**Supporting Table 4**
Comparative studies of MCG and other diagnostic tests in patients with stable CAD or ACS.\*

|  |  | **MCG** | **Reference** |
| --- | --- | --- | --- |
| **Trial/MCG criteria reported** | **Target indication/test population/*control* (n)** | **Specificity/sensitivity**  | **PPV/NPV**  | **Specificity/sensitivity**  | **PPV/NPV**  |
| Park et al. 2004 [e73]Unshielded, 9-channel MCG at rest with ≥1 of the following criteria diagnostic for CHD:* Direction of the main vector from the plus to minus pole between –20° and +110°
* Change in the angle of the main vector ≥45° in a time interval of 30 msec between Tmax/3 and Tmax
* Change in the distance separating the plus and minus poles ≥20 mm in a time interval of 30 msec between Tmax/3 and Tmax
* Change in the ratio of the pole strengths ≥0.3 in a time interval of 30 msec between Tmax/3 and Tmax
 | Myocardial ischemia in patients with symptoms of unstable anginaPatients with elevated troponin and angiographic documentation of CHD (53)*Patients with normal troponin levels in whom CHD could be ruled out* (33) | 93.9%/94.3% | 91.2%/96.2% | 93.9%/49% (12-lead ECG) | 92.8%/53.4% (12-lead ECG) |
| Park et al. 2005 [e74]Unshielded, 9-channel MCG with ≥1 of the following criteria diagnostic for CHD:* Direction of the main vector from the plus to minus pole between –20° and +110°
* Change in the angle of the main vector ≥45° in a time interval of 30 msec between Tbeg and Tmax
* Change in the distance separating the plus and minus poles ≥20 mm in a time interval of 30 msec between Tbeg and Tmax
* Change in the ratio of the pole strengths ≥0.3 in a time interval of 30 msec between Tbeg and Tmax
 | NSTEMIPatients presenting with acute chest pain with angiographic documentation of CAD without persistent ST segment elevation on ECG (143)*Subjects presenting with chest pain with normal ECG, troponins, or coronary evaluation (42)* | 92.8%/95.1%(visual by experienced reader)82.5%/86.4% (automated) | 97.8%/84.8%(visual by experienced reader)94.5%/63.5% (automated) | 91.1%/33.9%(12-lead ECG)90.5%/42.7% (troponin I)76.2%/51.0% (echocardiography) | 93.3%/27.4% (12-lead ECG)93.8%/31.7% (troponin I)87.9%/31.4% (echocardiography) |
| Steinberg et al. 2005 [e39]Unshielded, 9-channel MCG at rest with ischemia defined as:* Algorithm-generated score >49 (on a scale of 0–100) based on four MCG parameters measured during Tmax/3 and Tmax (*described in Table 1*)
 | Anatomic CADPatients with suspected CAD and angiographically proven >50% stenosis (19)*Patients with angiographically proven non-obstructive CAD (10)* | 40.0%/84.2% | 72.7%/57.1% | 90.0%/26.3% (ECG) | 83.3%/31.9% (ECG) |
| Tolstrup et al. 2006 [e40]Unshielded, 9- or 36-channel MCG at rest | Anatomic CADPatients with stable angina, Class I–II (20) or unstable angina Class III–IV (17) confirmed by SPECT or angiography | 83.3%/80.6% (all)100%/76.5% (stable)66.7%/85.7% (unstable) | 96.2%/45.5% (all)100%/42.9% (stable)92.3%/50.0% (unstable) | 33.3%/94.1% (all; SPECT) | 88.9%/50% (all; SPECT) |
| Fenici & Brisinda 2007 [e41]Unshielded, 36-channel MCG at rest with best discriminator defined as:* Machine learning method to calculate the dynamic motion of the effective magnetic vector during the T wave
 | Anatomic CADPatients with stable angina and CAD (51), of whom 35 had prior MI*Healthy subjects (52)* | 96%/56% | 94%/69% | 96%/39% (1-lead ECG) | 94%/69% (1-lead ECG) |
