

SUPPLEMENTAL MATERIAL

Data S1. Search string ‘Sex Differences in Symptom Presentation in Acute Coronary Syndrome: A Systematic Review and Meta-Analysis’.

Outcome	Determinant	Domain
Symptom* Presentation Presentations	Sex Sex factors (MeSH) Gender	Acute coronary syndrome (MeSH) Acute coronary syndrome* ACS Myocardial infarction (MeSH) Myocardial infarct* Heart attack Heart infarct* Cardiac infarct* MI Unstable angina (MeSH) Unstable angina UA

PubMed/MEDLINE:

(((((symptom*[Title/Abstract]) OR presentation[Title/Abstract]) OR presentations[Title/Abstract])) AND (((((((((((acute coronary syndrome[MeSH Terms]) OR acute coronary syndrome*[Title/Abstract]) OR ACS[Title/Abstract]) OR myocardial infarction[MeSH Terms]) OR myocardial infarct*[Title/Abstract]) OR heart attack[Title/Abstract]) OR heart infarct*[Title/Abstract]) OR cardiac infarct*[Title/Abstract]) OR MI[Title/Abstract]) OR unstable angina[MeSH Terms]) OR unstable angina[Title/Abstract]) OR UA[Title/Abstract])) AND (((sex[Title/Abstract]) OR sex factor[MeSH Terms]) OR gender[Title/Abstract])

Embase:

No.	Query	Results
#7	#5 AND [embase]/lim AND ('article'/it OR 'article in press'/it OR 'review'/it)	2689
#5	#1 AND #3 AND #4	5874
#4	'symptom'/exp OR 'symptom' OR 'symptom*':ti,ab,kw OR 'presentation':ti,ab,kw OR 'presentations':ti,ab,kw	2102679
#3	'sex':ti,ab,kw OR 'sex factor'/exp OR 'sex factor' OR 'gender':ti,ab,kw	1093115
#1	'acute coronary syndrome'/exp OR 'acute coronary syndrome' OR 'acute coronary syndrome*':ti,ab,kw OR 'acs':ti,ab,kw OR 'heart infarction'/exp OR 'heart infarction' OR 'myocardial infarct*':ti,ab,kw OR 'mi':ti,ab,kw OR 'heart attack':ti,ab,kw OR 'heart infarct*':ti,ab,kw OR 'cardiac infarct*':ti,ab,kw OR 'unstable angina pectoris'/exp OR 'unstable angina pectoris' OR 'unstable angina':ti,ab,kw OR 'ua':ti,ab,kw	514604

Filter: sources as embase or embase + medline, publication types as article, review or article in press

Cochrane:

-	+	#1	MeSH descriptor: [Acute Coronary Syndrome] explode all trees	MeSH	1629
-	+	#2	(acute coronary syndrome*);ti,ab,kw OR (ACS);ti,ab,kw	S	Limits 7609
-	+	#3	MeSH descriptor: [Myocardial Infarction] explode all trees	MeSH	10325
-	+	#4	(myocardial infarct*);ti,ab,kw OR (heart attack);ti,ab,kw OR (heart infarct*);ti,ab,kw OR (cardiac infarct*);ti,ab,kw OR (MI);ti,ab,kw	S	Limits 38922
-	+	#5	MeSH descriptor: [Angina, Unstable] explode all trees	MeSH	1057
-	+	#6	(unstable angina);ti,ab,kw OR (UA);ti,ab,kw	S	Limits 4810
-	+	#7	#1 OR #2 OR #3 OR #4 OR #5 OR #6	Limits	44482
-	+	#8	(symptom*);ti,ab,kw OR (presentation);ti,ab,kw OR (presentations);ti,ab,kw	S	Limits 186850
-	+	#9	MeSH descriptor: [Sex] explode all trees	MeSH	35
-	+	#10	MeSH descriptor: [Sex Factors] explode all trees	MeSH	5719
-	+	#11	(gender);ti,ab,kw	S	Limits 28284
-	+	#12	#9 OR #10 OR #11	Limits	32440
-	+	#13	#8 AND #7 AND #12	Limits	287
-	+	#14	Type a search term or use the S or MeSH buttons to compose	S MeSH	Limits N/A

Data S2. Adapted Newcastle-Ottawa quality assessment scale(1) (maximum 7 stars).

Selection

1 star per numbered item (maximum 4 stars)

1. Representativeness of exposed*cohort
 - a. Truly representative (star)
 - b. Somewhat representative (half star)
 - c. Selected group
 - d. No description
2. Selection of non-exposed cohort
 - a. Drawn from same community as exposed (star)
 - b. Drawn from different source
 - c. No description
3. Ascertainment of exposure
 - a. Medical record (star)
 - b. Interview (star)
 - c. Self-reported
 - d. No description
4. Demonstration that outcome of interest was not present at start of study
 - a. Yes (star)
 - b. No

Comparability

Maximum of 2 stars

1. Comparability of cohorts of basis of design or analysis
 - a. Study controls for age (most important factor) (star)
 - b. Study controls for comorbidities (star)

Outcome

1 star per numbered item (maximum 1 star)

1. Assessment of outcome
 - a. Independent blind assessment (star)
 - b. Medical record review (star)
 - c. Self-reported (questionnaire or interview)
 - d. Not described

*For this review, exposure related to the sex of the patient. When assessing quality of the study using this Newcastle-Ottawa scale, women with ACS were seen as the exposed cohort, and men with ACS as the non-exposed cohort.

Study:

Selection:

1. Representativeness of exposed cohort
 - X star
2. Selection of non-exposed cohort
 - X star
3. Ascertainment of exposure
 - X star
4. Demonstration that outcome of interest was not present at start of study
 - X star

Total: /4

Comparability:

1. Study takes confounder age into account
 - X star
2. Study take confounder comorbidities into account
 - X star

Total: /2

Outcome:

1. Assessment of outcome
 - X star

Total: /1

Cumulative total: /7

Table S1. Reported symptoms in each included study.

Included study	Symptoms reported by study
Tunstall-Pedoe et al., 1996 (2)	Chest pain, syncope
Meischke et al., 1998(3)	Chest pain, diaphoresis, shortness of breath, stomach or epigastric pain, nausea or vomiting, syncope
Goldberg et al., 1998(4)	Pain between shoulder blades, chest pain, diaphoresis, stomach or epigastric pain, jaw pain, left arm pain, nausea, neck pain, right arm pain, shortness of breath, syncope
Milner et al., 1999(5)	Chest pain, pain between shoulder blades, nausea or vomiting, shortness of breath, palpitations, indigestion, fatigue, arm pain, diaphoresis, jaw pain, dizziness, neck pain
Culic et al., 2002(6)	Chest pain, left arm pain, right arm pain, stomach or epigastric pain, neck pain, pain between shoulder blades, jaw pain, headache, diaphoresis, nausea, shortness of breath, belching, cough, dizziness, hiccups, tinnitus
Grace et al., 2003(7)	Chest pain, diaphoresis, shortness of breath, left arm pain, nausea, neck pain, fatigue, dizziness, indigestion, stomach or epigastric pain, syncope
Løvlien, Schei & Gjendal, 2006(8)	Chest pain, left arm pain, jaw pain, pain between shoulder blades, nausea, shortness of breath
Hirakawa et al., 2006(9)	Chest pain
Arslanian-Engoren et al., 2006(10)	Chest pain, shortness of breath, diaphoresis, left arm pain, nausea, right arm pain
Løvlien, Schei & Hole, 2006(11)	Chest pain, diaphoresis, left arm pain, shortness of breath, nausea or vomiting, fatigue, dizziness, palpitations, right arm pain, jaw pain, hot flushes, pain between shoulder blades, stomach or epigastric pain, headache, syncope,
Dey et al., 2008(12)	Chest pain, syncope, shortness of breath, palpitations, jaw pain, nausea or vomiting, diaphoresis
Kirchberger et al., 2011(13)	Chest pain, left arm or shoulder pain, right arm or shoulder pain, jaw pain, stomach or epigastric pain, pain between shoulder blades, nausea, shortness of breath, diaphoresis, fear, dizziness, syncope
Angerud et al., 2011(14)	Chest pain
Canto et al., 2012(15)	Chest pain
Pelter et al., 2012(16)	Chest pain, shortness of breath, arm pain, diaphoresis, stomach or epigastric pain, jaw pain
O'Donnell et al., 2012(17)	Chest pain, shortness of breath, diaphoresis, left arm pain, nausea, fatigue, pain between shoulder blades, palpitations, indigestion, fear
Zevallos et al., 2012(18)	Chest pain, left arm pain, pain between shoulder blades, stomach or epigastric pain
Coventry et al., 2013(19)	Chest pain, left arm pain, right arm pain, diaphoresis, shortness of breath, abdominal or epigastric pain, nausea or vomiting, syncope, fatigue, pain between shoulder blades
Melberg et al., 2013(20)	Chest pain, shortness of breath, syncope, nausea or vomiting, diaphoresis
Khan et al., 2013(21)	Chest pain, fatigue, hot flushes, shortness of breath, diaphoresis, left arm or shoulder pain, pain between shoulder blades, nausea, dizziness, right arm or shoulder pain, neck pain, headache, dizziness, headache, jaw pain,
Asgar Pour et al., 2015(22)	Chest pain, arm pain, diaphoresis, shortness of breath, nausea or vomiting, palpitations, fatigue, indigestion, pain between shoulder blades,
DeVon et al., 2017(23)	Chest pain, shortness of breath, fatigue, dizziness or lightheadedness, nausea, arm pain, sweating, pain between shoulder blades, palpitations, indigestion,
Lichtman et al., 2018(24)	Chest pain, dizziness, palpitations, shortness of breath, sweating, fatigue
Sederholm Lawesson et al., 2018(25)	No chest pain, neck pain, pain between shoulder blades, stomach pain, arm/hands pain, tiredness/fatigue, shortness of breath, syncope, nausea or vomiting, diaphoresis, fear
Allana et al., 2018(26)	Chest pain, shortness of breath, diaphoresis, pain between shoulder blades, nausea or vomiting, stomach or epigastric pain, jaw pain, syncope, palpitations
An et al., 2018(27)	Pain centrally in chest, pain between shoulder blades, left arm or shoulder pain, neck pain, jaw pain, right arm or shoulder pain, diaphoresis, hot flushes,

	fatigue, cough, palpitations, shortness of breath, indigestion, nausea or vomiting, dizziness, headache
Plaza-Martin et al., 2019(28)	Chest pain, shortness of breath, palpitations

Table S2. Subgroups for meta-regression.

Included study	Age: ≤ 65 years or >65 years
Tunstall-Pedoe et al., 1996(2)	≤ 65 years
Meischke et al., 1998(3)	> 65 years
Goldberg et al., 1998(4)	> 65 years
Milner et al., 1999(5)	> 65 years
Culic et al., 2002(6)	≤ 65 years
Grace et al., 2003(7)	≤ 65 years
Løvlien, Schei & Gjendal, 2006(8)	≤ 65 years
Hirakawa et al., 2006(9)	> 65 years
Arslanian-Engoren et al., 2006(10)	> 65 years
Løvlien, Schei & Hole, 2006(11)	≤ 65 years
Dey et al., 2008(12)	> 65 years
Kirchberger et al., 2011(13)	≤ 65 years
Angerud et al., 2011(14)	≤ 65 years
Canto et al., 2012(15)	> 65 years
Pelter et al., 2012(16)	> 65 years
O'Donnell et al., 2012(17)	≤ 65 years
Zevallos et al., 2012(18)	> 65 years
Coventry et al., 2013(19)	> 65 years
Melberg et al., 2013(20)	≤ 65 years
Khan et al., 2013(21)	≤ 65 years
Asgar Pour et al., 2015(22)	≤ 65 years
DeVon et al., 2017(23)	≤ 65 years
Lichtman et al., 2018(24)	≤ 65 years
Sederholm Lawesson et al., 2018(25)	> 65 years
Allana et al., 2018(26)	≤ 65 years
An et al., 2018(27)	≤ 65 years
Plaza-Martin et al., 2019(28)	> 65 years

Table S3. Results of the quality assessment using the Newcastle-Ottawa Scale.

Study	Selection (maximum 4)	Comparability (maximum 2)	Outcome (maximum 1)	Total score (maximum 7)
Plaza-Martin 2019(28)	****		*	5
An 2018 (27)	****	**		6
Allana 2018(26)	****			4
Sederholm Lawesson 2018 (25)	****	**		6
Lichtman 2018(24)	*** and half			3.5
DeVon 2017(23)	****	*	*	6
Asgar Pour 2015(22)	*** and half		*	4.5
Khan 2013 (21)	*** and half			3.5
Melberg 2013 (20)	*** and half		*	4.5
Coventry 2013(19)	*** and half	*	*	5.5
Zevallos 2013 (18)	*** and half		*	4.5
O'Donnell 2012 (17)	****	**		6
Pelter 2012 (16)	*** and half			3.5
Canto 2012 (15)	****	*	*	6
Angerud 2011(14)	** and half		*	3.5
Kirchberger 2011(13)	*** and half	**		5.5
Dey 2008(12)	****		*	5
DeVon 2008(29)	**			2
Løvlien, Schei & Hole, 2006(11)	*** and half	*		4.5
Arslanian-Engoren 2006(10)	****	*	*	6
Hirakawa 2006(9)	****		*	5
Omran 2006(30)	**			2
Løvlien, Schei & Gjendal, 2006(8)	*** and half			3.5
Chen 2005(31)	**	**		4
Grace 2003(7)	****			4
DeVon & Zerwic 2003(32)	**			2
Culic 2002(6)	****	**		6
Milner 1999(5)	*** and half	**		5.5
Goldberg 1998(4)	***	**	*	6
Meischke 1998(3)	****		*	5
Tunstall-Pedoe 1996(2)	*** and half		*	4.5

Table S4. Odds ratios of symptoms experienced when presenting with ACS in women relative to men.

Symptom	Study	Sample size	Crude OR (95% CI)	Adjusted OR (95% CI)
Chest pain	Allana et al (26)	M= 133, F= 116	1.23 (0.67-2.26)	
	An et al(27)	M= 323, F= 483	0.64 (0.47-0.89)	0.63 (0.44-0.91)
	Angerud et al(14)	M=2805, F=1223	0.74 (0.59-0.93)	
	Arslanian-Engoren et al(10)	M= 1258, F=536	0.56 (0.43-0.73)	0.86 (0.63-1.17)
	Asgar Pour et al (22)	M=183, F=137	0.79 (0.36-1.74)	
	Canto et al(15)	M=661,932, F=481,581	0.61 (0.61-0.62)	
	Coventry et al(19)	M= 1060, F=621	0.54 (0.44-0.67)	0.70 (0.57-0.88)
	Culic et al(6)	M=1395, F=601	0.56 (0.43- 0.72)	0.62 (0.48-0.80)
	DeVon et al (23)	M=343, F=131	0.72 (0.46-1.11)	0.70 (0.44-1.12)
	Dey et al (12)	M=29213 F=14180	0.73 (0.68-0.79)	
	Goldberg et al(4)	M=810, F=550	0.84 (0.64-1.11)	0.80 (0.59-1.09)
	Grace et al(7)	M=347, F=135	0.83 (0.55-1.26)	
	Hirakawa et al (9)	M=1712, F=509	0.71 (0.57-0.90)	
	Khan et al(21)	M=710, F=305	0.67 (0.47-0.96)	
	Kirchberger et al(13)	M= 1710, F=568	0.90 (0.61-1.33)	0.83 (0.54-1.28)
	Lichtman et al(24)	M=976, F=2009	0.78 (0.61-1.00)	
	Lovlien, Schei & Hole(11)	M=384, F=149	0.52 (0.29-0.94)	0.53 (0.29-0.97)
	Lovlien, Schei & Gjengedal(8)	M=44, F=38	0.62 (0.13-2.97)	
	Milner et al (5)	M=127, F=90	0.68 (0.39-1.17)	
	Meischke et al (3)	M=2970, F=1527	0.66 (0.54-0.82)	
	Melberg et al (20)	M=179, F=65	1.74 (0.98-3.09)	
	O'Donnell et al (17)	M=1402, F=545	NS: OR not provided	NS: OR not provided
	Pelter et al(16)	M=221, F=110	0.88 (0.51-1.50)	
	Plaza-Martin et al (28)	M=749, F=307	0.76 (0.56-1.04)	
	Sederholm Lawesson et al(25)	M=406, F=126	0.20 (0.12-0.35)	
	Tunstall-Pedoe et al(2)	M=3991, F=1551	0.98 (0.86-1.11)	
	Zevallos et al (18)	M=778, F=637	0.61 (0.46-0.79)	
Left arm or shoulder pain	An et al(27)	M= 323, F= 483	0.94 (0.67-1.33)	2.16 (1.21-3.86)
	Arslanian-Engoren et al(10)	M= 1258, F=536	0.80 (0.64-0.98)	0.93 (0.74-1.16)
	Coventry et al (19)	M=1060, F=621	1.54 (1.14-2.08)	1.26 (0.89-1.80)
	Culic et al(6)	M=1395, F=601	1.28 (1.04-1.57)	1.32 (1.06-1.61)
	Goldberg et al(4)	M=810, F=550	1.00 (0.79-1.27)	1.20 (0.93-1.56)
	Grace et al(7)	M=347, F=135	1.29 (0.87-1.93)	
	Khan et al(21)	M=710, F=305	1.38 (1.05-1.80)	
	Kirchberger et al(13)	M= 1710, F=568	1.26 (1.03-1.52)	1.36 (1.10-1.69)
	Lovlien, Schei & Hole(11)	M=384, F=149	1.16 (0.80-1.70)	1.34 (0.90-1.98)
	Lovlien, Schei & Gjengedal(8)	M=44, F=38	0.57 (0.22-1.46)	
	O'Donnell et al(17)	M=1402, F=545	1.17 (0.95-1.44)	1.27 (1.02-1.58)
	Zevallos et al (18)	M=778, F=637	0.53 (0.41-0.69)	
	Right arm or shoulder pain	An et al (27)	M= 323, F= 483	0.66 (0.23-1.91)
Arslanian-Engoren et al(10)		M= 1258, F=536	0.90 (0.65-1.26)	1.04 (0.74-1.48)
Coventry et al(19)		M= 1060, F=621	0.57 (0.39-0.83)	0.70 (0.48-1.04)
Culic et al (6)		M=1395, F=601	1.35 (1.11-1.64)	1.33 (1.09-1.61)
Goldberg et al(4)		M=810, F=550	1.15 (0.86-1.53)	1.28 (0.93-1.79)
Khan et al (21)		M=710, F=305	1.45 (1.06-1.99)	
Kirchberger et al(13)		M= 1710, F=568	1.14 (0.93-1.40)	1.19 (0.95-1.48)
Lovlien, Schei & Hole(11)		M=384, F=149	1.41 (0.94-2.13)	1.52 (1.00-2.32)
Arm pain	Asgar Pour et al (22)	M=183, F=137	0.84 (0.54-1.31)	
	DeVon et al (23)	M=343, F=131	1.30 (0.87-1.96)	1.28 (0.83-1.98)
	Milner et al (5)	M=127, F=90	1.66 (0.93-2.96)	
	Pelter et al(16)	M=221, F=110	1.50 (0.87-2.59)	
	Sederholm Lawesson et al(25)	M=406, F=126	2.73 (1.72-4.32)	2.55 (1.53-4.25)
Pain between shoulder blades	Allana et al (26)	M= 133, F= 116	3.06 (1.81-5.15)	
	An et al(27)	M= 323, F= 483	1.99 (1.48-2.67)	2.13 (1.53-2.97)
	Asgar Pour et al(22)	M=183, F=137	1.29 (0.81-2.04)	
	Coventry et al(19)	M= 1060, F=621	1.62 (0.96-2.74)	1.62 (0.93-2.81)
	Culic et al (6)	M=1395, F=601	2.16 (1.52-3.06)	1.64 (1.16-2.27)
	DeVon et al(23)	M=343, F=131	2.98 (1.91-4.66)	1.75 (1.21-2.53)
	Goldberg et al (4)	M=810, F=550	2.43 (1.70-3.47)	2.63 (1.79-3.85)
	Khan et al (21)	M=710, F=305	2.03 (1.53-2.69)	
Kirchberger et al (13)	M= 1710, F=568	2.31 (1.88-2.82)	2.22 (1.78-2.77)	

