

Which test for which patient?



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Patient Factors

- Ability to exercise
- Resting ECG
- Body habitus
- History of prior revascularization
- Preferences

Systems factors

- Availability
 - Test
 - Reader (Cardiology, Radiology)
- Time of Day
- Duration of Wait
 - ED/obs?

What are my choices? Functional

- Exercise ECG
 - With imaging?
- Pharmacologic
 - Vasodilator
 - Inotrope/Chronotrope
- Imaging
 - Myocardial Perfusion Imaging (SPECT or PET)
 - Stress echo

What are my choices? Anatomical

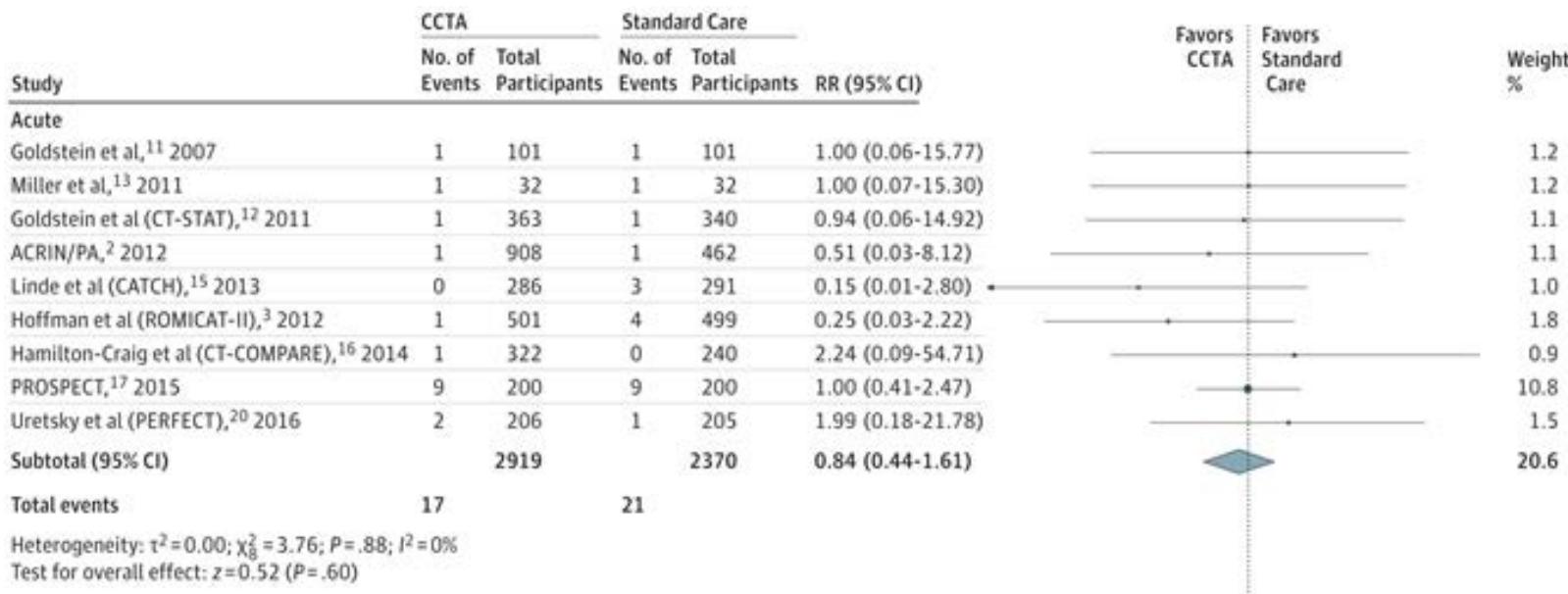
- Coronary Artery Calcium Scoring
- Coronary CT Angiography
- Cardiac MRI

How good are these tests? Diagnosis of CAD

	No. of Studies	No. of patients	Sensitivity	Specificity
Adenosine Echo	6	516	72 (62-79)	91 (88-93)
Adenosine SPECT	9	1207	90 (89-92)	90 (89-92)
Dipyridamole echo	20	1835	70 (66-74)	93 (90-95)
Dipyridamole SPECT	21	1464	89 (84-93)	65 (54-74)
Dobutamine echo	40	4097	80 (77-83)	84 (80-86)
Dobutamine SPECT	14	1066	82 (77-87)	75 (70-79)

