

## Supplemental material

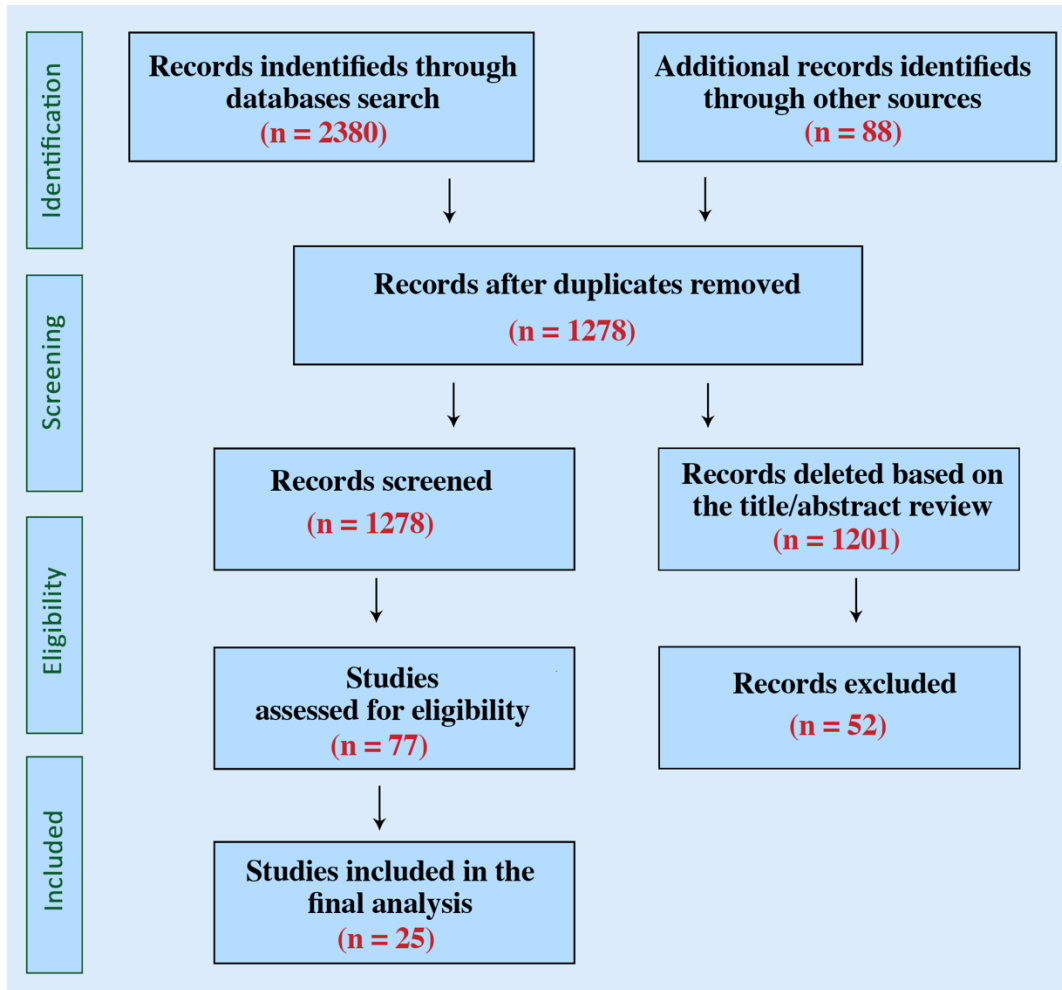
**Supplementary Table SI.** PECOS model

<b>PECOS model</b>	
<b>Participants</b>	Patients with coronary artery disease and arterial hypertension
<b>Exposure</b>	Trials investigating the diagnostic accuracy of non-invasive methods for coronary artery disease in arterial hypertension patients
<b>Comparator/Control</b>	Not applicable
<b>Outcomes</b>	Main clinical outcomes: the diagnostic accuracy of non-invasive methods including exercise electrocardiography (EEG), stress echocardiography (ECHO) and myocardial perfusion imaging (MPI)
<b>Study design</b>	Previously systematic reviews or meta-analysis were not included but these articles were searched for individual trials

**Supplementary Table SII.** Literature search strategy

Database search	PubMed-Medline, EMBASE, Scopus, Google Scholar, the Cochrane Central Registry of Controlled Trials and ClinicalTrial.gov.
Diagnostic accuracy term	"Coronary artery disease" OR "CAD" OR "Ischemic heart disease" OR "IHD" AND "Arterial hypertension" AND "Non-invasive diagnostic" OR "Stress echocardiography" OR "Stress echo" OR " Dipyridamole echocardiography" OR "Dobutamine echocardiography" OR "Electrocardiography exercise test" OR "EET" OR "Myocardial perfusion imaging" OR "MPI" AND "Diagnostic accuracy"
Occurrence term	"Diagnostic accuracy" OR "Sensitivity" OR "Specificity" OR "Positive predictive value" OR "Negative predictive value"
Additional search	European Society of Cardiology (ESC), American Heart Association (AHA), European Atherosclerosis Society (EAS), American College of Cardiology (ACC), and European of Association Cardiovascular Imaging (EACVI).

