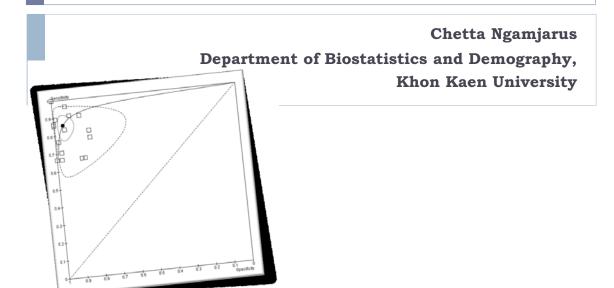
Introduction to Systematic Review of Diagnostic Test Accuracy



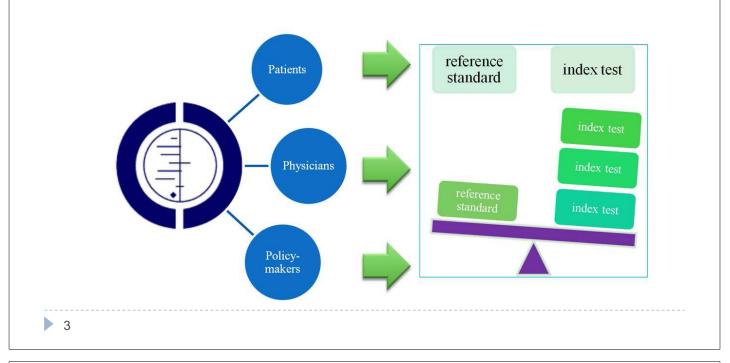
Outline

- Introduction
- How to conduct the diagnostic review
- How to define title and objective(s) of the review
- How to search the diagnostic studies
- How to select the included studies and extract data
- How to assess the study quality
- How to analyze data
- How to do the diagnostic review in RevMan5

Introduction

What is a diagnostic systematic review ?

• Why is it important ?



How to conduct the diagnostic review

The major steps

- Definition of title and objective(s) of the review
- Searching the diagnostic studies
- Selection the included studies and extraction of the data
- Assessment of study quality
- Statistical analysis
- Interpretation of results and development of recommendations

How to define title and objective(s) of the review

• To define a titile in a RevMan5 [CRDTA, 2005] • Index test(s) versus comparator(s) for target condition(s) in patient description • Index test(s) versus comparator(s) for target condition(s) • Index test(s) for target condition(s) in patient description • Index test(s) for patient description • Example: • Positron emission tomographic versus computed tomographic imaging for detecting mediastinal lymph node metastases in nonsmall cell lung cancer [Birim et al., 2005].

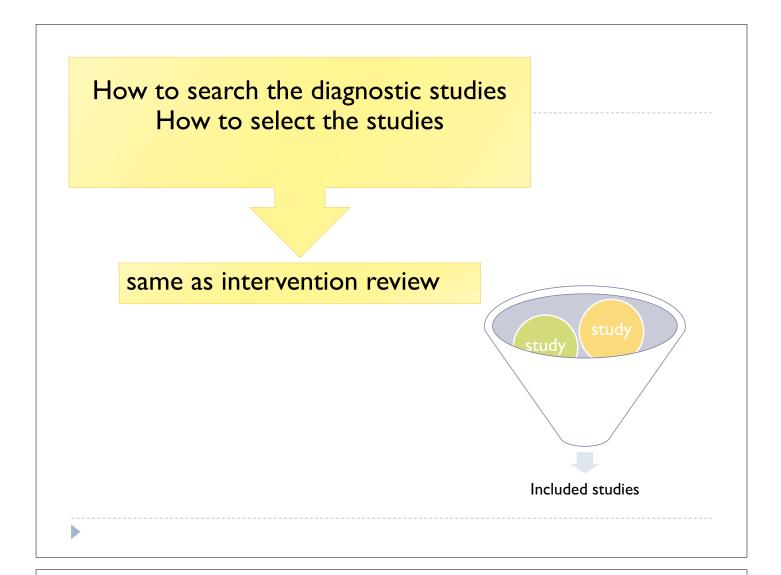
To define objective(s) of the review

The key components of objective(s) of the review

- The patients description, the presentation (a clinical problem)
- Index test
- Comparator test (other tests)
- Outcome (the target condition or a disease)

• Example:

• To determine the diagnostic accuracy of *Index test* for diagnosing target disorder in patient description.