	Lovlien, Schei & Hole (11)	M=384, F=149	1.91 (1.21-3.02)	1.80 (1.12-2.89)	
	Lovlien, Schei & Gjengedal(8)	M=44, F=38	3.45 (1.22-9.73)		
	Milner et al(5)	M=127, F=90	9.62 (2.10-44.11)		
	O'Donnell et al(17)	M=1402, F=545	1.62 (1.08-2.42)	1.57 (1.04-2.37)	
	Sederholm Lawesson et al(25)	M=406, F=126	3.10 (1.90-5.05)	3.59 (2.09-6.15)	
	Zevallos et al (18)	M=778, F=637	1.90 (1.34-2.70)		
Neck pain	An et al(27)	M= 323, F= 483	1.43 (1.01-2.03)	1.54 (1.04-2.27)	
	Culic et al(6)	M= 1395, F=601	1.75 (1.33-2.29)	1.56 (1.19-2.04)	
	Goldberg et al(4)	M=810, F=550	1.74 (1.26-2.39)	1.92 (1.28-2.86)	
	Grace et al(7)	M=347, F=135	2.08 (1.34-3.22)		
	Khan et al(21)	M=710, F=305	2.13 (1.57-2.88)		
	Milner et al (5)	M=127, F=90	1.17 (0.46-2.96)		
	O'Donnell et al(17)	M=1402, F=545	1.71 (1.32-2.21)	1.85 (1.42-2.40)	
	Sederholm Lawesson et al(25)	M=406, F= 126	2.40 (1.54-3.76)	2.97 (1.79-4.93)	
	Allana et al (26)	M= 133, F= 116	2.33 (1.29-4.22)		
	An et al (27)	M= 323, F= 483	0.70 (0.41-1.21)	NS: OR not provided	
Jaw pain	Culic et al (6)	M=1395, F=601	1.72 (1.20-2.47)	1.47 (1.04-2.08)	
	Dey et al(12)	M=682, F=344	2.84 (1.69-4.76)		
	Goldberg et al (4)	M=810, F=550	1.90 (1.28-2.82)	2.00 (1.23-3.22)	
	Khan et al(21)	M=710, F=305	2.11 (1.50-2.98)		
	Kirchberger et al(13)	M= 1710, F=568	1.73 (1.42- 2.11)	1.78 (1.43-2.21)	
	Lovlien, Schei & Hole(11)	M=384, F=149	1.53 (1.01-2.31)	1.66 (1.08-2.55)	
	Lovlien, Schei & Gjengedal(8)	M=44, F=38	3.00 (1.18-7.62)		
	Milner et al(5)	M=127, F=90	0.61 (0.18-2.05)		
	Pelter et al(16)	M=221, F=110	1.94 (0.83-4.54)		
	Allana et al (26)	M= 133, F=116	2.11 (1.24-3.59)		
	Coventry et al (19)	M=1060, F=621	1.36 (0.74-2.51)	1.02 (0.55-1.91)	
	Culic et al (6)	M=1395, F=601	0.80 (0.61-1.05)	0.95 (0.73-1.23)	
	Goldberg et al (4)	M=810, F=550	0.73 (0.43-1.22)	0.90 (0.53-1.54)	
	Grace et al(7)	M=347, F=135	1.95 (0.93-4.09)		
Stomach or epigastric pain	Kirchberger et al(13)	M= 1710, F=568	1.37 (1.03-1.83)	1.39 (1.02-1.91)	
	Lovlien, Schei & Hole(11)	M=384, F=149	1.29 (0.78-2.14)	1.38 (0.82-2.30)	
	Meischke et al (3)	M=2970, F=1527	0.98 (0.80-1.20)		
	Pelter et al(16)	M=221, F=110	1.71 (0.51-5.72)		
	Sederholm Lawesson et al(25)	M=406, F= 126	0.50 (0.21-1.21)	0.55 (0.21-1.42)	
	Zevallos et al (18)	M=778, F=637	1.80 (1.20-2.69)		
	Allana et al (26)	M= 133, F=116	1.74 (1.00-3.05)		
	An et al(27)	M= 323, F= 483	1.88 (1.41-2.51)	2.13 (1.57-2.95)	
	Arslanian-Engoren et al(10)	M= 1258, F=536	1.13 (0.94-1.36)	1.10 (0.90-1.34)	
	Asgar Pour et al (22)	M=183, F=137	0.81 (0.48-1.34)		
Shortness of breath	Coventry et al(19)	M= 1060, F=621	1.14 (0.91-1.42)	1.05 (0.84-1.33)	
	Culic et al(6)	M=1395, F=601	1.80 (1.48-2.19)	1.51 (1.23-1.82)	
	DeVon et al(23)	M=343, F=131	1.32 (0.88-1.97)	1.45 (0.93-2.26)	
	Dey et al (12)	M=682, F=344	1.02 (0.79-1.33)		
	Goldberg et al(4)	M=810, F=550	1.25 (1.00-1.56)	1.16 (0.92-1.49)	
	Grace et al(7)	M=347, F=135	1.47 (0.99-2.20)		
	Khan et al(21)	M=710, F=305	0.99 (0.75-1.29)		
	Kirchberger et al(13)	M= 1710, F=568	1.51 (1.25-1.83)	1.45 (1.17-1.78)	
	Lichtman et al(24)	M=976, F=2009	1.23 (1.06-1.43)		
	Lovlien, Schei & Hole(11)	M=384, F=149	1.47 (1.00-2.16)	1.63 (1.10-2.42)	
	Lovlien, Schei & Gjengedal(8)	M=44, F=38	2.15 (0.88-5.24)		
	Milner et al(5)	M=127, F=90	1.82 (1.05-3.16)	1.68 (0.95-2.96)	
	Meischke et al(3)	M=2970, F=1527	1.26 (1.11-1.42)		
	Melberg et al(20)	M=179, F=65	1.17 (0.56-2.46)		
	O'Donnell et al(17)	M=1402, F=545	1.33 (1.09-1.62)	1.33 (1.08-1.63)	
	Plaza-Martin et al (28)	M=749, F=307	2.06 (1.53-2.78)		
	Pelter et al(16)	M=221, F=110	1.55 (0.91-2.65)		
	Sederholm Lawesson et al(25)	M=406, F=126	0.98 (0.64-1.50)	1.04 (0.66-1.65)	
	An et al(27)	M= 323, F= 483	1.00 (0.74-1.35)	NS: OR not provided	
	Diaphoresis	Allana et al (26)	M= 133, F= 116	0.85 (0.51-1.41)	
		Arslanian-Engoren et al(10)	M= 1258, F=536	0.67 (0.55-0.82)	0.76 (0.62-0.94)
		Asgar Pour et al(22)	M=183, F=137	0.98 (0.52-1.87)	
		Coventry et al(19)	M= 1060, F=621	0.61 (0.43-0.85)	0.71 (0.50-1.01)
		Culic et al (6)	M=1395, F=601	0.62 (0.52-0.76)	0.73 (0.60-0.88)
DeVon et al(23)		M=343, F=131	0.94 (0.61-1.43)	0.96 (0.61-1.50)	
Dey et al(12)		M=682, F=344	0.75 (0.56-1.01)		

	Goldberg et al(4)	M=810, F=550	0.79 (0.64-0.98)	0.78 (0.62-1.00)
	Grace et al(7)	M=347, F=135	1.32 (0.88-1.96)	
	Khan et al(21)	M=710, F=305	0.77 (0.59-1.01)	
	Kirchberger et al(13)	M= 1710, F=568	0.91 (0.75-1.10)	0.93 (0.75-1.15)
	Lichtman et al(24)	M=976, F=2009	1.08 (0.74-1.58)	
	Lovlien, Schei & Hole(11)	M=384, F=149	1.08 (0.74-1.58)	1.29 (0.87-1.93)
	Meischke et al(3)	M=2970, F=1527	0.68 (0.60-0.77)	
	Melberg et al (20)	M=179, F=65	0.92 (0.50-1.69)	
	Milner et al (5)	M=127, F=90	1.45 (0.79-2.67)	
	O'Donnell et al(17)	M=1402, F=545	NS: OR not provided	NS: OR not provided
	Pelter et al(16)	M=221, F=110	0.91 (0.43-1.94)	
	Sederholm Lawesson et al(25)	M=406, F=126	1.20 (0.79-1.82)	1.40 (0.88-2.23)
Nausea or vomiting	Allana et al (26)	M= 133, F=116	2.51 (1.50-4.18)	
	An et al (27)	M= 323, F= 483	1.28 (0.93-1.76)	NS: OR not provided
	Arslanian-Engoren et al(10)	M=1258, F=536	1.24 (1.01-1.52)	1.48 (1.19-1.84)
	Asgar Pour et al (22)	M=183, F=137	1.29 (0.81-2.04)	
	Coventry et al(19)	M= 1060, F=621	1.55 (1.03-2.34)	1.57 (1.02-2.41)
	Culic et al (6)	M=1395, F=601	1.94 (1.60-2.36)	1.61 (1.33-1.96)
	DeVon et al(23)	M=343, F=131	1.52 (1.01-2.30)	1.72 (1.21-2.46)
	Dey et al (12)	M=682, F=344	1.63 (1.22-2.18)	
	Goldberg et al(4)	M=810, F=550	1.60 (1.28-2.02)	1.72 (1.33-2.22)
	Grace et al(7)	M=347, F=135	1.81 (1.19-2.73)	
	Khan et al(21)	M=710, F=305	1.85 (1.38-2.49)	
	Kirchberger et al(13)	M= 1710, F=568	1.90 (1.57-2.31)	2.23 (1.67-2.97)
	Lovlien, Schei & Hole(11)	M=384, F=149	2.14 (1.45-3.16)	2.38 (1.59-3.56)
	Lovlien, Schei & Gjengedal(8)	M=44, F=38	3.72 (1.49-9.29)	
	Meischke et al (3)	M=2970, F=1527	1.45 (1.28-1.64)	
	Melberg et al(20)	M=179, F=65	1.32 (0.72-2.43)	
	Milner et al (5)	M=127, F=90	2.29 (1.19-4.42)	2.43 (1.23-4.79)
	O'Donnell et al(17)	M=1402, F=545	1.23 (0.98-1.53)	1.31 (1.04-1.65)
	Sederholm Lawesson et al(25)	M=406, F=126	2.39 (1.59-3.61)	3.04 (1.93-4.78)
Fatigue	An et al(27)	M= 323, F= 483	1.51 (1.14-2.01)	1.39 (1.01-1.91)
	Asgar Pour et al(22)	M=183, F=137	0.85 (0.54-1.35)	
	Coventry et al (19)	M= 1060, F=621	2.13 (1.28-3.56)	
	DeVon et al(23)	M=343, F=131	1.13 (0.75-1.70)	1.04 (0.67-1.62)
	Grace et al(7)	M=347, F=135	1.24 (0.81-1.90)	
	Khan et al(21)	M=710, F=305	1.57 (1.19-2.05)	
	Lichtman et al (24)	M=976, F=2009	1.19 (1.02-1.39)	
	Lovlien, Schei & Hole(11)	M=384, F=149	1.36 (0.93-2.00)	1.43 (0.97-2.11)
	Milner et al (5)	M=127, F=90	2.07 (0.93-4.63)	
	O'Donnell et al(17)	M=1402, F=545	1.49 (1.19-1.87)	1.64 (1.30-2.08)
	Sederholm Lawesson et al(25)	M=406, F=126	1.43 (0.94-2.16)	1.31 (0.84-2.06)
Dizziness or light-headedness	An et al(27)	M= 323, F=483	1.53 (1.14-2.07)	1.83 (1.31-2.58)
	Culic et al (6)	M=1395, F=601	1.39 (0.96-2.03)	1.22 (0.84-1.75)
	DeVon et al(23)	M=343, F=131	1.29 (0.86-1.95)	1.26 (0.81-1.96)
	Grace et al(7)	M=347, F=135	1.70 (1.08-2.67)	
	Lovlien, Schei & Hole(11)	M=384, F=149	1.32 (0.89-1.95)	1.54 (1.03-2.32)
	Lichtman et al(24)	M=976, F=2009	1.09 (0.92-1.29)	
	Khan et al(21)	M=710, F=305	1.17 (0.86-1.58)	
	Kirchberger et al(13)	M= 1710, F=568	1.36 (1.08-1.70)	1.49 (1.16-1.91)
	Milner et al (5)	M=127, F=90	1.21 (0.61-2.38)	
Indigestion	An et al (27)	M= 323, F= 483	1.42 (0.66-3.06)	NS: OR not provided
	Asgar Pour et al(22)	M=183, F=137	0.74 (0.43-1.28)	
	DeVon et al (23)	M=343, F=131	1.51 (0.96-2.38)	1.40 (0.86-2.27)
	Grace et al(7)	M=347, F=135	1.32 (0.82-2.14)	
	Milner et al(5)	M=127, F=90	2.13 (1.03-4.44)	2.13 (1.01-4.53)
	O'Donnell et al(17)	M=1402, F=545	NS: OR not provided	NS: OR not provided
Palpitations	Allana et al(26)	M=133, F=116	2.11 (1.26-3.52)	
	An et al(27)	M= 323, F=483	1.63 (1.11-2.41)	NS: OR not provided
	Asgar Pour et al(22)	M=183, F=137	1.41 (0.85-2.35)	
	DeVon et al(23)	M=343, F=131	1.72 (1.06-2.79)	1.54 (1.05-2.25)
	Dey et al(12)	M=682, F=344	1.46 (0.82-2.61)	
	Lichtman et al(24)	M=976, F=2009	1.61 (1.29-2.01)	
	Lovlien, Schei & Hole(11)	M=384, F=149	2.77 (1.82-4.22)	3.14 (2.02-4.88)
	Milner et al (5)	M=127, F=90	3.42 (1.02-11.47)	
	O'Donnell et al(17)	M=1402, F=545	2.04 (1.25-3.31)	2.18 (1.31-3.63)

	Plaza-Martin et al(28)	M=749, F=307	3.05 (1.52-6.13)	
Fear	Kirchberger et al(13)	M= 1710, F=568	2.03 (1.66-2.49)	2.17 (1.73-2.72)
	O'Donnell et al(17)	M=1402, F=545	1.32 (0.98-1.78)	1.47 (1.08-2.01)
	Sederholm Lawesson et al(25)	M=406, F=126	2.19 (1.39-3.46)	2.65 (1.59-4.41)
Syncope	Allana et al(26)	M=133, F=116	0.95 (0.28-3.21)	
	Coventry et al(19)	M= 1060, F=621	1.41 (0.97-2.05)	1.42 (0.96-2.10)
	Dey et al(12)	M=682, F=344	1.06 (0.77-1.45)	
	Goldberg et al(4)	M=810, F=550	1.27 (0.87-1.86)	0.88 (0.56-1.41)
	Grace et al(7)	M=347, F=135	1.09 (0.46-2.55)	
	Kirchberger et al(13)	M= 1710, F=568	1.41 (0.95-2.09)	1.55 (1.00-2.39)
	Lovlien, Schei & Hole(11)	M=384, F=149	2.04 (1.11-3.77)	2.34 (1.25-4.40)
	Meischke et al (3)	M=2970, F=1527	1.23 (0.85-1.77)	
	Melberg et al(20)	M=179, F=65	0.95 (0.42-2.14)	
	Sederholm Lawesson et al(25)	M=406, F=126	0.98 (0.62-1.54)	0.96 (0.58-1.58)
	Tunstall-Pedoe et al(2)	M=3991, F=1551	1.31 (0.94-1.83)	
	Headache	An et al (27)	M= 323, F= 483	1.67 (0.98-2.83)
Culic et al(6)		M=1395, F=601	2.63 (1.85-3.85)	2.04 (1.45-2.86)
Khan et al(21)		M=710, F=305	1.54 (1.10-2.15)	
Lovlien, Schei & Hole(11)		M=384, F=149	1.25 (0.76-2.04)	1.46 (0.88-2.44)
Hot flushes	An et al (27)	M= 323, F= 483	1.14 (0.60-2.14)	NS: OR not provided
	Khan et al(21)	M=710, F=305	1.51 (1.16-1.98)	
	Lovlien, Schei & Hole(11)	M=384, F=149	1.47 (0.95-2.25)	1.63 (1.00-2.54)
Cough	An et al (27)	M= 323, F= 483	0.74 (0.38-1.44)	NS: OR not provided
	Culic et al(6)	M=1395, F=601	2.08 (1.54-2.78)	1.59 (1.19-2.08)

OR: Odds ratio CI: confidence interval, M=male, F=female.

Table S5. Meta-regression showing effects of age on the odds ratio of the symptom being present in women relative to men.

	Age ≤ 65 years	Age > 65 years	p-value
	OR (95%CI)	OR (95%CI)	
<i>Symptom</i>			
Chest pain	0.79 (0.68-0.91)	0.64 (0.55-0.75)	0.06
Diaphoresis	0.90 (0.78-1.05)	0.76 (0.66-0.88)	0.14
Dizziness or lightheadedness*			
Fatigue†	1.32 (1.17-1.48)	1.74 (1.27-2.38)	0.11
Indigestion*			
Jaw pain	1.68 (1.29-2.20)	1.97 (1.37-2.85)	0.57
Left arm or left shoulder pain	1.21 (1.10-1.34)	0.89 (0.58-1.37)	0.10
Nausea or vomiting	1.45 (1.32-1.59)	1.74 (1.53-1.98)	0.49
Neck pain*			
Pain between the shoulder blades	2.12 (1.89-2.37)	2.28 (1.78-2.92)	0.59
Palpitations	1.72 (1.33-2.23)	2.24 (1.25-4.00)	0.42
Shortness of breath	1.40 (1.23-1.59)	1.27 (1.10-1.47)	0.33
Stomach or epigastric pain	1.34 (0.94-1.92)	1.08 (0.75-1.54)	0.40
Syncope	1.35 (1.09-1.68)	1.18 (1.00-1.40)	0.34
Right arm or right shoulder pain*			

*Less than 10 studies reported on this symptom, no meta-regression analysis performed

OR = odds ratio; 95%CI = 95% confidence interval

Figure S1. Funnel plot for pooled odds ratio of chest pain.



Figure S2. Funnel plot for pooled odds ratio of fatigue.

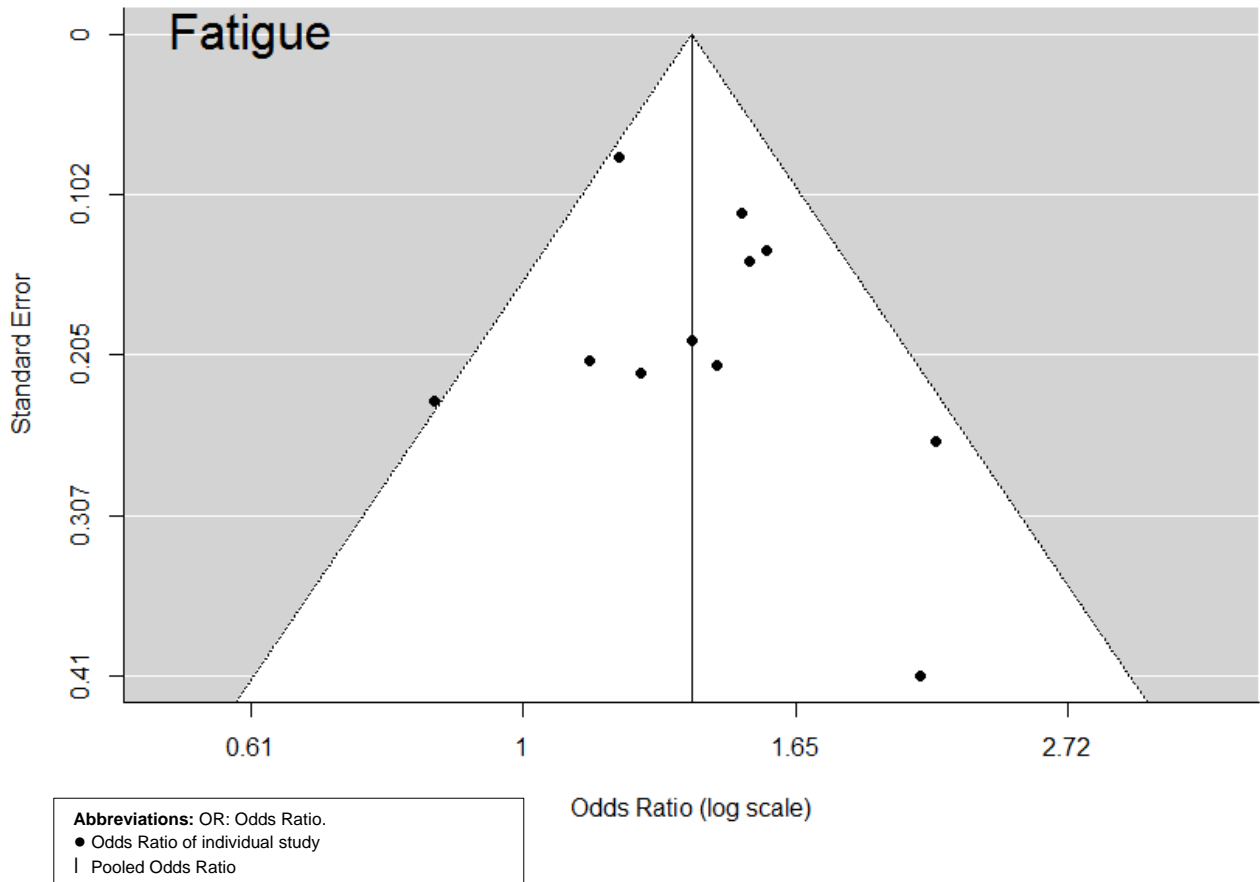


Figure S3. Funnel plot for pooled odds ratio of jaw pain.