**Supplementary Figure S1.** Flowchart of studies included in the meta-analysis

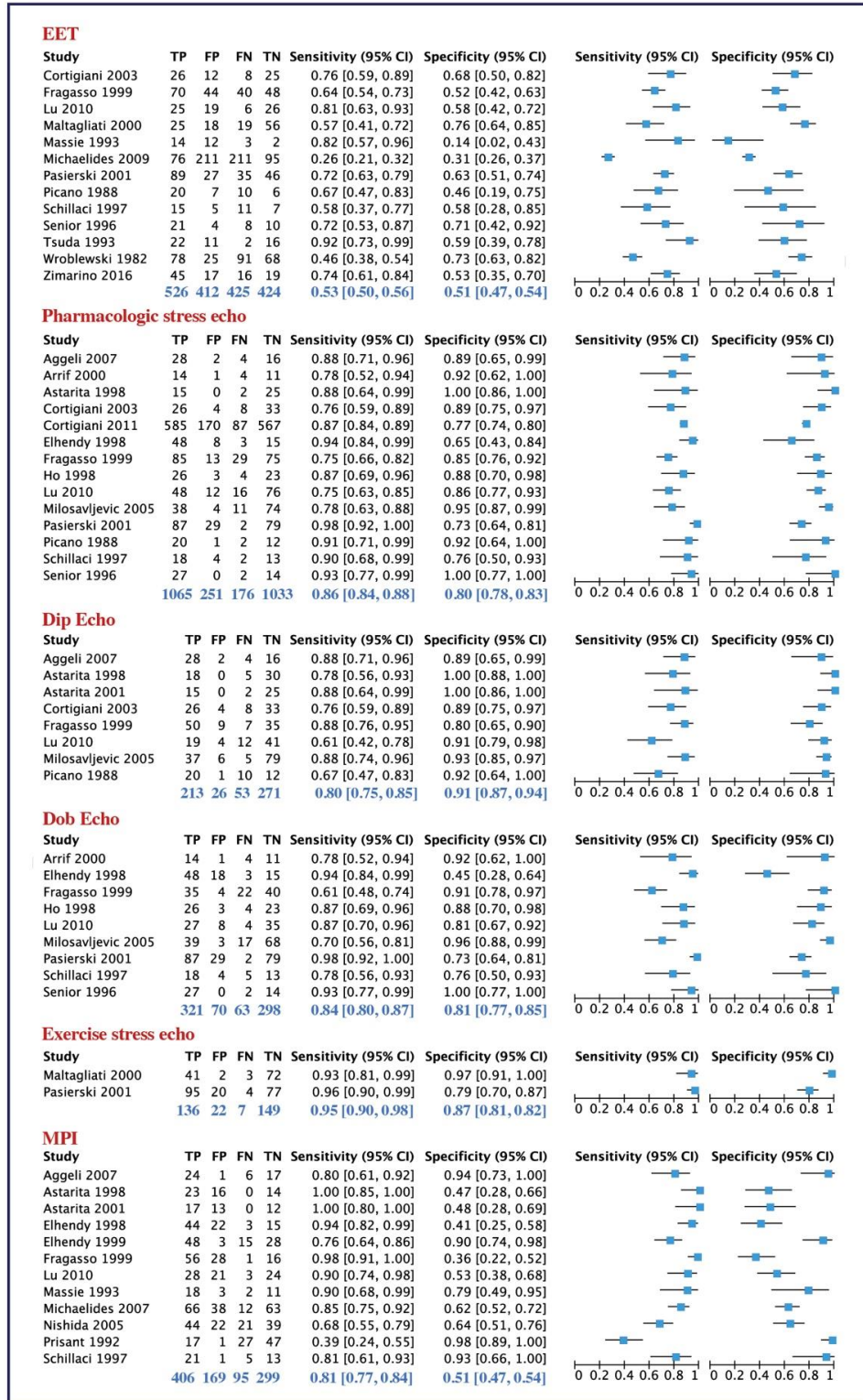


**Supplementary Table SIII.** Main characteristics of patients enrolled among included studies

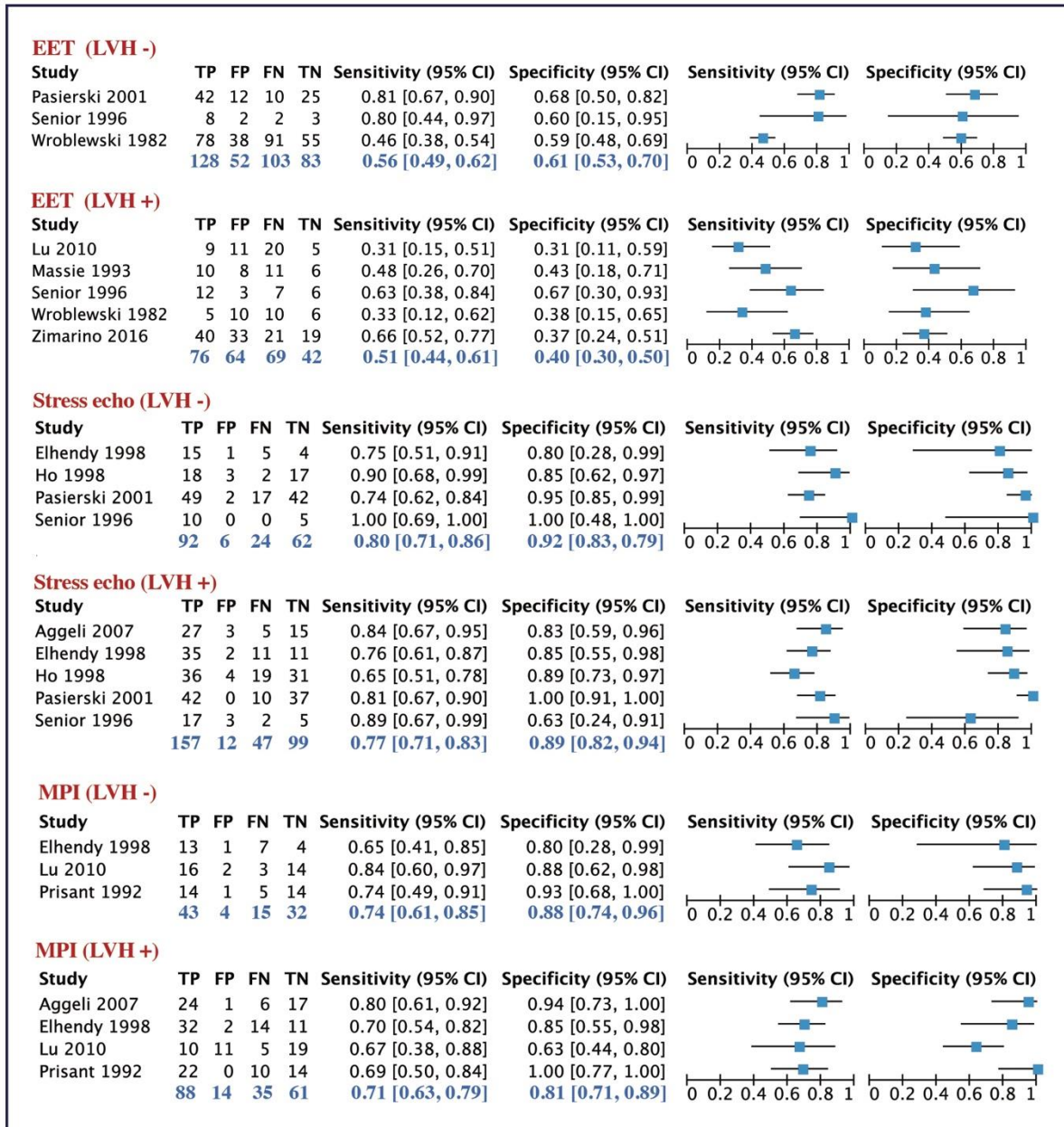
<b>Study (trial) year</b>	<b>Age</b> %	<b>Female</b> %	<b>Smoking</b> %	<b>DM</b> %	<b>Dyslipidemia</b> %	<b>Significant</b> CAD	<b>SVD</b> %	<b>MVD</b> %
Wroblewski 1982	NR	22.6	NR	NR	NR	40.5	NR	NR
Picano 1988	52±8	69.7	67.4	9.31	27.9	69.7	NR	NR
Prisant 1992	54.8±9	50	70	22	NR	19.6	NR	NR
Massie 1993	61 ± 8	NR	23	2.6	26	58.8	NR	NR
Tsuda 1993	55.2	NR	NR	NR	NR	47.1	NR	NR
Senior 1996	59	30	NR	NR	NR	67.5	16.3	51.2
Schillaci 1997	61 ± 8	37.5	NR	NR	NR	55	NR	NR
Astarita 1998	58 ±11	52.3	NR	NR	NR	40.5	NR	NR
