hay | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Hollander | 0 | 0 | 1 | 1 | 1 | 1 | 4 |
| Ko | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Lingen | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Min | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Miszalski | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Nasis | 0 | 1 | 1 | 0 | 1 | 1 | 4 |
| Noda | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Øvrehus | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Rubinshtein | 0 | 1 | 1 | 1 | 1 | 0 | 4 |
| Schmermund | 1 | 1 | 1 | 1 | 1 | 1 | 6 |

| | | | | | | | |
|---------------------|-----------------------|--------------------------------|----------------|-----------------------------|-----------------------|-------------------------------|--------------|
| Yamamoto | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| Yiu | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| CMR-perf | | | | | | | |
| | Representative | Patient characteristics | Outcome | Confirmation outcome | Follow up time | Follow up completeness | Total |
| Bertaso | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Bingham | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Bodi | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Chen | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Coelho-Filho | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Doesch | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Freed | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Hartlage | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| Ingkanisorn | 0 | 1 | 1 | 0 | 1 | 1 | 4 |
| Lo | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| Lubbers | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Macwar | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Pilz | 1 | 1 | 1 | 0 | 1 | 1 | 5 |
| CMR-wm | | | | | | | |
| | Representative | Patient characteristics | Outcome | Confirmation outcome | Follow up time | Follow up completeness | Total |
| Bodi | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Gebker | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Kelle | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Korosoglou | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Kuijpers | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Wallace | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| EET | | | | | | | |
| | Representative | Patient characteristics | Outcome | Confirmation outcome | Follow up time | Follow up completeness | Total |
| Bigi | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Bourque | 0 | 1 | 1 | 1 | 1 | 1 | 5 |
| Bouzas- | 0 | 1 | 1 | 1 | 1 | 1 | 5 |

| Mosquera | | | | | | | |
|----------------------|-----------------------|--------------------------------|----------------|-----------------------------|-----------------------|-------------------------------|--------------|
| Calasans | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| Cannan | 0 | 0 | 1 | 1 | 1 | 1 | 4 |
| Chatziioannou | 0 | 0 | 1 | 1 | 1 | 0 | 3 |
| Cho | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| Coletta | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Dedic | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| Houghton | 1 | 0 | 1 | 0 | 1 | 1 | 4 |
| Jeetley | 0 | 1 | 1 | 1 | 0 | 1 | 4 |
| Lichtlen | 1 | 0 | 1 | 0 | 1 | 0 | 3 |
| Marshall | 0 | 1 | 1 | 1 | 1 | 1 | 5 |
| Mulcahy | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Niemann | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Pontone | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| Raiker | 0 | 0 | 1 | 1 | 1 | 1 | 4 |
| Sanchis | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| Sawada | 0 | 0 | 1 | 1 | 1 | 0 | 3 |
| Vanzetto | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Zanco | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| | | | | | | | |
| PET | Representative | Patient characteristics | Outcome | Confirmation outcome | Follow up time | Follow up completeness | Total |
| Chow | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Chow | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Dorbala | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Tosh, van | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| | | | | | | | |
| SE | Representative | Patient characteristics | Outcome | Confirmation outcome | Follow up time | Follow up completeness | Total |
| Afridi | 1 | 1 | 1 | 1 | 0 | 1 | 5 |
| Almeida | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Anthopoulos | 1 | 0 | 1 | 1 | 1 | 0 | 4 |

| | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|
| Baldini | 1 | 0 | 1 | 1 | 0 | 0 | 3 |
| Bholasingh | 1 | 0 | 1 | 1 | 0 | 1 | 4 |
| Biagini | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Bouzas- Mosquera | 0 | 1 | 1 | 1 | 1 | 0 | 4 |
| Calasans | 0 | 1 | 1 | 1 | 1 | 0 | 4 |
| Chuah | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Chung | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Ciaroni | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Coletta | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Colon | 0 | 0 | 1 | 1 | 1 | 1 | 4 |
| Cordovil | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Cortigiani | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Davar | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Hartlage | 0 | 0 | 1 | 1 | 0 | 1 | 3 |
| Isma'eel | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Ismail | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Kamaran | 1 | 0 | 1 | 1 | 0 | 1 | 4 |
| Krivokapich | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Krivokapich | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Low | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Marcovitz | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Marwick | 0 | 0 | 1 | 1 | 1 | 1 | 4 |
| Mesa | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Olmos | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Pingitore | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Sawada | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Sawada | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Song | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Srivastava | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Steinberg | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Yao | 1 | 0 | 1 | 1 | 1 | 1 | 5 |

| | | | | | | | |
|----------------------|-----------------------|--------------------------------|----------------|-----------------------------|-----------------------|-------------------------------|--------------|
| Yao | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Zagatina | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| SPECT | Representative | Patient characteristics | Outcome | Confirmation outcome | Follow up time | Follow up completeness | Total |
| Acampa | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Akinboboye | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Basic | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Bom | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| Boyne | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Bucerius | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Calnon | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Chatziioannou | 0 | 1 | 1 | 1 | 1 | 0 | 4 |
| Dawson | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Dona | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Doukky | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Ferreira | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Filipiak | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Galassi | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Gentile | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Gibbons | 0 | 0 | 1 | 1 | 1 | 1 | 4 |
| Gibson | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| Groutars | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Hachamovitch | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Hage | 0 | 0 | 1 | 1 | 1 | 0 | 3 |
| Hakeem | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| Iqbal | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Jeong | 0 | 1 | 1 | 1 | 1 | 0 | 4 |
| Kaminek | 1 | 0 | 1 | 0 | 1 | 0 | 3 |
| Klodos | 0 | 0 | 1 | 1 | 1 | 0 | 3 |
| Koehli | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Leslie | 1 | 0 | 1 | 1 | 1 | 0 | 4 |

| | | | | | | | |
|---------------------|---|---|---|---|---|---|---|
| Lima | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Miernik | 0 | 0 | 1 | 0 | 1 | 1 | 3 |
| Mouden | 0 | 1 | 1 | 1 | 1 | 1 | 5 |
| Nabi | 0 | 0 | 1 | 1 | 0 | 1 | 3 |
| Nishimura | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Olmos | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Otsuka | 1 | 0 | 1 | 0 | 1 | 1 | 4 |
| Pazhenkottil | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Petix | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Raziei | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Romero | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| Schinkel | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Schinkel | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Sharma | 0 | 1 | 1 | 1 | 1 | 1 | 5 |
| Shimoni | 0 | 0 | 1 | 1 | 1 | 1 | 4 |
| Simonsen | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Soman | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Stratmann | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Stratmann | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Sugihara | 1 | 0 | 1 | 0 | 1 | 1 | 4 |
| Travin | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Travin | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Uebleis | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Uthamalingam | 0 | 1 | 1 | 1 | 1 | 1 | 5 |
| Vanzetto | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| Wolak | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| Yang | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Zanco | 1 | 0 | 1 | 0 | 1 | 1 | 4 |

Appendix E

eTable 1a. Coronary Computed Tomographic Angiography (CCTA) – patient and study characteristics

| Author (ref. #) | Year | Design | Selection | N | Lost to follow-up, N (%) | Mean age, y (SD) | Male, N (%) | History of CAD, N (%) | History of MI, N (%) | History of revasc, N (%) | Scanner | Definition neg. test | Quality assessment |
|-------------------|------|--------|------------------------|------|--------------------------|------------------|-------------|-----------------------|----------------------|--------------------------|---------------|----------------------|--------------------|
| Abidov(1) | 2009 | PS | Suspected CAD | 199 | 1 (0.5) | 54 (NS) | 107 (54) | 0 (0) | 0 (0) | 0 (0) | 64-slice | <50% stenosis | 6 |
| Aggarwal(2) § | 2011 | PS | Suspected or known CAD | 111 | 13 (10) | 51 (NS) | 47 (42) | NS | NS | NS | 16-slice | <50% stenosis | 3 |
| Aldrovandi(3) | 2012 | RS | Suspected or known CAD | 767 | NS | 62 (11) | 496 (65) | 217 (28) | 151 (20) | 172 (22) | 64-slice | <50% stenosis | 5 |
| Andreini(4) | 2012 | PS | Suspected CAD | 1196 | 38 (3) | 62 (11) | 782 (62) | 0 (0) | 0 (0) | 0 (0) | 64-slice | <50% stenosis | 6 |
| Carrigan(5) | 2009 | RS | Suspected CAD | 227 | NS | 54 (12) | 139 (61) | 0 (0) | 0 (0) | 0 (0) | 64-slice | <50% stenosis | 5 |
| Chen(6) | 2014 | PS | Suspected or known CAD | 151 | 0 (0) | 56 (48-63) | 91 (60) | 17 (11) | NS | 17 (11) | 320-row | <50% stenosis | 5 |
| Cho(7) | 2012 | RS | Suspected CAD | 2977 | NS | 58 (10) | 1476 (50) | 0 (0) | 0 (0) | 0 (0) | 64-slice | <50% stenosis | 5 |
| Chong(8) § | 2012 | RS | NS | 70 | NS | 52 (NS) | 40 (57) | NS | NS | NS | 16/64-slice | <50% stenosis | 3 |
| Chow(9) | 2010 | PS | NS | 2076 | 96 (4) | 58 (12) | 1087 (52) | NS | NS | 0 (0) | 64-slice | <50% stenosis | 5 |
| Christiaens(10) § | 2012 | PS | Suspected or known CAD | 175 | 0 (0) | 60 (8) | 124 (71) | NS | 2 (1) | 12 (7) | 64-slice | <50% stenosis | 2 |
| Danciu(11) | 2007 | PS | Suspected or known CAD | 421 | 0 (0) | 64 (12) | 266 (63) | 145 (34) | NS | NS | 64-slice | <50% stenosis | 5 |
| Dedic(12) | 2011 | PS | Suspected CAD | 409 | 47 (10) | 58 (NS) | 217 (53) | 0 (0) | 0 (0) | 0 (0) | 64-slice | <50% stenosis | 5 |
| Gilard(13) | 2007 | PS | Suspected CAD | 141 | 0 (0) | 59 (12) | 88 (62) | 0 (0) | 0 (0) | 0 (0) | 16-slice | <50% stenosis | 5 |
| Gopal(14) | 2009 | PS | Suspected CAD | 493 | NS | 58 (15) | 347 (70) | 0 (0) | 0 (0) | 0 (0) | 64-slice | <50% stenosis | 5 |
| Grutta, Ia(15) | 2011 | PS | Suspected CAD | 125 | NS | 57 (10) | 82 (66) | 0 (0) | 0 (0) | 0 (0) | 64-slice | <50% stenosis | 5 |
| Hadamitzky(16) | 2013 | RS | Suspected CAD | 1584 | 36 (2) | 58 (11) | 1091 (69) | 0 (0) | 0 (0) | 0 (0) | 16 / 64-slice | <50% stenosis | 6 |
| Hansen(17) § | 2010 | PS | Suspected CAD | 89 | 0 (0) | 56 (9) | 56 (63) | 0 (0) | 0 (0) | 0 (0) | 64-slice | <50% stenosis | 5 |
| Hay(18) | 2010 | RS | Suspected CAD | 138 | NS | 57 (NS) | 73 (53) | 0 (0) | 0 (0) | 0 (0) | 64-slice | <50% stenosis | 4 |
| Hollander(19) § | 2009 | PS | Suspected or known CAD | 481 | 0 (0) | 46 (9) | 193 (40) | NS | 2 (0.2) | NS | 64-slice | <50% stenosis | 4 |
| Ko(20) | 2014 | RS | Suspected or known CAD | 115 | 1 (1) | 64 (10) | 76 (66) | 48 (42) | 11 (10) | NS | 320-row | <50% stenosis | 5 |
| Lingen, van(21) | 2008 | RS | Suspected or known CAD | 178 | NS | 56 (NS) | 76 (43) | NS | NS | NS | 16-slice | <50% stenosis | 4 |

| Author (ref. #) | Year | Design | Selection | N | Lost to follow-up, N (%) | Mean age, y (SD) | Male, N (%) | History of CAD, N (%) | History of MI, N (%) | History of revasc, N (%) | Scanner | Definition | Quality assessment |
|---------------------|------|--------|------------------------|------|--------------------------|------------------|-------------|-----------------------|----------------------|--------------------------|---------------------|---------------|--------------------|
| Min(22) | 2010 | PS | Suspected or known CAD | 172 | NS | 63 (12) | 98 (57) | 42 (24) | NS | NS | 64-slice | <50% stenosis | 4 |
| Miszalski-Jamka(23) | 2012 | NS | Suspected CAD | 494 | 10 (2) | 58 (10) | 259 (52) | 0 (0) | 0 (0) | 0 (0) | 16 / 64-slice | <50% stenosis | 5 |
| Nasis(24) § | 2011 | PS | Suspected CAD | 203 | 0 (0) | 55 (11) | 123 (60) | 0 (0) | 0 (0) | 0 (0) | 320-row | <50% stenosis | 4 |
| Noda(25) § | 2008 | PS | Suspected CAD | 26 | NS | 65 (NS)& | 12 (43)& | 0 (0) | 0 (0) | 0 (0) | 16-slice | <50% stenosis | 1 |
| Øvrehus(26) | 2011 | PS | Suspected CAD | 1055 | 0 (0) | 55 (NS) | 464 (44) | 0 (0) | 0 (0) | 0 (0) | 64-slice | <50% stenosis | 6 |
| Rubinshtein(27) § | 2013 | PS | Suspected CAD | 334 | NS | 57 (13) | 189 (57) | 0 (0) | 0 (0) | 0 (0) | 64-slice | <50% stenosis | 4 |
| Schmermund(28) | 2010 | RS | Suspected CAD | 670 | 36 (5) | 59 (11) | 409 (58) | 0 (0) | 0 (0) | 0 (0) | 64-slice | <50% stenosis | 6 |
| Yamamoto(29) | 2013 | NS | Suspected CAD | 511 | NS | 66 (11) | 325 (64) | 0 (0) | 0 (0) | 0 (0) | 64-slice | <50% stenosis | 5 |
| Yiu(30) | 2012 | RS | Suspected CAD | 2432 | NS | 57 (12) | 1364 (56) | 0 (0) | 0 (0) | 0 (0) | 64-slice 320-row | <50% stenosis | 5 |

CAD=coronary artery disease, MI=myocardial infarction, N=number of patients, NS=not specified, PS=prospective, Revasc=revascularization, RS=retrospective, SD=standard deviation.