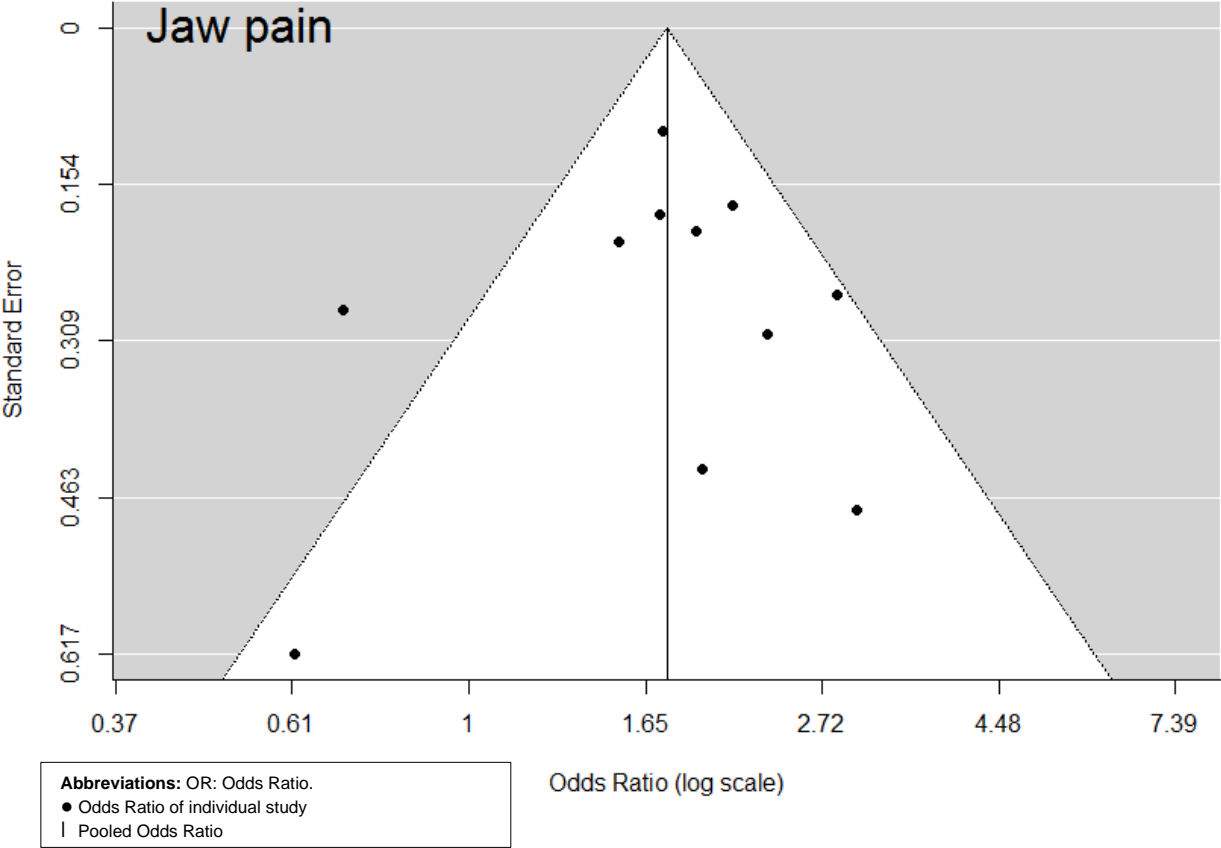


Figure S4. Funnel plot for pooled odds ratio of left arm or left shoulder pain.

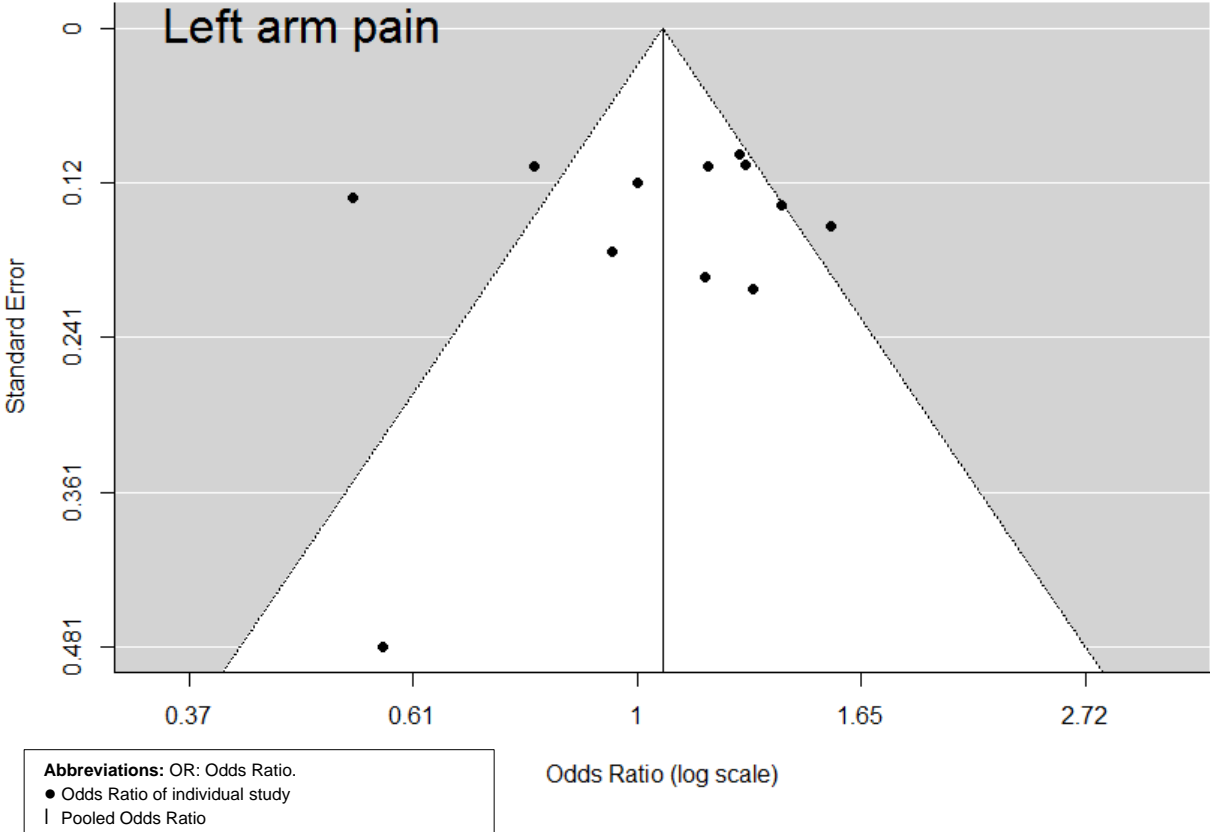


Figure S5. Funnel plot for pooled odds ratio of nausea or vomiting.

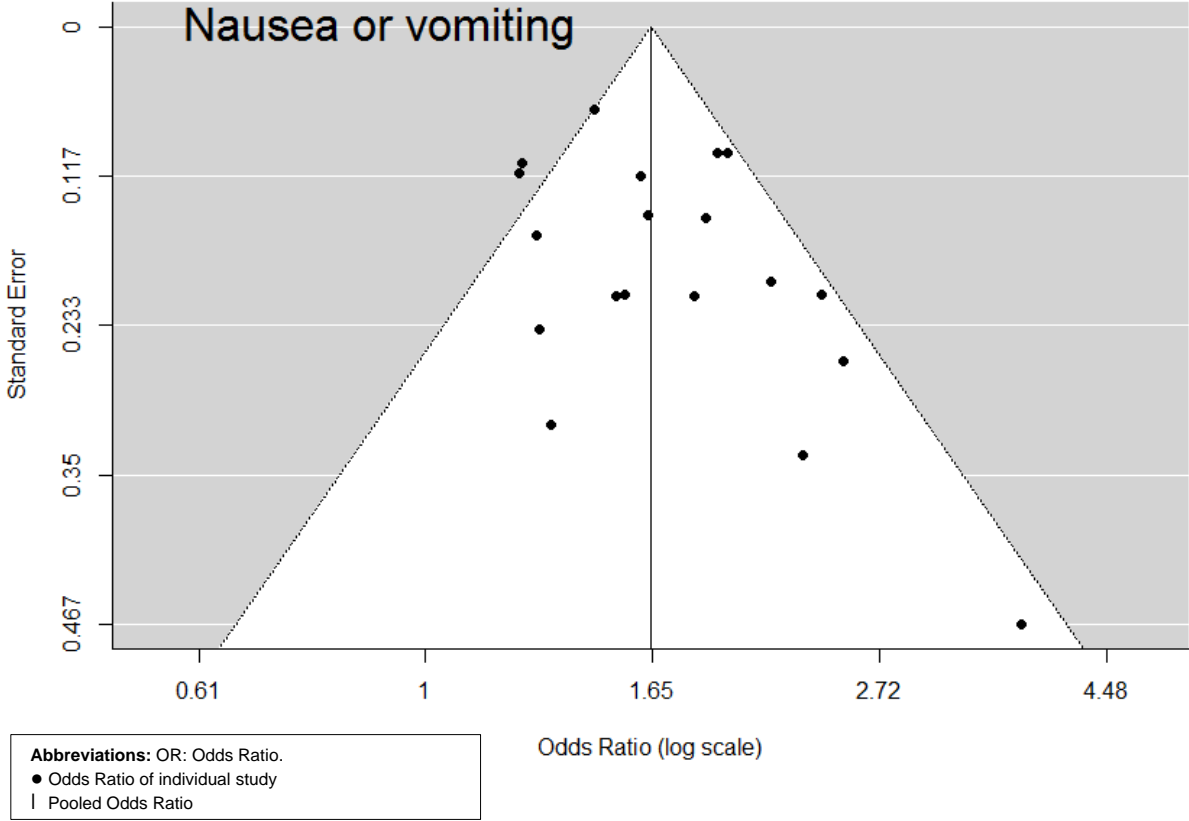


Figure S6. Funnel plot for pooled odds ratio of pain between shoulder blades.

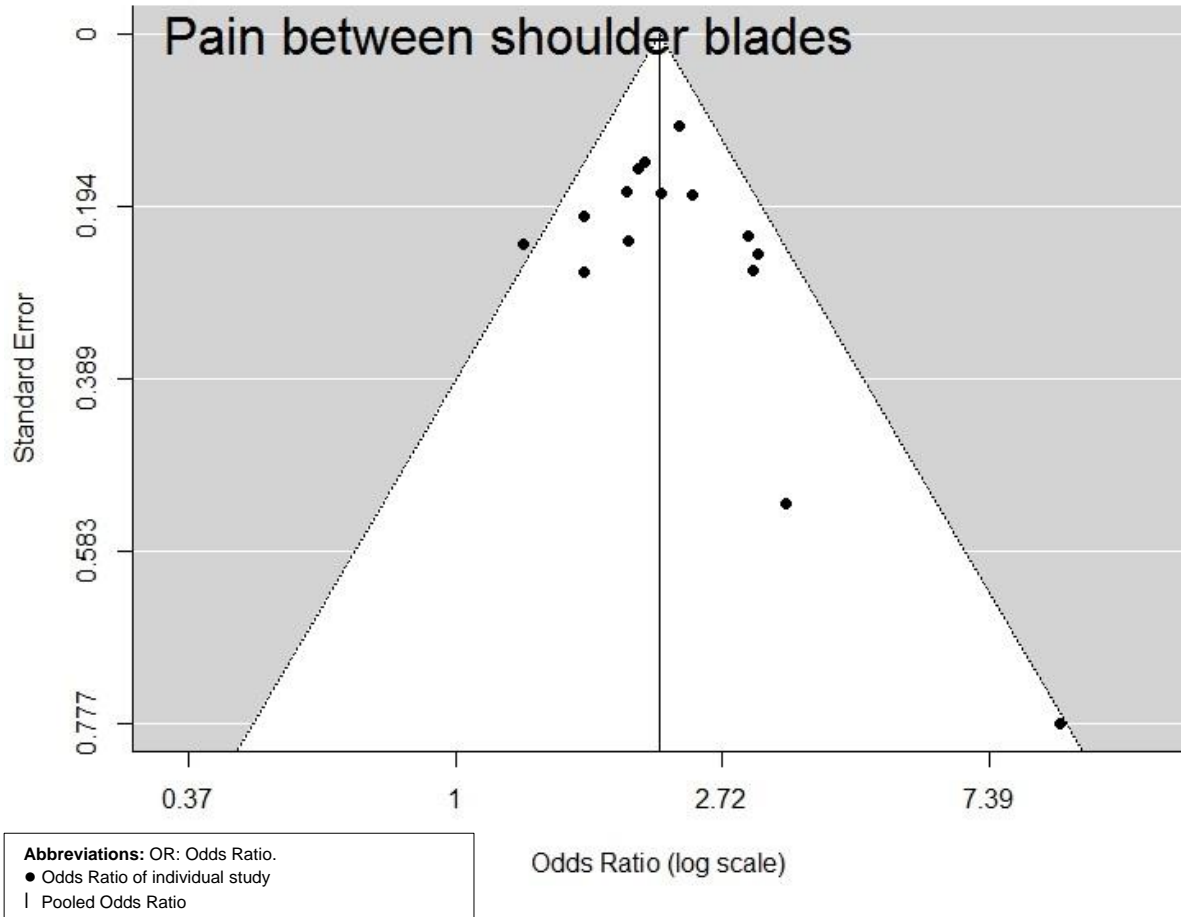


Figure S7. Funnel plot for pooled odds ratio of palpitations.

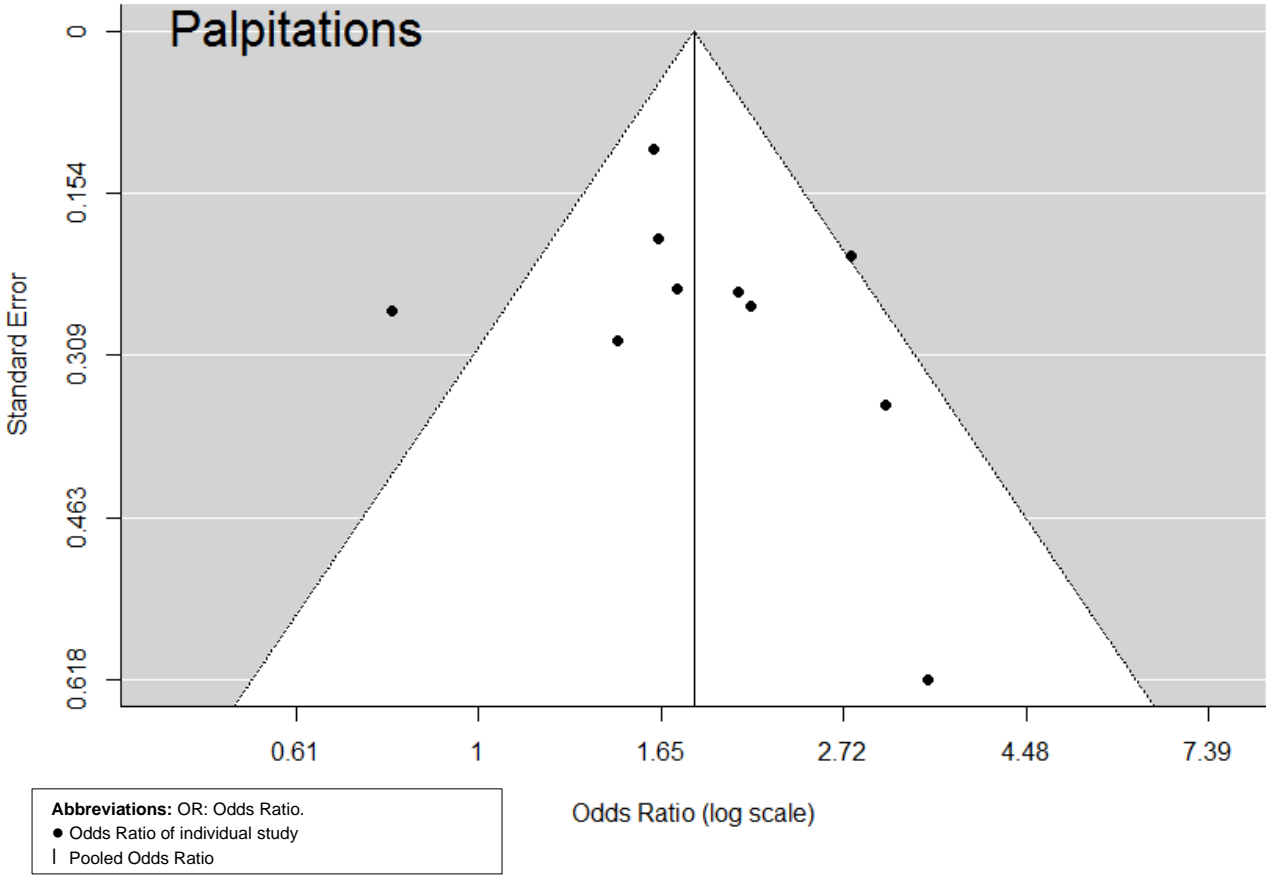


Figure S8. Funnel plot for pooled odds ratio of shortness of breath.

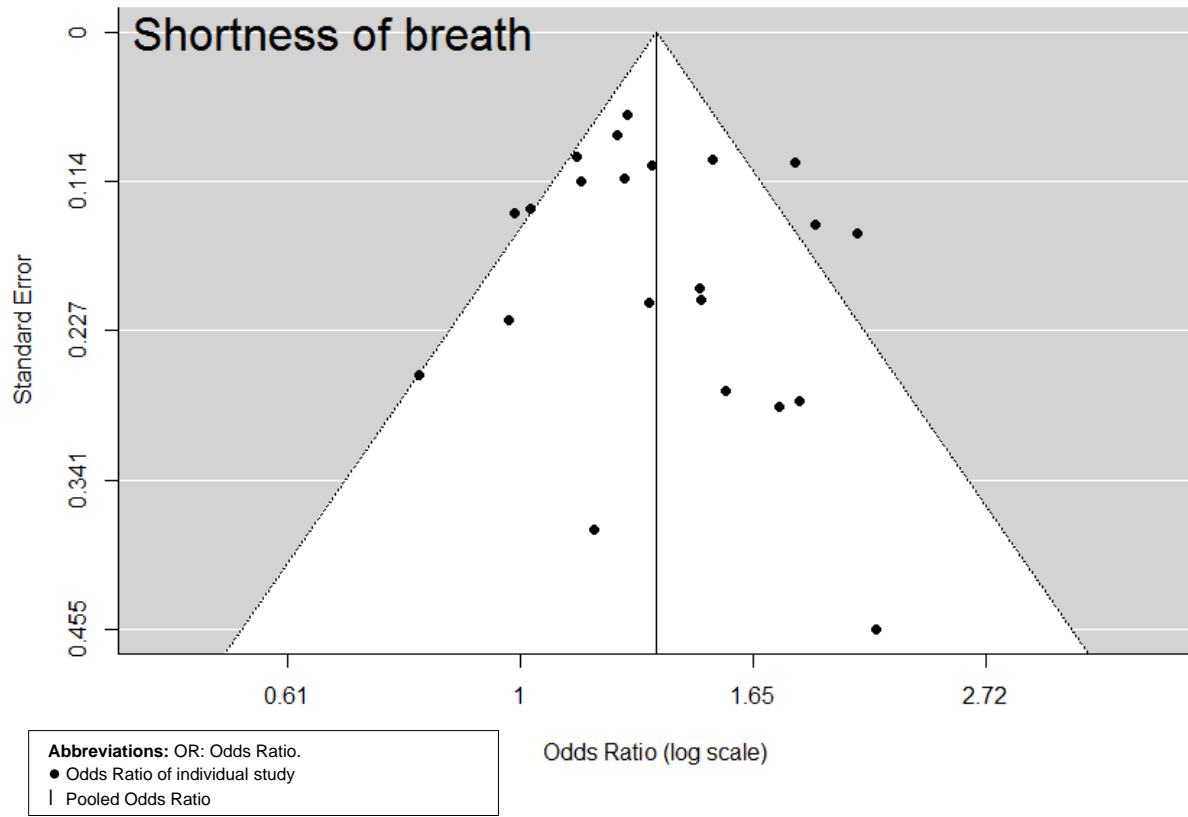


Figure S9. Funnel plot for pooled odds ratio of stomach or epigastric pain.