Elhendy 1998	60 ±10	36.9	NR	NR	NR	78.5	29	50
Ho 1998	60 ±9	73.2	54	28	43	73	15	31
Fragasso 1999	61±5	45.5	NR	NR	NR	56	35	21
Arrif 2000	NR	NR	NR	40	NR	53.3	NR	NR
Maltagliati 2000	58±8	NR	NR	30	NR	49.1	41	59
Pasierski 2001	53±8	NR	NR	NR	NR	59	29	34
Elhendy 2001	56±9	26	22	14	20	74	39	35
Astarita 2001	58±10	45.2	NR	NR	NR	43.4	52.1	47.8
Cortigiani 2003	65±8	23	NR	17	57	48.5	18	30.5
Milosavljevic 2005	54±7	35	58	15	27	44.1	46.4	53.5
Nishida 2005	68	33.7	NR	NR	NR	51.8	16.27	58.2
Michaelides 2007	50±7	28.5	30	14.5	27	44	21	23
Aggeli 2007	67±5	47	22	11	18	64	NR	NR
Michaelides 2009	58±8	41.3	58.5	5.5	46.5	20	38	62
Lu 2010	61±7	100	32	33	26	40.8	54.8	45.2
Cortigiani 2011	66±10	52.8	32	29	65	44	60	40
Zimarino 2016	66±2	12	39	26	63	53	NR	NR