| Park et al. 2007 [e79]― | NSTEMIPatients with acute chest pain with NSTEMI and with angiographically proven CAD (264): Subgroup with BBB (56) | 93.5%/86.9% | 97.6%/71.4% | 68.8%/34.8% (echocardiography)56.8%/37.5% (troponin I) | 76.2%/26.8% (echocardiography)71.4%/33.3% (troponin I) |
| Park 2008 [e18]Shielded, 55-channel MCG conducted at rest and under dobutamine stress, with ischemia determined based on the current distribution at QRSmax | Functional ischemiaPatients with angiographically proven obstructive CAD (42)Patients with suspected CAD with angiographically proven non-obstructive CAD (58) | 82.8%/97.6% | 80.4%/98.0% | 82.8%/26.0% (12-lead ECG) | 52.4%/60.8% (12-lead ECG) |
| Goernig et al. 2009 [e21]Shielded, 31-channel MCG at rest with spatiotemporal correlation analysis combining three MCG parameters (mean value correlation QRS at T, STDEV correlation T at QRS and QRS form) determined as best discriminant | Anatomic CADPatients who suffered MI 16–64 (mean 28 days) earlier with angiographically proven >70% stenosis (108)*Subjects without known CAD and with echocardiographic proven normal LVEF* *(70)* | 64%/72.6% | 86.4%/73.4% | 56%/68.6% (12-lead ECG) | 72.3%/65.3% (12-lead ECG) |
| Kwon et al. 2010 [e68]Shielded, 64-channel MCG at rest using an algorithm of weighted maximum of posteriori as a function of five prespecified MCG variables T\_FMA; T\_FMA –R\_FMA; TT\_CAMx; TT\_CAMx – R\_FMA; and TT\_CMD | ACS and non-ACS CADPatients admitted to hospital with suspected ACS diagnosed as CAD with angiographically proven ≥50% stenosis of a vessel (237)Subgroup of patients with chest pain and angiographically proven CAD, but with no abnormality of ECG or troponin (102)*Patients with angiographically proven non-obstructive CAD (127*)*Healthy subjects (89)* | 85%/84%82.3%/73.5% | 91.3%/74%84.3%/70.7% | 89.8%/44.7% (12-lead ECG) | 89.1%/46.5% (12-lead ECG) |
| Lin et al. 2011 [e69]Shielded, 9-channel MCG at rest with analysis based on three MCG parameters (pre-peak repolarization [angle, trajectory, and angular deviation], post-peak repolarization [angle, trajectory, and angular deviation] and the pre-post angle change) and map morphology | ACSPatients presenting with acute chest pain, with angiographically proven CAD with ≥70% stenosis (190)*Patients presenting with acute chest pain with angiographically proven non-obstructive CAD (97)* | 73.2%/88.9% | – | 75.2%/63.2% (ECG) | –– |

\*Only those studies that report diagnostic performance outcomes for MCG and reference are tabulated. Where multiple MCG parameters were assessed, those with the best performance are reported.
MCG = magnetocardiography; CAD = coronary artery disease; ACS = acute coronary syndrome; PPV = positive predictive value; NPV = negative predictive value; CHD = coronary heart disease; Tmax/3 = one-third peak intensity; Tmax = peak intensity; ECG = electrocardiogram; NSTEMI = non-ST-elevation myocardial infarction; Tbeg = beginning of the T wave; SPECT = single-photon emission computed tomography; MI = myocardial infarction; BBB = bundle branch block; STDEV = standard deviation; LVEF = left ventricular ejection fraction; T\_FMA = orientation of magnetic field map at Tmax; R\_FMA = orientation of magnetic field map at Rpeak; TT\_CAMx = maximum value of the main current angle in the ST period; TT\_CMD = maximum value of a dynamic change of the strength of the main current vector within a time interval of 30 ms in the ST period.