How to extract data

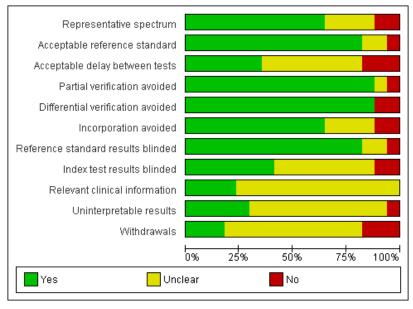
Important sections in the extraction data form

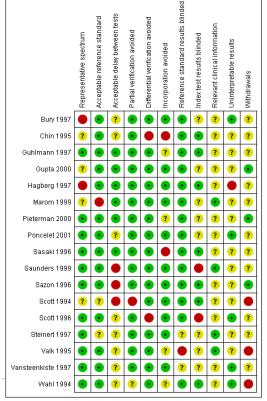
- General Details
- Participants
- Target condition, reference standard, index test(s) and comparator test(s)
- Results for diagnostic accuracy studies (2×2 table)

How to assess the study quality

	OULDAGE		Answers	
	QUADAS Items	Yes	Unclear	No
1.	Was the spectrum of patients' representative of the patients who will receive the test in practice? (patients' spectrum)			
2.	Is the reference standard likely to correctly classify the target condition? (reference standard)		P1	o.
3.	Is the time period between reference standard and index test short enough to be reasonably sure that the target condition did not change between the two tests? (disease progression)			
4.	Did the whole sample or a random selection of the sample, receive verification using a reference standard of diagnosis? (partial verification)		6.	
5.	Did patients receive the same reference standard regardless of the index test result? (differential verification)			
6.	Was the reference standard independent of the index test (i.e. the index test did not form part of the reference standard)? (incorporation)		1	1
7.	Were the index test results interpreted without knowledge of the results of the reference standard? (test review)			
8.	Were the reference standard results interpreted without knowledge of the results of the index test? (diagnostic review)		6	6
9.	Were the same clinical data available when test results were interpreted as would be available when the test is used in practice? (clinical review)			
10.	Were uninterpretable/ intermediate test results reported? (uninterpretable results)		(:	1
11.	Were withdrawals from the study explained? (withdrawals)			

Methodological quality graph in RevMan5:





How to analyze data

Methods of meta-analysis of diagnostic test accuracy

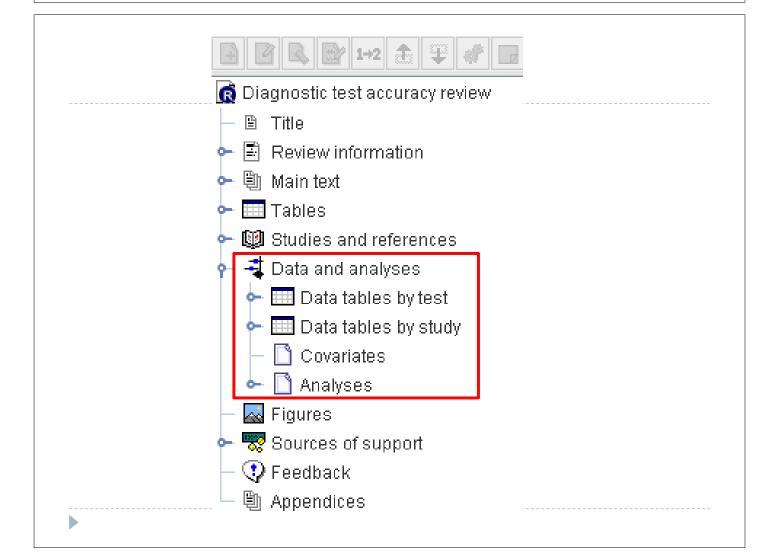
- Forest plot
- Summary receiver operating characteristic curves (SROC)
- Bivariate regression model or HSROC model

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How to do the diagnostic review in RevMan5

🙀 New Review Wizard						X	
New Review Wizard Which type of review do you wa	ant to cre	eate?				? 🗖	
Type of Review:							
Intervention review							
Diagnostic test accuracy rev	/iew						
Methodology review	👩 Ne	w Review Wizard					Σ
Overview of reviews	New	Review Wizard /hat is the title of the					?
	Title:						
	۲	[Index test(s)]	versus	[comparator(s)]	for	[target condition(s)] in	n [participant description]
	0	[Index test(s)]	versus	[comparator(s)]	for	[target condition(s)]	
<u>C</u> ancel	0	[Index test(s)]	for	[target condition(s)]	in	[participant description]
	0	[Index test(s)]	for	[target condition(s)]			
	<u>C</u> a	ancel		< <u>B</u> ack		<u>N</u> ext >	<u>F</u> inish