*DM – diabetes mellitus, SVD – single vessel disease, MVD – multi-vessel disease, NR – not reported.*

**Supplementary Figure S2.** Forest plot of sensitivity and specificity of different non-invasive modalities in predicting CAD

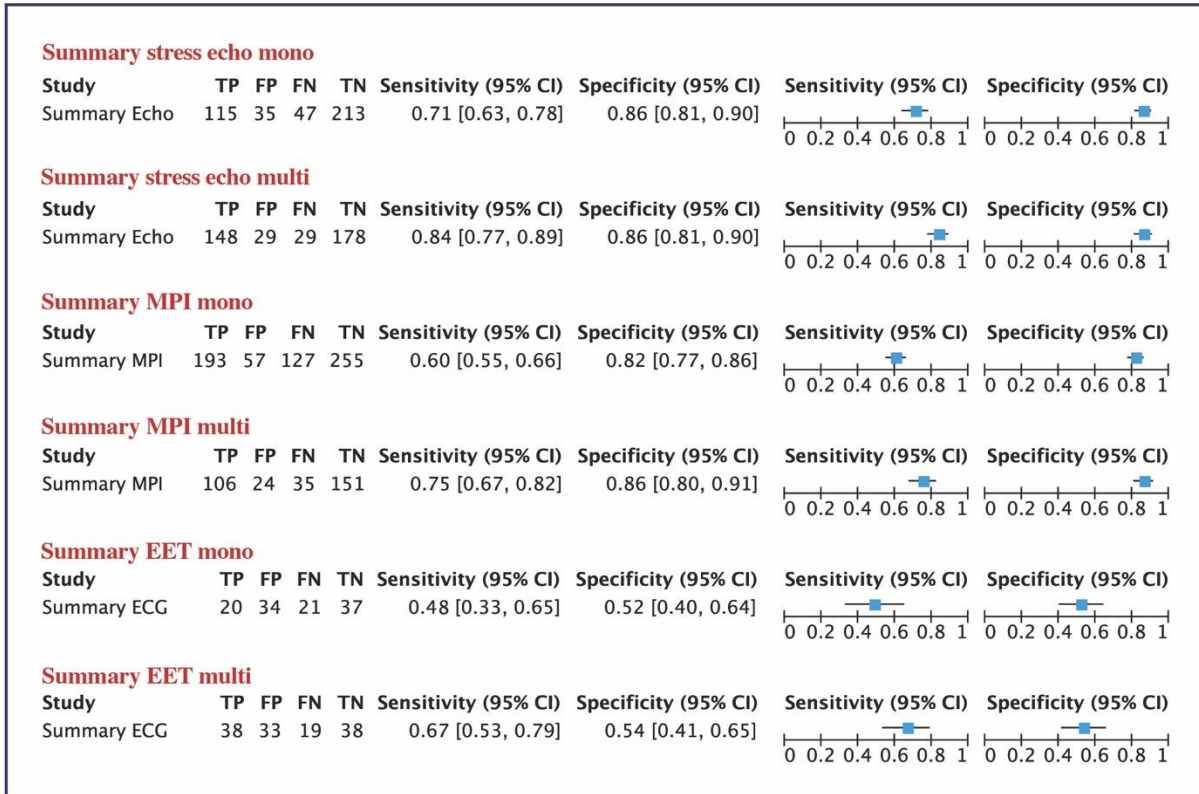


**Supplementary Figure S3.** Forest plot of sensitivity and specificity of different non-invasive modalities: The effect of LVH on diagnostic accuracy



