

Appendix 1 (as supplied by authors): Details of the included reviews.

Author	Topic	Index test	Reference standard(s)	N ¹	Median prevalence (range)	Setting ^{2,4}	Consecutive or random enrollment? ²	Exclusion of patients with difficult-to-diagnose conditions?	Patient referral based on? ^{2,5}	Partial Verification? ^{2,6}	Differential Verification? ^{2,7}
Berger ¹⁷	Diagnosis of gallstones	Upper abdominal pain	Ultrasound or oral cholecystography	11 (83-1896)	0.13 (0.05-0.41)	6x primary care, 1x tertiary care, 2x secondary care, 2x NR	2x yes, 6x no, 3x NR	10x no, 1x yes	8x symptoms, 3x reference or other test	11x no	3x yes, 8x no
Deville ¹⁸	Workup of herniated discs in patients selected for surgery	Straight leg raising test	Surgery	11 (52-2504)	0.77 (0.56-0.98)	11x NR	2x yes, 6x no, 3x NR	9x no, 2x yes	1x symptoms, 10x other test	11x no	11x no
Fiellin ¹⁹	Screening for lifetime alcohol abuse and/or dependence in primary care settings	Questionnaire	DSM-III-R or DSM-IV ¹ , derived from a variety of questionnaires	12 (84-1333)	0.28 (0.05-0.45)	12x primary care	6x yes, 5x no, 1x NR	10x no, 2x yes	10x symptoms, 2x other test	3x yes, 9x no	12x no
Gould ²⁰	Workup of pulmonary nodules	Positron emission tomography	Most studies used histopathology; others surgery, imaging techniques or biopsy	29 (17-109)	0.70 (0.50-0.96)	1x primary care, 1x combination, 5x secondary care, 22x NR	2x yes, 23x no, 4x NR	26x no, 3x yes	5x index test, 23x other test, 1x NR	2x yes, 27x no	20x yes, 9x no
Hobby ²¹	Diagnosis of complete tears of the triangular fibrocartilage complex in the wrist	magnetic resonance imaging	Arthroscopy; two studies used surgery	11 (13-102)	0.50 (0.39-0.94)	10x secondary and tertiary care, 1x NR	5x yes, 3x no, 3x NR	10x no	6x symptoms, 1x index test, 2x other test, 2x NR	4x yes, 6x no	1x yes, 9x no
Hoffman ²²	Workup of prostate cancer	Prostate specific antigen	Radical prostatectomy or prostate biopsies	10 (29-673)	0.41 (0.22-0.76)	9x secondary care, 1x primary care	3x yes, 3x no, 4x NR	6x no, 4x yes	5x symptoms, 1x index test, 4x other test	10x no	3x yes, 7x no
Hoogendam ²³	Primary care screening for prostate cancer	Digital Rectal Examination	Biopsy or transrectal ultrasonography	13 (309-6630)	0.03 (0.01-0.07)	11x primary care, 1x combination, 1x NR	3x yes, 7x no, 3x NR	3x yes	12x symptoms	5x yes, 7x no, 1x NR	12x yes
Huicho ²⁴	Urinary infections	Dipstick nitrate	Culture	16 (23-3251)	0.15 (0.01-0.30)	9x secondary care, 4x NR, 3x only primary care	4x yes, 3x no, 9x NR	15x no, 1x yes	4x symptoms, 7x other tests, 5x NR	16x no	16x no
Hurley ²⁵	Diagnosis of Gram-negative infection	Limulus amoebocyte lysate assay	Blood culture	22 (10-218)	0.25 (0.10-0.68)	1x primary care, 8x secondary and tertiary care, 13x NR	1x yes, 5x no, 16x NR	20x no, 2x yes	10x symptoms, 11x other test, 1x NR	21x no, 1x NR	4x yes, 17x no, 1x NR
Kelly ²⁶	Workup of staging in gastro-esophageal carcinoma	Eosophageal ultrasound	Surgery and histopathology	13 (13-328)	0.60 (0.23-0.85)	13x secondary care	2x yes, 6x no, 5x NR	11x no, 2x yes	1x symptoms, 2x index test, 9x other test, 1x NR	5x yes, 8x no	13x no
Kim ²⁷	Diagnosis of coronary artery disease	Dobutamine stress echocardiography	Coronary angiography	39 (27-288)	0.72 (0.29-0.87)	1x combination, 4x secondary and tertiary care, 34x NR	21x yes, 14x no, 4x NR	8x no, 31x yes	7x symptoms, 1x index test, 30x other test, 1x NR	1x yes, 37x no, 1x NR	39x no
Kwok ²⁸	Detection of coronary artery disease in women	Exercise echocardiogram	Coronary angiography	19 (33-613)	0.37 (0.18-0.62)	19x NR	6x yes, 8x no, 5x NR	15x no, 4x yes	1x symptoms, 4x index test, 14x other test	3x yes, 16x no	19x no
Lau ¹⁶ + Balk ¹⁵	Emergency department diagnosis of acute myocardial infarction	Creatine kinase	A variety of reference standards; most studies used WHO criteria	19 (59-2093)	0.22 (0.06-0.42)	5x secondary care, 2x tertiary care, 12x NR	3x yes, 12x no, 4x NR	15x no, 4x yes	10x symptoms, 1x indextest, 8x other* test	1x yes, 18x no	1x yes, 18x no
Lederle ²⁹	Screening for abdominal aortic aneurysm	Abdominal palpation	Ultrasound	10 (23-424)	0.08 (0.02-0.17)	1x secondary and tertiary care, 2x combination, 7x NR	4x yes, 4x no, 2x NR	9x no, 1x yes	8x symptoms, 2x other test	1x yes, 9x no	2x yes, 8x no
Mitchell ³⁰	Screening for squamous intraepithelial lesions of the cervix	Pap smear	Biopsy, or colposcopy guided biopsy	17 (18-3534)	0.43 (0.17-0.95)	2x primary care, 2x combination, 12x secondary and tertiary care, 1x NR	1x yes, 6x no, 10x NR	13x no, 4x yes	6x index test, 10x other test, 1x NR	1x yes, 16x no	17x no
Moi ³¹	Detection of Down Syndrome	Ultrasound	Karyotyping and follow-up	22 (99-20381)	0.01 (0.00-0.05)	5x primary care, 17x secondary care	9x yes, 1x no, 12x NR	22x no	11x symptoms, 9x other test, 2x NR	22x no	12x yes, 10x no
Nelemans ³²	Evaluation of peripheral arterial disease	Magnetic resonance angiography	Angiography	13 (12-45)	0.41 (0.15-0.73)	1x secondary care, 12x NR	2x yes, 11x no	11x no, 2x yes	13x reference or other tests	13x no	2x yes, 11x no
Safriel ³³	Diagnosis of pulmonary emboli	Spiral computed tomography	A variety of reference standards; mainly pulmonary angiogram and ventilation-perfusion scintigraphy	10 (20-149)	0.46 (0.27-0.82)	4x secondary care, 6x NR	5x yes, 3x not consecutive, 2x NR	9x no, 1x yes	2x symptoms, 8x other test	1x yes, 9x no	4x yes, 6x no