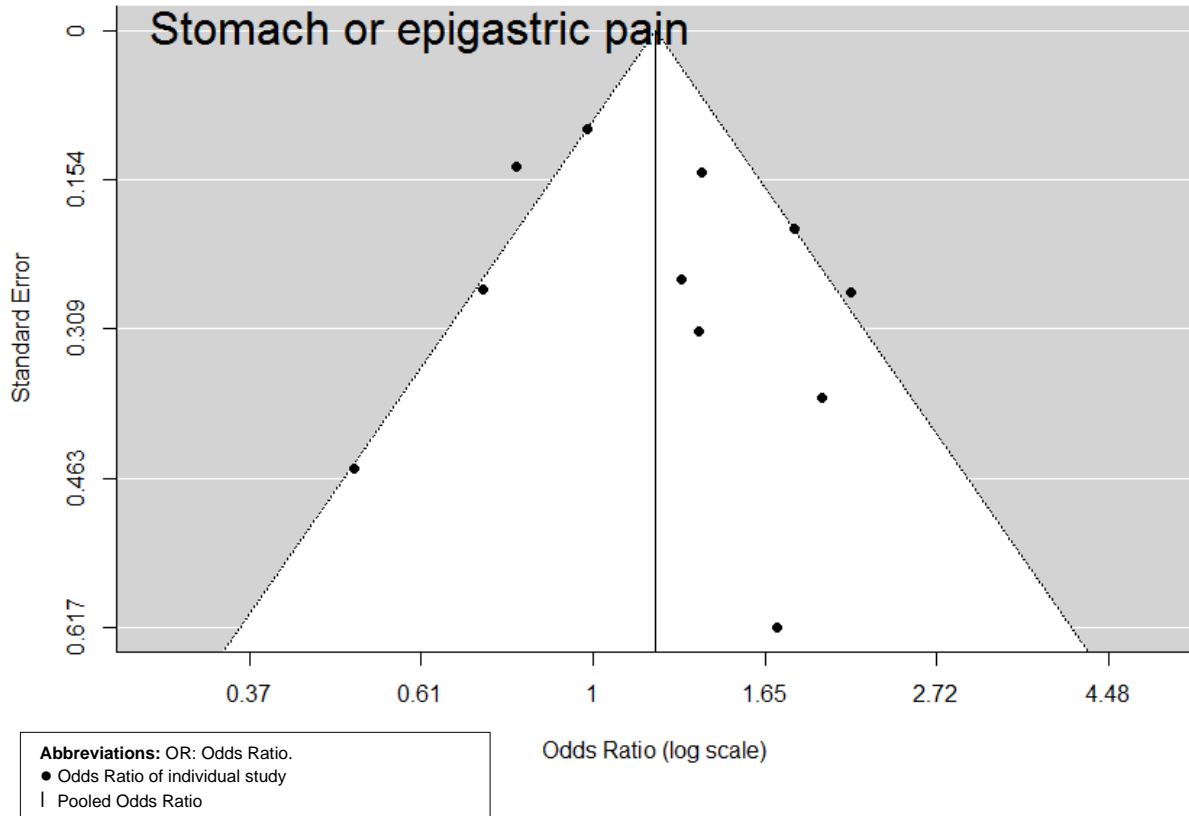


Figure S10. Funnel plot for pooled odds ratio of syncope.

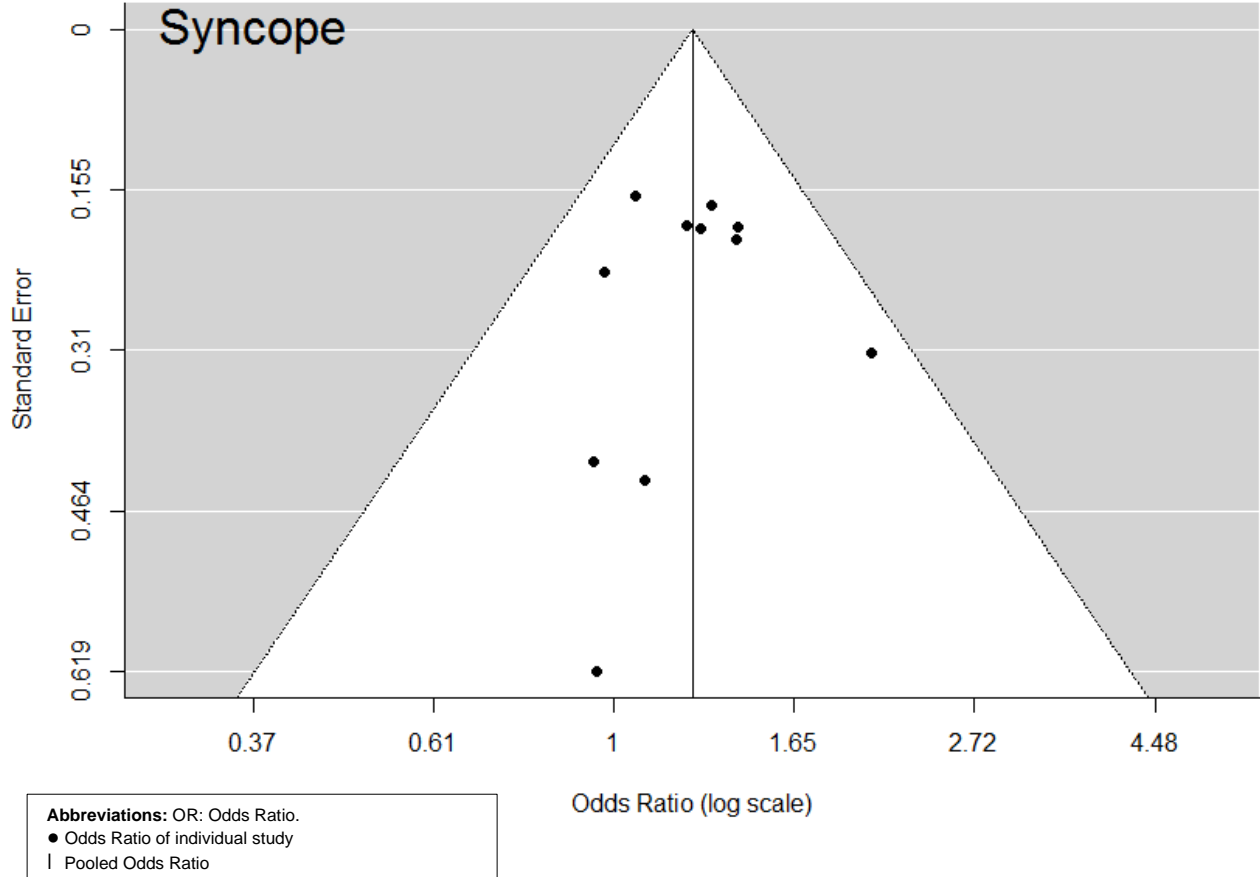


Figure S11. Funnel plot for pooled odds ratio of diaphoresis.

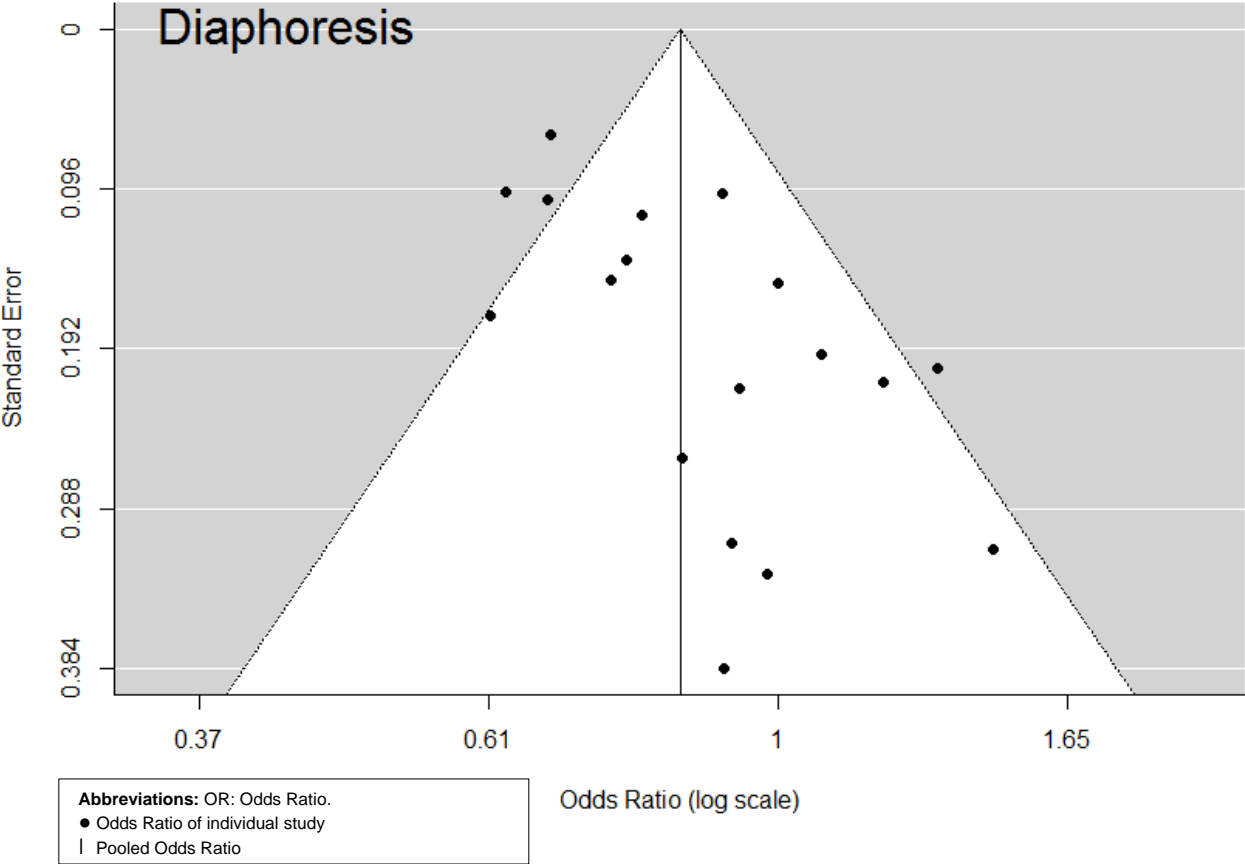


Figure S12. Results of the aggregated meta-analysis for chest pain as a symptom of ACS in women relative to men summarised in a forest plot.

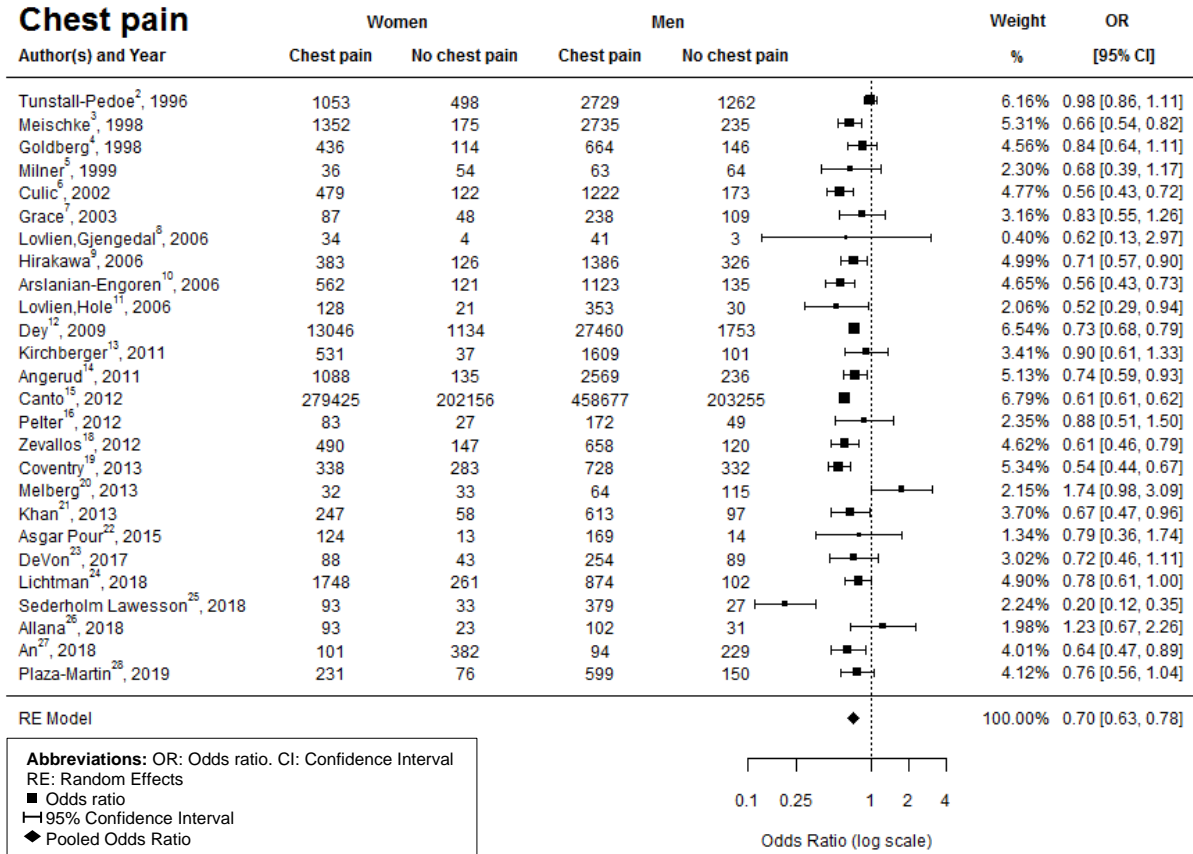


Figure S13. Results of the aggregated meta-analysis for diaphoresis as a symptom of ACS in women relative to men summarised in a forest plot.

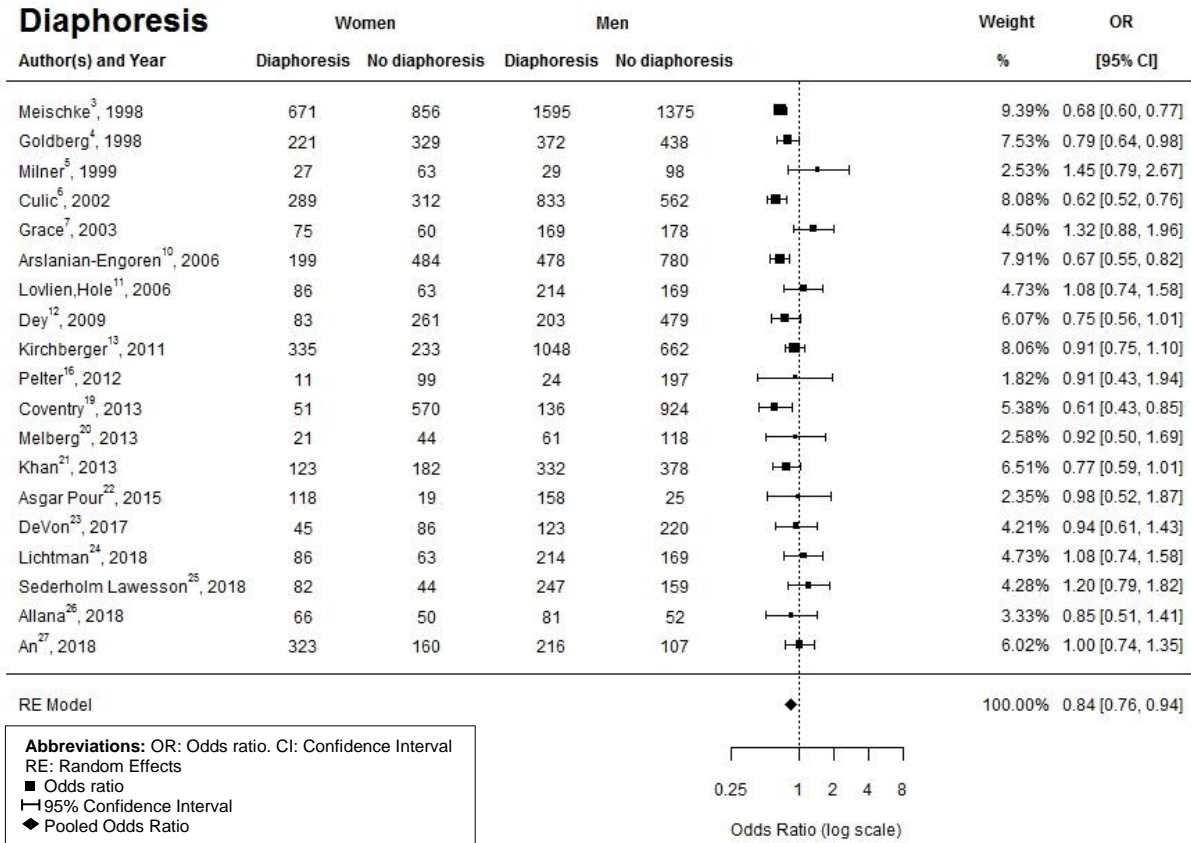


Figure S14. Results of the aggregated meta-analysis for dizziness or light-headedness as a symptom of ACS in women relative to men summarised in a forest plot.

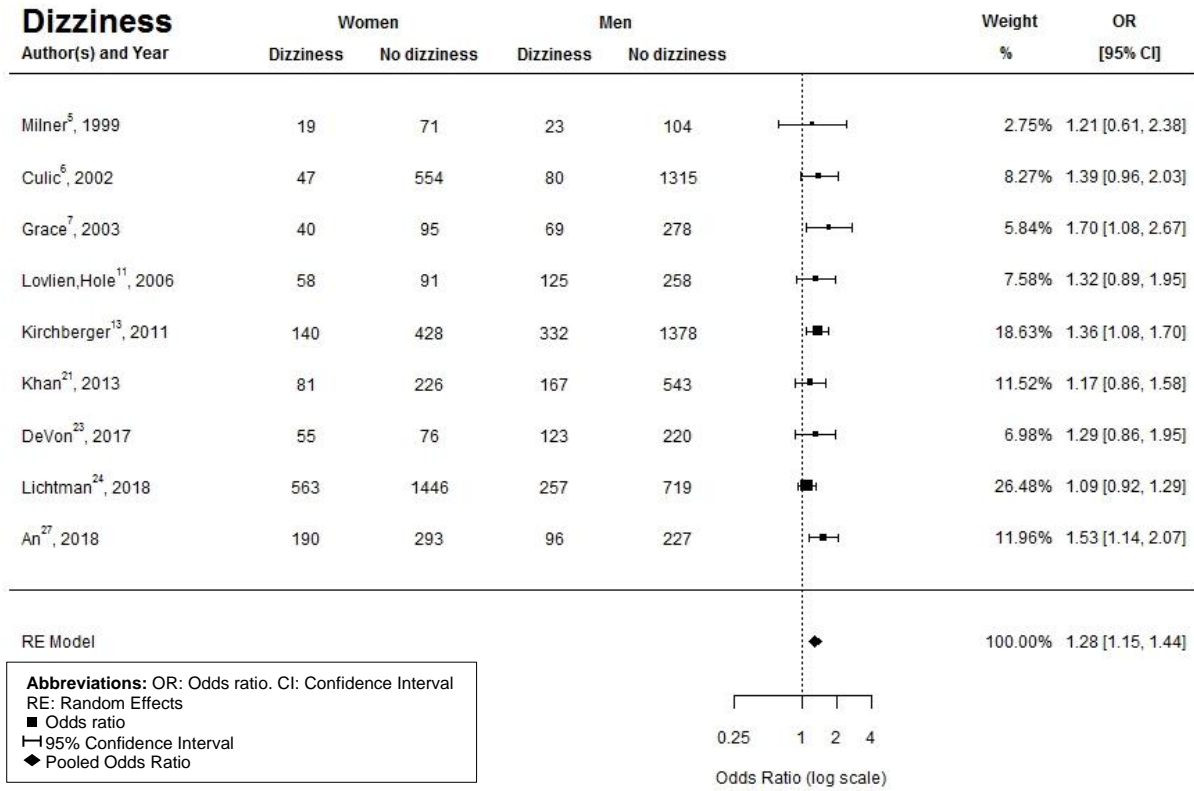


Figure S15. Results of the aggregated meta-analysis for fatigue as a symptom of ACS in women relative to men summarised in a forest plot.

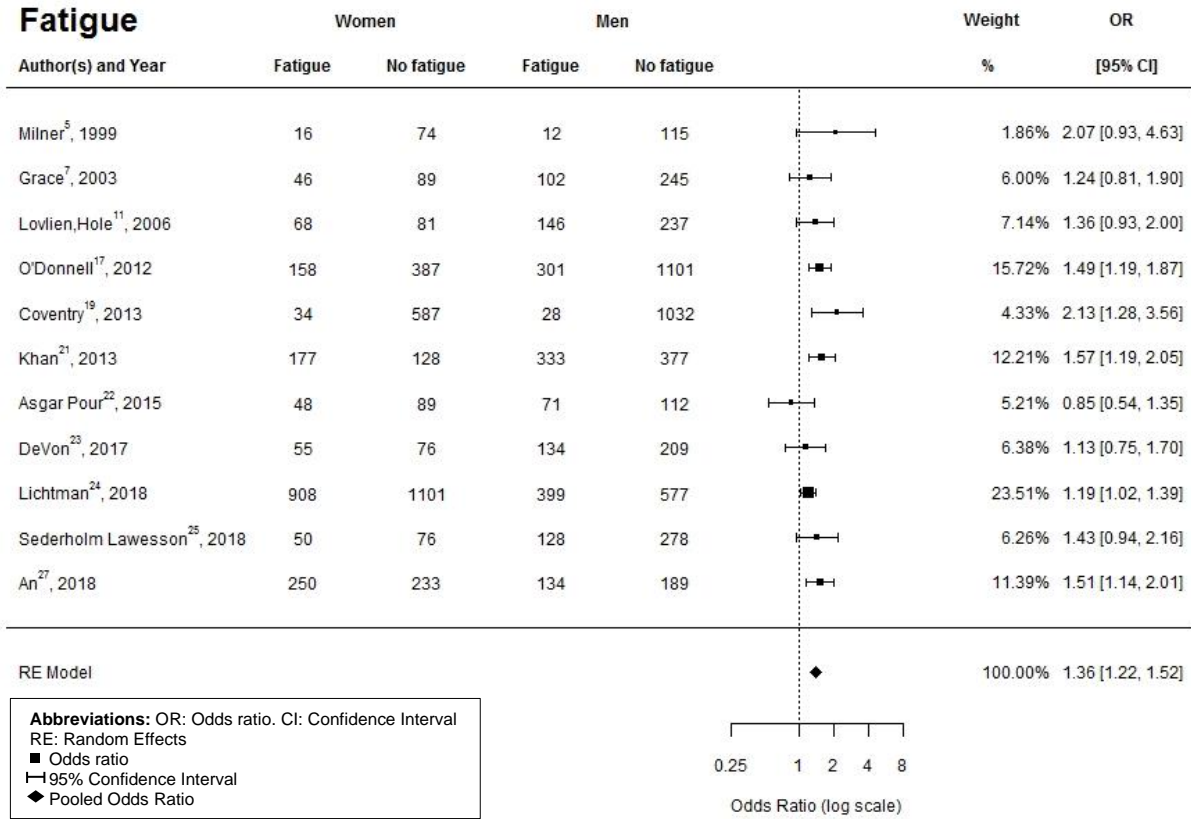


Figure S16. Results of the aggregated meta-analysis for indigestion as a symptom of ACS in women relative to men summarised in a forest plot.

