

Supplementary Table 2. Performance of noninvasive tests for the diagnosis of CAD*

Study	Year	Number of patients	Prevalence of CAD (%)	Stress modality	Mean age (years)	Male (%)	Prior MI (%)	Sensitivity (%)	Specificity (%)	Positive LR	Negative LR
Stress ECG											
Koskinen et al. ¹⁾	1987	100	90	Exercise	57	55	NR	63	80	3.17	0.46
Hecht et al. ²⁾	1990	116	58.6	Exercise	58	80	42.2	52	65	1.45	0.75
Chae et al. ³⁾	1993	243	72	Exercise	65	0	42	25	38	0.41	1.96
Mairesse et al. ⁴⁾	1994	129	64.3	Exercise	56	74	NR	42	83	2.43	0.7
Kajinami et al. ⁵⁾	1995	251	53	Exercise	56	69	NR	74	75	3	0.35
Nallamothu et al. ⁶⁾	1995	321	76.9	Exercise	57	75	NR	46	60	1.14	0.9
Hamasaki et al. ⁷⁾	1996	125	37.6	Exercise	64	76	0	83	65	2.4	0.26
Khattar et al. ⁸⁾	1998	100	56	Exercise	62	70	70	70	41	1.18	0.74
Santana-Boado et al. ⁹⁾	1998	163	49.7	Exercise	60	61	0	67	71	2.28	0.47
Michaelides et al. ¹⁰⁾	1999	245	86.1	Exercise	52	89	0	66	88	5.58	0.39
Beygui et al. ¹¹⁾	2000	179	36.3	Exercise	61	84	4.5	51	62	1.35	0.79
Gentile et al. ¹²⁾	2001	132	81.8	Exercise	70	68	0	85	58	2.04	0.25
Daou et al. ¹³⁾	2002	338	76.3	Exercise	59	92	59.8	47	64	1.3	0.83
Stress Echo											
Picano et al. ¹⁴⁾	1989	374	80.2	Vasodilator	54	77	36	73	88	5.96	0.31
Crouse et al. ¹⁵⁾	1991	228	76.8	Exercise	62	67	0	97	64	2.71	0.05
Ferrara et al. ¹⁶⁾	1991	109	82.6	Vasodilator	62	62	NR	79	99	78.9	0.21
Marcovitz et al. ¹⁷⁾	1992	141	77.3	Dobutamine	60	60	10.6	96	66	2.8	0.06
Marwick et al. ¹⁸⁾	1992	150	76	Exercise	57	79	NR	84	86	6.06	0.18
Quiñones et al. ¹⁹⁾	1992	112	76.8	Exercise	57	67	NR	74	89	6.47	0.29

Hecht et al. ²⁰⁾	1993	180	76.1	Exercise	56	86	NR	93	86	6.72	0.08
Hecht et al. ²¹⁾	1993	136	69.1	Exercise	59	89	NR	83	91	8.74	0.19
Marwick et al. ²²⁾	1993	217	65.4	Dobutamine	58	72	0	72	83	4.15	0.34
Picano et al. ²³⁾	1993	178	73	Vasodilator	58	84	0	72	96	17.21	0.29
Takeuchi et al. ²⁴⁾	1993	120	61.7	Dobutamine	63	74	NR	85	94	13.09	0.16
Beleslin et al. ²⁵⁾	1994	136	87.5	Exercise	50	85	56.6	87	82	4.97	0.15
Beleslin et al. ²⁵⁾	1994	136	87.5	Vasodilator	50	85	56.6	74	94	12.54	0.28
Beleslin et al. ²⁵⁾	1994	136	87.5	Dobutamine	50	85	56.6	82	77	3.51	0.23
Mairesse et al. ⁴⁾	1994	129	64.3	Dobutamine	56	70	0	76	85	4.99	0.28
Ostojic et al. ²⁶⁾	1994	150	87.3	Vasodilator	51	83	50.7	71	90	6.76	0.32
Ostojic et al. ²⁶⁾	1994	150	87.3	Dobutamine	51	83	50.7	75	79	3.56	0.32
Severi et al. ²⁷⁾	1994	429	57.3	Vasodilator	55	72	0	75	90	7.19	0.28
Geleijnse et al. ²⁸⁾	1995	223	64.1	Dobutamine	58	69	0	72	79	3.4	0.36
Latcham et al. ²⁹⁾	1995	106	81.1	Dobutamine	63	61	NR	74	65	2.13	0.39
Marwick et al. ³⁰⁾	1995	161	36.7	Exercise	60	0	0	80	81	4.28	0.25
Marwick et al. ³¹⁾	1995	147	42.2	Exercise	58	59	0	71	91	7.55	0.32
Roger et al. ³²⁾	1995	127	84.3	Exercise	NR	NR	NR	88	70	2.93	0.17
Anthopoulos et al. ³³⁾	1996	120	74.2	Dobutamine	75	60	40	87	84	5.37	0.16
Bartunek et al. ³⁴⁾	1996	75	100	Dobutamine	57	85	NR	80	88	6.67	0.23
Elhendy et al. ³⁵⁾	1996	133	83.5	Dobutamine	60	77	NR	78	86	5.76	0.25
Hoffmann et al. ³⁶⁾	1996	150	63.3	Dobutamine	46	80	0	76	87	5.97	0.28
Pingitore et al. ³⁷⁾	1996	110	83.6	Vasodilator	60	83	NR	82	94	14.55	0.2
Pingitore et al. ³⁷⁾	1996	110	83.6	Dobutamine	60	83	30	95	89	8.52	0.06
San Román et al. ³⁸⁾	1996	102	61.8	Vasodilator	62	57	0	78	97	29.92	0.23
San Román et al. ³⁸⁾	1996	102	61.8	Dobutamine	62	57	0	78	95	15.25	0.23
Hennesy et al. ³⁹⁾	1997	317	86.4	Dobutamine	60	72	42.2	85	61	2.16	0.24