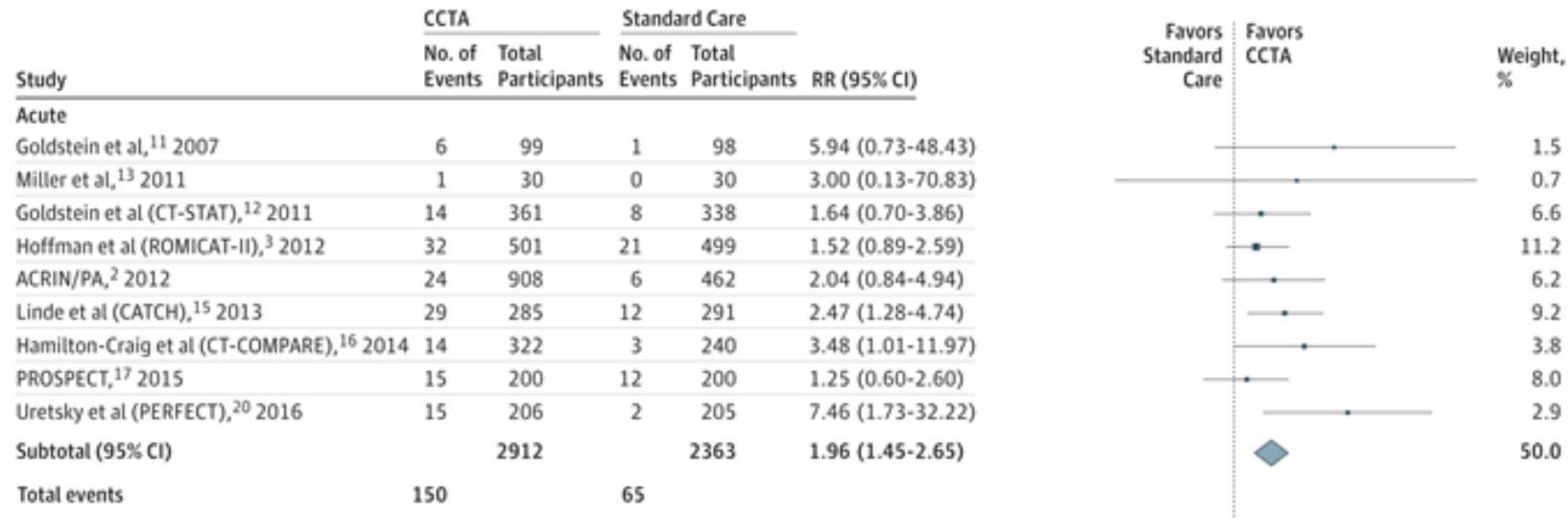
Pharmacologic stress testing for coronary disease diagnosis: A meta-analysis Am Heart Journal 2001

Diagnosis of MI



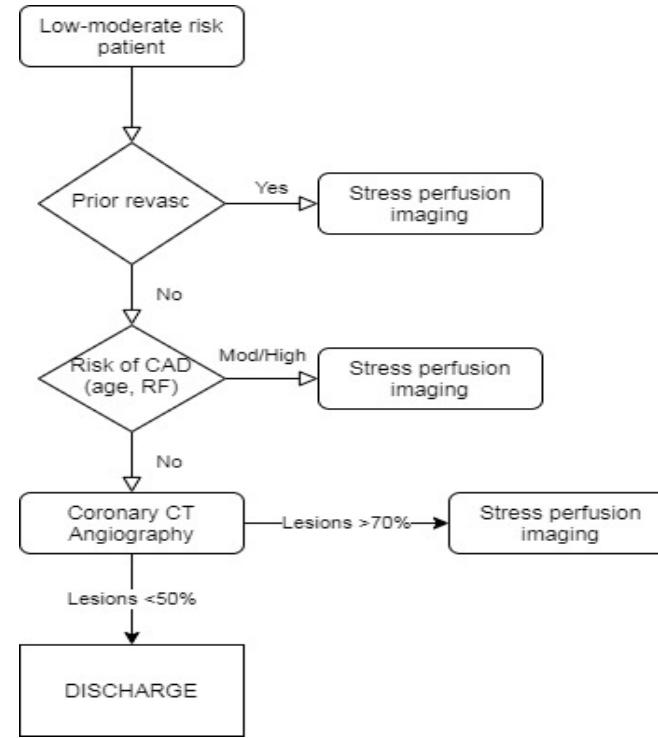
Coronary Computed Tomography Angiography vs Functional Stress Testing for Patients With Suspected Coronary Artery Disease: A Systematic Review and Meta-analysis, JAMA 2017

Revascularization



Coronary Computed Tomography Angiography vs Functional Stress Testing for Patients With Suspected Coronary Artery Disease: A Systematic Review and Meta-analysis, JAMA 2017

My decision making:





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