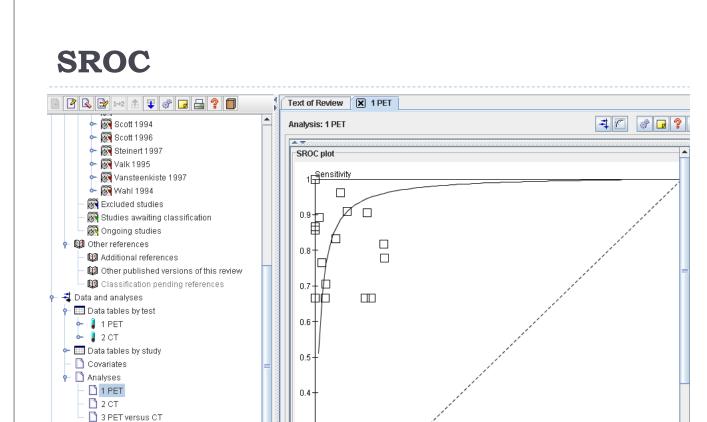
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Data and analyses	Test: 1 CT						
	Study	TP	FP	FN	TN 🗸	Sensitivity	Specificity
— 🐼 Chin et al 1995	Chin et al 1995	4	2	5		0.44 [0.14, 0.79]	0.90 [0.70, 0.99]
— 🌄 Magnani et al 1999	Magnani et al 1999	6	3	3	16	0.67 [0.30, 0.93]	0.84 [0.60, 0.97]
– 🕅 Vansteenkiste et al 1998b 🔤	Vansteenkiste et al 1998b	24	16	4	12	0.86 [0.67, 0.96]	0.43 [0.24, 0.63]
— 🕅 Bury et al 1996	Bury et al 1996	12	4	4	29	0.75 [0.48, 0.93]	0.88 [0.72, 0.97]
— 🐼 Marom et al 1999 — 🐼 Albes et al 1999	Marom et al 1999	26	5	18	30	0.59 [0.43, 0.74]	0.86 [0.70, 0.95]
- Xindes et al 1999	Albes et al 1999	15	3	1		0.94 [0.70, 1.00]	0.73 [0.39, 0.94]
Pieterman et al 2000	Vansteenkiste et al 1998	21	15	7	_	0.75 [0.55, 0.89]	0.63 [0.46, 0.77]
— 🞆 Valk et al 1995	Pieterman et al 2000	24	24			0.75 [0.57, 0.89]	0.66 [0.53, 0.77]
— 🕅 Scott et al 1996	Valk et al 1995	15	14	9		0.63 [0.41, 0.81]	0.73 [0.59, 0.84]
— 🐼 Poncelet et al 2001	Scott et al 1996	6	3	3			
- 🐼 Kubota et al 2000		5		4		0.67 [0.30, 0.93]	0.83 [0.59, 0.96]
— 🐼 Wahl et al 1994 — 🐼 Sazon et al 1996	Poncelet et al 2001	5	17			0.56 [0.21, 0.86]	0.68 [0.54, 0.80]
Hagberg et al 1997	Kubota et al 2000	4	4	2		0.67 [0.22, 0.96]	0.67 [0.35, 0.90]
- 🕅 Saunders et al 1999	Wahl et al 1994	(9	4	7	0.64 [0.31, 0.89]	0.44 [0.20, 0.70]
— 🎆 Guhlmann et al 1997	Sazon et al 1996	13	7	3		0.81 [0.54, 0.96]	0.56 [0.30, 0.80]
— 🕅 Higashi et al 1999	Hagberg et al 1997	5	0	4		0.56 [0.21, 0.86]	1.00 [0.66, 1.00]
— 🕅 Guan et al 2001	Saunders et al 1999	3	7	14	60	0.18 [0.04, 0.43]	0.90 [0.80, 0.96]
- 🕅 Richter et al 1999	Guhlmann et al 1997	7	3	8	14	0.47 [0.21, 0.73]	0.82 [0.57, 0.96]
- 🐼 Kitase et al 2000 - 🐼 Farrell et al 2000	Higashi et al 1999	4	9	4	25	0.50 [0.16, 0.84]	0.74 [0.56, 0.87]
w von Haag et al 2002	Guan et al 2001	11	5	7	19	0.61 [0.36, 0.83]	0.79 [0.58, 0.93]
Dunagan et al 2001	Footnote:		'			· · · ·	