Ho et al. ⁴⁰⁾	1997	223	72.7	Dobutamine	58	81	NR	94	79	4.4	0.08
Roger et al. ⁴¹⁾	1997	340	74.1	Exercise	65	72	0	78	41	1.32	0.53
Elhendy et al. ⁴²⁾	1998	290	76.2	Dobutamine	58	70	NR	72	86	4.98	0.33
Elhendy et al. ⁴³⁾	1998	295	77	Dobutamine	NR	NR	NR	75	87	5.68	0.29
Hennessy et al. ⁴⁴⁾	1998	218	90.8	Dobutamine	62	0	47.7	49	85	3.27	0.6
Khattar et al. ⁸⁾	1998	100	74	Dobutamine	62	70	28	68	81	3.52	0.4
Miyazono et al. ⁴⁵⁾	1998	112	55.4	Vasodilator	66	72	NR	74	90	7.42	0.29
San Román et al. ⁴⁶⁾	1998	102	64.7	Vasodilator	64	49	0	82	94	14.61	0.19
San Román et al. ⁴⁶⁾	1998	102	64.7	Dobutamine	64	49	0	79	89	7.1	0.24
Fragasso et al. ⁴⁷⁾	1999	101	56.4	Vasodilator	61	55	0	61	91	6.75	0.42
Fragasso et al. ⁴⁷⁾	1999	101	56.4	Dobutamine	61	55	0	88	80	4.3	0.15
Hoffmann et al. ⁴⁸⁾	1999	283	64.7	Dobutamine	56	67	0	72	78	3.28	0.36
Nagel et al. ⁴⁹⁾	1999	163	66.9	Dobutamine	60	71	0	74	82	4.02	0.32
Parodi et al. ⁵⁰⁾	1999	101	79.2	Vasodilator	55	80	0	78	76	3.26	0.3
Smart et al. ⁵¹⁾	2000	386	72.5	Dobutamine	61	66	NR	85	87	6.44	0.17
Dolan et al. ⁵²⁾	2001	112	81.3	Dobutamine	61	55	22	71	81	3.76	0.35
Pasierski et al. ⁵³⁾	2001	248	46.8	Exercise	53	67	0	82	96	21.55	0.19
Pasierski et al. ⁵³⁾	2001	248	46.8	Dobutamine	53	67	0	74	98	32.22	0.27
Nedeljkovic et al. ⁵⁴⁾	2006	117	59	Vasodilator	54	78	27.4	93	92	11.18	0.08
Nedeljkovic et al. ⁵⁴⁾	2006	117	59	Exercise	54	78	27.4	90	88	7.19	0.12
Nedeljkovic et al. ⁵⁴⁾	2006	117	59	Dobutamine	54	78	27.4	96	92	11.49	0.05
Hanekom et al. ⁵⁵⁾	2007	150	59.3	Dobutamine	66	67	19	91	53	1.92	0.17
Porter et al. ⁵⁶⁾	2011	100	52	Vasodilator	62	60	29	60	73	2.2	0.55
Celutkiene et al. ⁵⁷⁾	2012	151	35.1	Dobutamine	62	59	0	83	93	11.69	0.18
Peteiro et al. ⁵⁸⁾	2012	116	64.7	Exercise	61	85	40.5	84	63	2.3	0.25