§ Specific study population.

eTable 1b. Coronary Computed Tomographic Angiography (CCTA) – absolute number of adverse cardiovascular events

| Author (ref. #) | Follow-up, years (SD) | N | Negative test (i.e. <50% stenosis) | | | | | Population event risk | | |
|-----------------|-----------------------|------|------------------------------------|----|--------|-----|-----------------------------|-----------------------|--------------------|-----------------------------|
| | | | Death/Cardiac death | MI | Revasc | UAP | Cardiac death + MI (AER, %) | N | Cardiac death + MI | Cardiac death + MI (AER, %) |
| Abidov(1) | 2.3 (0.7) | 163 | 0 / 0 | 0 | 3 | NS | 0 (0.0%) | 199 | 0 | 0.0% |
| Aggarwal(2) | 2.8 (0.3) | 92 | NS / 1 | 0 | 0 | NS | 1 (0.4%) | 111 | 1 | 0.3% |
| Aldrovandi(3) | 1.7 (0.3) | 501 | 2 / 1 | 3 | 11* | 0 | 4 (0.5%) | 767 | 16 | 1.2% |
| Andreini(4) | 4.3 (1.8) | 744 | NS / NS | NS | NS | NS | 23 (0.7%) | 1196 | 125 | 2.4% |
| Carrigan(5) | 2.3 (0.8) | 172 | NS / NS | NS | NS | NS | 1 (0.3%) | 227 | 4 | 0.8% |
| Chen(6) | 1.2 (0.3) | 106 | NS / 0 | 1 | NS | 0 | 1 (0.8%) | | | |
| Cho(7) | 3.3 (2.3-4.6) | 2568 | NS / 1 | 2 | 16 | 3 | 3 (0.0%) | 2977 | 9 | 0.1% |
| Chong(8) | 4.6 (0.6) | 70 | 1 / 0 | 1 | 0 | NS | 1 (0.3%) | | | |
| Chow(9) | 1.3 (0.7) | 1457 | 10 / 4 | 5 | NS | NS | 9 (0.5%) | 2076 | 34 | 1.3% |
| Christiaens(10) | 0.5 (0.2) | 136 | 0 / 0 | 0 | 0 | NS | 0 (0.0%) | 175 | 0 | 0.0% |
| Danciu(11) | 1.3 (0.3) | 237 | 0 / 0 | 0 | NS | NS | 0 (0.0%) | 421 | 2 | 0.4% |
| Dedic(12) | 2.6 (NS) | 277 | NS / 1 | 2 | 3 | 3 | 3 (0.4%) | 409 | 10 | 0.9% |
| Gilard(13) | 1.2 (NS) | 141 | 0 / 0 | 1 | NS | NS | 1 (0.6%) | | | |
| Gopal(14) | 3.3 (0.8) | 361 | 0 / 0 | 0 | 0 | NS | 0 (0.0%) | 493 | 21 | 1.3% |
| Grutta, Ia(15) | 2.0 (NS) | 90 | NS / 0 | 0 | 5* | NS | 0 (0.0%) | 125 | 2 | 0.8% |
| Hadamitzky(16) | 5.5 (5.1-6.2) | 1258 | NS / NS | NS | NS | NS | 15 (0.2%) | 1584 | 25 | 0.3% |
| Hansen(17) | 1.0 (0.2) | 74 | 0 / 0 | 0 | 0 | NS | 0 (0.0%) | 89 | 0 | 0.0% |
| Hay(18) | 1.7 (NS-NS) | 116 | 0 / 0 | 0 | 0 | 0 | 0 (0.0%) | 138 | 0 | 0.0% |
| Hollander(19) | 1.0 (0.0) | 481 | 1 / 0 | 0 | 0 | NS | 0 (0.0%) | | | |
| Ko(20) | 1.5 (1.1-2.3) | 20 | 0 / 0 | 0 | NS | NS | 0 (0.0%) | 115 | 1 | 0.6% |

| Author (ref. #) | Follow-up, years (SD) | N | Negative test (i.e. <50% stenosis) | | | | | Population event risk | | |
|---------------------|-----------------------|------|------------------------------------|----|--------|-----|-----------------------------|-----------------------|--------------------|-----------------------------|
| | | | Death/Cardiac death | MI | Revasc | UAP | Cardiac death + MI (AER, %) | N | Cardiac death + MI | Cardiac death + MI (AER, %) |
| Lingen, van(21) | 1.0 (NS) | 178 | 0 / 0 | 0 | 2 | 0 | 0 (0.0%) | | | |
| Min(22) | 1.8 (0.4) | 109 | 0 / 0 | 1 | 0 | 1 | 1 (0.5%) | 172 | 1 | 0.3% |
| Miszalski-Jamka(23) | 3.6 (0.9) | 355 | NS / NS | NS | 31 | NS | 9 (0.7%) | 494 | 17 | 1.0% |
| Nasis(24) | 1.2 (NS) | 168 | 0 / 0 | 0 | 0 | 0 | 0 (0.0%) | 203 | 0 | 0.0% |
| Noda(25) | 0.8 (0.6) | 8 | NS / 0 | 0 | 0 | 0 | 0 (0.0%) | 26 | 1 | 4.8% |
| Øvrehus(26) | 1.5 (1.2–2.1) | 843 | 2 / 0 | 3 | 2 | NS | 3 (0.2%) | 1055 | 7 | 0.4% |
| Rubinshtein(27) § | 6.1 (1.0) | 334 | NS / 10 | 3 | NS | NS | 13 (0.6%) | | | |
| Schmermund(28) | 3.2 (NS) | 705 | 9 / 0 | 2 | 13 | NS | 2 (0.1%) | | | |
| Yamamoto(29) | 3.3 (1.2) | 372 | NS / 0 | 2 | 5 | 4 | 2 (0.2%) | 453 | 9 | 0.6% |
| Yiu(30) | 2.2 (1.3–3.1) | 1752 | NS / NS | NS | NS | NS | NS (0.5%) | 2432 | 58 | 1.1% |

AER=annual event rate, MI=myocardial infarction, N=number of patients, NS=not specified, Revasc=revascularization, SD=standard deviation, UAP=unstable angina pectoris.

* Represents (possible) early revascularizations.

eTable 2a. Cardiovascular Magnetic Resonance (CMR) perfusion – patient and study characteristics

| Author (ref. #) | Year | Design | Selection | N | Lost to follow-up, N (%) | Mean age, y (SD) | Male, N (%) | History of CAD, N (%) | History of MI, N (%) | History of revasc, N (%) | Tesla | Stressor (%) | Definition 'no ischemia' | Quality assessment |
|--------------------------|------|--------|------------------------|------|--------------------------|------------------|-------------|-----------------------|----------------------|--------------------------|-------|-------------------------------------|--|--------------------|
| Bertaso(31) | 2012 | PS | Suspected or known CAD | 362 | NS | 62 (12) | 211 (58) | 157 (43) | NS | NS | 1.5 | Adenosine | Qualitative (no reversible defect) | 4 |
| Bingham(32) | 2011 | PS | Suspected or known CAD | 908 | 24 (3) | 65 (NS) | 532 (59) | 449 (49) | 317 (35) | 433 (48) | 1.5 | Adenosine | Semi-quantitative (no fixed / reversible defect) | 6 |
| Bodi(33) | 2012 | PS | Suspected or known CAD | 1722 | NS | 64 (11) | 1071 (62) | NS | 389 (23) | 363 (21) | 1.5 | Dipyridamole | Semi-quantitative (no fixed / reversible defect) | 4 |
| Chen(6) | 2014 | PS | Suspected or known CAD | 151 | 0 (0) | 56 (48-63) | 91 (60) | 17 (11) | NS | 17 (11) | 1.5 | Regadenoson / dipyridamole | Qualitative (no reversible defect) | 5 |
| Coelho-Filho(34) | 2011 | PS | Suspected or known CAD | 405 | 0 (0) | 57 (14) | 237 (59) | NS | 82 (20) | 98 (24) | 1.5 | Adenosine (92%) / dipyridamole (8%) | Semi-quantitative (no reversible defect) | 5 |
| Doesch(35) | 2009 | PS | Known CAD | 81 | 0 (0) | 64 (NS) | 67 (83) | 81 (100) | 24 (30) | 28 (35) | 1.5 | Adenosine | Qualitative (no reversible defect) | 6 |
| Freed(36) | 2013 | PS | Suspected or known CAD | 149 | 16 (10) | 56 (15) | 83 (56) | 45 (30) | NS | NS | 1.5 | Regadenoson | Qualitative (no reversible defect) | 4 |
| Hartlage(37) § | 2011 | RS | Suspected CAD | 89 | NS | 56 (12) | 29 (33) | 0 (0) | 0 (0) | 0 (0) | 1.5 | Adenosine | Qualitative (no reversible defect) | 3 |
| Ingkanisorn(38) § | 2006 | PS | Suspected or known CAD | 135 | 2 (1) | 56 (14) | 75 (56) | 23 (17) | 9 (7) | 16 (12) | 1.5 | Adenosine | Qualitative (no fixed / reversible defect) | 4 |
| Lo(39) | 2011 | RS | Suspected or known CAD | 203 | NS | 62 (12) | 119 (59) | 32 (16) | 20 (10) | 32 (16) | 1.5 | Adenosine | Qualitative (no reversible defect) | 5 |
| Lubbers(40) | 2012 | PS | NS | 125 | 3 (2)† | 61 (11) | NS (54) | NS | 0 (0) | NS | 1.5 | Adenosine | Qualitative (no fixed / reversible defect) | 5 |
| Macwar(41) | 2013 | RS | Suspected or known CAD | 564 | NS | 62 (13) | 325 (58) | 293 (52) | NS | NS | 1.5 | Adenosine | Qualitative (no reversible defect) | 4 |
| Pilz(42) | 2008 | PS | Suspected CAD | 218 | 0 (0) | 63 (13) | 122 (56) | 0 (0) | 0 (0) | 0 (0) | 1.5 | Adenosine | Qualitative (no fixed / reversible defect) | 5 |

CAD=coronary artery disease, MI=myocardial infarction, N=number of patients, NS=not specified, PS=prospective, Revasc=revascularization, RS=retrospective, SD=standard deviation.

† Based on entire population (and not just the population that was followed up).

§ Specific study population.

eTable 2b. Cardiovascular Magnetic Resonance (CMR) perfusion – absolute number of adverse cardiovascular events

| Author (ref. #) | Follow-up, years (SD) | N | Death/Cardiac death | Negative test | | | | Cardiac death + MI (AER, %) | Population event risk | | |
|-------------------------|-----------------------|------|---------------------|---------------|--------|-----|-----------|-----------------------------|-----------------------|-----------------------------|--|
| | | | | MI | Revasc | UAP | N | | Cardiac death + MI | Cardiac death + MI (AER, %) | |
| Bertaso(31) | 1.8 (1.5–2.1) | 272 | NS / 1 | 1 | 14 | NS | 2 (0.4%) | 362 | 5 | 0.8% | |
| Bingham(32) | 2.6 (1.2) | 610 | NS / NS | NS | NS | NS | NS (0.8%) | 908 | 35 | 1.5% | |
| Bodi(33) | 1.1 (0.9) | 1010 | NS / 7 | 10 | NS | NS | 17 (1.5%) | 1722 | 61 | 3.2% | |
| Chen(6) | 1.2 (0.3) | 108 | 0 / 0 | 0 | 2 | NS | 0 (0.0%) | | | | |
| Coelho-Filho(34) | 2.5 (NS–NS) | 296 | NS / NS | NS | NS | NS | NS (0.7%) | 405 | 38 | 3.8% | |
| Doesch(35) | 2.5 (0.7) | 36 | 0 / 0 | 0 | 2 | 0 | 0 (0.0%) | 81 | 8 | 4.0% | |
| Freed(36) | 2.0 (0.8) | 106 | 0 / 0 | 0 | 0 | 5 | 0 (0.0%) | 149 | 2 | 0.7% | |
| Hartlage(37) | 0.8 (NS–NS) | 82 | 0 / 0 | 0 | 0 | 0 | 0 (0.0%) | 89 | 0 | 0.0% | |
| Ingkanisorn(38) | 1.3 (NS–NS) | 107 | 0 / 0 | 0 | 0 | NS | 0 (0.0%) | | | | |
| Lo(39) | 3.2 (1.6) | 160 | NS / NS | NS | NS | NS | NS (1.0%) | 203 | 15 | 2.3% | |
| Lubbers(40) | 1.8 (NS–NS) | 125 | NS / 0 | 1 | 3 | 0 | 1 (0.4%) | | | | |
| Macwar(41) | 4.0 (1.8) | 264 | NS / 0 | 0 | 8 | NS | 0 (0.0%) | 504 | 23 | 1.1% | |
| Pilz(42) | 1.0 (0.0) | 218 | 0 / 0 | 0 | 2 | 0 | 0 (0.0%) | | | | |

AER=annual event rate, MI=myocardial infarction, N=number of patients, NS=not specified, Revasc=revascularization, SD=standard deviation, UAP=unstable angina pectoris.

eTable 3a. Cardiovascular Magnetic Resonance (CMR) wall motion – patient and study characteristics

| Author (ref. #) | Year | Design | Selection | N | Lost to follow up, N (%) | Mean age, y (SD) | Male, N (%) | History of CAD, N (%) | History of MI, N (%) | History of revasc, N (%) | Tesla | Stressor | Definition 'no ischemia' | Quality assessment |
|-----------------------|------|--------|------------------------|------|--------------------------|------------------|-------------|-----------------------|----------------------|--------------------------|-------|-------------------------|---------------------------------------|--------------------|
| Bodi(43) | 2012 | PS | Suspected or known CAD | 1722 | NS | 64 (11) | 1071 (62) | NS | 389 (23) | 363 (21) | 1.5 | Dipyridamole | Qualitative (no reversible WMA) | 4 |
| Gebker(44) | 2011 | PS | Suspected or known CAD | 1532 | 43 (3) | 63 (NS) | 1031 (67) | 737 (48) | 481 (31) | 874 (57) | 1.5 | Dobutamine (+ atropine) | Semi-quantitative (no reversible WMA) | 6 |
| Kelle(45) | 2011 | PS | Suspected or known CAD | 1017 | 94 (6)† | 61 (11) | 689 (68) | 529 (52) | 251 (25) | 435 (43) | 1.5 | Dobutamine (+ atropine) | Qualitative (no reversible WMA) | 6 |
| Korosoglou(46) | 2010 | PS | Suspected or known CAD | 1493 | 17 (1) | 65 (13) | 1110 (74) | 816 (55) | NS | 779 (52) | 1.5 | Dobutamine (+ atropine) | Semi-quantitative (no reversible WMA) | 5 |
| Kuijpers(47) | 2004 | PS | Suspected or known CAD | 214 | 2 (1) | 63 (NS) | 179 (84) | 77 (36) | 74 (35) | 40 (19) | 1.0 | Dobutamine | Qualitative (no reversible WMA) | 6 |
| Wallace(48) | 2009 | PS | Suspected or known CAD | 221 | 0 (0) | 63 (12) | 0 (0) | NS | 62 (28) | 81 (37) | 1.5 | Dobutamine (+ atropine) | Qualitative (no reversible WMA) | 5 |

CAD=coronary artery disease, MI=myocardial infarction, N=number of patients, NS=not specified, PS=prospective, Revasc=revascularization, RS=retrospective, SD=standard deviation, WMA=wall motion abnormalities.