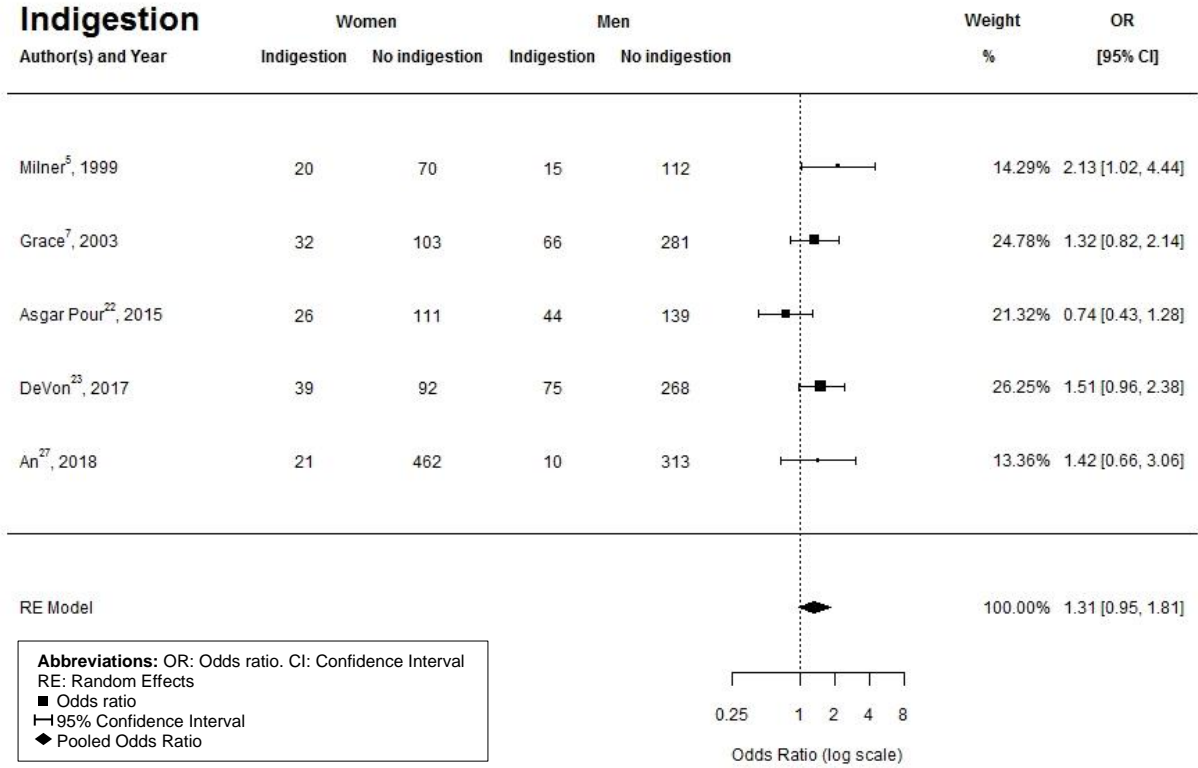


Figure S17. Results of the aggregated meta-analysis for jaw pain as a symptom of ACS in women relative to men summarised in a forest plot.

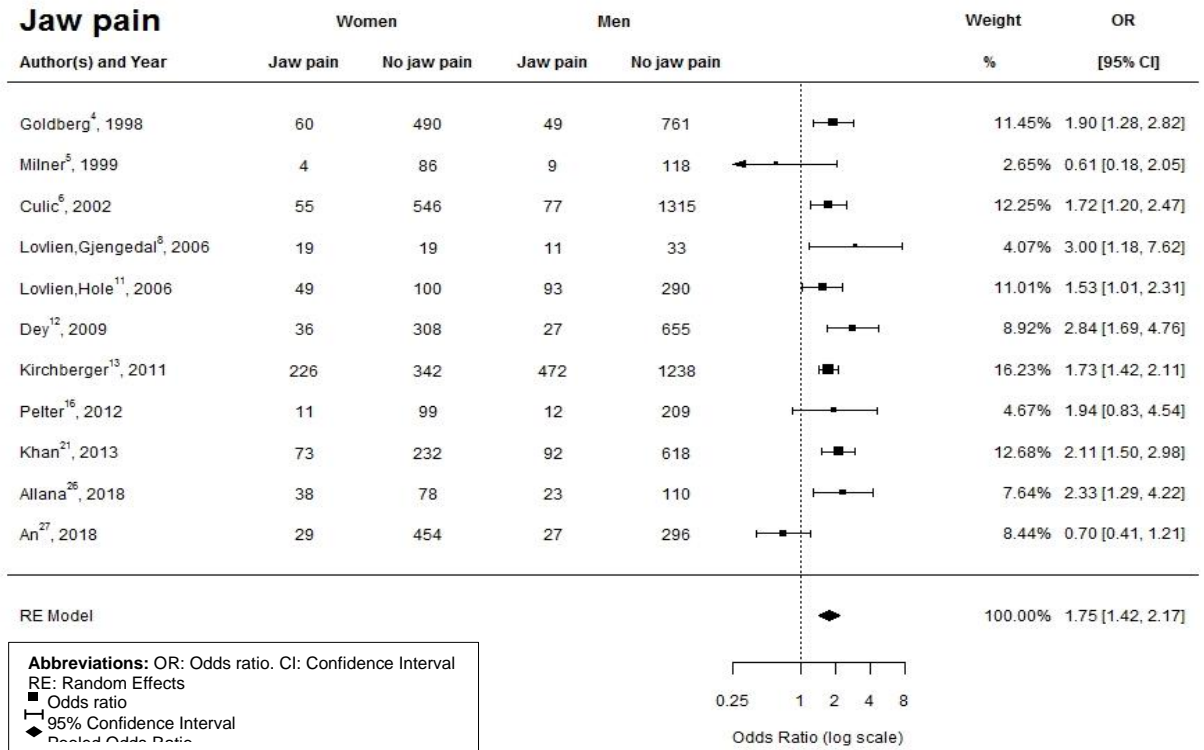


Figure S18. Results of the aggregated meta-analysis for left arm pain or left shoulder pain as a symptom of ACS in women relative to men summarised in a forest plot.

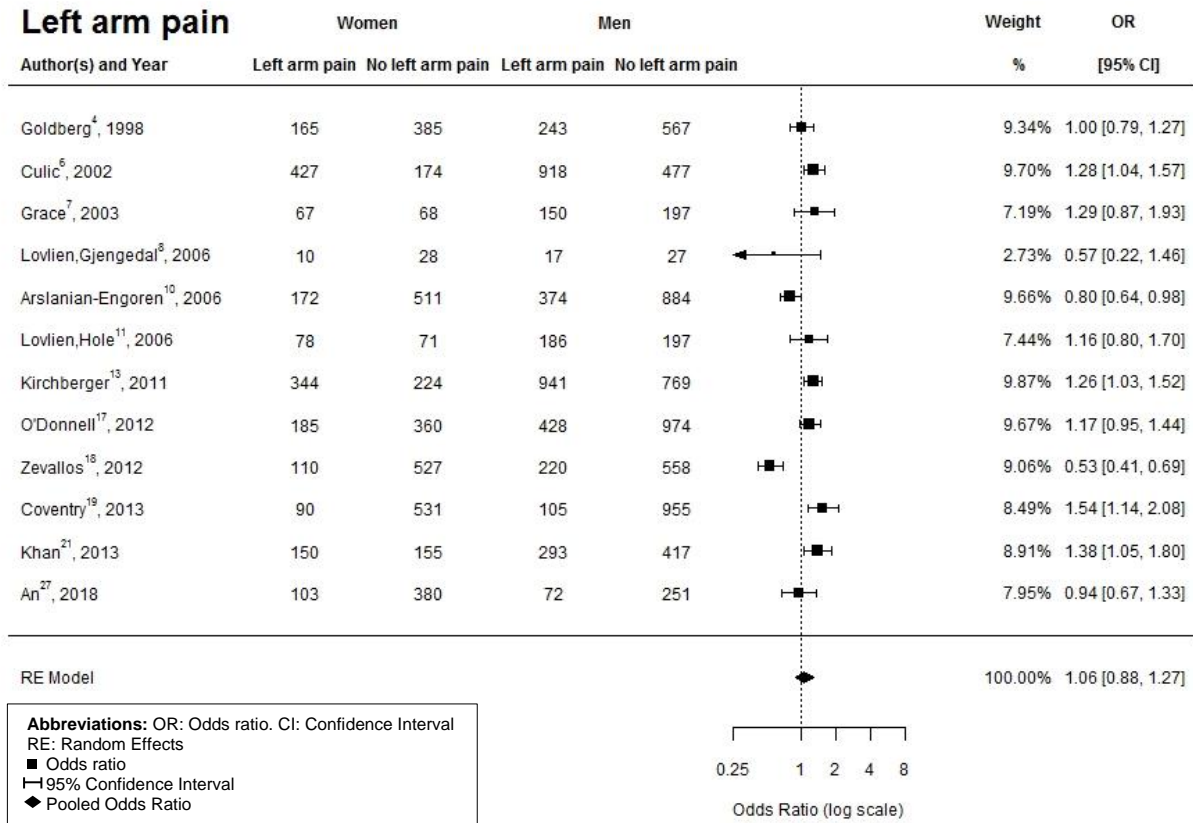


Figure S19. Results of the aggregated meta-analysis for nausea or vomiting as a symptom of ACS in women relative to men summarised in a forest plot.

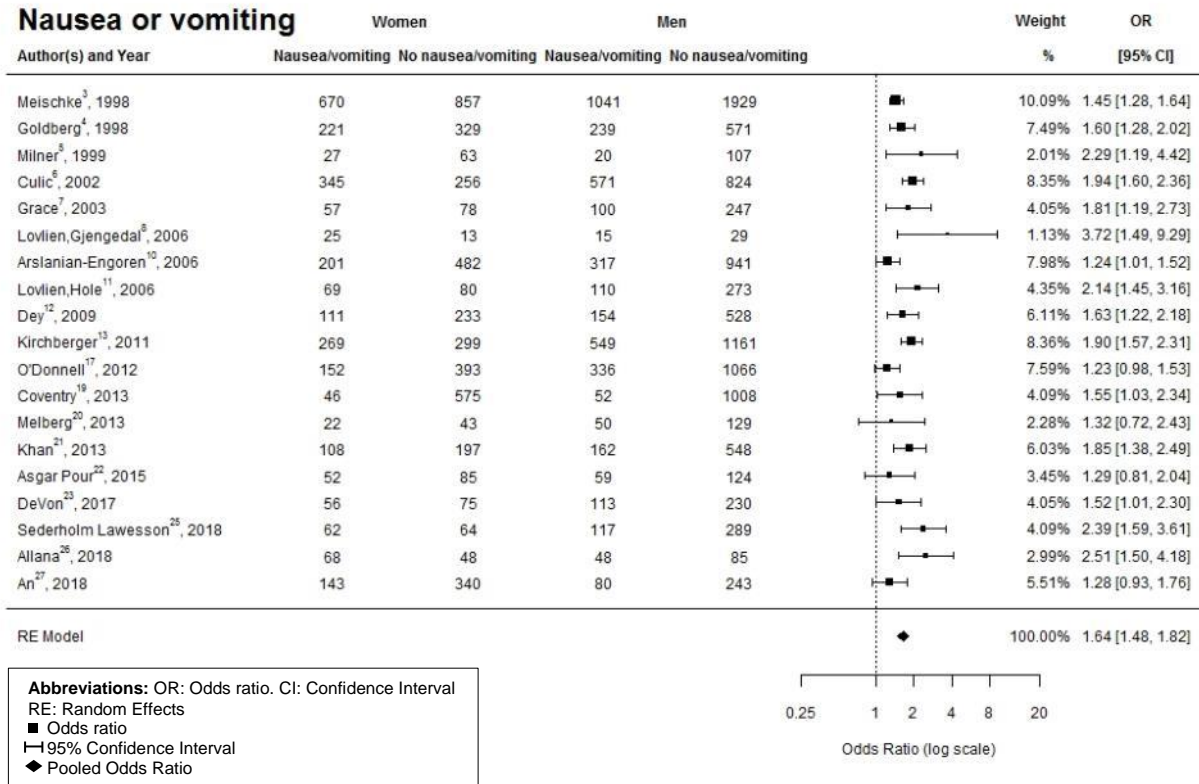


Figure S20. Results of the aggregated meta-analysis for neck pain as a symptom of ACS in women relative to men summarised in a forest plot.

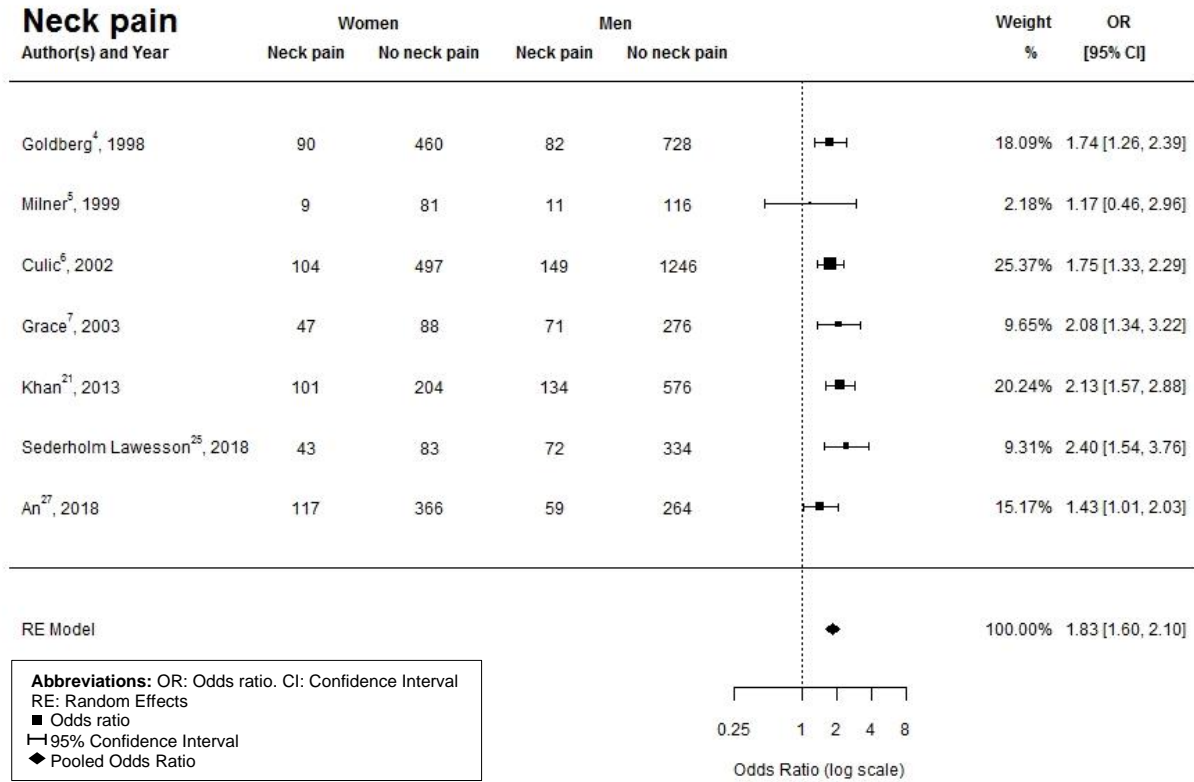


Figure S21. Results of the aggregated meta-analysis for pain between shoulder blades as a symptom of ACS in women relative to men summarised in a forest plot.

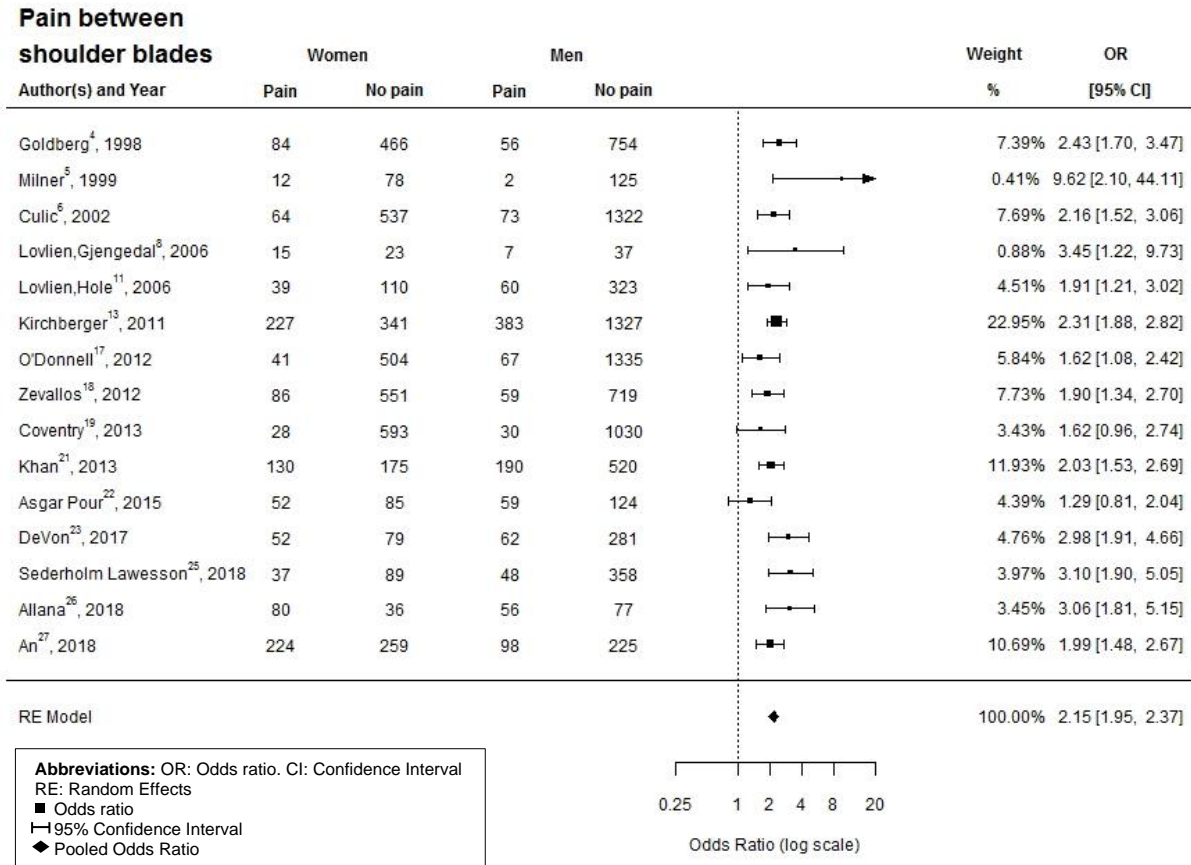


Figure S22. Results of the aggregated meta-analysis for palpitations as a symptom of ACS in women relative to men summarised in a forest plot.