SPECT

Mahmariyan et al. ⁵⁹⁾	1990	360	74.7	Exercise	56	74	22	87	87	6.53	0.15
Christian et al. ⁶⁰⁾	1992	688	81.3	Exercise	63	77	42	92	39	1.51	0.21
Chae et al. ³⁾	1993	243	67.1	Exercise	62	0	42	71	65	2.03	0.44
Kajinami et al. ⁵⁾	1995	251	53	Exercise	56	68	0	83	59	2.03	0.29
Nallamothu et al. ⁶⁾	1995	321	83.2	Exercise	57	100	0	81	69	2.57	0.28
Mohiuddin et al. ⁶¹⁾	1996	202	79.2	Vasodilator	58	59	NR	90	86	6.29	0.12
Amanullah et al. ⁶²⁾	1997	222	76.7	Vasodilator	71	54	0	93	73	3.39	0.1
Miller et al. ⁶³⁾	1997	243	83.5	Vasodilator	63	99	34.7	91	28	1.26	0.32
Gallowitsch et al. ⁶⁴⁾	1998	107	49.5	Vasodilator	64	54	39.3	94	91	10.14	0.06
Santana-Boado et al. ⁹⁾	1998	163	58.9	Vasodilator	60	62	0	92	90	8.82	0.09
Gentile et al. ¹²⁾	2001	132	81.8	Vasodilator	70	69	0	94	54	2.04	0.12
Daou et al. ¹³⁾	2002	338	78.4	Exercise	56	83	60	63	77	2.7	0.48
Psirropoulos et al. ⁶⁵⁾	2002	606	19.6	Exercise	54	48	19.8	93	44	1.65	0.16
Shirai et al. ⁶⁶⁾	2002	603	39.3	Exercise	63	97	31	45	97	12.77	0.57
Doyle et al. ⁶⁷⁾	2003	184	14.1	Vasodilator	59	0	NR	62	82	3.47	0.47
Groutars et al. ⁶⁸⁾	2003	123	78.1	Exercise	63	72	52	97	59	2.38	0.05
Shelley et al. ⁶⁹⁾	2003	108	59.3	Vasodilator	70	NR	0	94	79	4.48	0.08
Dondi et al. ⁷⁰⁾	2004	130	83.1	Exercise	63.2	60	0	96	73	3.53	0.05
Hambye et al. ⁷¹⁾	2004	100	86	Vasodilator	63	48	43	73	79	3.43	0.34
González et al. ⁷²⁾	2005	145	80.5	Vasodilator	60	68	36	87	57	2.03	0.22
Johansen et al. ⁷³⁾	2005	357	35.3	Vasodilator	57	37	0	75	79	3.59	0.32
Thompson et al. ⁷⁴⁾	2005	116	75.9	Vasodilator	60	70	0	86	79	4.04	0.17
Berman et al. ⁷⁵⁾	2006	785	70.7	Vasodilator	NR	NR	0	91	56	2.04	0.17
Berman et al. ⁷⁵⁾	2006	290	77.6	Vasodilator	NR	NR	0	83	86	5.99	0.2
Berman et al. ⁷⁵⁾	2006	365	75.3	Exercise	NR	NR	0	91	56	2.06	0.16
Hung et al. ⁷⁶⁾	2006	126	64.3	Vasodilator	66	70	8.7	93	64	2.6	0.11