	Study	TP	FP	FN	ΤN	Sensitivity	Specificity	Sensitivity	Specificity
	Bury 1997	11	8	3	44	0.79 [0.49, 0.95]	0.85 [0.72, 0.93]		
	Chin 1995	5	3	4	18	0.56 [0.21, 0.86]	0.86 [0.64, 0.97]	_	
	Guhlmann 1997	8	3	7	14	0.53 [0.27, 0.79]	0.82 [0.57, 0.96]		
	Gupta 2000	36	36	17	79	0.68 [0.54, 0.80]	0.69 [0.59, 0.77]		
	Hagberg 1997	5	0	4	9	0.56 [0.21, 0.86]	1.00 [0.66, 1.00]	_	
	Marom 1999	26	4	18	30	0.59 [0.43, 0.74]	0.88 [0.73, 0.97]		
	Pieterman 2000	24	24	8	46	0.75 [0.57, 0.89]	0.66 [0.53, 0.77]		
	Poncelet 2001	5	17	4	36	0.56 [0.21, 0.86]	0.68 [0.54, 0.80]		
	Sasaki 1996	11	7	6	47	0.65 [0.38, 0.86]	0.87 [0.75, 0.95]		
	Saunders 1999	3	7	12	62	0.20 [0.04, 0.48]	0.90 [0.80, 0.96]		
	Sazon 1996	13	7	3	9	0.81 [0.54, 0.96]	0.56 [0.30, 0.80]		
	Scott 1994	1	2	2	20	0.33 [0.01, 0.91]	0.91 [0.71, 0.99]		
	Scott 1996	6	3	3	15	0.67 [0.30, 0.93]	0.83 [0.59, 0.96]	_	
	Steinert 1997	16	5	12	79	0.57 [0.37, 0.76]	0.94 [0.87, 0.98]		
	Valk 1995	15	14	9	38	0.63 [0.41, 0.81]	0.73 [0.59, 0.84]		
	Vansteenkiste 1997	10	13	5	22	0.67 [0.38, 0.88]	0.63 [0.45, 0.79]		
	Wahl 1994	7	9	4	7	0.64 [0.31, 0.89]	0.44 [0.20, 0.70]		
									0.2 0.4 0.6 0.8 1
	Study	ТР	FP	FN	TN	Sensitivity	Specificity	Sensitivity	Specificity
	Study Bury 1997	ТР 12	FP 0	FN 2			Specificity 1.00 [0.93, 1.00]	Sensitivity	Specificity -
				FN 2 2		0.86 [0.57, 0.98]		Sensitivity	Specificity
	Bury 1997	12	0	2	52 17	0.86 [0.57, 0.98] 0.78 [0.40, 0.97]	1.00 [0.93, 1.00]	Sensitivity	Specificity
	Bury 1997 Chin 1995	12 7	0 4	2 2 2	52 17 17	0.86 [0.57, 0.98] 0.78 [0.40, 0.97] 0.87 [0.60, 0.98]	1.00 [0.93, 1.00] 0.81 [0.58, 0.95] 1.00 [0.80, 1.00]	Sensitivity	Specificity
	Bury 1997 Chin 1995 Guhlmann 1997	12 7 13	0 4 0	2 2 2	52 17 17	0.86 [0.57, 0.98] 0.78 [0.40, 0.97] 0.87 [0.60, 0.98] 0.96 [0.87, 1.00]	1.00 [0.93, 1.00] 0.81 [0.58, 0.95]	Sensitivity	Specificity
	Bury 1997 Chin 1995 Guhlmann 1997 Gupta 2000	12 7 13 51	0 4 0 8	2 2 2 2	52 17 17 107 9	0.86 [0.57, 0.98] 0.78 [0.40, 0.97] 0.87 [0.60, 0.98] 0.96 [0.87, 1.00] 0.67 [0.30, 0.93]	1.00 [0.93, 1.00] 0.81 [0.58, 0.95] 1.00 [0.80, 1.00] 0.93 [0.87, 0.97]	Sensitivity	Specificity
	Bury 1997 Chin 1995 Guhlmann 1997 Gupta 2000 Hagberg 1997	12 7 13 51 6	0 4 0 8 0	2 2 2 3	52 17 17 107 9 31	0.86 [0.57, 0.98] 0.78 [0.40, 0.97] 0.87 [0.60, 0.98] 0.96 [0.87, 1.00] 0.67 [0.30, 0.93] 0.91 [0.78, 0.97]	1.00 [0.93, 1.00] 0.81 [0.58, 0.95] 1.00 [0.80, 1.00] 0.93 [0.87, 0.97] 1.00 [0.66, 1.00]	Sensitivity	Specificity