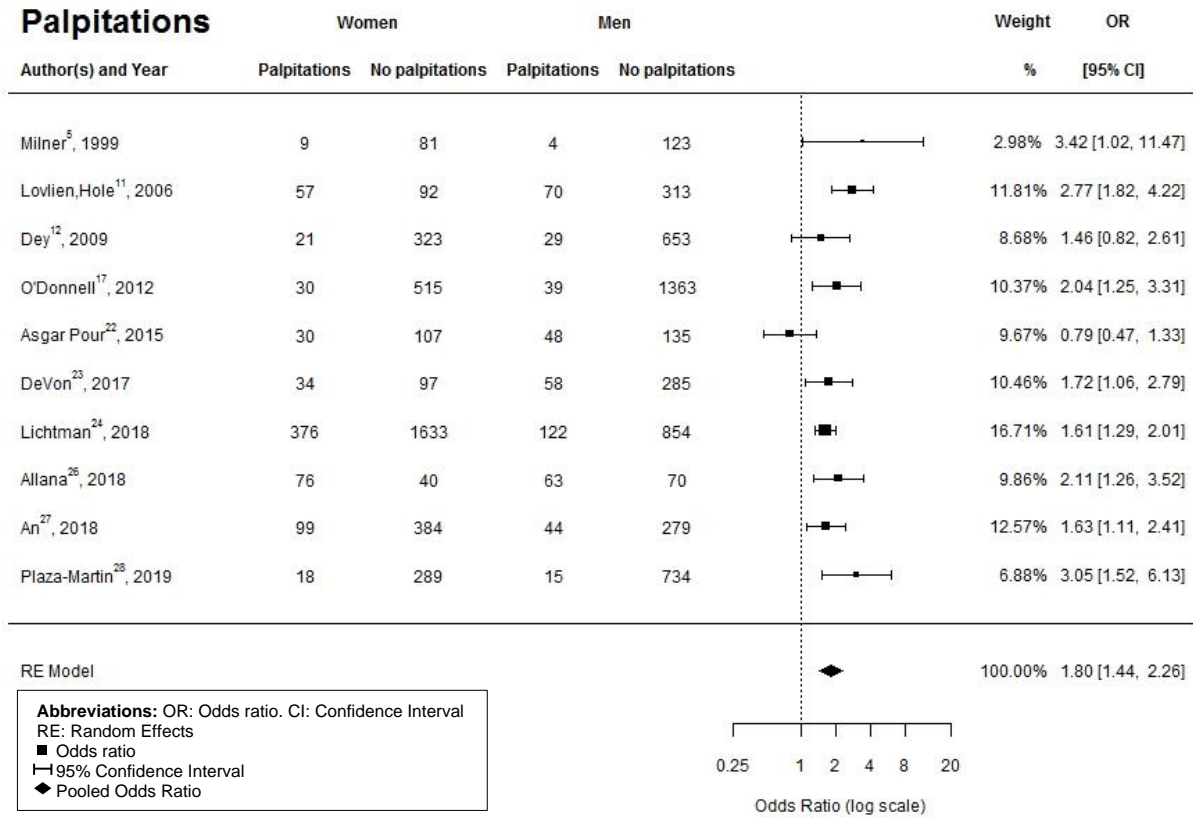


Figure S23. Results of the aggregated meta-analysis for right arm pain or right shoulder pain as a symptom of ACS in women relative to men summarised in a forest plot.

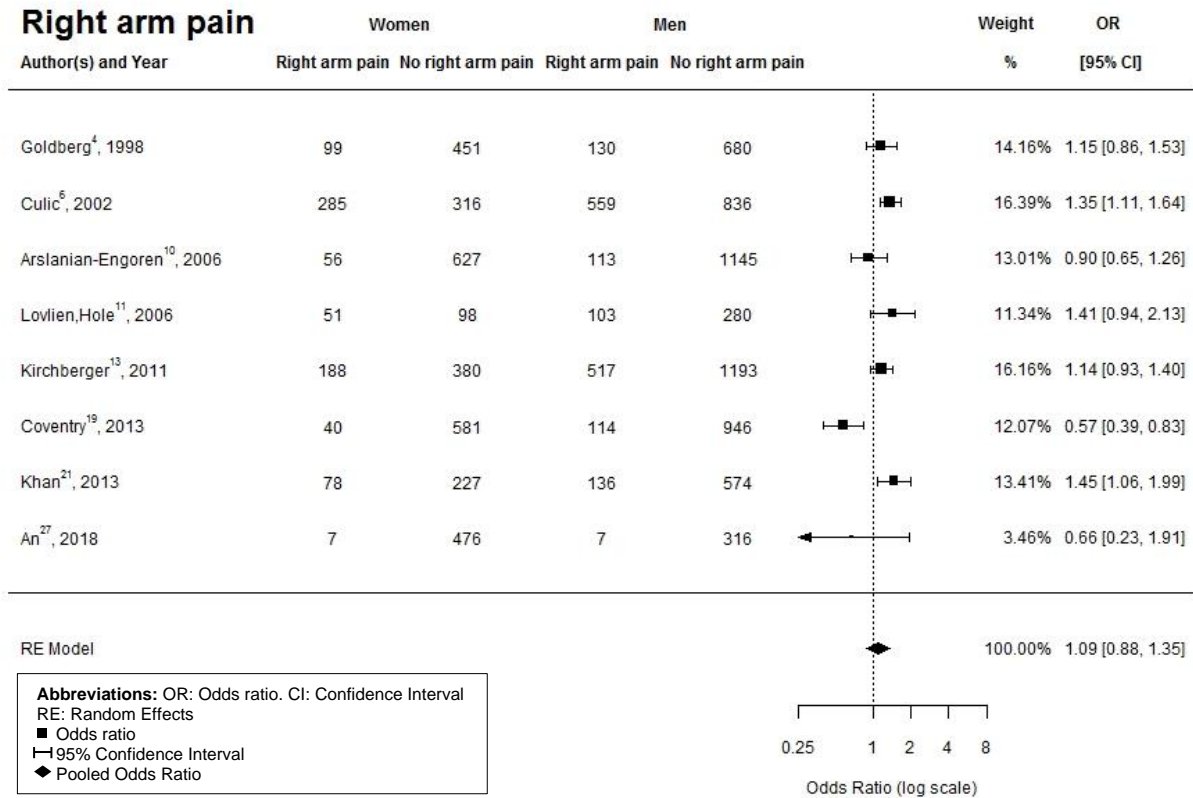


Figure S24. Results of the aggregated meta-analysis for shortness of breath as a symptom of ACS in women relative to men summarised in a forest plot.

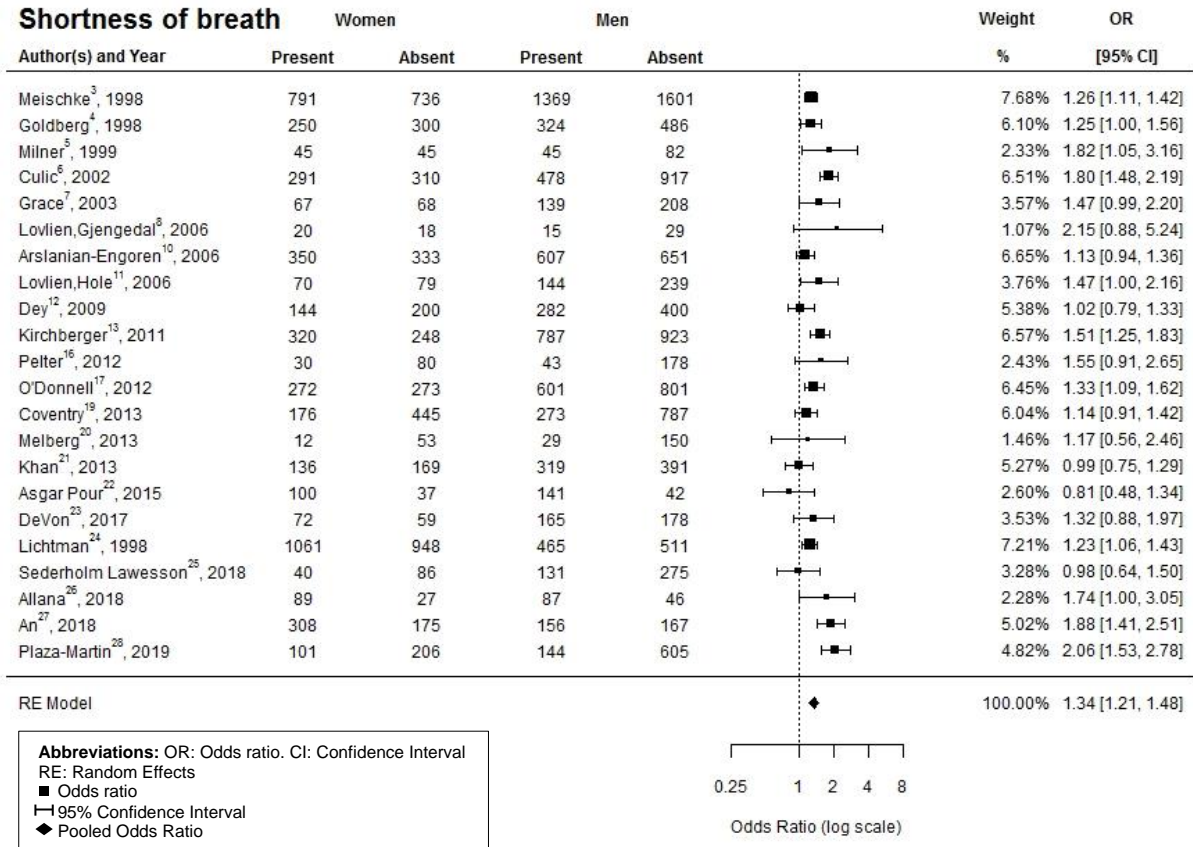


Figure S25. Results of the aggregated meta-analysis for stomach or epigastric pain as a symptom of ACS in women relative to men summarised in a forest plot.

Stomach or epigastric pain

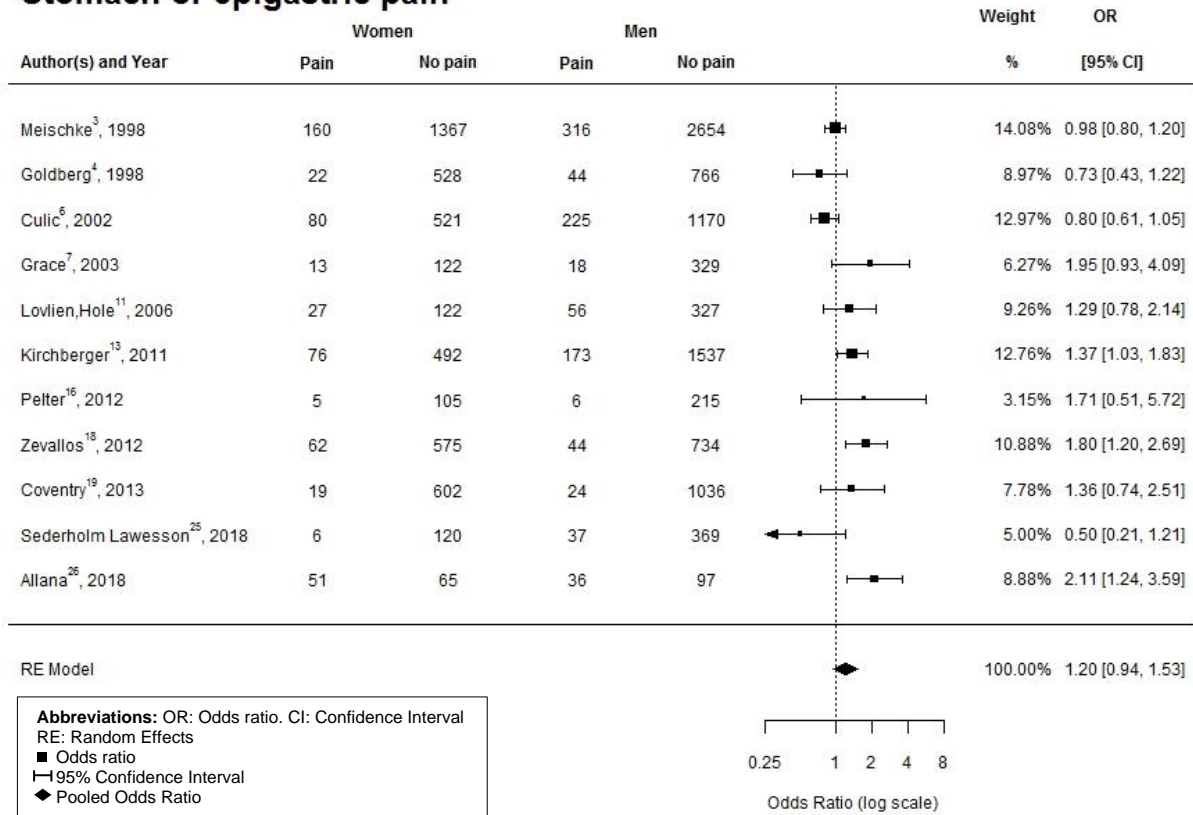


Figure S26. Results of the aggregated meta-analysis for syncope as a symptom of ACS in women relative to men summarised in a forest plot.

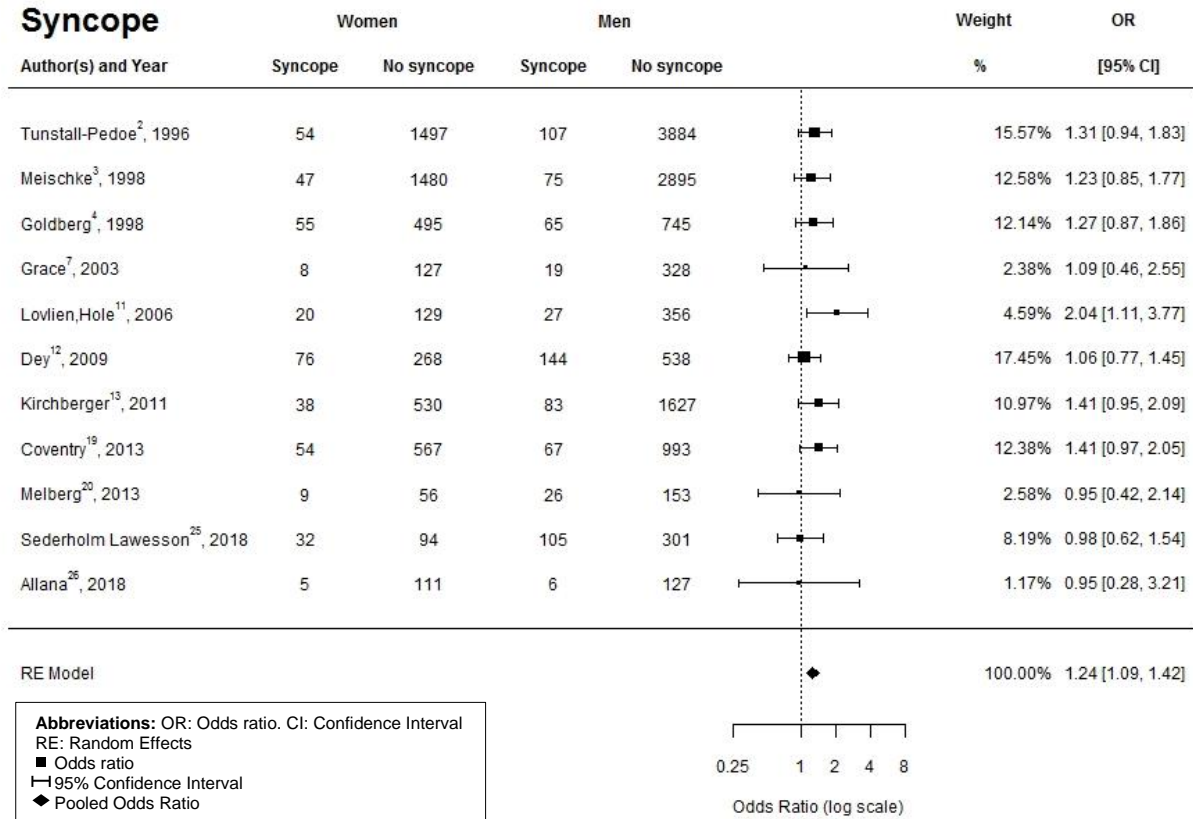


Figure S27. Results of the cumulative meta-analysis for chest pain as a symptom of ACS in women relative to men summarised in a forest plot.

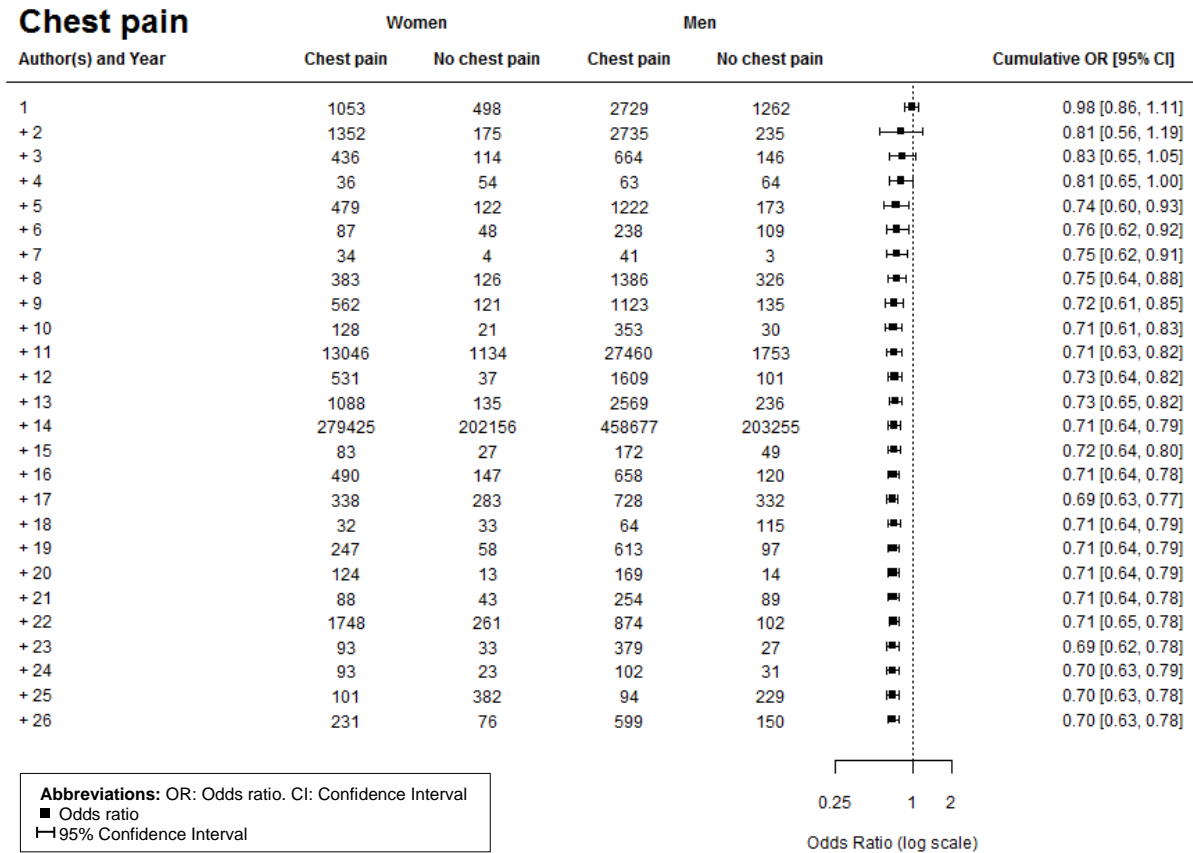


Figure S28. Results of the cumulative meta-analysis for diaphoresis as a symptom of ACS in women relative to men summarised in a forest plot.

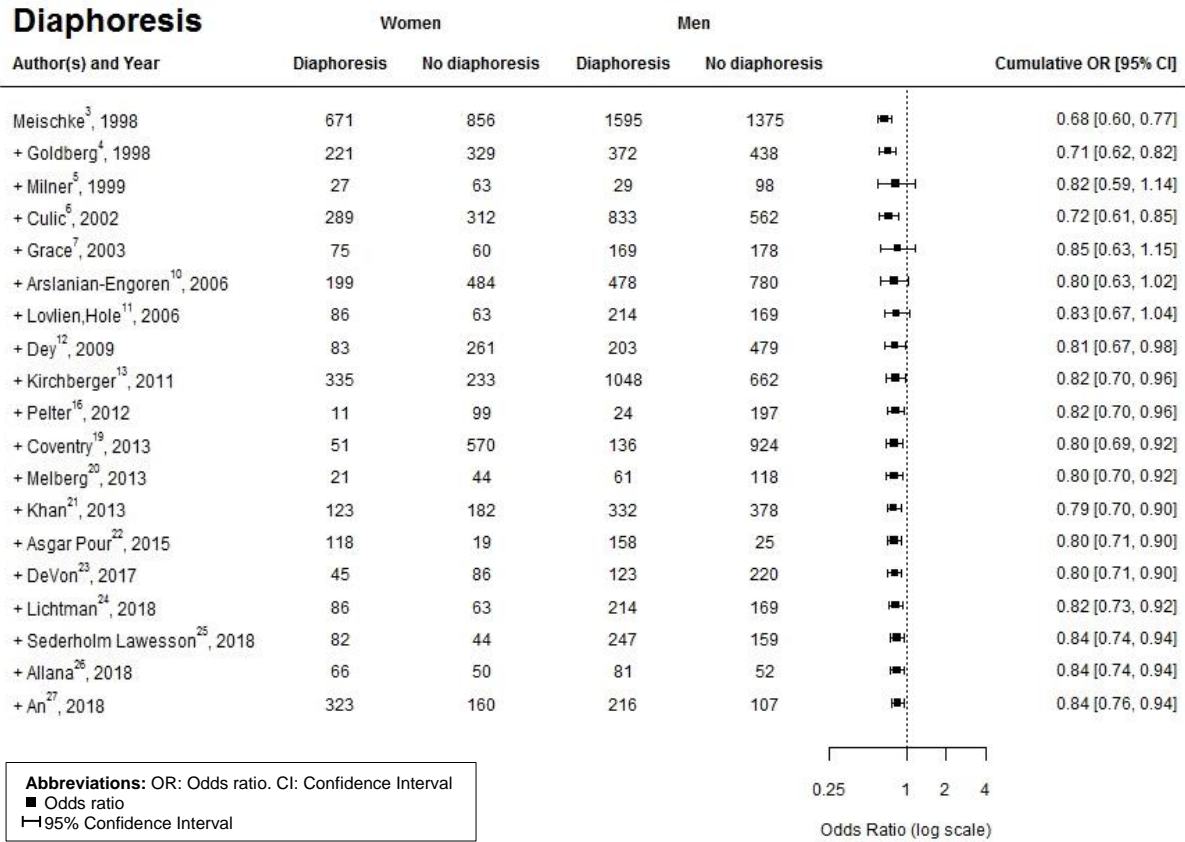


Figure S29. Results of the cumulative meta-analysis for dizziness or light-headedness as a symptom of ACS in women relative to men summarised in a forest plot.