† Based on entire population (and not just the population that was followed up).

eTable 3b. Cardiovascular Magnetic Resonance (CMR) wall motion – absolute number of adverse cardiovascular events

| Author (ref. #) | Follow-up, years (SD) | N | Negative test | | | | | Population event risk | | |
|-----------------------|-----------------------|------|---------------------|----|--------|-----|-----------------------------|-----------------------|--------------------|-----------------------------|
| | | | Death/Cardiac death | MI | Revasc | UAP | Cardiac death + MI (AER, %) | N | Cardiac death + MI | Cardiac death + MI (AER, %) |
| Bodi(43) | 1.1 (0.9) | 1529 | NS / 19 | 16 | NS | NS | 35 (2.1%) | 1722 | 61 | 3.2% |
| Gebker(44) | 2.1 (0.8) | 923 | NS / 3 | 5 | 46 | NS | 8 (0.4%) | 1532 | 30 | 0.9% |
| Kelle(45) | 3.7 (2.0) | 716 | NS / NS | NS | NS | NS | NS (1.1%) | 1017 | 46 | 1.2% |
| Korosoglou(46) | 2.0 (1.0) | 1193 | NS / 1 | 4 | 15 | NS | 5 (0.2%) | 1493 | 53 | 1.8% |
| Kuijpers(47) | 2.0 (0.9) | 214 | NS / 1 | 3 | 11 | NS | 4 (0.9%) | | | |
| Wallace(48) | 6.2 (1.6) | 161 | NS / 6 | 9 | 27 | 24 | 15 (1.5%) | 221 | 40 | 2.9% |

AER=annual event rate, MI=myocardial infarction, N=number of patients, NS=not specified, Revasc=revascularization, SD=standard deviation, UAP=unstable angina pectoris.

eTable 4a. Exercise electrocardiography – patient and study characteristics

| Author (ref. #) | Year | Design | Selection | N | Lost to follow-up, N (%) | Mean age, y (SD) | Male, N (%) | History of CAD, N (%) | History of MI, N (%) | History of revasc, N (%) | Cut off value ST-depression | Quality assessment |
|------------------------------|------|--------|------------------------|------|--------------------------|------------------|-------------|-----------------------|----------------------|--------------------------|-----------------------------|--------------------|
| Bigi(49) | 2007 | PS | Suspected or known CAD | 700 | 8 (1) | 59 (53-64) | 595 (85) | 510 (72) | NS | NS | ≥1.0 mm | 5 |
| Bourque(50) § | 2011 | PS | Suspected or known CAD | 463 | 46 (9) | 54 (NS) | 332 (72) | 105 (23) | 67 (15) | 89 (19) | ≥1.0 mm | 5 |
| Bouzas-Mosquera(51) § | 2009 | PS | Suspected or known CAD | 4004 | NS | 60 (13) | 2358 (59) | 1153 (29) | 871 (22) | 611 (15) | ≥1.0 mm | 5 |
| Calasans(52) | 2013 | NS | Suspected CAD | 397 | NS | 57 (11) | 175 (44) | 0 (0) | 0 (0) | 0 (0) | ≥1.0 mm | 5 |
| Cannan(53) § | 1992 | NS | Suspected CAD | 87 | 1 (1) | 57 (NS-NS) | 65 (75) | 0 (0) | NS | 0 (0) | ≥1.0 mm | 4 |
| Chatziioannou(54) § | 1999 | RS | Suspected or known CAD | 369 | NS | 54 (10)& | 337 (87)† | 224 (61) | NS (21) | NS | ≥1.0 mm | 3 |
| Cho(7) | 2012 | RS | Suspected CAD | 2977 | NS | 58 (10) | 1476 (50) | 0 (0) | 0 (0) | 0 (0) | ≥1.0 mm | 5 |
| Coletta(55) | 1995 | PS | Suspected or known CAD | 204 | 0 (0) | 58 (7)& | 216 (81)† | NS | 137 (51)† | 17 (6)† | ≥1.0 mm | 5 |
| Dedic(12) | 2011 | PS | Suspected CAD | 409 | 44 (10) | 56 (10) | 244 (52) | 0 (0) | 0 (0) | 0 (0) | ≥1.0 mm | 5 |
| Houghton(56) | 1990 | RS | Suspected or known CAD | 64 | 2 (3) | 51 (NS) | 0 (0) | 15 (23) | 0 (0) | NS | ≥1.0 mm | 4 |
| Jeetley(57) § | 2006 | PS | Suspected or known CAD | 154 | 3 (2) | 60 (13) | 87 (56) | 48 (31) | 27 (18) | 49 (32) | ≥1.0 mm | 4 |
| Lichtlen(58) | 1995 | PS | Suspected CAD | 176 | NS | 48 (21-68) | 115 (65) | 0 (0) | NS | NS | ≥1.0 mm | 3 |
| Marshall(59) § | 2010 | RS | Suspected or known CAD | 498 | 18 (3) | 53 (10) | 379 (73) | 181 (35) | 65 (13) | 117 (23) | ≥2.0 mm | 5 |
| Mulcahy(60) | 1991 | PS | Known CAD | 172 | 0 (0) | 58 (NS) | 148 (86) | 172 (100) | 75 (44) | 23 (13) | ≥1.0 mm | 6 |
| Niemann(61) | 2004 | RS | Suspected or known CAD | 2763 | NS | 56 (NS) | 1777 (64) | NS | 771 (28) | NS | NS | 4 |
| Pontone(62) | 2013 | PS | Suspected CAD | 681 | NS | 61 (10) | 461 (68) | 0 (0) | 0 (0) | 0 (0) | >1.0 mm | 5 |
| Raiker(63) § | 1994 | NS | Suspected or known CAD | 207 | 1 (0.5) | 59 (11) | 108 (52) | 42 (20) | 10 (5) | NS | ≥2.0 mm | 4 |
| Sanchis(64) § | 2005 | PS | Suspected or known CAD | 283 | NS | 64 (12)† | 407 (67)† | 269 (44)† | NS | NS | ≥1.0 mm | 2 |
| Sawada(65) § | 1990 | RS | Suspected CAD | 148 | 22 (13) | 53 (11) | 77 (52) | 0 (0) | 0 (0) | 0 (0) | ≥1.0 mm | 3 |
| Vanzetto(66) | 1999 | NS | Suspected or known CAD | 1137 | 45 (4) | 55 (9) | 857 (75) | NS | 270 (24) | 239 (21) | ≥1.0 mm | 5 |
| Zanco(67) | 1995 | PS | Suspected or known CAD | 147 | 29 (7) | 53 (9) | 121 (82) | NS | 61 (41) | NS | ≥1.0 mm | 5 |

CAD=coronary artery disease, MI=myocardial infarction, N=number of patients, NS=not specified, PS=prospective, Revasc=revascularization, RS=retrospective, SD=standard deviation, UAP=unstable angina pectoris.

† Based on entire population (and not just the population that was followed up).

\$ Specific study population.

eTable 4b. Exercise electrocardiography – absolute number of adverse cardiovascular events

| Author (ref. #) | Follow-up, years (SD) | N | Death/Cardiac death | Negative test | | | | Cardiac death + MI (AER, %) | Population event risk | | |
|----------------------------|-----------------------|------|---------------------|---------------|--------|-----|------------|-----------------------------|-----------------------|-----------------------------|--|
| | | | | MI | Revasc | UAP | N | | Cardiac death + MI | Cardiac death + MI (AER, %) | |
| Bigi(49) | 3.1 (2.0–4.3) | 700 | 22 / 18 | 40 | 103 | NS | 58 (2.7%) | | | | |
| Bourque(50) | 2.2 (0.5) | 417 | 12 / 1 | 3 | 1 | NS | 4 (0.4%) | 463 | 4 | 0.4% | |
| Bouzas-Mosquera(51) | 4.5 (3.4) | 4004 | 313 / 63 | 120 | 197 | NS | 183 (1.0%) | | | | |
| Calasans(52) | 6.3 (1.4) | 397 | 13 / 3 | 13 | NS | NS | 16 (0.6%) | | | | |
| Cannan(53) | 1.8 (NS–NS) | 68 | 0 / 0 | 0 | NS | NS | 0 (0.0%) | 87 | 0 | 0.0% | |
| Chatziioannou(54) | 1.5 (0.2) | 288 | NS / NS | NS | 14 | NS | 2 (0.5%) | 369 | 5 | 0.9% | |
| Cho(7) | 3.3 (2.3–4.6) | 2489 | NS / 1 | 3 | 48 | 2 | 4 (0.0%) | 2977 | 9 | 0.1% | |
| Coletta(55) | 1.3 (0.7) | 109 | 0 / 0 | 1 | NS | NS | 1 (0.7%) | 204 | 11 | 4.1% | |
| Dedic(12) | 2.6 (2.1–3.2) | 172 | NS / 0 | 1 | 6 | 3 | 1 (0.2%) | 409 | 10 | 0.9% | |
| Houghton(56) | 3.2 (NS) | 36 | 3 / 2 | 0 | NS | NS | 2 (1.7%) | 64 | 4 | 2.0% | |
| Jeetley(57) | 0.7 (0.4) | 39 | 0 / 0 | 0 | 2* | NS | 0 (0.0%) | | | | |
| Lichtlen(58) | 12.4 (NS–NS) | 75 | 10 / 3 | 4 | NS | 8 | 7 (0.8%) | 154 | 6 | 0.3% | |
| Marshall(59) | 4.1 (NS) | 367 | NS / 2 | 4 | NS | NS | 6 (0.4%) | 498 | 7 | 0.3% | |
| Mulcahy(60) | 2.0 (NS) | 68 | NS / 0 | 5 | 3 | 2 | 5 (3.7%) | 172 | 9 | 2.6% | |
| Niemann(61) | 5.2 (NS) | 1560 | 106 / 41 | 98 | 226* | NS | 139 (1.7%) | 2579 | 324 | 2.4% | |
| Pontone(62) | 3.7 (1.0) | 262 | NS / 0 | 20 | 45 | NS | 20 (2.1%) | 681 | 73 | 2.9% | |
| Raiker(63) | 1.1 (0.2) | 66 | NS / 0 | 0 | 1 | NS | 0 (0.0%) | 207 | 1 | 0.4% | |
| Sanchis(64) | 0.5 (0.0) | 161 | 0 / 0 | 0 | NS | NS | 0 (0.0%) | 283 | 3 | 2.1% | |
| Sawada(65) | 2.4 (0.7) | 79 | 0 / 0 | 1 | 2 | NS | 1 (0.5%) | 148 | 2 | 0.6% | |
| Vanzetto(66) | 6.0 (1.5) | 601 | NS / 16 | 19 | NS | NS | 35 (1.0%) | 1137 | 103 | 1.5% | |

| Author (ref. #) | Follow-up, years (SD) | N | Death/Cardiac death | Negative test | | | | Population event risk | | |
|-----------------|-----------------------|----|---------------------|---------------|--------|-----|-----------------------------|-----------------------|--------------------|-----------------------------|
| | | | | MI | Revasc | UAP | Cardiac death + MI (AER, %) | N | Cardiac death + MI | Cardiac death + MI (AER, %) |
| Zanco(67) | 3.6 (NS) | 63 | NS / 3 | 2 | NS | 6 | 5 (2.2%) | 147 | 9 | 1.7% |

AER=annual event rate, MI=myocardial infarction, N=number of patients, NS=not specified, Revasc=revascularization, SD=standard deviation, UAP=unstable angina pectoris. * Represents (possible) early revascularizations.

eTable 5a. Positron Emission Tomography (PET) – patient and study characteristics

| Author (ref. #) | Year | Design | Selection | N | Lost to follow-up, N (%) | Mean age, y (SD) | Male, N (%) | History of CAD, N (%) | History of MI, N (%) | History of revasc, N (%) | Tracer | Stressor (%) | Definition 'no ischemia' | Quality assessment |
|----------------------|------|--------|------------------------|------|--------------------------|------------------|-------------|-----------------------|----------------------|--------------------------|--------------|---|--|--------------------|
| Chow(68) | 2005 | RS | Suspected or known CAD | 629 | NS (NS) | 59 (NS) | 178 (28) | NS | 59 (9) | 96 (15) | Rb-82 | Dipyridamole | Qualitative (no fixed / reversible defect) | 4 |
| Chow(69) | 2009 | PS | Suspected or known CAD | 109 | 3 (2) | 61 (NS) | 77 (71) | NS | 50 (46) | 54 (50) | Rb-82 / N-13 | Treadmill exercise (64) / dobutamine (36) | Semi-quantitative (SSS < 4) | 5 |
| Dorbala(70) | 2009 | PS | Suspected or known CAD | 1432 | NS (NS) | 63 (NS) | NS (48) | NS (31) | NS (NS) | NS (NS) | Rb-82 | Dipyridamole (85) / adenosine (15) / | Semi-quantitative (0% of LV) | 4 |
| Tosh, van(71) | 2011 | PS | Suspected CAD | 457 | NS | 63 (12) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | Rb-82 | Dipyridamole (NS) / dobutamine (NS) | Semi-quantitative (SSS = 0) | 5 |

CAD=coronary artery disease, MI=myocardial infarction, N=number of patients, NS=not specified, PS=prospective, Revasc=revascularization, RS=retrospective, SD=standard deviation, SSS=summed stress score.

eTable 5b. Positron Emission Tomography (PET) – absolute number of adverse cardiovascular events

| Author (ref. #) | Follow-up, years (SD) | N | Death/Cardiac death | Negative test | | | | Population event risk | | |
|----------------------|-----------------------|-----|---------------------|---------------|--------|-----|-----------------------------|-----------------------|--------------------|-----------------------------|
| | | | | MI | Revasc | UAP | Cardiac death + MI (AER, %) | N | Cardiac death + MI | Cardiac death + MI (AER, %) |
| Chow(68) | 2.3 (1.1) | 629 | NS / 0 | 1 | 13 | NS | 1 (0.1%) | | | |
| Chow(69) | 2.3 (1.6) | 46 | NS / 0 | 0 | 1 | NS | 0 (0.0%) | 124 | 6 | 2.1% |
| Dorbala(70) | 1.7 (0.7) | 664 | 39 / 2 | 6 | NS | NS | 8 (0.7%) | 1432 | 83 | 3.4% |
| Tosh, van(71) | 3.3 (1.6) | 457 | 11 / 2 | 3 | 4 | NS | 5 (0.3%) | | | |

AER=annual event rate, MI=myocardial infarction, N=number of patients, NS=not specified, Revasc=revascularization, SD=standard deviation, UAP=unstable angina pectoris.