Appendix to: Leeflang MMG, Rutjes AWS, Reitsma JB, et al. Variation of a test's sensitivity and specificity with disease prevalence. *CMAJ* 2013. DOI:10.1503/cmaj.121286. Copyright © 2013 The Author(s) or their employer(s).

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Sloan ³⁴	Diagnosis of gonorrhoea and chlamydial infection	Lower abdominal pain	A variety of reference standards: culture, bacteriological tests, serology etc.	14 (172-1222)	0.13 (0.03-0.37)	4x primary care, 5x combination, 1x secondary and tertiary care, 4x NR	6x yes, 2x no, 6x NR	13x no, 1x yes	14x symptoms	13x no, 1x NR	12x no, 2x NR
Sonnad ³⁵	Workup of staging of prostate cancer.	Magnetic resonance imaging	Prostatectomy, combined with pathology	21 (18-235)	0.48 (0.23-0.82)	22x secondary and tertiary care	7x yes, 5x no, 10x NR	22x no	22x reference test or other test	3x yes, 19 no	1x yes, 21x no
Vasquez ³⁶	Workup of acute cholecystitis	Cholescintigraphy	Surgery and histopathology; follow up	15 (20-163)	0.47 (0.10-0.72)	15x secondary care	2x yes, 1x no, 12x NR	12x no, 3x yes	1x symptoms, 13x index test, 1x other test	14x no, 1x NR	15x yes
Visser ³⁷	Workup of peripheral arterial stenosis	Colour duplex ultrasound	Angiography	17 (12-167)	0.29 (0.05-0.72)	15x NR, 2x secondary and tertiary care	4x yes, 5x no, 8x NR	17x no	6x symptoms, 1x index test, 8x other test, 2x NR	17x no	17x no
Wiese ³⁸	Diagnosis of vaginal trichomoniasis	Wet mount slide	Culture	29 (68-1199)	0.26 (0.07-0.55)	28x tertiary care, 1x NR	13x yes, 4x no, 12x NR	27x no, 2x yes	27x symptoms, 2x NR	1x yes, 28x no	1x yes, 28x no

¹Number of studies, between brackets the range of included patients per study.

²NR = not reported.

³DSM = Diagnostic and Statistical Manual of Mental Disorders.

⁴Setting could be either primary care, secondary care and/or tertiary care or a combination of primary and secondary/tertiary care

⁵Patients could be referred to be included in the study based on symptoms, on the index test result, on the reference standard result, or based on the results of another test.

⁶Partial verification occurs when only a part of the included patients receives the reference standard, for example, if only some of the index test negatives receive the reference standard.

⁷Differential verification occurs when two reference standards have been used, often one for the index test positives and a different one for the index test negatives.