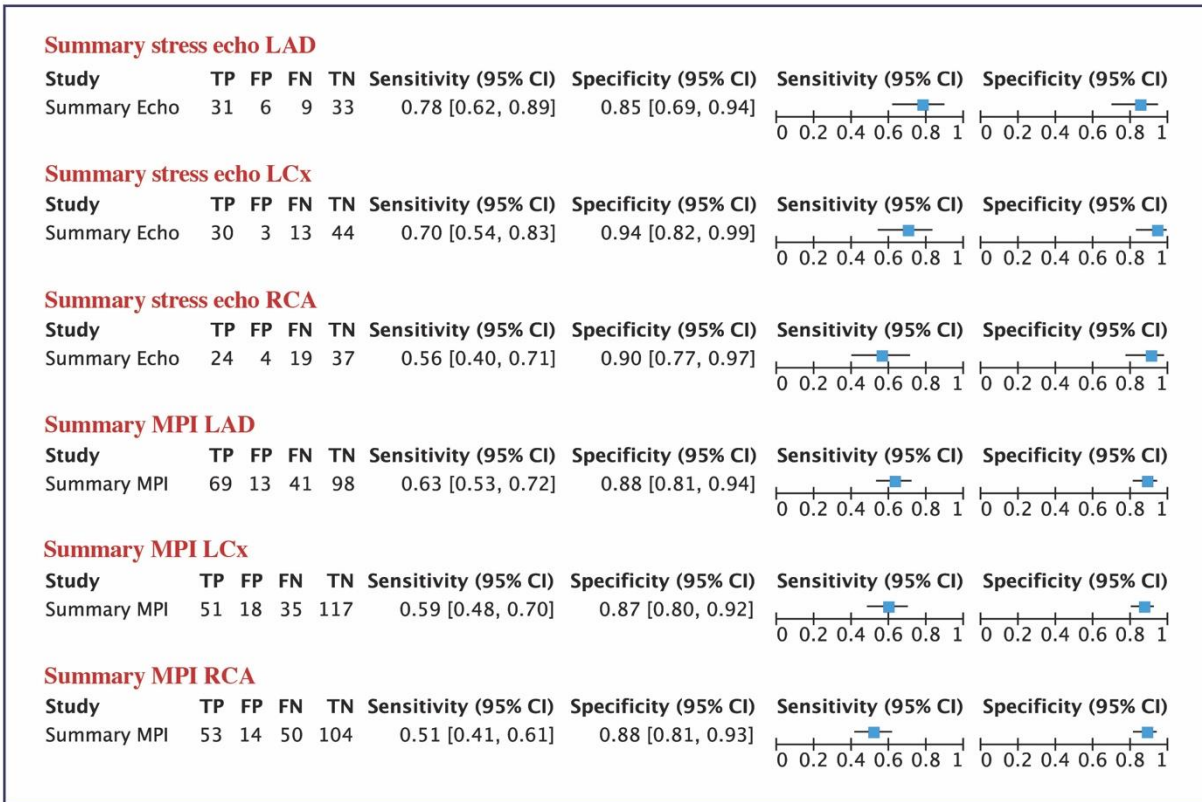
Note: D-L random-effects model used.

**Supplementary Figure S4.** Forest plot of sensitivity and specificity of different non-invasive modalities: The effect of number of CAD vessels on diagnostic accuracy



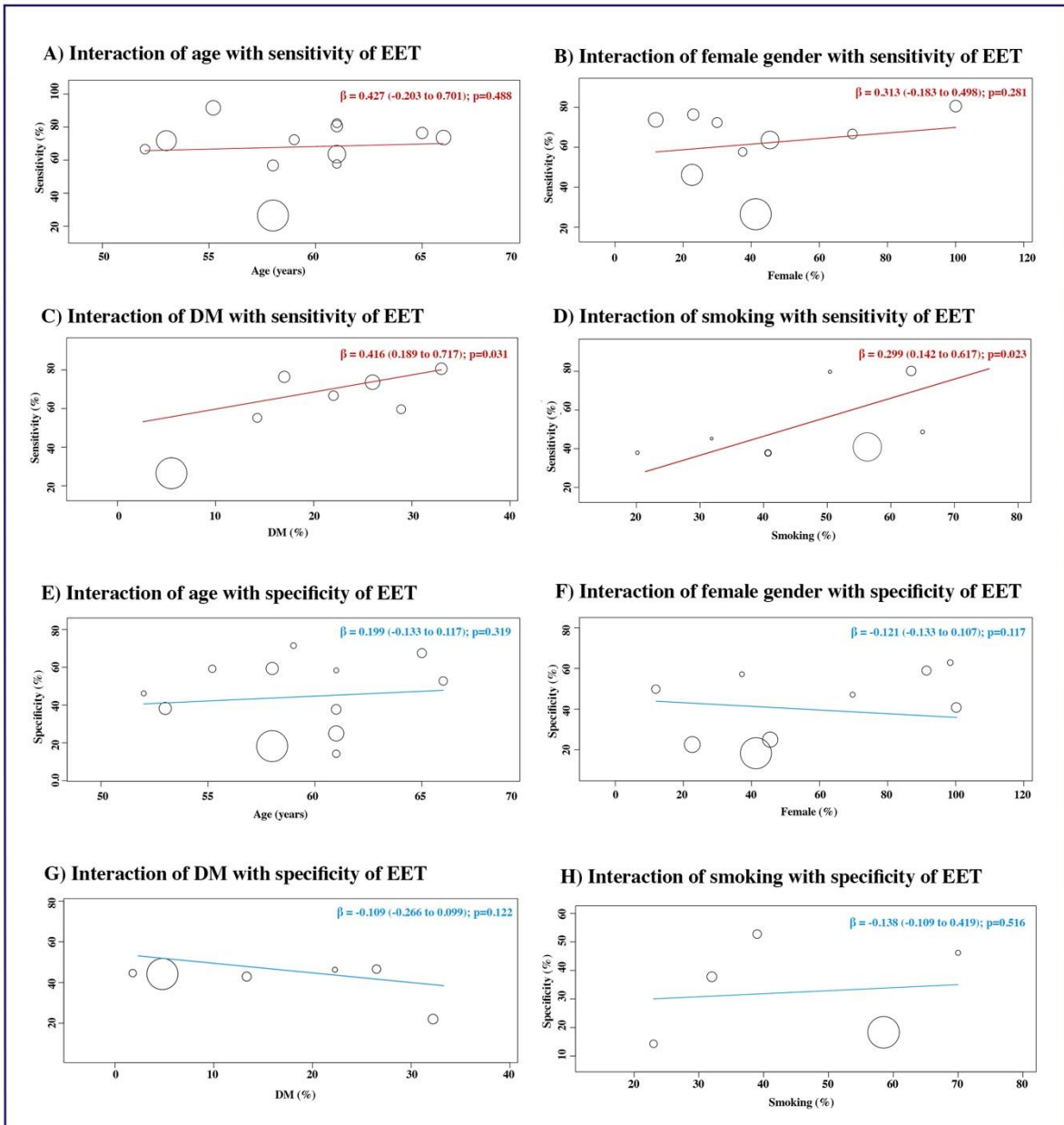
Note: D-L random-effects model used.