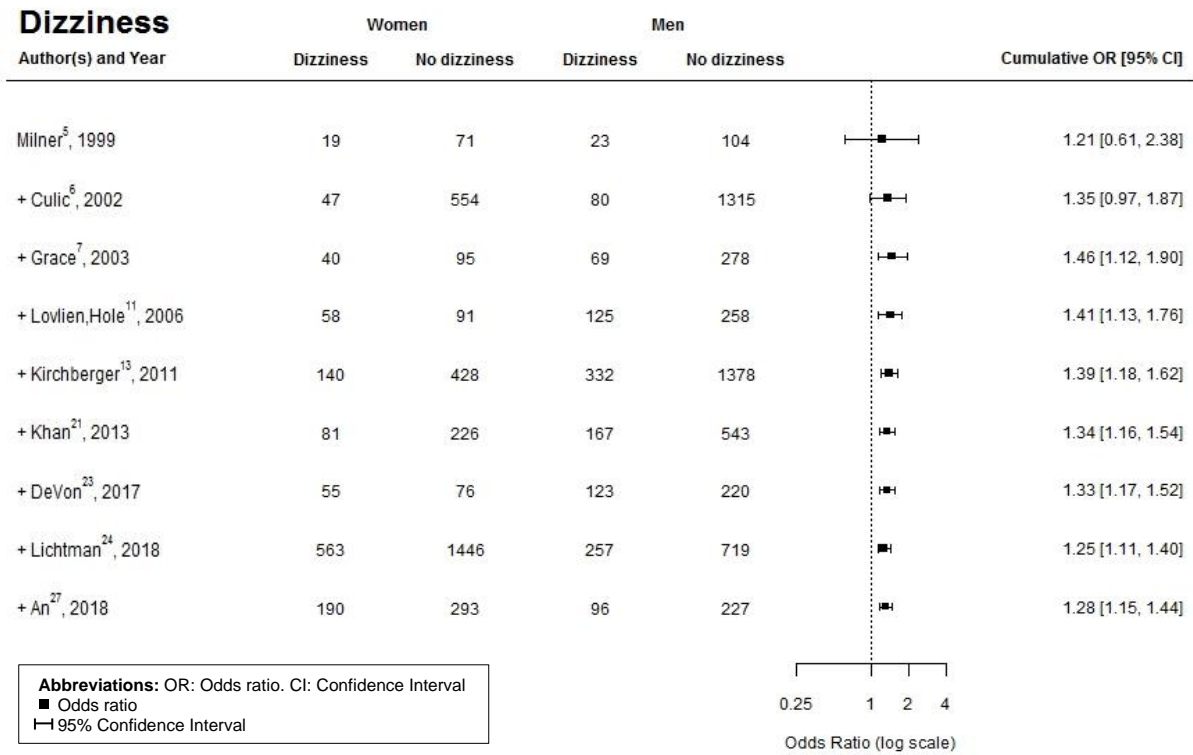


Figure S30. Results of the cumulative meta-analysis for fatigue as a symptom of ACS in women relative to men summarised in a forest plot.

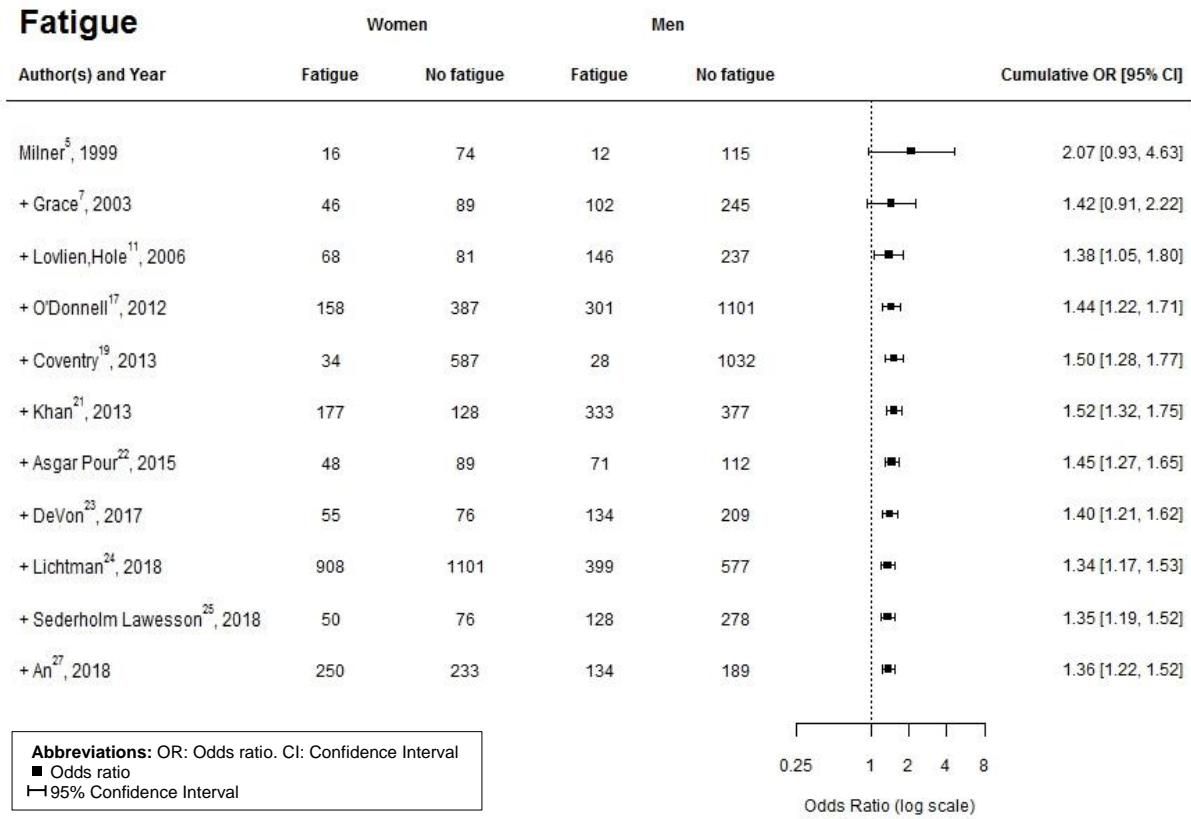


Figure S31. Results of the cumulative meta-analysis for indigestion as a symptom of ACS in women relative to men summarised in a forest plot.

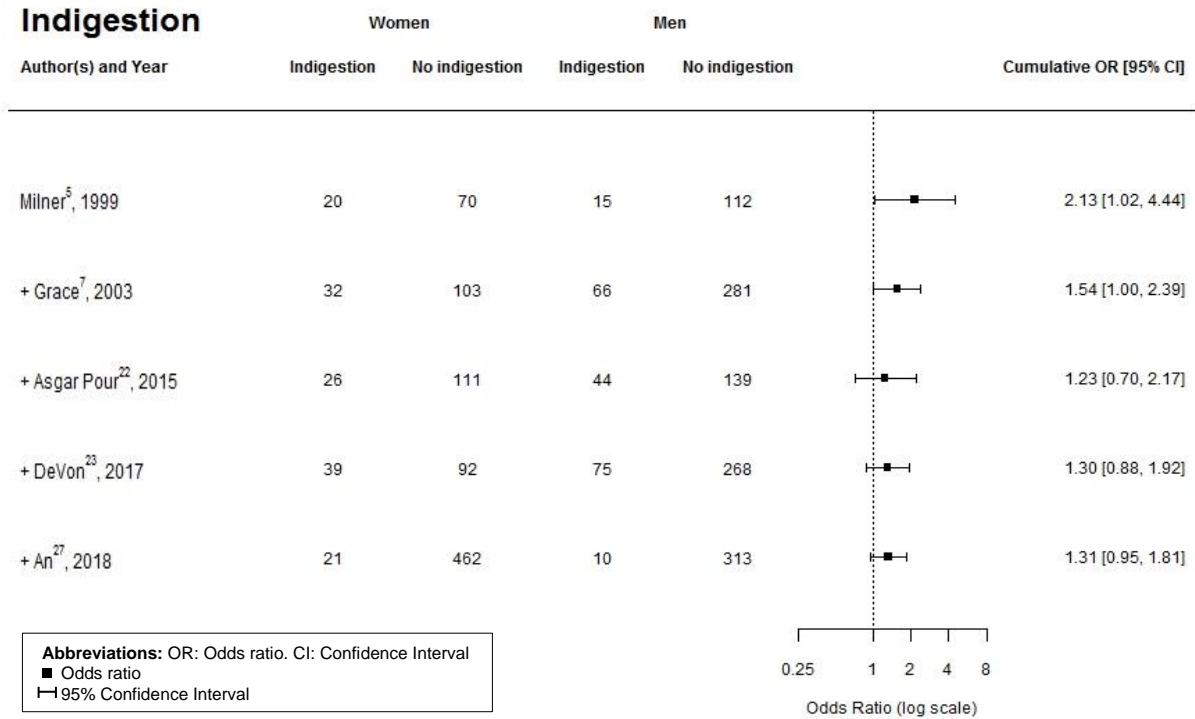


Figure S32. Results of the cumulative meta-analysis for jaw pain as a symptom of ACS in women relative to men summarised in a forest plot.

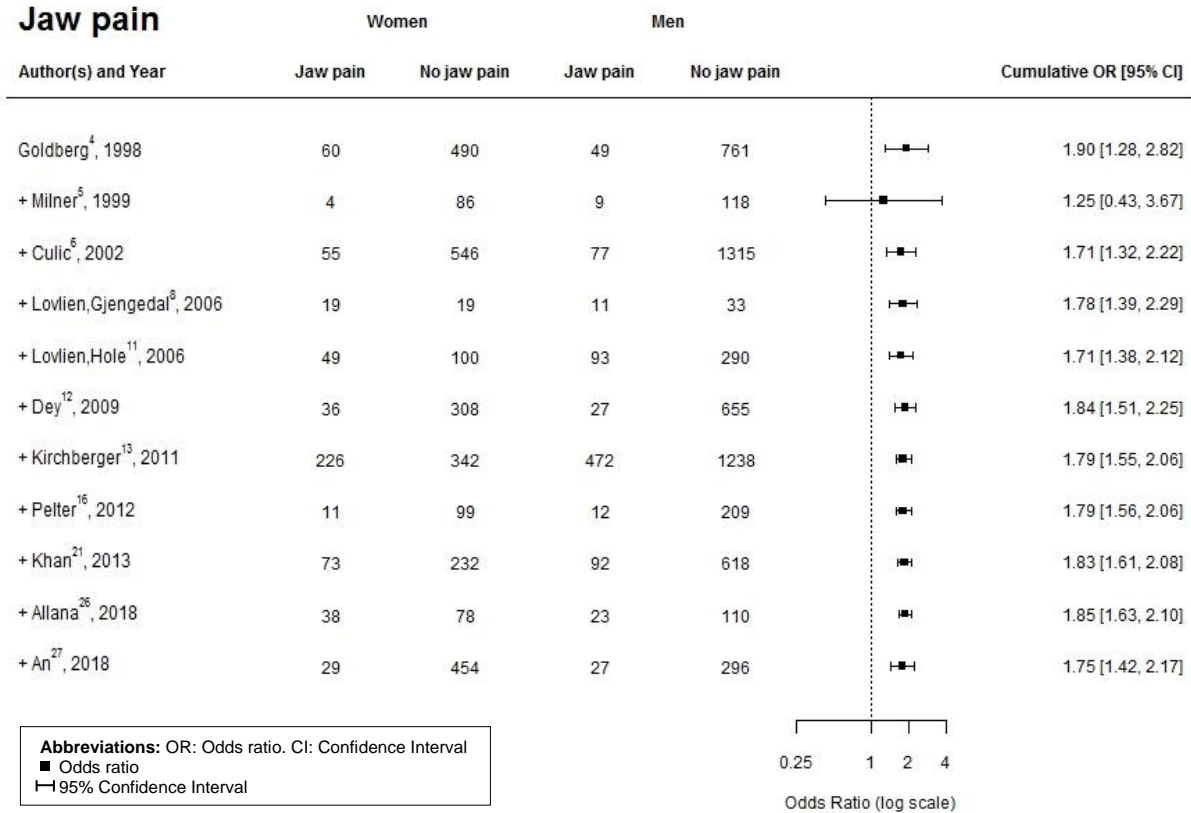


Figure S33. Results of the cumulative meta-analysis for left arm pain or left shoulder pain as a symptom of ACS in women relative to men summarised in a forest plot.

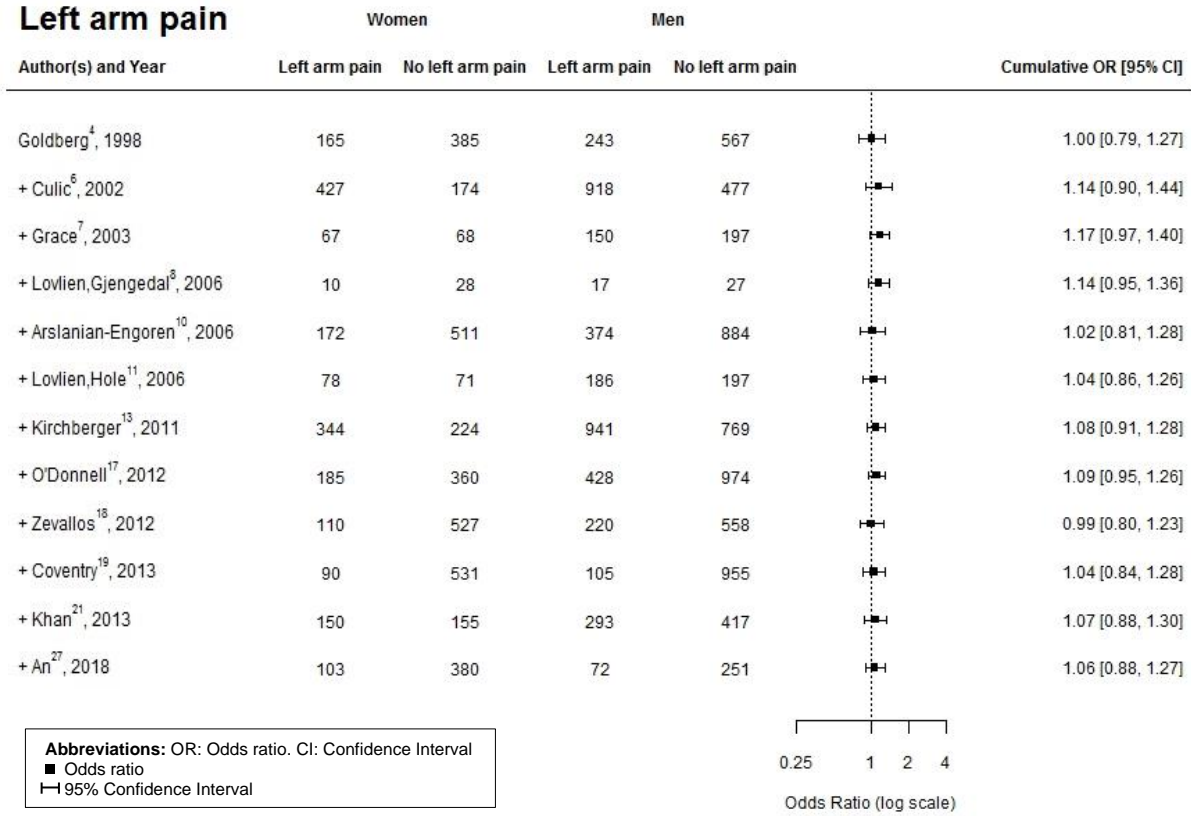


Figure S34. Results of the cumulative meta-analysis for nausea or vomiting as a symptom of ACS in women relative to men summarised in a forest plot.

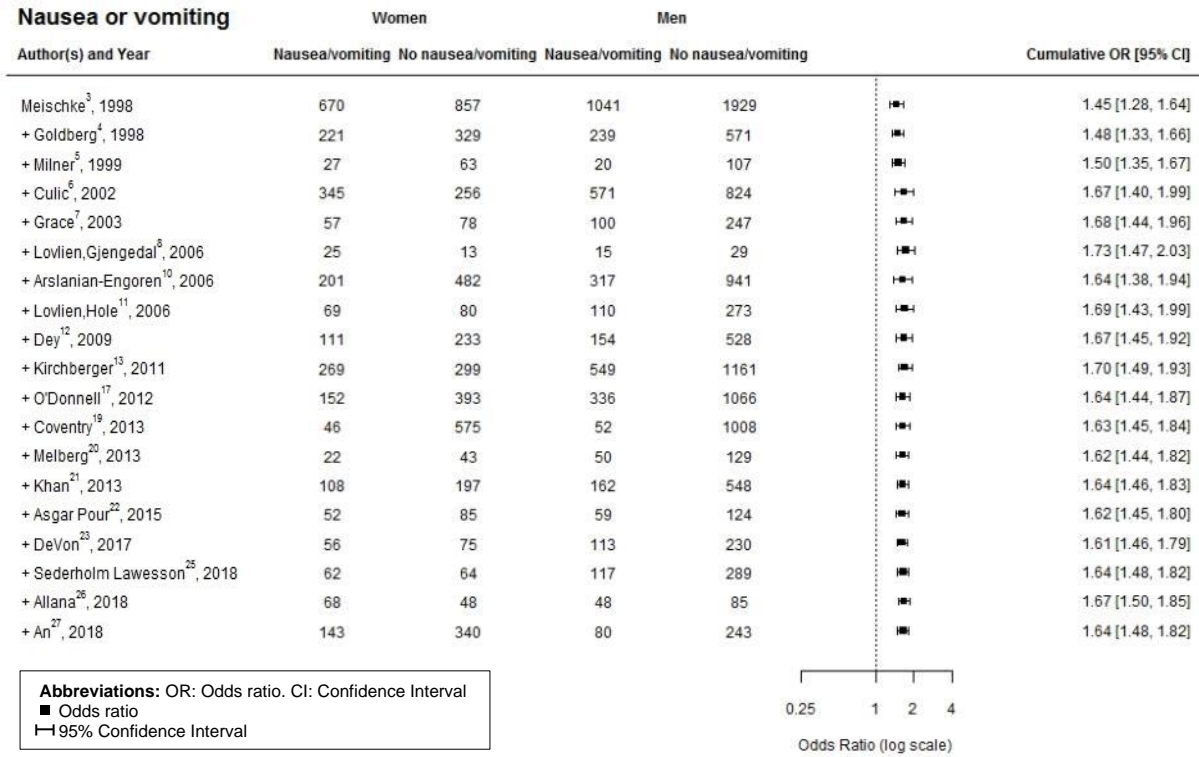


Figure S35. Results of the cumulative meta-analysis for neck pain as a symptom of ACS in women relative to men summarised in a forest plot.