PET	Bury 1997 Chin 1995 Guhlmann 1997 Gupta 2000 Hagberg 1997 Marom 1999	12 7 13 51 6 40	0 4 0 8 0 3	2 2 2 3 4	52 17 17 107 9 31 60	0.86 [0.57, 0.98] 0.78 [0.40, 0.97] 0.87 [0.60, 0.98] 0.96 [0.87, 1.00] 0.67 [0.30, 0.93] 0.91 [0.78, 0.97] 0.91 [0.75, 0.98]	1.00 [0.93, 1.00] 0.81 [0.58, 0.95] 1.00 [0.80, 1.00] 0.93 [0.87, 0.97] 1.00 [0.66, 1.00] 0.91 [0.76, 0.98] 0.86 [0.75, 0.93]	Sensitivity	Specificity
PET	Bury 1997 Chin 1995 Guhlmann 1997 Gupta 2000 Hagberg 1997 Marom 1999 Pieterman 2000	12 7 13 51 6 40 29	0 4 0 8 0 3 10	2 2 2 3 4 3	52 17 107 9 31 60 44	0.86 [0.57, 0.98] 0.78 [0.40, 0.97] 0.87 [0.60, 0.98] 0.96 [0.87, 1.00] 0.67 [0.30, 0.93] 0.91 [0.78, 0.97] 0.91 [0.75, 0.98] 0.67 [0.30, 0.93]	1.00 [0.93, 1.00] 0.81 [0.58, 0.95] 1.00 [0.80, 1.00] 0.93 [0.87, 0.97] 1.00 [0.66, 1.00] 0.91 [0.76, 0.98]	Sensitivity	Specificity
PET	Bury 1997 Chin 1995 Guhimann 1997 Gupta 2000 Hagberg 1997 Marom 1999 Pieterman 2000 Poncelet 2001	12 7 13 51 6 40 29 6	0 4 0 3 10 8	2 2 2 3 4 3 3	52 17 107 9 31 60 44 53	0.86 [0.57, 0.98] 0.78 [0.40, 0.97] 0.87 [0.60, 0.98] 0.96 [0.87, 1.00] 0.67 [0.30, 0.93] 0.91 [0.78, 0.97] 0.91 [0.76, 0.98] 0.67 [0.30, 0.93] 0.76 [0.50, 0.93]	1.00 [0.93, 1.00] 0.81 [0.58, 0.95] 1.00 [0.80, 1.00] 0.93 [0.87, 0.97] 1.00 [0.66, 1.00] 0.91 [0.76, 0.98] 0.86 [0.75, 0.93] 0.85 [0.72, 0.93]	Sensitivity	Specificity
PET	Bury 1997 Chin 1995 Guhlmann 1997 Gupta 2000 Hagberg 1997 Marom 1999 Pieterman 2000 Poncelet 2001 Sasaki 1996	12 7 13 51 6 40 29 6 13	0 4 0 3 10 8 1	2 2 2 3 4 3 3 4	52 17 107 31 60 44 53 65	0.86 [0.57, 0.98] 0.78 [0.40, 0.97] 0.87 [0.60, 0.98] 0.96 [0.87, 1.00] 0.67 [0.30, 0.93] 0.91 [0.78, 0.97] 0.91 [0.76, 0.98] 0.67 [0.30, 0.93] 0.76 [0.50, 0.93] 0.71 [0.44, 0.90]	1.00 [0.93, 1.00] 0.81 [0.58, 0.95] 1.00 [0.80, 1.00] 0.93 [0.87, 0.97] 1.00 [0.66, 1.00] 0.91 [0.76, 0.98] 0.86 [0.75, 0.93] 0.85 [0.72, 0.93] 0.98 [0.90, 1.00] 0.97 [0.90, 1.00]	Sensitivity	Specificity