eTable 6a. Stress echocardiography – patient and study characteristics

| Author (ref. #) | Year | Design | Selection | N | Lost to follow-up, N (%) | Mean age, y (SD) | Male, N (%) | History of CAD, N (%) | History of MI, N (%) | History of revasc, N (%) | Stressor (%) | Definition 'no ischemia' | Quality assessment |
|-----------------------|------|--------|------------------------|------|--------------------------|------------------|-------------|-----------------------|----------------------|--------------------------|--|---|--------------------|
| Afridi(72) | 1994 | RS | Suspected or known CAD | 77 | 0 (0) | 62 (9) | 76 (99) | 41 (53) | 22 (29) | 28 (36) | Dobutamine | Qualitative (no reversible WMA) | 5 |
| Almeida(73) | 2011 | PS | Suspected CAD | 147 | 0 (0) | 62 (NS) | 0 (0) | 0 (0) | 10 (7) | 17 (12) | Dipyridamole | Semi-quantitative (no reversible WMA) | 5 |
| Anthopoulos(74) | 1996 | PS | Suspected or known CAD | 120 | NS | 75 (3) | 72 (60) | NS | 48 (40) | NS | Dobutamine | Semi-quantitative (no reversible WMA) | 4 |
| Baldini(75) | 2006 | PS | Suspected or known CAD | 112 | NS | 62 (NS) | 80 (71) | NS | 0 (0) | NS | Dipyridamole (+ atropine) | Semi-quantitative (no reversible WMA) | 3 |
| Bholasingh(76) | 2003 | PS | Suspected or known CAD | 377 | 0 (0) | 56 (12) | 237 (58) | 77 (20) | 59 (16) | NS | Dobutamine (+ atropine) | Semi-quantitative (no reversible WMA) | 4 |
| Biagini(77) § | 2005 | NS | Suspected or known CAD | 1434 | 16 (1) | 73 (5) | 965 (67) | NS | NS | NS | Dobutamine (+ atropine) | Semi-quantitative (no reversible WMA) | 5 |
| Bouzas-Mosquera(51) § | 2009 | PS | Suspected or known CAD | 4004 | NS | 60 (13) | 2358 (59) | 1153 (29) | 871 (22) | 611 (15) | Treadmill exercise | Semi-quantitative (no reversible WMA) | 4 |
| Calasans(52) § | 2013 | NS | Suspected CAD | 397 | NS | 57 (11) | 175 (44) | 0 (0) | 0 (0) | 0 (0) | Treadmill exercise | Semi-quantitative (no reversible WMA) | 4 |
| Chuah(78) | 1998 | PS | Suspected or known CAD | 860 | 3 (0.3) | 70 (10) | 479 (56) | 390 (45) | NS (31) | NS (24) | Dobutamine (+ atropine) | Semi-quantitative (no reversible WMA) | 6 |
| Chung(79) | 2004 | RS | Suspected or known CAD | 233 | 19 (8) | 64 (2) | 108 (46) | 51 (22) | 0 (0) | 0 (0) | Treadmill exercise (79) / Dobutamine + atropine (21) | Qualitative (no fixed / reversible WMA) | 6 |
| Ciaroni(80) | 2002 | NS | Suspected CAD | 94 | 0 (0) | 64 (NS) | 55 (59) | 0 (0) | 0 (0) | 0 (0) | Dobutamine | Semi-quantitative (no reversible WMA) | 6 |
| Coletta(55) | 1995 | PS | Suspected or known CAD | 268 | 29 (11) | 58 (7) | 216 (81) | NS | 137 (51) | 17 (6) | Dipyridamole | Semi-quantitative (no reversible WMA) | 4 |
| Colon(81) § | 1998 | PS | Suspected CAD | 108 | 0 (0) | 54 (12) | 54 (50) | 0 (0) | NS | NS | Treadmill exercise (72) / Dobutamine + atropine (28) | Qualitative (no reversible WMA) | 4 |
| Cordovil(82) | 2004 | NS | Suspected or known CAD | 300 | 0 (0) | 61 (NS) | 0 (0) | 120 (40) | 70 (23) | 46 (15) | Dobutamine (+ atropine) | Semi-quantitative (no reversible WMA) | 6 |
| Cortigiani(83) | 2001 | RS | Suspected or known CAD | 1733 | 0 (0) | 63 (NS) | 941 (54) | NS | 587 (34) | 0 (0) | Dipyridamole (58) / Dobutamine (42) | Semi-quantitative (no reversible WMA) | 5 |
| Davar(84) | 1999 | NS | Suspected or known CAD | 72 | 0 (0) | 60 (11) | 0 (0) | NS | NS | NS | Dobutamine (+ atropine) | Qualitative (no reversible WMA) | 5 |
| Hartlage(37) § | 2011 | RS | Suspected CAD | 166 | 0 (0) | 54 (13) | 37 (22) | 0 (0) | 0 (0) | 0 (0) | Dobutamine + handgrip exercise (+ atropine) | Qualitative (no reversible WMA) | 3 |
| Isma'eel(85) | 2009 | PS | Suspected or known CAD | 45 | 4 (8) | 68 (6)& | 0 (0) | NS | NS (22)† | NS (18)† | Dobutamine | NS (no reversible WMA) | 5 |

| Author (ref. #) | Year | Design | Selection | N | Lost to follow-up, N (%) | Mean age, y (SD) | Male, N (%) | History of CAD, N (%) | History of MI, N (%) | History of revasc, N (%) | Stressor (%) | Definition 'no ischemia' | Quality assessment |
|-----------------|------|--------|------------------------|------|--------------------------|------------------|-------------|-----------------------|----------------------|--------------------------|--|--|--------------------|
| Ismail(86) | 1995 | RS | Suspected or known CAD | 115 | 0 (0) | 53 (11) | 42 (37) | NS | NS | NS | Bicycle exercise | Qualitative (no fixed / reversible WMA) | 5 |
| Kamaran(87) | 1995 | RS | Suspected or known CAD | 210 | 0 (0) | 60 (NS) | 84 (40) | NS | 55 (26) | NS | Dobutamine | Qualitative (no reversible WMA) | 4 |
| Krivokapich(88) | 1993 | RS | Suspected or known CAD | 360 | 0 (0) | 62 (13) | 237 (66) | NS | 127 (35) | 64 (18) | Treadmill exercise | Semi-quantitative (no reversible WMA) | 5 |
| Krivokapich(89) | 1999 | PS | Suspected or known CAD | 558 | 0 (0) | 67 (12) | 220 (39) | NS | 154 (28) | 129 (23) | Dobutamine (+ atropine) | Semi-quantitative (no reversible WMA) | 5 |
| Low(90) | 2004 | NS | Suspected CAD | 122 | 0 (0) | 60 (11) | 75 (62) | 0 (0) | 0 (0) | 0 (0) | Dobutamine (+ atropine) | NS (no fixed / reversible WMA) | 6 |
| Marcovitz(91) | 1996 | RS | Suspected or known CAD | 291 | NS (6) | 63 (12) | 146 (50) | NS | NS | NS | Dobutamine | Qualitative (no reversible WMA) | 5 |
| Marwick(92) § | 1998 | NS | Suspected or known CAD | 191 | 2 (1) | 63 (13) | 120 (62) | 59 (31) | NS | NS | Dobutamine (+ atropine) | Qualitative (no fixed / reversible WMA) | 4 |
| Mesa(93) | 1999 | RS | Suspected or known CAD | 100 | 0 (0) | 60 (13) | 0 (0) | 22 (22) | 1 (1) | 10 (10) | Dobutamine (+ atropine) | Qualitative (no reversible WMA) | 6 |
| Olmos(94) | 1998 | PS | Suspected or known CAD | 225 | 23 (9) | 56 (12)† | 189 (76)† | NS | 86 (35)† | 57 (23)† | Treadmill exercise | Semi-quantitative (no fixed / reversible WMA) | 5 |
| Pingitore(95) | 1999 | PS | Suspected or known CAD | 460 | 23 (4)† | 60 (10) | 379 (82) | NS | 279 (61) | NS | Dipyridamole (+ atropine) | Semi-quantitative (no reversible WMA) | 5 |
| Sawada(65) | 1990 | RS | Suspected CAD | 148 | 22 (13) | 53 (11) | 77 (52) | 0 (0) | 0 (0) | 0 (0) | Treadmill exercise | Qualitative (no fixed / reversible WMA) | 4 |
| Sawada(96) | 2009 | PS | Suspected or known CAD | 318 | 6 (2) | 59 (12) | 153 (47) | NS | 94 (29) | 16 (5) | Dobutamine | Semi-quantitative (no reversible WMA) | 5 |
| Song(97) | 2002 | RS | Suspected or known CAD | 650 | 42 (6) | 54 (10) | 427 (66) | NS | NS | 0 (0) | Ergonovine | Semi-quantitative (no reversible WMA) | 5 |
| Srivastava(98) | 2008 | RS | Suspected or known CAD | 727 | 0 (0) | 71 (NS) | 299 (41) | 218 (30) | 158 (22) | 151 (21) | Dobutamine (+ atropine) | Semi-quantitative (no fixed and no reversible WMA) | 6 |
| Steinberg(99) | 1997 | PS | Suspected or known CAD | 120 | 0 (0) | 67 (10) | 119 (99) | NS | 27 (23) | 4 (3) | Dobutamine | Qualitative (no reversible WMA) | 5 |
| Yao(100) | 2003 | PS | Suspected or known CAD | 1500 | NS (2) | 59 (13) | 762 (51) | NS | 248 (17) | 260 (17) | Dobutamine + atropine (66) / Treadmill exercise (34) | Semi-quantitative (no fixed / reversible WMA) | 5 |
| Yao(101) | 2010 | RS | Suspected or known CAD | 3121 | 0 (0) | 60 (13) | 1494 (48) | NS | 510 (16) | 348 (11) | Dobutamine + atropine (59) / Treadmill exercise (41) | Semi-quantitative (no fixed / reversible WMA) | 5 |

| Author (ref. #) | Year | Design | Selection | N | Lost to follow-up, N (%) | Mean age, y (SD) | Male, N (%) | History of CAD, N (%) | History of MI, N (%) | History of revasc, N (%) | Stressor (%) | Definition 'no ischemia' | Quality assessment |
|-----------------|------|--------|------------------------|-----|--------------------------|------------------|-------------|-----------------------|----------------------|--------------------------|------------------|---|--------------------|
| Zagatina(102) | 2013 | RS | Suspected or known CAD | 323 | NS | 54 (8) | 247 (76) | 255 (79) | 159 (49) | NS | Bicycle exercise | Semi-quantitative (no fixed / reversible WMA) | 4 |

CAD=coronary artery disease, MI=myocardial infarction, N=number of patients, NS=not specified, PS=prospective, Revasc=revascularization, RS=retrospective, SD=standard deviation, WMA=wall motion abnormalities.

† Based on entire population (and not just the population that was followed up).

§ Specific study population.

eTable 6b. Stress echocardiography – absolute number of adverse cardiovascular events

| Author (ref. #) | Follow-up, years (SD) | N | Negative test | | | | | Cardiac death + MI (AER, %) | Population event risk | | |
|---------------------|-----------------------|------|---------------------|----|--------|-----|-----------|-----------------------------|-----------------------|-----------------------------|--|
| | | | Death/Cardiac death | MI | Revasc | UAP | N | | Cardiac death + MI | Cardiac death + MI (AER, %) | |
| Afridi(72) | 0.8 (NS) | 67 | NS / NS | NS | NS | NS | 3 (5.6%) | 77 | 7 | 11.4% | |
| Almeida(73) | 1.3 (NS) | 128 | 0 / 0 | 0 | NS | NS | 0 (0.0%) | 147 | 0 | 0.0% | |
| Anthopoulos(74) | 1.2 (0.6) | 38 | NS / 0 | 0 | NS | NS | 0 (0.0%) | 120 | 13 | 9.0% | |
| Baldini(75) | 0.8 (0.6) | 27 | NS / 0 | 2 | NS | NS | 2 (9.3%) | 112 | 28 | 31.3% | |
| Bholasingh(76) | 0.5 (NS) | 351 | NS / 1 | 0 | 7 | 6 | 1 (0.6%) | 377 | 4 | 2.1% | |
| Biagini(77) § | 6.5 (NS) | 759 | NS / NS | NS | NS | NS | 92 (1.9%) | 1434 | 294 | 3.2% | |
| Bouzas-Mosquera(51) | 4.5 (3.4) | 3335 | NS / NS | NS | NS | NS | NS (0.8%) | 4004 | 183 | 1.0% | |
| Calasans(52) | 6.3 (1.4) | 329 | NS / NS | NS | NS | NS | 11 (0.5%) | 397 | 16 | 0.6% | |
| Chuah(78) | 2.0 (0.8) | 539 | NS / 30 | 12 | NS | NS | 42 (3.9%) | 860 | 86 | 5.0% | |
| Chung(79) | 2.7 (1.1) | 233 | NS / 4 | 1 | 7 | NS | 5 (0.8%) | | | | |
| Ciaroni(80) | 5.3 (0.6) | 71 | NS / 0 | 0 | 1 | 1 | 0 (0.0%) | 94 | 6 | 1.2% | |
| Coletta(55) | 1.3 (0.7) | 222 | NS / 2 | 2 | NS | 6 | 4 (1.4%) | 268 | 15 | 4.3% | |
| Colon(81) | 1.1 (0.6) | 100 | NS / 0 | 0 | NS | NS | 0 (0.0%) | 108 | 0 | 0.0% | |
| Cordovil(82) | 2.3 (NS) | 205 | NS / 2 | 3 | 7 | NS | 5 (1.1%) | 300 | 15 | 2.2% | |
| Cortigiani(83) | 2.8 (NS) | 1273 | NS / 19 | 41 | 56 | NS | 60 (1.7%) | 1733 | 113 | 2.3% | |
| Davar(84) | 1.1 (NS) | 72 | 0 / 0 | 0 | 0 | 0 | 0 (0.0%) | | | | |
| Hartlage(37) | 0.9 (0.1–1.6) | 164 | 0 / 0 | 1 | 0 | 1 | 1 (0.7%) | 166 | 1 | 0.7% | |
| Isma'eel(85) | 2.0 (0) | 35 | 2 / 1 | 2 | 6 | 2 | 3 (4.3%) | 45 | 4 | 4.4% | |
| Ismail(86) | 1.9 (NS) | 115 | NS / 0 | 3 | 1 | 1 | 3 (1.4%) | | | | |
| Kamaran(87) | 0.7 (NS–NS) | 147 | 5 / 1 | 0 | 6 | NS | 1 (1.0%) | 210 | 30 | 20.4% | |