**Supplementary Figure S5.** Forest plot of sensitivity and specificity of different non-invasive modalities: The effect of the different territories of CAD on diagnostic accuracy



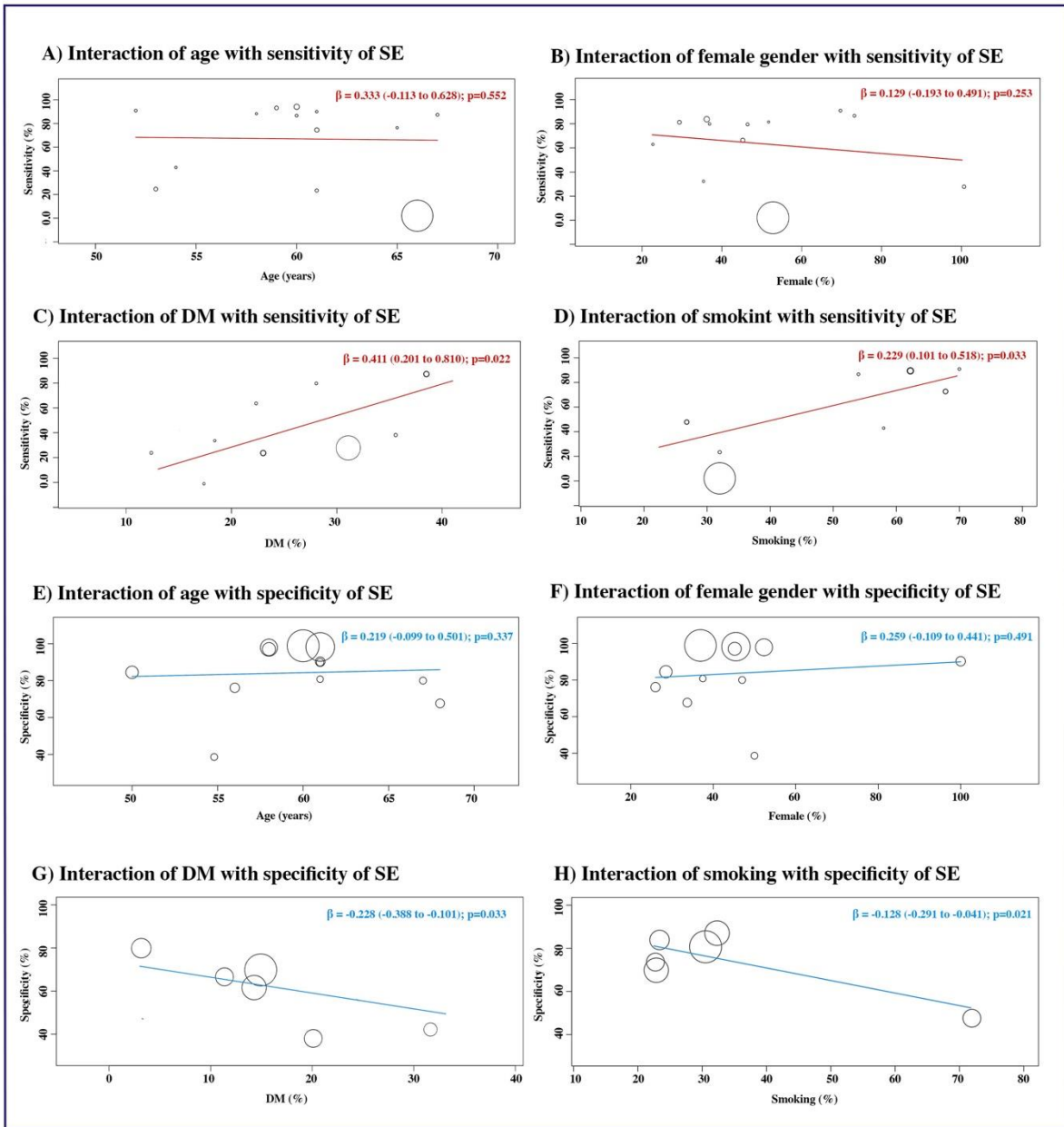
Note: D-L random-effects model used.