PET	Bury 1997 Chin 1995 Guhlmann 1997 Gupta 2000 Hagberg 1997 Marom 1999 Pieterman 2000 Poncelet 2001 Sasaki 1996 Saunders 1999	12 7 13 51 6 40 29 6 13 12	0 4 0 3 10 8 1 2	2 2 2 3 4 3 4 5	52 17 107 31 60 44 53 65 16	0.86 [0.57, 0.98] 0.78 [0.40, 0.97] 0.87 [0.60, 0.98] 0.96 [0.87, 1.00] 0.67 [0.30, 0.93] 0.91 [0.78, 0.97] 0.91 [0.76, 0.98] 0.67 [0.30, 0.93] 0.76 [0.50, 0.93] 0.71 [0.44, 0.90]	1.00 [0.93, 1.00] 0.81 [0.58, 0.95] 1.00 [0.80, 1.00] 0.93 [0.87, 0.97] 1.00 [0.66, 1.00] 0.91 [0.76, 0.98] 0.86 [0.75, 0.93] 0.86 [0.72, 0.93] 0.88 [0.72, 0.93] 0.98 [0.90, 1.00] 1.00 [0.79, 1.00]	Sensitivity	Specificity
PET	Bury 1997 Chin 1995 Guhlmann 1997 Gupta 2000 Hagberg 1997 Marom 1999 Pieterman 2000 Poncelet 2001 Sasaki 1996 Saunders 1999 Sazon 1996	12 7 51 6 40 29 6 13 12 16	0 4 0 3 10 8 1 2 0	2 2 2 3 4 3 4 5	52 17 107 31 60 44 53 65 16 19	0.86 [0.57, 0.9] 0.78 [0.40, 0.97] 0.87 [0.60, 0.98] 0.96 [0.87, 1.00] 0.67 [0.30, 0.93] 0.91 [0.78, 0.97] 0.91 [0.76, 0.98] 0.67 [0.30, 0.93] 0.76 [0.50, 0.93] 0.71 [0.44, 0.90] 1.00 [0.79, 1.00]	1.00 [0.93, 1.00] 0.81 [0.58, 0.95] 1.00 [0.80, 1.00] 0.93 [0.87, 0.97] 1.00 [0.66, 1.00] 0.91 [0.76, 0.98] 0.86 [0.75, 0.93] 0.86 [0.72, 0.93] 0.88 [0.72, 0.93] 0.98 [0.90, 1.00] 1.00 [0.79, 1.00]	Sensitivity	Specificity
PET	Bury 1997 Chin 1995 Guhlmann 1997 Gupta 2000 Hagberg 1997 Marom 1999 Pieterman 2000 Poncelet 2001 Sasaki 1996 Saunders 1999 Sazon 1996 Scott 1994	12 7 13 51 6 40 29 6 13 12 16 2	0 4 0 3 10 8 1 2 0 3	2 2 2 3 4 3 4 5 0	52 17 107 31 60 44 53 65 16 19 18	$\begin{array}{c} 0.86 \left[0.57, 0.98 \right] \\ 0.78 \left[0.40, 0.97 \right] \\ 0.87 \left[0.60, 0.98 \right] \\ 0.96 \left[0.87, 1.00 \right] \\ 0.91 \left[0.70, 0.93 \right] \\ 0.91 \left[0.76, 0.93 \right] \\ 0.91 \left[0.76, 0.93 \right] \\ 0.76 \left[0.50, 0.93 \right] \\ 0.71 \left[0.44, 0.90 \right] \\ 1.00 \left[0.79, 1.00 \right] \\ 1.00 \left[0.09, 0.93 \right] \\ 1.00 \left[0.66, 1.00 \right] \\ 1.00 \left[0.66, 1.00 \right] \\ \end{array}$	1.00 [0.93, 1.00] 0.81 [0.58, 0.95] 1.00 [0.80, 1.00] 0.93 [0.87, 0.97] 1.00 [0.66, 1.00] 0.91 [0.76, 0.98] 0.86 [0.75, 0.93] 0.85 [0.72, 0.93] 0.88 [0.97, 0.93] 0.98 [0.90, 1.00] 0.97 [0.90, 1.00] 1.00 [0.79, 1.00] 0.86 [0.65, 0.97]	Sensitivity	Specificity