| Author (ref. #) | Follow-up, years (SD) | N | Death/Cardiac death | Negative test | | | | Cardiac death + MI (AER, %) | Population event risk | | |
|-----------------|-----------------------|------|---------------------|---------------|--------|-----|-----------|-----------------------------|-----------------------|-----------------------------|--|
| | | | | MI | Revasc | UAP | N | | Cardiac death + MI | Cardiac death + MI (AER, %) | |
| Krivokapich(88) | 1.0 (NS) | 295 | NS / 2 | 7 | 25* | NS | 9 (3.1%) | 360 | 16 | 4.4% | |
| Krivokapich(89) | 1.0 (NS) | 422 | NS / 13 | 14 | 26 | NS | 27 (6.4%) | 558 | 52 | 9.3% | |
| Low(90) | 4.1 (1.6) | 122 | NS / 1 | 3 | 5 | NS | 4 (0.8%) | | | | |
| Marcovitz(91) | 1.3 (0.3) | 148 | 15 / 5 | 3 | NS | NS | 8 (4.2%) | 291 | 29 | 7.7% | |
| Marwick(92) § | 3.2 (1.2) | 51 | NS / 2 | 1 | 1 | NS | 3 (1.8) | 191 | 24 | 3.9% | |
| Mesa(93) | 2.0 (0.9) | 100 | 6 / 0 | 0 | 2 | NS | 0 (0.0%) | NS | NS | | |
| Olmos(94) | 3.7 (2.0) | 117 | NS / 1 | 3 | 5 | 3 | 4 (0.9%) | 225 | 15 | 1.8% | |
| Pingitore(95) | 3.2 (1.8) | 253 | NS / 6 | 13 | 22 | NS | 19 (2.3%) | 460 | 40 | 2.7% | |
| Sawada(65) | 2.4 (0.7) | 148 | NS / 0 | 2 | 4 | NS | 2 (0.6%) | | | | |
| Sawada(96) | 5.3 (3.1) | 206 | NS / NS | NS | NS | NS | 56 (5.1%) | 318 | 107 | 6.3% | |
| Song(97) | 3.8 (1.9) | 413 | NS / 3 | 4 | 3* | 4 | 7 (0.4%) | 650 | 19 | 0.8% | |
| Srivastava(98) | 3.3 (1.5) | 727 | NS / 12 | 52 | NS | NS | 64 (2.7%) | | | | |
| Steinberg(99) | 5.0 (NS) | 42 | 4 / 0 | 2 | 12* | NS | 2 (1.0%) | 120 | 12 | 2.0% | |
| Yao(100) | 2.7 (1.0) | 1075 | NS / NS | NS | NS | NS | NS (0.9%) | 1500 | 74 | 1.8% | |
| Yao(101) | 2.8 (1.1) | 2072 | NS / NS | NS | NS | NS | NS (0.8%) | 3121 | 161 | 1.8% | |
| Zagatina(102) | 5.2 (0.2) | 105 | NS / 1 | 5 | 3* | NS | 6 (1.1%) | 323 | 48 | 2.9% | |

AER=annual event rate, MI=myocardial infarction, N=number of patients, NS=not specified, Revasc=revascularization, SD=standard deviation, UAP=unstable angina pectoris.

* Represents (possible) early revascularizations.

§ Specific study population.

eTable 7a. Single-photon Emission Computed Tomography (SPECT) – patient and study characteristics

| Author (ref. #) | Year | Design | Selection | N | Lost to follow-up, N (%) | Mean age, y (SD) | Male, N (%) | History of CAD, N (%) | History of MI, N (%) | History of revasc, N (%) | Tracer | Stressor (%) | Definition 'no ischemia' | Quality assessment |
|-------------------------------|------|--------|------------------------|------|--------------------------|------------------|-------------|-----------------------|----------------------|--------------------------|--------------------|---|---|--------------------|
| Acampa(103) | 2014 | RS | Suspected or known CAD | 828 | 44 (5) | 60 (NS) | 470 (57) | NS | 160 (19) | 239 (29) | Tc-99m MIBI | Treadmill exercise (59) / Dipyridamole (41) | Semi-quantitative (SSS < 3) | 5 |
| Akinboboye(104) | 2001 | RS | Suspected or known CAD | 529 | NS | 57 (16) | NS (29) | NS | NS (11) | 0 (0) | Thallium-201 | Treadmill exercise (73) / Dipyridamole (29) / Dobutamine (9) | NS (included only 'normal' scans) | 4 |
| Basic(105) | 2006 | PS | Suspected or known CAD | 51 | 0 (0) | 60 (11) | 34 (67) | 26 (51) | 4 (8) | NS | Tc-99m MIBI | Dipyridamole | Semi-quantitative (included only 'normal perfusion') | 5 |
| Bom(106) | 2014 | NS | Suspected CAD | 762 | NS | 63 (12) | 319 (42) | 0 (0) | 0 (0) | 0 (0) | Tc-99m Tetrofosmin | Adenosine (80) / Adenosine + exercise (16) / Dobutamine (2) / Dobutamine + atropine (1) | Qualitative (no fixed / reversible defect) | 5 |
| Bucerius(107) | 2009 | RS | Suspected or known CAD | 90 | 1 (1) | 75 (4) | 54 (60) | 46 (51) | 21 (23) | 33 (37) | Tc-99m MIBI | Bicycle exercise | Semi-quantitative (SDS < 2) | 6 |
| Boyne(108) | 1997 | PS | Suspected or known CAD | 229 | 26 (10) | 58 (12) | 114 (50) | NS | 54 (27) | NS | Tc-99m MIBI | Exercise | Qualitative and quantitative (no fixed / reversible defect) | 4 |
| Calnon(109) | 2001 | NS | Suspected or known CAD | 308 | 3 (1) | 62 (NS) | 142 (46) | NS | 93 (31) | 50 (16) | Tc-99m MIBI | Dobutamine | NS ('normal' scans) | 5 |
| Chatziioannou(54) § | 1999 | RS | Suspected or known CAD | 388 | NS | 54 (10) | 337 (87) | 224 (58) | 67 (17) | 155 (40) | Tc-99m MIBI | Treadmill exercise | Qualitative (no fixed / reversible defect) | 4 |
| Dawson(110) | 2009 | PS | Suspected or known CAD | 261 | NS | 64 (NS) | 131 (50) | 134 (52) | 99 (38) | NS | Tc-99m MIBI | Dipyridamole | Qualitative (no fixed / reversible defect) | 4 |
| Dona(111) | 2011 | PS | Suspected or known CAD | 114 | 3 (5) | 67 (NS) | 67 (59) | NS | NS | 43 (38) | Tc-99m MIBI | Bicycle exercise / Dipyridamole | Semi-quantitative (SDS ≤ 1) | 5 |
| Doukky(112) | 2013 | PS | Suspected or known CAD | 1236 | 14 (1) | 58 (12) | 642 (52) | 79 (6) | 10 (1) | 74 (6) | Tc-99m MIBI | Treadmill exercise / Adenosine (+ low-level exercise) | Semi-quantitative (SSS = 0) | 6 |
| Ferreira(113) | 2013 | RS | Suspected or known CAD | 790 | 67 (8) | 63 (12) | 378 (48) | 190 (24) | NS | 157 (20) | Tc-99m Tetrofosmin | Adenosine (68) / Exercise (32) | Semi-quantitative (SSS ≤ 1) | 5 |
| Filipiak-Strzecka(114) | 2013 | RS | Suspected or known CAD | 732 | 0 (0) | 57 (9) | 299 (41) | NS | 109 (15) | 75 (10) | Tc-99m MIBI | Treadmill exercise | Qualitative (no reversible defect) | 5 |

| Author (ref. #) | Year | Design | Selection | N | Lost to follow-up, N (%) | Mean age, y (SD) | Male, N (%) | History of CAD, N (%) | History of MI, N (%) | History of revasc, N (%) | Tracer | Stressor (%) | Definition 'no ischemia' | Quality assessment |
|--------------------------|------|--------|------------------------|------|--------------------------|------------------|-------------|-----------------------|----------------------|--------------------------|---|--|--|--------------------|
| Galassi(115) | 2001 | NS | Suspected or known CAD | 459 | 56 (11) | 58 (10) | 357 (78) | NS | 252 (55) | 40 (9) | Tc-99m Tetrofosmin | Treadmill exercise | Semi-quantitative (SSS = 0) | 4 |
| Gentile(116) | 2001 | PS | Suspected CAD | 124 | 8 (6) | 71 (NS)& | 90 (68)& | 0 (0) | 0 (0) | 0 (0) | Thallium-201 | Bicycle exercise (89) / Dipyridamole (18) | Qualitative (no reversible defect) | 5 |
| Gibbons(117) \$ | 1999 | RS | Suspected or known CAD | 4473 | 176 (4) | 61 (11) | 2046 (46) | NS | 241 (5) | 0 (0) | Thallium-201 / Tc-99m MIBI | Treadmill exercise | NS (included only 'normal stress scans') | 4 |
| Gibson(118) | 2002 | PS | Suspected CAD | 652 | 77 (11) | 52 (13) | 224 (34) | 0 (0) | 0 (0) | 0 (0) | Tc-99m MIBI | Treadmill exercise (93) / Dipyridamole (7) | NS (no fixed / reversible defect) | 5 |
| Groutars(119) | 2002 | PS | Suspected or known CAD | 597 | 13 (2) | 62 (11) | 348 (58) | NS | 193 (32) | 178 (30) | Rest Thallium 201 / stress Tc-99m Tetrofosmin | Adenosine (58) / Bicycle exercise (42) | Semi-quantitative (SSS < 4) | 5 |
| Hachamovitch(120) | 1997 | RS | Suspected or known CAD | 1079 | 71 (6)& | 70 (NS) | 542 (50) | NS | 346 (32) | 362 (34) | Rest Thallium-201 / stress Tc-99m MIBI | Adenosine | Semi-quantitative (SSS < 4) | 5 |
| Hage(121) \$ | 2006 | NS | NS | 65 | NS | 66 (13) | 13 (20) | NS | 0 (0) | 0 (0) | Tc-99m MIBI / Tetrofosmin | Adenosine | Qualitative (included only 'normal' scans) | 3 |
| Hakeem(122) | 2008 | NS | Suspected or known CAD | 1084 | NS | 63 (10) | 1029 (95) | 417 (40) | 194 (19) | 328 (31) | Tc-99m MIBI / Tetrofosmin | Adenosine (68) / Treadmill exercise (32) | Semi-quantitative (SSS < 4) | 5 |
| Iqbal(123) | 2012 | RS | Suspected or known CAD | 2000 | 0 (0) | 59 (12) | 900 (45) | 481 (24) | 133 (7) | 362 (18) | Tc-99m MIBI | Adenosine (50) / Regadenoson (50) | NS (included only 'normal perfusion pattern') | 6 |
| Jeong(124) \$ | 2013 | RS | Suspected CAD | 337 | 42 (11) | 61 (9) | 184 (50) | 0 (0) | 0 (0) | 0 (0) | Thallium-201 rest / Tc99m MIBI stress | Dipyridamole | NS (included only 'normal perfusion') | 4 |
| Kaminek(125) | 2002 | NS | Suspected or known CAD | 149 | NS | 54 (9) | 114 (77) | NS | 73 (49) | NS | Thallium-201 | Bicycle exercise | Qualitative (no reversible defect) | 3 |
| Klondas(126) \$ | 2003 | NS | Suspected or known CAD | 49 | NS | 67 (10) | 6 (12) | NS | 1 (2) | 5 (10) | Thallium-201 / Tc-99m MIBI | Dipyridamole (51) / Adenosine (49) | NS (included only 'normal' scans) | 3 |
| Koehli(127) | 2006 | RS | Suspected or known CAD | 200 | 5 (3) | 65 (10) | 114 (57) | 50 (25) | NS | NS | Rest Thallium-201 / stress Tc-99m MIBI | Bicycle exercise (41) / Dipyridamole (53) / Dobutamine +atropine (3) / Adenosine (5) | Semi-quantitative (no fixed / reversible defect) | 5 |

| Author (ref. #) | Year | Design | Selection | N | Lost to follow-up, N (%) | Mean age, y (SD) | Male, N (%) | History of CAD, N (%) | History of MI, N (%) | History of revasc, N (%) | Tracer | Stressor (%) | Definition 'no ischemia' | Quality assessment |
|---------------------------|------|--------|------------------------|------|--------------------------|------------------|-------------|-----------------------|----------------------|--------------------------|----------------------------|---|--|--------------------|
| Leslie(128) | 2005 | RS | NS | 718 | NS | 60 (11) | NS | NS | NS (26) | NS | Tc-99m MIBI | Treadmill exercise (77) / Dipyridamole (15) / Dipyridamole + exercise (7) | Qualitative (no reversible defect) | 4 |
| Lima(129) | 2004 | RS | Suspected CAD | 321 | 7 (2) | 79 (3) | 121 (38) | 0 (0) | 0 (0) | 0 (0) | Tc-99m MIBI | Dipyridamole (50) / Treadmill exercise (50) | Semi-quantitative (no reversible defect) | 6 |
| Miernik(130) \$ | 2012 | PS | Suspected or known | 115 | 0 (0) | 58 (9) | 0 (0) | NS | 0 (0) | 0 (0) | Tc-99m MIBI | Treadmill exercise | Quantitative (<10% reversible perfusion defect) | 3 |
| Mouden(131) \$ | 2014 | RS | Suspected CAD | 282 | 0 (0) | 69 (9) | 177 (63) | 0 (0) | 0 (0) | 0 (0) | Tc-99m Tetrofosmin | Adenosine (+ low-level exercise) (95) / Dobutamine (5) | Semi-quantitative (no reversible defect) | 5 |
| Nabi(132) \$ | 2012 | PS | Suspected or known CAD | 1561 | 15 (1) | 56 (14) | 663 (42) | 189 (12) | NS | NS | NS (Tc-99m) | Adenosine (92) / Treadmill exercise (8) / Dobutamine (0.2) | Quantitative (no fixed or reversible defect) | 3 |
| Nishimura(133) | 2008 | PS | Suspected or known CAD | 4031 | 223 (5) | 66 (10) | 2580 (64) | NS | 1172 (29) | 1436 (36) | Tc-99m Tetrofosmin | Exercise (69) / Dipyridamole (15) / Adenosine (14) | Semi-quantitative (SSS < 4) | 5 |
| Olmos(94) | 1998 | PS | Suspected or known CAD | 225 | 23 (9) | 56 (12)& | 189 (76)& | NS | 86 (35)& | 57 (23)& | Thallium-201 | Treadmill exercise | Semi-quantitative (no reversible defect) | 5 |
| Otsuka(134) | 2014 | PS | NS | 543 | 24 (4) | 65 (NS) | 334 (62) | NS | 0 (0) | 0 (0) | Thallium-201 | Bicycle exercise | Qualitative ('without any perfusion abnormalities) | 4 |
| Pazhenkottil(135) | 2011 | RS | Suspected or known CAD | 876 | NS | 65 (11) | 558 (64) | 343 (39) | NS | NS | Tc-99m Tetrofosmin | Adenosine | Semi-quantitative (SSS < 1) | 4 |
| Petix(136) | 2005 | PS | Suspected or known CAD | 333 | 4 (0.0) | 63 (10) | 217 (65) | NS | 126 (38) | 87 (26) | Tc-99m MIBI | Bicycle exercise (75) / Dipyridamole (25) | Semi-quantitative (SSS < 4) | 5 |
| Raziei(137) | 2011 | PS | Suspected or known CAD | 1047 | NS | 60 (12) | 248 (24) | NS | 9 (1) | 0 (0) | Tc-99m MIBI | Dipyridamole (63) / Treadmill exercise (37) / Dobutamine (0.4) | NS (included only 'normal' scans) | 4 |
| Romero-Farina(138) | 2015 | NS | Suspected or known CAD | 2922 | NS | 63 (13) | 1275 (44) | 508 (17) | NS | NS | Tc-99m Tetrofosmin | Exercise (70) (+ dipyridamole (16))/Dipyridamole (14) | Semi-quantitative (no fixed / reversible defect) | 4 |
| Sharma(139) \$ | 2010 | RS | Suspected CAD | 76 | 4 (5%) | 66 (9) | 10 (13) | 0 (0) | 0 (0) | 0 (0) | Thallium-201 / Tc-99m MIBI | Adenosine | Semi-quantitative (included only 'normal' MPI) | 5 |