**Supplementary Figure S6.** Meta regression of demographic and clinical indices on sensitivity and specificity of EET. **A** – Age on sensitivity of EET; **B** – female gender on sensitivity of EET; **C** – diabetes mellitus on sensitivity of EET; **D** – smoking on sensitivity of EET; **E** – age on specificity of EET; **F** – female gender on specificity of EET; **G** – diabetes mellitus on sensitivity of EET; **H** – smoking on specificity of EET



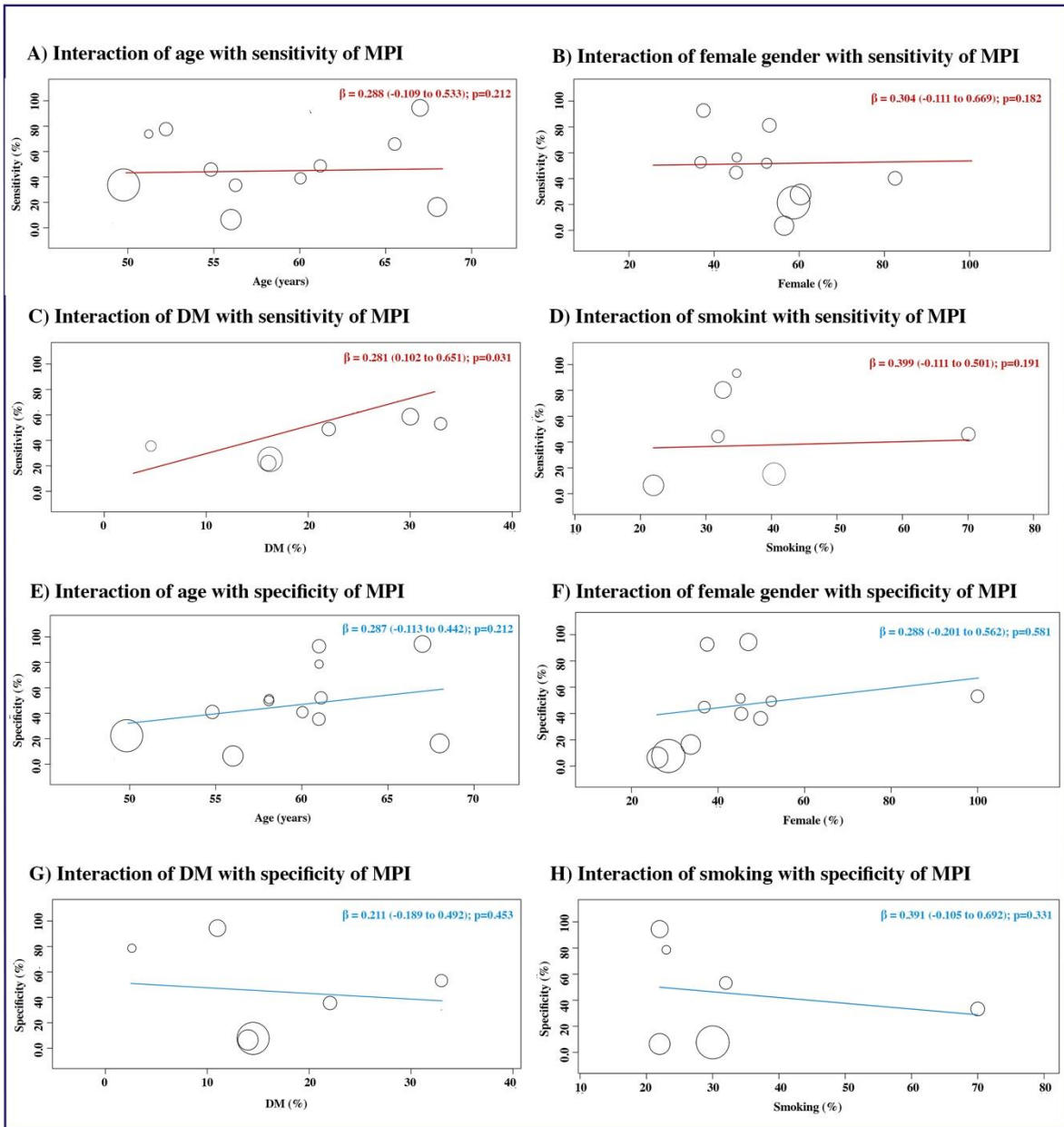
Note: D-L random-effects model used.