PET	Bury 1997 Chin 1995 Guhimann 1997 Gupta 2000 Hagberg 1997 Marom 1999 Pieterman 2000 Poncelet 2001 Sasaki 1996 Saunders 1999 Sazon 1994 Scott 1994	12 7 51 6 40 29 6 13 12 16 2 9	0 4 0 3 10 8 1 2 0 3 0	2 2 2 3 4 3 4 5 0 1 0	52 17 107 9 31 60 44 53 65 16 19 18 83	$\begin{array}{c} 0.86 \ [0.57, \ 0.98] \\ 0.78 \ [0.40, \ 0.97] \\ 0.87 \ [0.60, \ 0.98] \\ 0.96 \ [0.87, \ 1.00] \\ 0.67 \ [0.30, \ 0.93] \\ 0.91 \ [0.78, \ 0.97] \\ 0.91 \ [0.78, \ 0.97] \\ 0.67 \ [0.30, \ 0.93] \\ 0.76 \ [0.50, \ 0.93] \\ 0.76 \ [0.50, \ 0.93] \\ 0.71 \ [0.44, \ 0.90] \\ 1.00 \ [0.66, \ 1.00] \\ 0.68 \ [0.72, \ 0.98] \\ 0.89 \ [0.72, \ 0.98] \end{array}$	$\begin{array}{c} 1.00 \left[0.93, 1.00 \right] \\ 0.81 \left[0.58, 0.95 \right] \\ 1.00 \left[0.80, 1.00 \right] \\ 0.93 \left[0.87, 0.97 \right] \\ 1.00 \left[0.66, 1.00 \right] \\ 0.91 \left[0.76, 0.98 \right] \\ 0.86 \left[0.75, 0.93 \right] \\ 0.85 \left[0.72, 0.93 \right] \\ 0.88 \left[0.90, 1.00 \right] \\ 1.00 \left[0.79, 1.00 \right] \\ 1.00 \left[0.79, 1.00 \right] \\ 1.00 \left[0.86, 0.97 \right] \\ 1.00 \left[0.81, 1.00 \right] \\ 1.00 \left[0.81, 1.00 \right] \end{array}$	Sensitivity	Specificity
PET	Bury 1997 Chin 1995 Guhlmann 1997 Gupta 2000 Hagberg 1997 Marom 1999 Pieterman 2000 Poncelet 2001 Sasaki 1996 Saunders 1999 Sazon 1996 Scott 1994 Scott 1996 Steinert 1997	12 7 51 6 40 29 6 13 12 16 2 9 25	0 4 0 3 10 8 1 2 0 3 0 1	2 2 2 3 4 3 4 5 0 1 0 3	52 17 107 9 31 60 44 53 65 16 19 18 83 49	$\begin{array}{c} 0.86 \ [0.57, \ 0.98]\\ 0.78 \ [0.40, \ 0.97]\\ 0.87 \ [0.60, \ 0.98]\\ 0.96 \ [0.87, \ 1.00]\\ 0.67 \ [0.30, \ 0.93]\\ 0.91 \ [0.78, \ 0.97]\\ 0.91 \ [0.76, \ 0.98]\\ 0.67 \ [0.30, \ 0.93]\\ 0.76 \ [0.50, \ 0.93]\\ 0.76 \ [0.50, \ 0.93]\\ 0.71 \ [0.44, \ 0.90]\\ 1.00 \ [0.66, \ 1.00]\\ 0.89 \ [0.72, \ 0.98]\\ 0.83 \ [0.63, \ 0.95]\\ \end{array}$	1.00 [0.93, 1.00] 0.81 [0.58, 0.95] 1.00 [0.80, 1.00] 0.93 [0.87, 0.97] 1.00 [0.66, 1.00] 0.91 [0.76, 0.98] 0.86 [0.75, 0.93] 0.85 [0.72, 0.93] 0.98 [0.90, 1.00] 0.97 [0.90, 1.00] 0.97 [0.90, 1.00] 0.86 [0.65, 0.97] 1.00 [0.81, 1.00] 0.99 [0.94, 1.00]	Sensitivity	Specificity
PET	Bury 1997 Chin 1995 Guhlmann 1997 Gupta 2000 Hagberg 1997 Marom 1999 Pieterman 2000 Poncelet 2001 Sasaki 1996 Saunders 1999 Sazon 1996 Scott 1994 Scott 1996 Steinert 1997 Valk 1995	12 7 51 6 40 29 6 13 12 16 2 9 25 20	0 4 0 3 10 8 1 2 0 3 0 1 3	2 2 2 3 4 3 4 5 0 1 0 3 4	52 17 107 9 31 60 44 53 65 16 19 18 83 49 34	$\begin{array}{c} 0.86 \ [0.57, \ 0.98]\\ 0.78 \ [0.40, \ 0.97]\\ 0.87 \ [0.60, \ 0.98]\\ 0.96 \ [0.87, \ 1.00]\\ 0.67 \ [0.30, \ 0.93]\\ 0.91 \ [0.78, \ 0.97]\\ 0.91 \ [0.76, \ 