| Author (ref. #) | Year | Design | Selection | N | Lost to follow-up, N (%) | Mean age, y (SD) | Male, N (%) | History of CAD, N (%) | History of MI, N (%) | History of revasc, N (%) | Tracer | Stressor (%) | Definition 'no ischemia' | Quality assessment |
|----------------------|------|--------|------------------------|--------|--------------------------|------------------|-------------|-----------------------|----------------------|--------------------------|----------------------------|--|--|--------------------|
| Schinkel(140) | 2002 | PS | Suspected or known CAD | 473 | 3 (1)& | 61 (12) | 273 (58) | NS | 210 (44) | 167 (35) | Tc-99m MIBI | Dobutamine (+atropine) | Semi-quantitative (no fixed / reversible defect) | 5 |
| Schinkel(141) | 2002 | PS | Suspected or known CAD | 693 | 2 (0.3)& | 60 (10) | 419 (60) | NS | 194 (28) | 211 (30) | Tc-99m Tetrofosmin | Dobutamine (+atropine) | Semi-quantitative (no fixed / reversible defect) | 5 |
| Shimoni(142) § | 2010 | PS | Suspected or known CAD | 53 | 0 (0) | 75 (7)& | 43 (74)& | NS | 17 (29)& | 23 (40)& | Thallium-201 | Dipyridamole | NS (no fixed / reversible defect) | 4 |
| Simonsen(143) | 2013 | NS | Suspected or known CAD | 2157 | 7 (0.3) | 61 (0) | 1152 (53) | 720 (33) | 394 (18) | 619 (29) | Tc-99m MIBI | Exercise / Adenosine / Dipyridamole / Dobutamine | Semi-quantitative (SSS < 4) | 6 |
| Soman(144) | 1999 | RS | Suspected or known CAD | 435 | 35 (8) | 57 (10) | NS (56) | 28 (6)& | NS | 24 (5)& | Tc-99m MIBI | Treadmill exercise (90) / Dipyridamole (10) | NS (included only 'normal' scans) | 5 |
| Stratmann(145) | 1994 | RS | Suspected or known CAD | 534 | 20 (3) | 65 (9) | 519 (97) | NS | 197 (37) | 107 (20) | Tc-99m MIBI | Dipyridamole | Qualitative (no reversible defect) | 5 |
| Stratmann(146) | 1994 | RS | Suspected or known CAD | 521 | 10 (2) | 59 (NS) | 511 (98) | 190 (36) | 184 (35) | 132 (25) | Tc-99m MIBI | Treadmill exercise | Qualitative (no reversible defect) | 6 |
| Sugihara(147) | 1998 | PS | Suspected or known CAD | 182 | 0 (0) | 68 (11) | 105 (58) | NS | NS | NS | Tc-99m MIBI | Treadmill exercise | Qualitative (no reversible defect) | 4 |
| Travin(148) | 1997 | PS | Suspected or known CAD | 2228 | 149 (6) | 63 (NS) | 1226 (52) | NS | 711 (30) | 308 (13) | Tc-99m MIBI | Treadmill exercise (64) / Dipyridamole (43) | Semi-quantitative (no fixed / reversible defect) | 5 |
| Travin(149) | 2004 | RS | Suspected or known CAD | 3207 | 332 (9) | 62 (13) | 1620 (51) | 937 (29) | 777 (24) | 789 (25) | Tc-99m MIBI | Treadmill exercise (59)/Dipyridamole (36)/Dobutamine (5)/Adenosine(<1) | Semi-quantitative (SSS = 0) | 6 |
| Uebles(150) | 2009 | PS | Known CAD | 260 | 1 (0.4) | 60 (10) | 174 (67) | 260 (100) | 57 (22) | 89 (34) | Tc-99m MIBI | Bicycle (62) / Pharmacological stress (38) | Semi-quantitative (SDS < 5) | 6 |
| Uthamalingam (151) § | 2013 | NS | Suspected CAD | 43 | 0 (0) | 73 (9) | 10 (23) | 0 (0) | 0 (0) | 0 (0) | Tc-99m MIBI | Regadenoson | NS (included only 'normal' scans) | 5 |
| Vanzetto(66) | 1999 | RS | Suspected or known CAD | 1137 | 45 (4) | 55 (9) | 857 (75) | NS | 270 (24) | 239 (21) | Thallium-201 | Bicycle exercise | Qualitative (no fixed / reversible defect) | 5 |
| Wolak(152) | 2014 | RS | Suspected CAD | 11,812 | NS | 61 (NS) | 4928 (42) | 0 (0) | 0 (0) | 0 (0) | Thallium-201 / Tc-99m MIBI | Treadmill exercise / Dipyridamole / Dobutamine | Quantitative (perfusion defect <5%) | 5 |

| Author (ref. #) | Year | Design | Selection | N | Lost to follow-up, N (%) | Mean age, y (SD) | Male, N (%) | History of CAD, N (%) | History of MI, N (%) | History of revasc, N (%) | Tracer | Stressor (%) | Definition 'no ischemia' | Quality assessment |
|------------------|------|--------|------------------------|-----|--------------------------|------------------|-------------|-----------------------|----------------------|--------------------------|-------------|------------------|--|--------------------|
| Yang(153) | 2006 | RS | Suspected or known CAD | 155 | 4 (3) | 54 (NS) | 117 (75) | 88 (57) | 0 (0) | 0 (0) | Tc-99m MIBI | Bicycle exercise | Qualitative (no fixed / reversible defect) | 6 |
| Zanco(67) | 1995 | PS | Suspected or known CAD | 147 | 29 (7) | 53 (9) | 121 (82) | NS | 61 (41) | NS | Tc-99m MIBI | Bicycle exercise | Semi-quantitative (no reversible defect) | 4 |

CAD=coronary artery disease, MI=myocardial infarction, N=number of patients, NS=not specified, PS=prospective, Revasc=revascularization, RS=retrospective, SD=standard deviation, SDS=summed difference score, SSS=summed stress score.

† Based on entire population (and not just the population that was followed up).

§ Specific study population.

eTable 7b. Single-photon Emission Computed Tomography (SPECT) – absolute number of adverse cardiovascular events

| Author (ref. #) | Follow-up, years (SD) | N | Death/Cardiac death | Negative test | | | | Cardiac death + MI (AER, %) | Population event risk | | |
|-------------------------------|-----------------------|------|---------------------|---------------|--------|-----|-----------|-----------------------------|-----------------------|-----------------------------|--|
| | | | | MI | Revasc | UAP | N | | Cardiac death + MI | Cardiac death + MI (AER, %) | |
| Acampa(103) | 4.4 (3.7-5.3) | 828 | NS / 13 | 11 | NS | NS | 24 (0.7%) | | | | |
| Akinboboye(104) | 1.5 (0.5) | 529 | NS / 11 | 7 | NS | NS | 18 (2.3%) | | | | |
| Basic(105) | 2.4 (NS) | 27 | NS / 0 | 0 | 0 | 0 | 0 (0.0%) | 51 | 2 | 1.6% | |
| Bom(106) | 2.0 (NS) | 762 | 15 / 1 | 8 | 33 | NS | 9 (0.6%) | | | | |
| Bucerius(107) | 2.7 (1.1) | 44 | NS / 1 | 1 | 4 | NS | 2 (1.7%) | 90 | 6 | 2.5% | |
| Boyne(108) | 1.6 (0.4) | 155 | 0 / 0 | 2 | NS | NS | 2 (0.8%) | 229 | 2 | 0.5% | |
| Calnon(109) | 1.9 (1.1) | 150 | 20 / 2 | 5 | 0 | NS | 7 (2.5%) | 308 | 33 | 5.6% | |
| Chatziannou(54) | 1.5 (0.2) | 231 | NS / 0 | 0 | 4 | NS | 0 (0.0%) | 388 | 5 | 0.9% | |
| Dawson(110) | 1.2 (0.4) | 172 | NS / 3 | 4 | NS | NS | 7 (3.4%) | 261 | 22 | 7.0% | |
| Dona(111) | 1.8 (0.8) | 114 | NS / 1 | 2 | 15 | NS | 3 (1.5%) | | | | |
| Doukky(112) | 2.3 (0.8) | 1236 | 18 / 5 | 6 | 23* | NS | 11 (0.4%) | | | | |
| Ferreira(113) | 3.6 (1.1) | 790 | 57 / 10 | 9 | 19 | NS | 19 (0.7%) | | | | |
| Filipiak-Strzecka(114) | 4.8 (0.7) | 421 | 11 / 5 | 22 | 23 | NS | 27 (1.3%) | 732 | 74 | 2.1% | |
| Galassi(115) | 3.2 (NS-NS) | 106 | 0 / 0 | 3 | 6 | NS | 3 (0.9%) | 459 | 35 | 2.4% | |
| Gentile(116) | 2.3 (NS) | 19 | 1 / 0 | 0 | 1 | NS | 0 (0.0%) | 124 | 12 | 4.2% | |
| Gibbons(117) | 3.0 (2.0) | 4473 | NS / 26 | 57 | 75 | NS | 83 (0.6%) | | | | |
| Gibson(118) | 1.9 (0.5) | 652 | 2 / 0 | 1 | 1 | 2 | 1 (0.1%) | | | | |
| Groutars(119) | 1.9 (0.8) | 278 | NS / 2 | 3 | NS | NS | 5 (0.9%) | 597 | 46 | 4.1% | |
| Hachamovitch(120) | 2.3 (0.8) | 445 | NS / 9 | 7 | NS | NS | 16 (1.6%) | 1079 | 120 | 4.8% | |
| Hage(121) | 2.0 (0.7) | 65 | 1 / 0 | 0 | 6 | NS | 0 (0.0%) | | | | |

| Author (ref. #) | Follow-up, years (SD) | N | Death/Cardiac death | Negative test | | | | Cardiac death + MI (AER, %) | Population event risk | | |
|--------------------|-----------------------|------|---------------------|---------------|--------|-----|-----------|-----------------------------|-----------------------|-----------------------------|--|
| | | | | MI | Revasc | UAP | N | | Cardiac death + MI | Cardiac death + MI (AER, %) | |
| Hakeem(122) | 2.1 (NS-NS) | 684 | 56 / 11 | 15 | NS | NS | 26 (1.8%) | 1048 | 79 | 3.6% | |
| Iqbal(123) | 2.0 (0.0) | 2000 | NS / NS | NS | NS | NS | 43 (1.1%) | | | | |
| Jeong(124) | 2.7 (1.0) | 337 | NS / NS | NS | NS | NS | 6 (0.7%) | | | | |
| Kaminek(125) | 1.7 (0.8) | 74 | NS / 4 | 0 | 8* | NS | 4 (3.2%) | 149 | 21 | 8.3% | |
| Klodos(126) | 2.3 (1.7) | 49 | 3 / 2 | 4 | 5 | NS | 6 (5.3%) | | | | |
| Koehli(127) | 3.0 (NS-NS) | 85 | NS / 0 | 0 | 2 | NS | 0 (0.0%) | 200 | 14 | 2.3% | |
| Leslie(128) | 5.6 (1.1) | 437 | NS / NS | NS | NS | NS | 27 (1.1%) | 718 | 79 | 2.0% | |
| Lima(129) | 2.8 (1.3) | 260 | NS / NS | NS | NS | NS | 16 (2.2%) | 321 | 35 | 3.9% | |
| Miernik(130) | 3.6 (2.6) | 95 | NS / 0 | 0 | 0 | NS | 0 (0.0%) | 115 | 0 | 0.0% | |
| Mouden (131) | 2.0 (0.9) | 177 | NS / 1 | NS | 35* | NS | 1 (0.3%) | 282 | 2 | 0.4% | |
| Nabi(132) | 0.6 (0.2) | 1441 | 0 / 0 | 8 | NS | NS | 8 (0.9%) | 1561 | 17 | 1.8% | |
| Nishimura(133) | 3.0 (0.0) | 1862 | NS / 11 | 15 | NS | NS | 26 (0.5%) | 4031 | 96 | 0.8% | |
| Olmos(94) | 3.7 (2.0) | 115 | NS / 1 | 3 | NS | NS | 4 (0.9%) | 225 | 15 | 1.8% | |
| Otsuka(134) | 3.4 (0.8) | 543 | NS / 3 | 9 | 11 | NS | 12 (0.6%) | | | | |
| Pazhenkottil(135) | 2.3 (0.6) | 43 | NS / 0 | 0 | NS | NS | 0 (0.0%) | 876 | 5 | 0.2% | |
| Petix(136) | 1.6 (1.3) | 79 | NS / NS | NS | NS | NS | NS (0.9%) | 333 | 30 | 5.6% | |
| Raziei(137) | 1.0 (0.0) | 1047 | 14 / 2 | 1 | 3 | NS | 3 (0.3%) | | | | |
| Romero-Farina(138) | 5.0 (3.3) | 2922 | 269 / NS | NS | NS | NS | 81 (0.6%) | | | | |
| Sharma(139) | 2.0 (1.1) | 76 | NS / 0 | 0 | 1 | NS | 0 (0.0%) | | | | |
| Schinkel(140) | 8.0 (1.4) | 161 | NS / NS | NS | NS | NS | NS (1.2%) | 473 | 101 | 2.7% | |
| Schinkel(141) | 3.1 (1.4) | 312 | NS / NS | NS | NS | NS | NS (1.5%) | 693 | 85 | 4.0% | |
| Shimoni(142) | 4.3 (NS-NS) | 10 | NS / 2 | 0 | 0 | 0 | 2 (4.7%) | | | | |