**Supplementary Figure S7.** Meta regression of demographic and clinical indices on sensitivity and specificity of SE. **A** – Age on sensitivity of SE; **B** – female gender on sensitivity of SE; **C** – diabetes mellitus on sensitivity of SE; **D** – smoking on sensitivity of SE; **E** – age on specificity of SE; **F** – female gender on specificity of SE; **G** – diabetes mellitus on sensitivity of SE; **H** – smoking on specificity of SE



Note: D-L random-effects model used.

**Supplementary Figure S8.** Meta regression of demographic and clinical indices on sensitivity and specificity of MPI. **A** – Age on sensitivity of MPI; **B** – female gender on sensitivity of MPI; **C** – diabetes mellitus on sensitivity of MPI; **D** – smoking on sensitivity of MPI; **E** – age on specificity of MPI; **F** – female gender on specificity of MPI; **G** – diabetes mellitus on sensitivity of MPI; **H** – smoking on specificity of MPI



Note: D-L random-effects model used.

**Supplementary Table SIV.** Assessment of risk of bias in the included studies using Newcastle-Ottawa Quality Assessment Scale (NOS) for cohorts (observational) studies

Study, year	Selection	Selection	Selection	Selection	Comparability	Exposure	Exposure	Exposure	Quality
	1	2	3	4	1	1	2	3	
Wroblewski 1982	b)	a)	a)	a)	a)	b)	b)	c)	Fair
Picano 1988	b)	b)	a)	a)	b)	b)	a)	b)	Good
Prisant 1992	a)	a)	b)	b)	a)	b)	a)	b)	Good
Massie 1993	a)	a)	b)	b)	a)	b)	a)	b)	Good
Tsuda 1993	b)	b)	b)	b)	b)	b)	b)	c)	Fair
Senior 1996	a)	a)	b)	a)	b)	a)	a)	b)	Good
Schillaci 1997	b)	a)	a)	b)	b)	b)	a)	b)	Good
Astarita 1998	b)	b)	a)	b)	b)	b)	a)	b)	Good
Elhendy 1998	a)	b)	a)	b)	b)	b)	a)	b)	Good
Ho 1998	a)	a)	b)	b)	b)	a)	b)	b)	Good
Fragasso 1999	a)	a)	b)	b)	b)	a)	b)	b)	Good
Arrif 2000	b)	b)	b)	b)	a)	b)	b)	c)	Fair
Maltagliati 2000	a)	a)	a)	b)	b)	a)	b)	b)	Good
Pasierski 2001	a)	a)	b)	b)	a)	a)	b)	b)	Good
Elhendy 2001	a)	b)	a)	a)	b)	a)	b)	a)	Good
Astarita 2001	a)	b)	a)	a)	a)	a)	b)	b)	Good
Cortigiani 2003	a)	b)	a)	b)	b)	a)	b)	b)	Good
Milosavljevic	a)	a)	b)	b)	a)	a)	b)	a)	Good
Nishida 2005	b)	b)	b)	b)	b)	b)	b)	c)	Fair
Michaelides 2007	a)	b)	a)	a)	a)	a)	a)	b)	Good
Aggeli 2007	a)	b)	b)	a)	a)	a)	b)	b)	Good
Michaelides 2009	a)	b)	b)	b)	b)	b)	b)	b)	Good
Lu 2010	a)	b)	a)	a)	b)	b)	a)	c)	Good
Cortigiani 2011	a)	b)	a)	b)	a)	a)	b)	b)	Good
Zimarino 2016	a)	a)	b)	b)	a)	a)	a)	b)	Good

*Legend: NOS: Selection- 1: a), b) one star, c), d) no star; Selection- 2: a) one star, b, c) no star; Selection- 3: a), b) one star, c), d), e) no star, Selection- 4: a) one star, b) no star;*

*Comparability: a), b) one star, c) no star; Exposure-1: a), b) one star, c), d), e) no star; Exposure-2: a) one star, b) no star; Exposure-2: a), b) one star, c), d), no star.*

*Good quality: 3 or 4 stars in selection domain AND 1 or 2 stars in comparability domain AND 2 or 3 stars in outcome/exposure domain.*

*Fair quality: 2 stars in selection domain AND 1 or 2 stars in comparability domain AND 2 or 3 stars in outcome/exposure domain.*

*Poor quality: 0 or 1 star in selection domain OR 0 stars in comparability domain OR 0 or 1 star in outcome/exposure domain.*