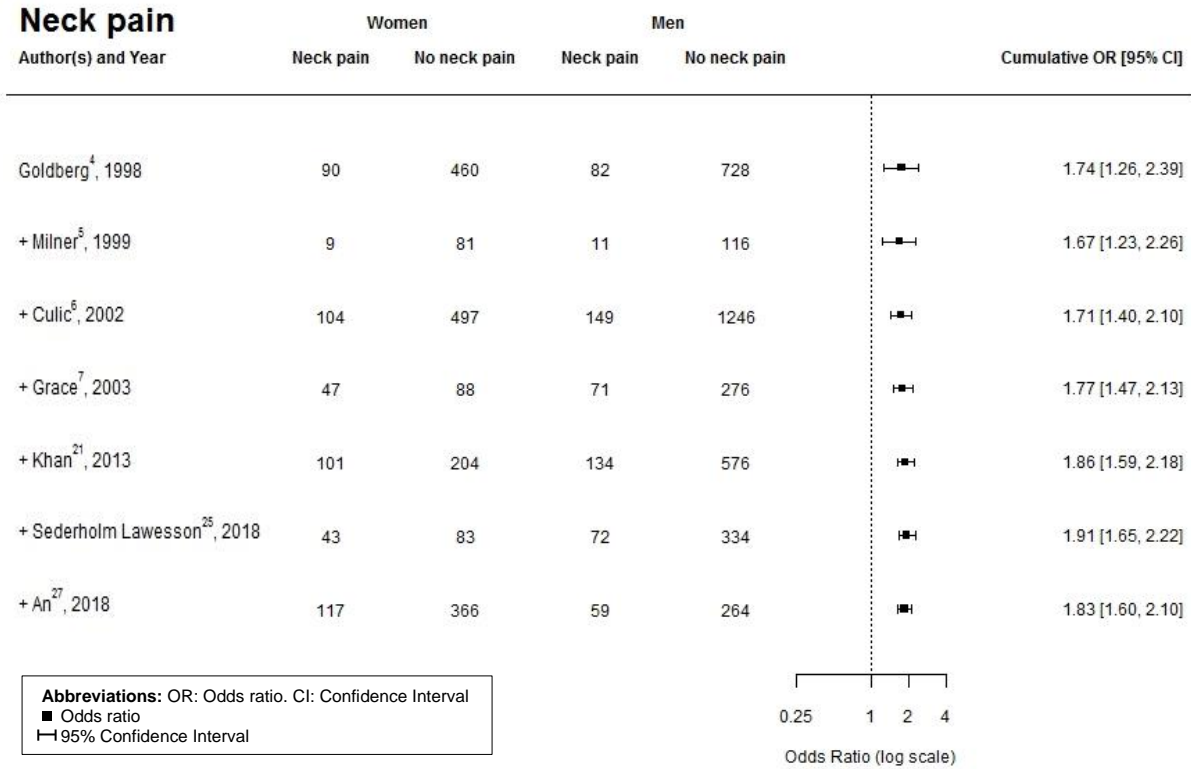


Figure S36. Results of the cumulative meta-analysis for pain between shoulder blades as a symptom of ACS in women relative to men summarised in a forest plot.

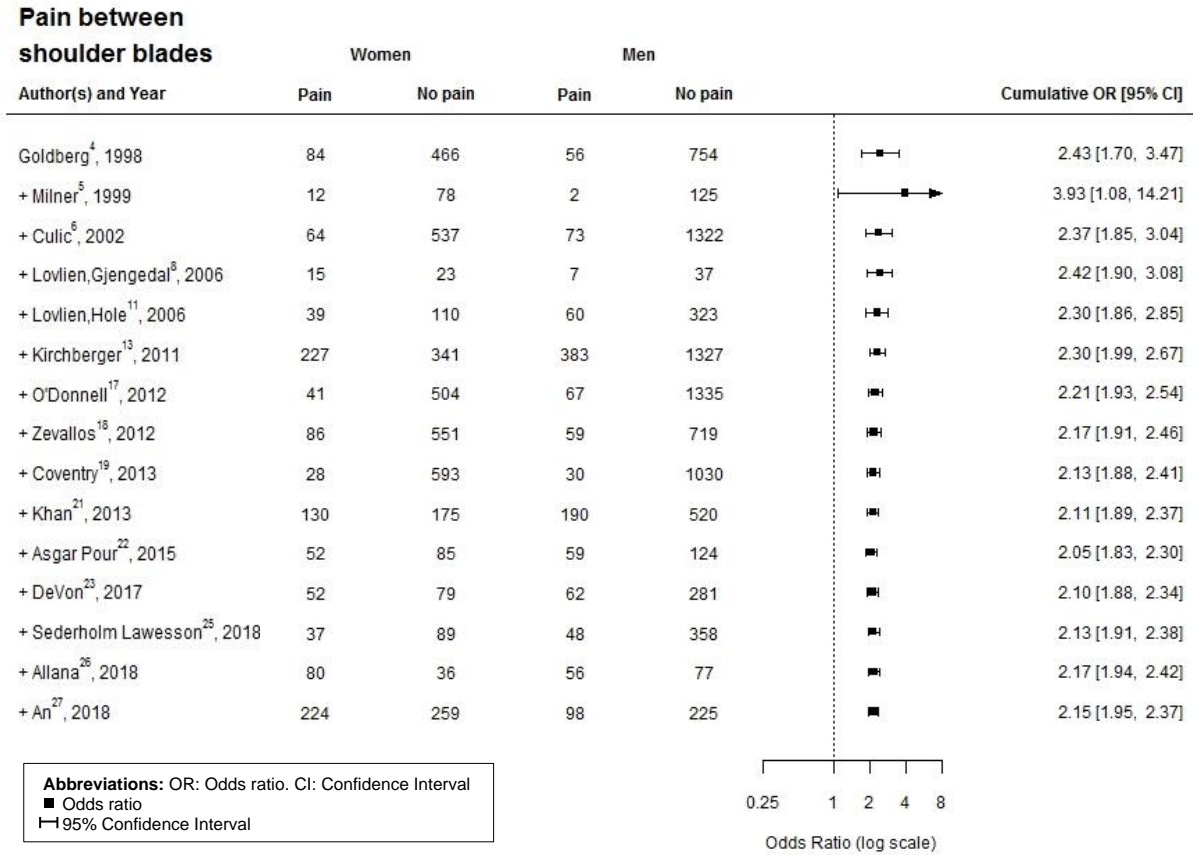


Figure S37. Results of the cumulative meta-analysis for palpitations as a symptom of ACS in women relative to men summarised in a forest plot.

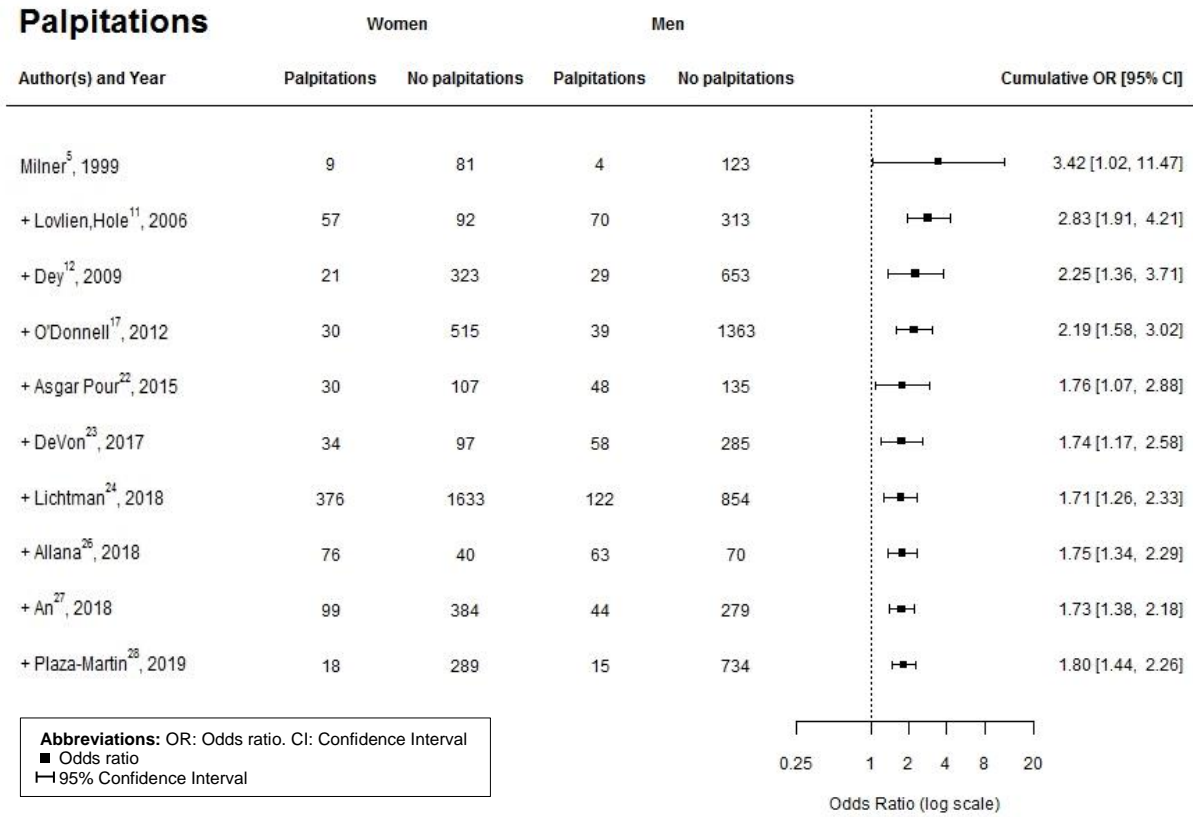


Figure S38. Results of the cumulative meta-analysis for right arm pain or right shoulder pain as a symptom of ACS in women relative to men summarised in a forest plot.

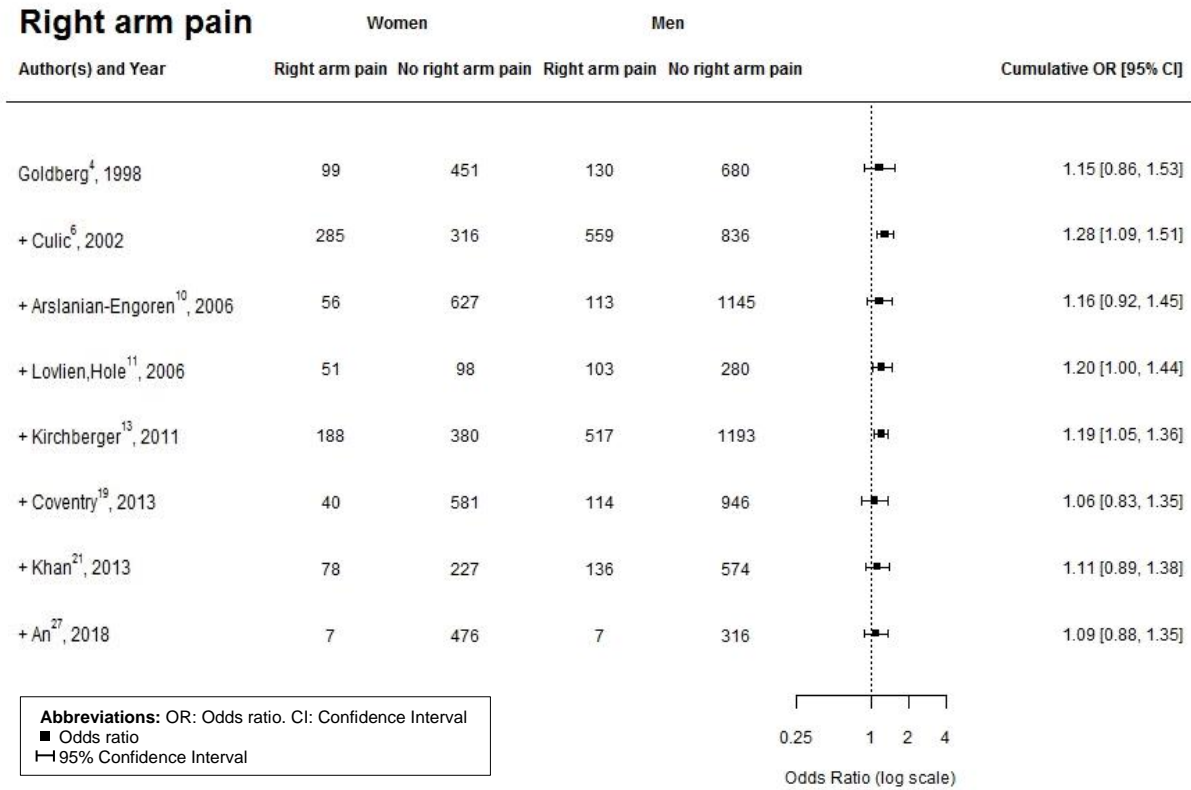


Figure S39. Results of the cumulative meta-analysis for shortness of breath as a symptom of ACS in women relative to men summarised in a forest plot.

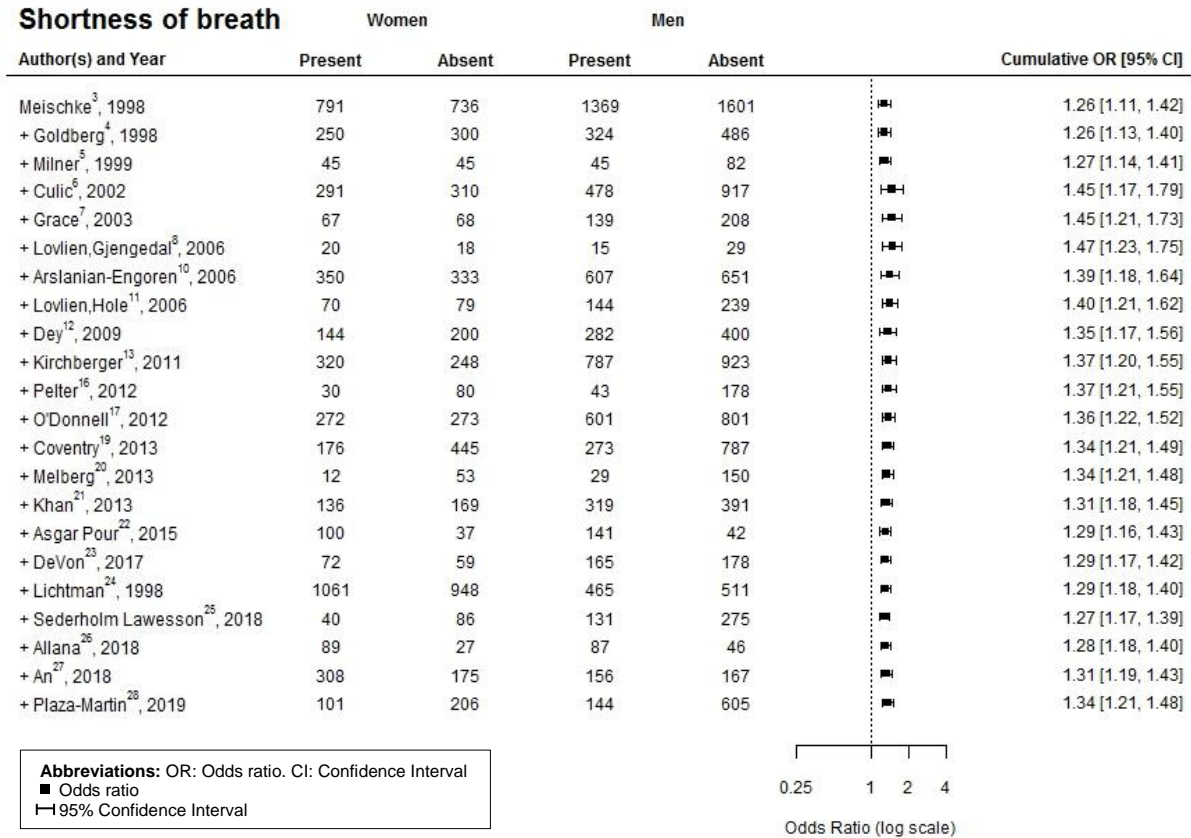


Figure S40. Results of the cumulative meta-analysis for stomach and epigastric pain as a symptom of ACS in women relative to men summarised in a forest plot.

Stomach or epigastric pain

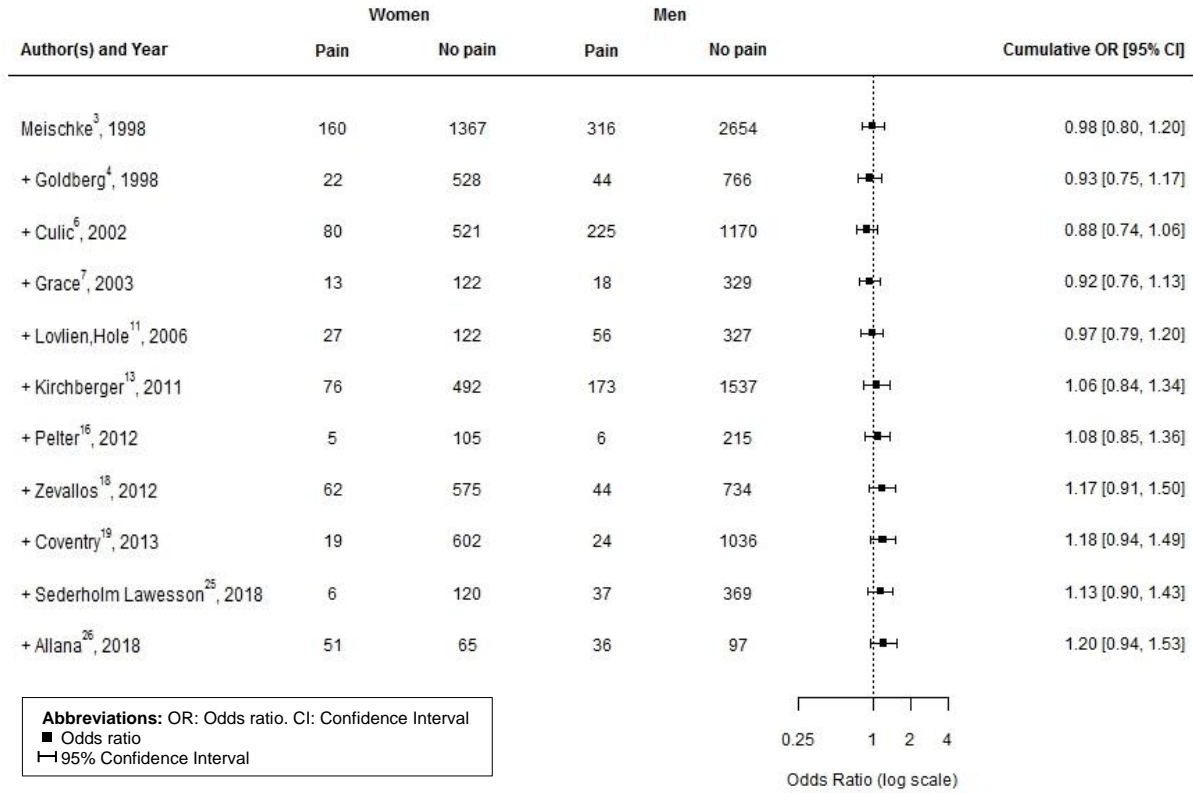
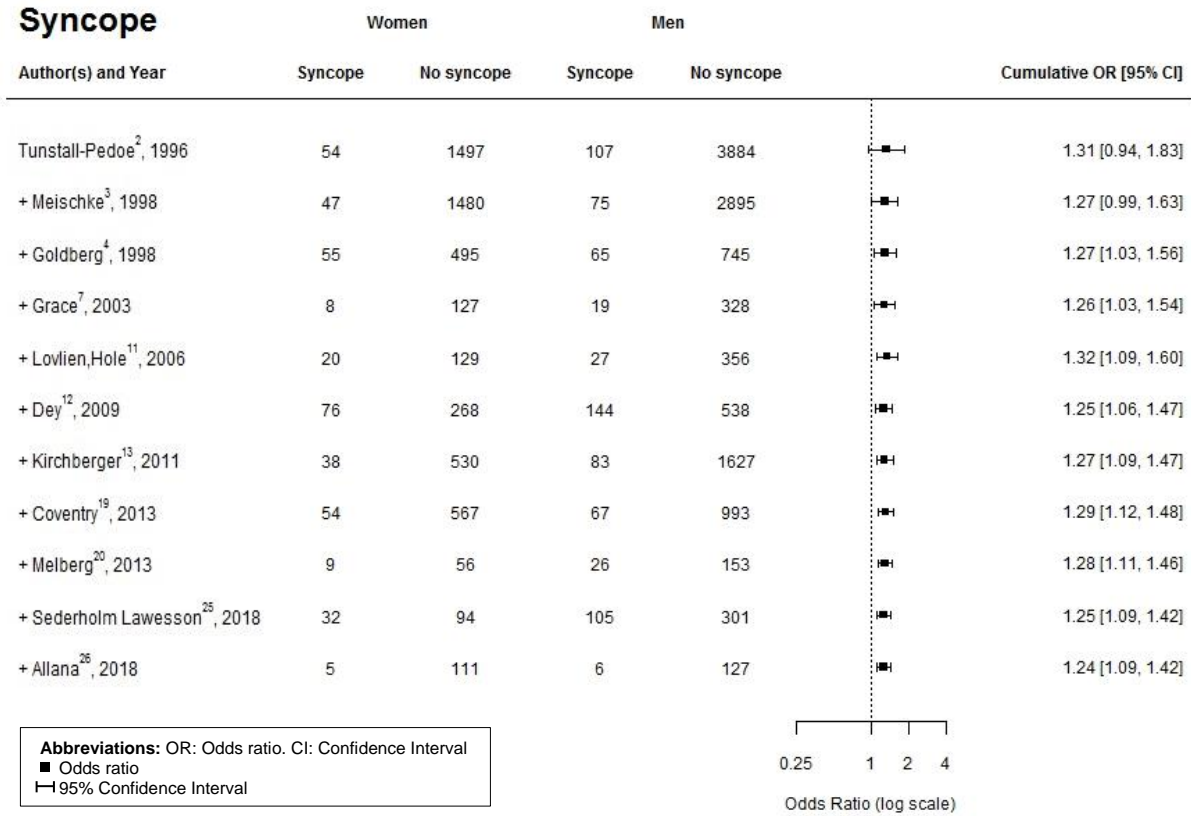


Figure S41. Results of the cumulative meta-analysis for syncope as a symptom of ACS in women relative to men summarised in a forest plot.



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