| Author (ref. #) | Follow-up, years (SD) | N | Negative test | | | | | Population event risk | | |
|-----------------|-----------------------|--------|---------------------|-----|--------|-----|-----------------------------|-----------------------|--------------------|-----------------------------|
| | | | Death/Cardiac death | MI | Revasc | UAP | Cardiac death + MI (AER, %) | N | Cardiac death + MI | Cardiac death + MI (AER, %) |
| Simonsen(143) | 6.2 (NS) | 1327 | NS / NS | NS | NS | NS | 54 (0.7%) | 2157 | 182 | 1.4% |
| Soman(144) | 2.5 (1.3) | 435 | NS / 2 | 0 | 5 | NS | 2 (0.2%) | | | |
| Stratmann(145) | 1.1 (0.4) | 372 | NS / NS | NS | NS | NS | 30 (7.3%) | 534 | 58 | 9.9% |
| Stratmann(146) | 1.1 (0.4) | 321 | NS / NS | NS | NS | NS | 8 (2.3%) | 521 | 24 | 4.2% |
| Sugihara(147) | 1.1 (0.6) | 157 | NS / 1 | 0 | 3 | 4 | 1 (0.6%) | 182 | 3 | 1.5% |
| Travin(148) | 1.3 (0.7) | 987 | NS / NS | NS | NS | NS | 15 (1.2%) | 2086 | 85 | 3.1% |
| Travin(149) | 2.2 (1.3) | 1970 | NS / 40 | 23 | NS | NS | 63 (1.5%) | 3207 | 180 | 2.6% |
| Uebleis(150) | 5.4 (2.9–8.2) | 174 | NS / NS | NS | NS | NS | 18 (1.9%) | 260 | 23 | 1.6% |
| Uthamalgam(151) | 1.2 (0.6) | 43 | 2 / 1 | 0 | 5* | NS | 1 (1.9%) | | | |
| Vanzetto(66) | 6.0 (1.5) | 388 | NS / 7 | 6 | NS | NS | 13 (0.6%) | 1137 | 103 | 1.5% |
| Wolak(152) | 6.0 (2.7) | 11,812 | 945 / 146 | 359 | NS | NS | 505 (0.7%) | | | |
| Yang(153) | 4.2 (1.6) | 155 | NS / 0 | 3 | 7 | NS | 3 (0.5%) | | | |
| Zanco(67) | 3.6 (NS) | 74 | NS / 1 | 2 | NS | NS | 3 (1.1%) | 147 | 9 | 1.7% |

AER=annual event rate, MI=myocardial infarction, N=number of patients, NS=not specified, Revasc=revascularization, SD=standard deviation, UAP=unstable angina pectoris.

* Represents (possible) early revascularizations.

Table: Annualized event rate of cardiac death and myocardial infarction in studies comparing two modalities.

| Author (ref. #) | Modality | Cardiac death + MI (AER, %) | Total n | Death/ cardiac death | MI | Revasc | UAP |
|--------------------|----------|-----------------------------|---------|----------------------|-----|--------|-----|
| Chen(6) | CCTA | 0.8% | 106 | NS/0 | 1 | NS | 0 |
| | CMRp | 0.0% | 108 | 0/0 | 0 | | NS |
| Cho(7) | CCTA | 0.0% | 2568 | NS/1 | 2 | 16 | 3 |
| | EET | 0.0% | 2489 | NS/1 | 3 | 48 | 2 |
| Dedic(12) | CCTA | 0.4% | 277 | NS/1 | 2 | 3 | 3 |
| | EET | 0.2% | 172 | NS/0 | 1 | 6 | 3 |
| Bouzas | EET | 1.0% | 4004 | 313/63 | 120 | 197 | NS |
| Mosquera(51) | SE | 0.8% | 3335 | NS/NS | NS | NS | NS |
| Calasans(52) | EET | 0.6% | 397 | 13//3 | 13 | NS | NS |
| | SE | 0.5% | 329 | NS/NS | NS | NS | NS |
| Coletta(55) | EET | 0.7% | 109 | 0/0 | 1 | NS | NS |
| | SE | 1.4% | 222 | NS/2 | 2 | NS | 6 |
| Sawada(65) | EET | 0.5% | 79 | 0/0 | 1 | 2 | NS |
| | SE | 0.6% | 148 | NS/0 | 2 | 4 | NS |
| Hartlage(37) | CMRp | 0.0% | 82 | 0/0 | 0 | 0 | 0 |
| | SE | 0.7% | 164 | 0/0 | 1 | 0 | 1 |
| Chatziinoannou(54) | EET | 0.5% | 288 | NS/NS | NS | 14 | NS |
| | SPECT | 0.0% | 231 | NS/0 | 0 | 4 | NS |
| Vanzetto(66) | EET | 1.0% | 601 | NS/16 | 19 | NS | NS |
| | SPECT | 0.6% | 388 | NS/7 | 6 | NS | NS |
| Zanco(67) | EET | 2.2% | 63 | NS/3 | 2 | NS | 6 |
| | SPECT | 1.1% | 74 | NS/1 | 2 | NS | NS |
| Olmos(94) | SE | 0.9% | 117 | NS/1 | 3 | 5 | 3 |
| | SPECT | 0.9% | 115 | NS/1 | 3 | NS | NS |

AER=annual event rate, MI=myocardial infarction, N=number of patients, NS=not specified, Revasc=revascularization, UAP=unstable angina pectoris.

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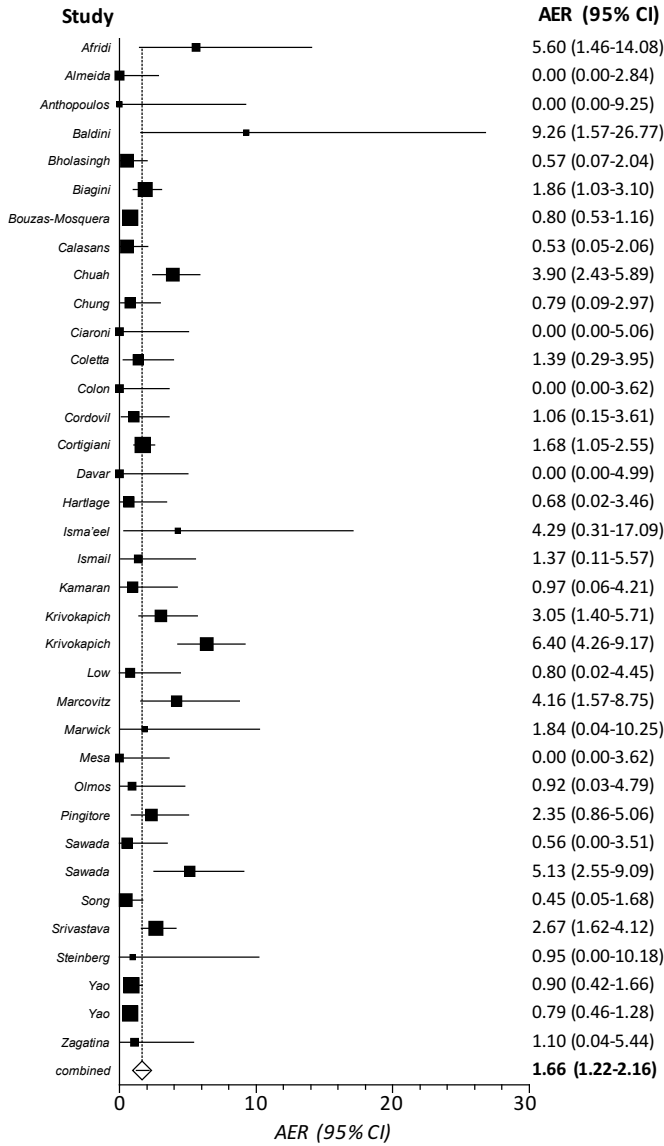
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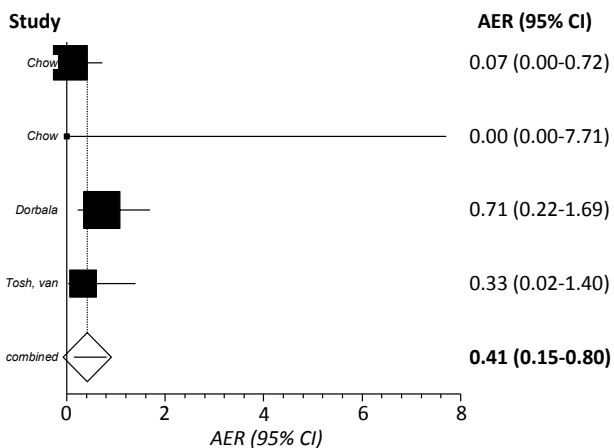
Appendix F

SE



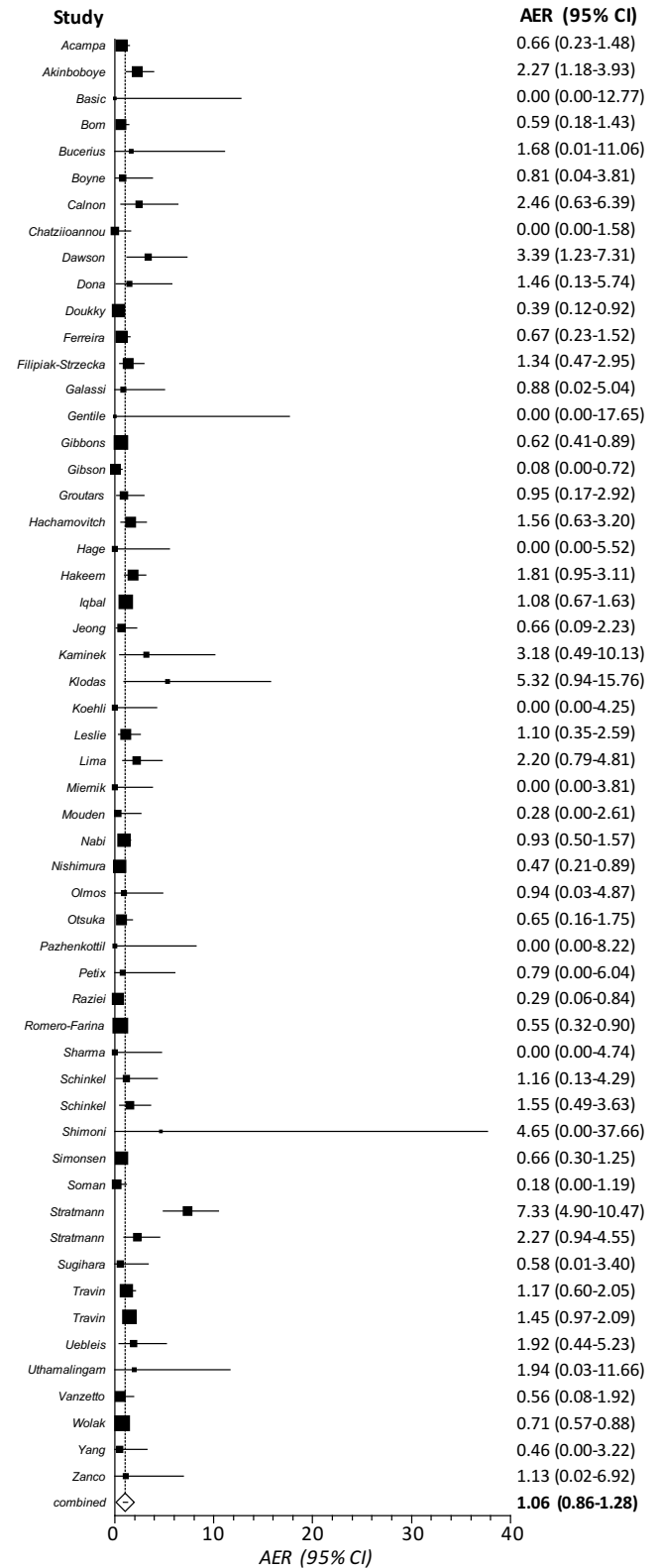
I^2 (inconsistency) Egger's regression test 72.4% 0.83
 p -value Egger test 0.02
 Tau² statistics 0.007016

PET



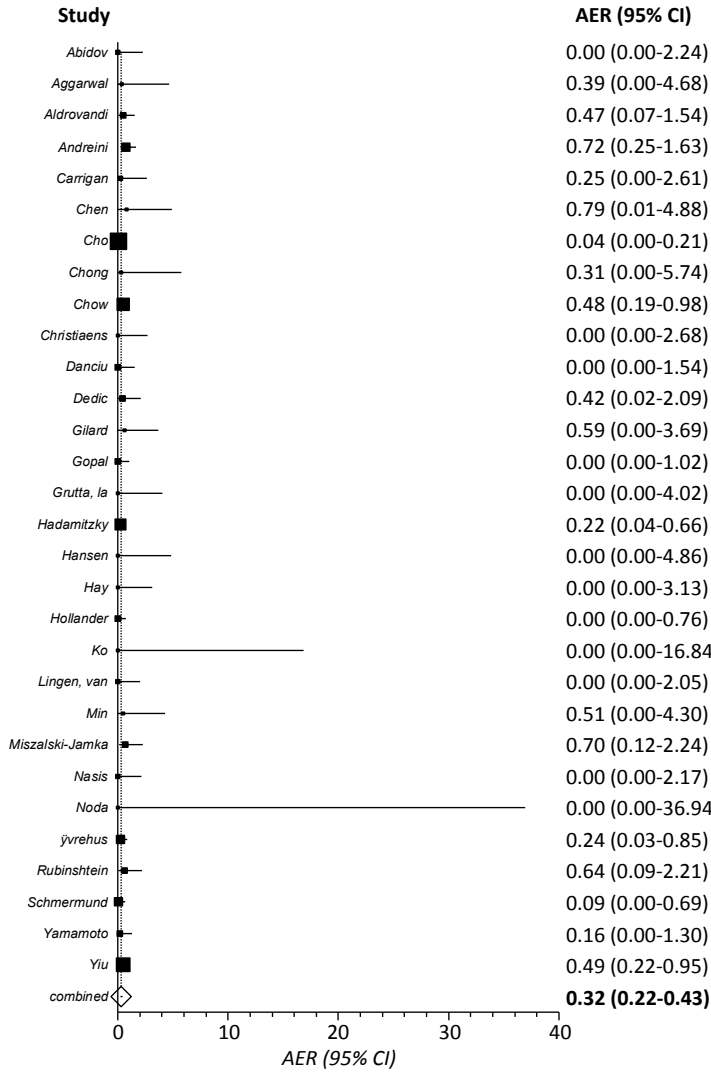
I^2 (inconsistency) Egger's regression test 13.1% 0.67
 p -value Egger test 0.561
 Tau² statistics 0.000373