Jeetley et al. ⁷⁷⁾	2006	123	69.1	Vasodilator	62	54	33	86	50	1.72	0.28
Slomka et al. ⁷⁸⁾	2006	174	78.7	Vasodilator	63	67	0	84	81	4.44	0.2
Sharples et al. ⁷⁹⁾	2007	224	68.3	Vasodilator	NR	NR	23	87	61	2.23	0.21
Bokhari et al. ⁸⁰⁾	2008	218	65.6	Exercise	56	69	0	81	79	3.81	0.24
Lipiec et al. ⁸¹⁾	2008	103	76.7	Vasodilator	58	64	50	92	54	2.02	0.14
Tadehara et al. ⁸²⁾	2008	101	53.4	Vasodilator	72.1	52	19.7	93	70	3.1	0.1
Wolak et al. ⁸³⁾	2008	114	60.5	Vasodilator	65	0	0	80	73	2.99	0.28
Hida et al. ⁸⁴⁾	2009	119	52.1	Vasodilator	68	67	0	52	88	4.2	0.55
Wu et al. ⁸⁵⁾	2009	218	59.6	Vasodilator	64	62	2.8	95	63	2.52	0.09
Yoon et al. ⁸⁶⁾	2009	344	63.7	Vasodilator	63.3	37	0	87	34	1.32	0.38
Greenwood et al. ⁸⁷⁾	2012	752	39.4	Vasodilator	60	63	0	67	83	3.84	0.41
Schwitter et al. ⁸⁸⁾	2013	425	48.5	Vasodilator	61	67	27	59	72	2.13	0.57
Yıldırım Poyraz et al. ⁸⁹⁾	2014	281	27	Vasodilator	62.6	39	0	86	94	14.33	0.15
Neglia et al. ⁹⁰⁾	2015	293	34	Vasodilator	60.9	61	0	73	67	2.2	0.4
PET											
Go et al. ⁹¹⁾	1990	202	75.3	Vasodilator	NR	NR	47	93	78	4.25	0.08
Bateman et al. ⁹²⁾	2006	112	62.5	Vasodilator	67	46	25	87	93	12.27	0.14
Kajander et al. ⁹³⁾	2010	104	36.5	Vasodilator	63	55	0	95	91	10.41	0.06
Stress CMR											
Ishida et al. ⁹⁴⁾	2003	104	74	Vasodilator	66	78	0	90	85	6.05	0.12
Takase et al. ⁹⁵⁾	2004	102	74.5	Vasodilator	66	83	44.1	93	85	6.06	0.08
Pilz et al. ⁹⁶⁾	2006	171	66.1	Vasodilator	62	63	28.1	97	83	5.61	0.04
Merkle et al. ⁹⁷⁾	2007	228	75.4	Vasodilator	61	79	0	93	86	6.5	0.08
Sharples et al. ⁷⁹⁾	2007	226	75.2	Vasodilator	62	68	31	74	73	2.71	0.36
Bernhardt et al. ⁹⁸⁾	2009	823	38	Vasodilator	64	76	NR	88	83	5.03	0.15
Greenwood et al. ⁸⁷⁾	2012	752	39.4	Vasodilator	65	63	0	87	83	5.21	0.16

Motwani et al. ⁹⁹⁾	2012	111	87.3	Vasodilator	61	74	12	94	67	2.82	0.09
Chen et al. ¹⁰⁰⁾	2013	151	35.9	Vasodilator	65	60	0	92	96	21.47	0.08
Groothuis et al. ¹⁰¹⁾	2013	192	35.9	Vasodilator	56	49	0	86	81	4.57	0.18
Schwitter et al. ⁸⁸⁾	2013	533	48.5	Vasodilator	60	73	27	75	59	1.83	0.42

Coronary computed tomography angiography

Meijboom et al. ¹⁰²⁾	2007	104	84.6	None	58	73	0	100	75	4	0
Meijboom et al. ¹⁰³⁾	2007	123	51.2	None	62	0	0	100	75	4	0
Meijboom et al. ¹⁰³⁾	2007	279	68.1	None	58	100	0	99	90	9.79	0.01
Shabestari et al. ¹⁰⁴⁾	2007	143	75.5	None	63	72	0	96	57	2.24	0.06
Meijboom et al. ¹⁰⁵⁾	2008	360	68	None	60	68	0	99	64	2.76	0.01
Budoff et al. ¹⁰⁶⁾	2008	227	24.2	None	57	59	0	95	83	5.43	0.07
Gueret et al. ¹⁰⁷⁾	2013	746	34.7	None	61	71	20	91	50	1.82	0.18
Neglia et al. ⁹⁰⁾	2015	475	29.4	None	60.9	61	0	91	92	11.2	0.1

CAD = coronary artery disease; CMR = cardiac magnetic resonance imaging; ECG = electrocardiography; Echo = echocardiography; LR = likelihood ratio; MI = myocardial infarction; NR = not reported; PET = positron emission tomography; SPECT = single-photon emission computed tomography.

*Defined as diameter stenosis $\geq 50\%$ in major epicardial coronary arteries on invasive coronary angiography.