SPECT



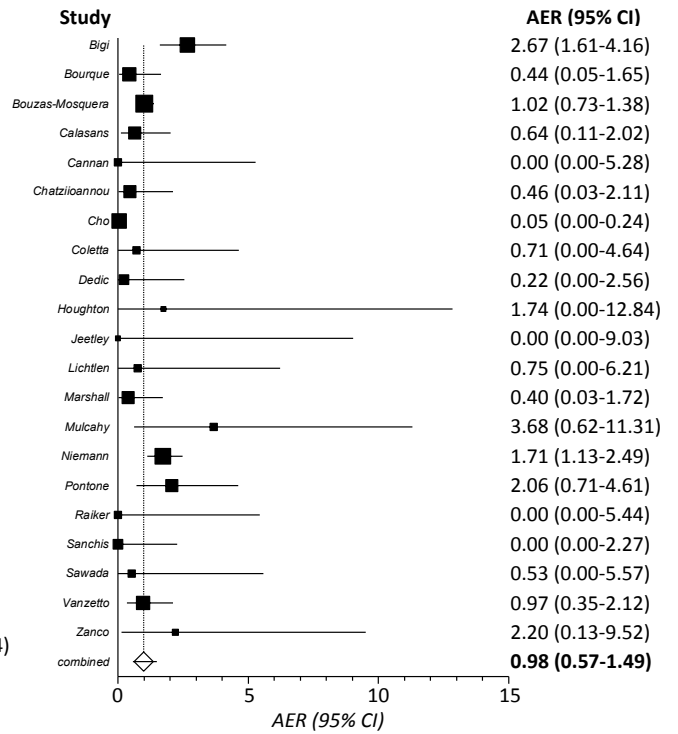
I^2 (inconsistency) Egger's regression test 65.2% 0.64
 p -value Egger test 0.006
 Tau² statistics 0.002655

CCTA



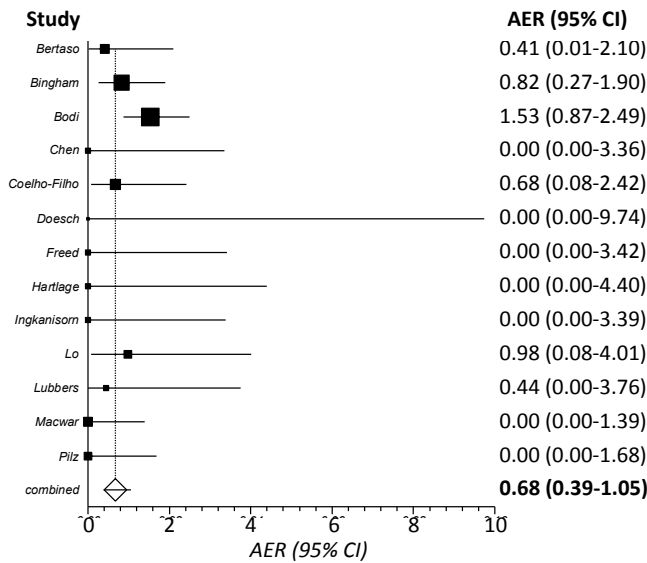
I² (inconsistency) Egger's regression p-value Egger test Tau² statistics
 9.9 % 0.44 0.02 0.00025

EET



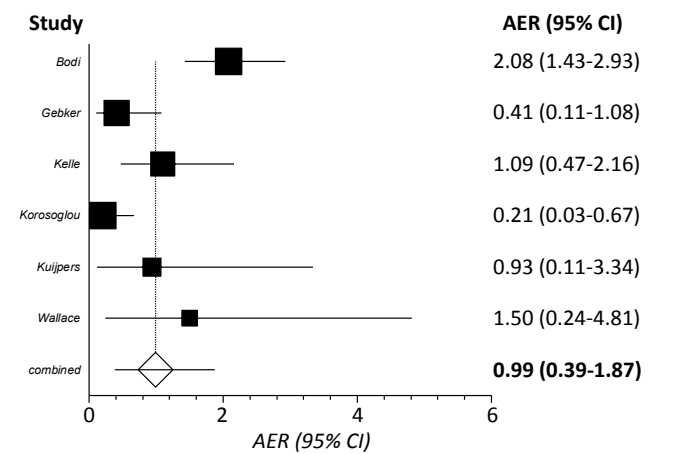
I² (inconsistency) Egger's regression p-value Egger test Tau² statistics
 76.5% 1.16 0.017 0.006604

CMR-perf



I² (inconsistency) Egger's regression p-value Egger test Tau² statistics
 19.8 % -0.34 0.632 0.001026

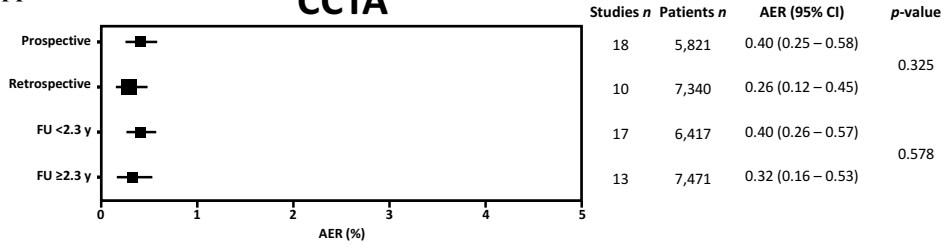
CMR-wm



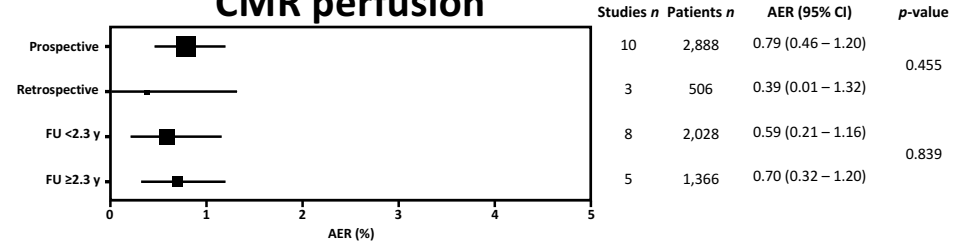
I² (inconsistency) Egger's regression p-value Egger test Tau² statistics
 83.1% 2.38 0.167 0.006725

Appendix G

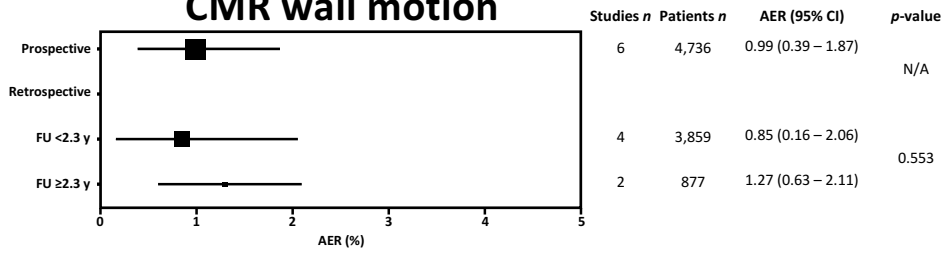
CCTA



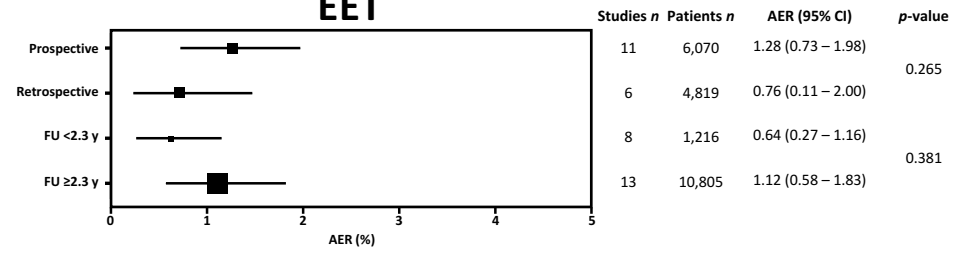
CMR perfusion



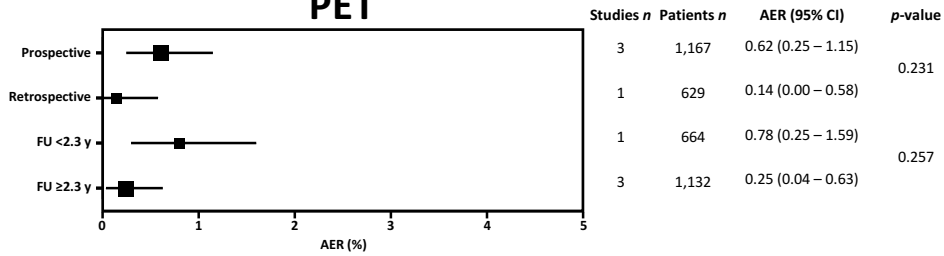
CMR wall motion



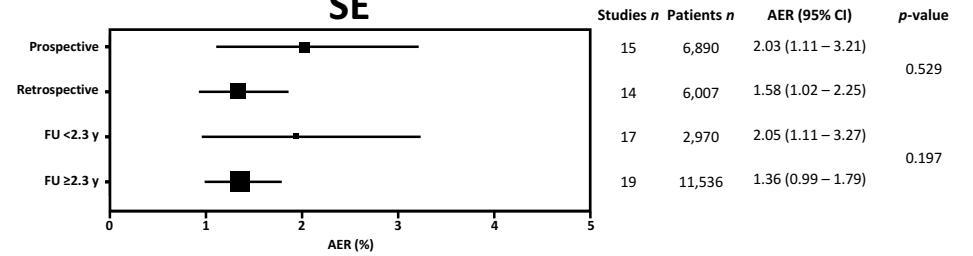
EET



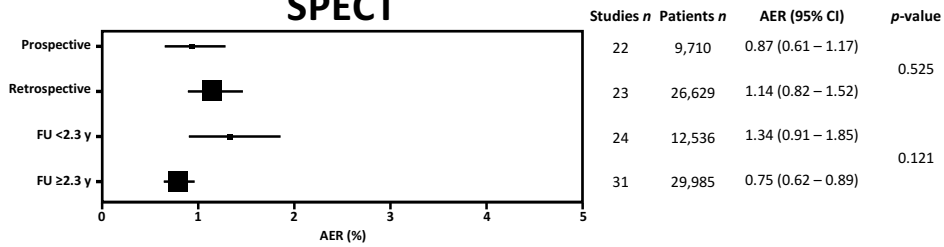
PET



SE



SPECT



Appendix H. Regression coefficients (B) with 95% confidence intervals from multivariable linear meta regression analysis comparing modalities with CCTA (reference category)

| Modalities | All studies - unadjusted N=165 studies | | | | Restricted to suspected CAD N=45 studies | | | |
|------------|--|-------------------------------|-------|------------------|---|-------------------------------|--------|------------------|
| | N studies | Pooled AER neg. test (95% CI) | Beta | p-value | N studies | Pooled AER neg. test (95% CI) | Beta | p-value |
| CCTA | 30 | 0.32 (0.22-0.43) | ref | ref | 19 | 0.31 (0.19-0.47) | ref | ref |
| CMR-perf | 13 | 0.68 (0.39-1.05) | 0.035 | 0.276 | 2 | 0.16 (0.03-0.92) | -0.034 | 0.613 |
| CMR-wm | 6 | 0.99 (0.39-1.87) | 0.078 | 0.031 | 0 | - | - | - |
| EET | 21 | 0.98 (0.57-1.49) | 0.077 | 0.004 | 7 | 0.68 (0.15-1.61) | 0.029 | 0.386 |
| PET | 4 | 0.41 (0.15-0.80) | 0.009 | 0.843 | 1 | 0.43 (0.04-1.24) | 0.016 | 0.801 |
| SE | 36 | 1.66 (1.22-2.16) | 0.138 | <0.001 | 7 | 0.64 (0.25-1.20) | 0.043 | 0.268 |
| SPECT | 55 | 1.06 (0.86-1.28) | 0.089 | <0.001 | 9 | 0.69 (0.40-1.06) | 0.053 | 0.068 |
| Modalities | Subset with total AER - unadjusted N=119 studies | | | | Adjusted for total AER B: total AER (0.025, p<0.001) N=119 studies | | | |
| | N studies | Pooled AER neg. test (95% CI) | Beta | p-value | N studies | Fitted AER neg. test (95% CI) | Beta | p-value |
| CCTA | 23 | 0.33 (0.22-0.46) | ref | ref | 23 | 0.56 (0.37-0.79) | ref | ref |
| CMR-perf | 9 | 0.82 (0.46-1.27) | 0.050 | 0.184 | 9 | 0.79 (0.37-1.37) | 0.028 | 0.312 |
| CMR-wm | 5 | 0.97 (0.32-1.97) | 0.077 | 0.061 | 5 | 0.96 (0.51-1.56) | 0.047 | 0.087 |
| EET | 17 | 0.90 (0.44-1.52) | 0.066 | 0.037 | 17 | 0.97 (0.58-1.46) | 0.047 | 0.040 |
| PET | 2 | 0.76 (0.26-1.53) | 0.051 | 0.484 | 2 | 0.52 (0.04-1.54) | -0.006 | 0.912 |
| SE | 29 | 1.77 (1.26-2.37) | 0.145 | <0.001 | 29 | 1.24 (0.83-1.74) | 0.073 | <0.001 |
| SPECT | 34 | 1.40 (1.05-1.81) | 0.118 | <0.001 | 34 | 1.14 (0.77-1.59) | 0.064 | 0.001 |
| Modalities | Subset with total AER and % CAD - unadjusted N=71 studies | | | | Adjusted for total AER and % CAD B: total AER (0.045, p<0.001), % CAD (0.00023, p=0.565) N=71 studies | | | |
| | N studies | Pooled AER neg. test (95% CI) | Beta | p-value | N studies | Fitted AER neg. test (95% CI) | Beta | p-value |
| CCTA | 20 | 0.31 (0.19-0.45) | ref | ref | 20 | 0.77 (0.57-1.00) | ref | ref |
| CMR-perf | 7 | 0.58 (0.26-1.03) | 0.030 | 0.427 | 7 | 0.83 (0.34-1.53) | 0.006 | 0.855 |
| CMR-wm | 3 | 0.55 (0.13-1.01) | 0.032 | 0.426 | 3 | 0.71 (0.29-1.32) | -0.007 | 0.817 |
| EET | 13 | 0.69 (0.28-1.27) | 0.039 | 0.202 | 13 | 0.90 (0.54-1.35) | 0.014 | 0.528 |
| PET | 1 | 0.78 (0.25-1.59) | 0.061 | 0.367 | 1 | 0.33 (0.01-1.09) | -0.061 | 0.197 |
| SE | 12 | 1.22 (0.61-2.03) | 0.104 | 0.001 | 12 | 1.22 (0.78-1.76) | 0.045 | 0.048 |
| SPECT | 15 | 1.29 (0.88-1.78) | 0.112 | <0.001 | 15 | 1.07 (0.66-1.56) | 0.031 | 0.165 |