0.98]\\ 0.67 \ [0.30, \ 0.93]\\ 0.76 \ [0.50, \ 0.93]\\ 0.76 \ [0.50, \ 0.93]\\ 0.71 \ [0.44, \ 0.90]\\ 1.00 \ [0.66, \ 1.00]\\ 0.89 \ [0.72, \ 0.98]\\ 0.83 \ [0.63, \ 0.95]\\ \end{array}$	$\begin{array}{c} 1.00 \left[0.93, 1.00 \right] \\ 0.81 \left[0.58, 0.95 \right] \\ 1.00 \left[0.80, 1.00 \right] \\ 0.93 \left[0.87, 0.97 \right] \\ 1.00 \left[0.66, 1.00 \right] \\ 0.91 \left[0.76, 0.98 \right] \\ 0.86 \left[0.75, 0.93 \right] \\ 0.86 \left[0.72, 0.93 \right] \\ 0.86 \left[0.70, 0.91 \right] \\ 0.97 \left[0.90, 1.00 \right] \\ 0.97 \left[0.90, 1.00 \right] \\ 0.97 \left[0.90, 1.00 \right] \\ 0.86 \left[0.65, 0.97 \right] \\ 1.00 \left[0.84, 1.00 \right] \\ 0.94 \left[0.84, 0.98 \right] \\ 0.97 \left[0.85, 1.00 \right] \end{array}$	Sensitivity	Specificity
PET	Bury 1997 Chin 1995 Guhlmann 1997 Gupta 2000 Hagberg 1997 Marom 1999 Pieterman 2000 Poncelet 2001 Sasaki 1996 Saunders 1999 Sazon 1996 Scott 1994 Scott 1996 Steinert 1997 Valk 1995 Vansteenkiste 1997	12 7 51 6 29 6 13 12 16 2 9 25 20 10	0 4 0 3 10 8 1 2 0 3 0 1 3 1	2 2 2 3 4 3 4 5 0 1 0 3 4 5	52 17 107 9 31 60 44 53 65 16 19 18 83 49 34	$\begin{array}{c} 0.86 \\ (0.57, \ 0.98) \\ 0.78 \\ (0.40, \ 0.97] \\ 0.87 \\ (0.60, \ 0.98) \\ 0.96 \\ (0.87, \ 1.00] \\ 0.67 \\ (0.30, \ 0.93) \\ 0.91 \\ (0.76, \ 0.98) \\ 0.67 \\ (0.30, \ 0.93) \\ 0.76 \\ (0.50, \ 0.93) \\ 0.76 \\ (0.50, \ 0.93) \\ 0.71 \\ (0.44, \ 0.90) \\ 1.00 \\ (0.79, \ 1.00] \\ 0.67 \\ (0.90, \ 0.99) \\ 1.00 \\ (0.66, \ 1.00) \\ 0.89 \\ (0.72, \ 0.98) \\ 0.83 \\ (0.63, \ 0.95) \\ 0.67 \\ (0.38, \ 0.88) \\ \end{array}$	$\begin{array}{c} 1.00 \left[0.93, 1.00 \right] \\ 0.81 \left[0.58, 0.95 \right] \\ 1.00 \left[0.80, 1.00 \right] \\ 0.93 \left[0.87, 0.97 \right] \\ 1.00 \left[0.66, 1.00 \right] \\ 0.91 \left[0.76, 0.98 \right] \\ 0.86 \left[0.75, 0.93 \right] \\ 0.86 \left[0.72, 0.93 \right] \\ 0.86 \left[0.70, 0.91 \right] \\ 0.97 \left[0.90, 1.00 \right] \\ 0.97 \left[0.90, 1.00 \right] \\ 0.97 \left[0.90, 1.00 \right] \\ 0.86 \left[0.65, 0.97 \right] \\ 1.00 \left[0.84, 1.00 \right] \\ 0.94 \left[0.84, 0.98 \right] \\ 0.97 \left[0.85, 1.00 \right] \end{array}$		Specificity

Re-analysis of the data from Birim et al (2005).



SROC from bivariate model

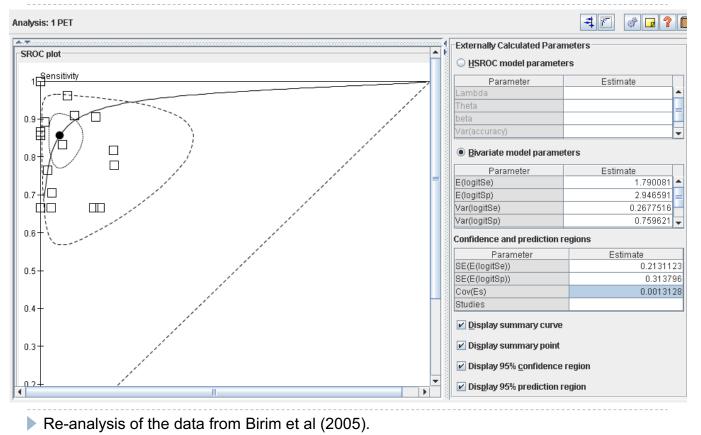
Re-analysis of the data from Birim et al (2005).

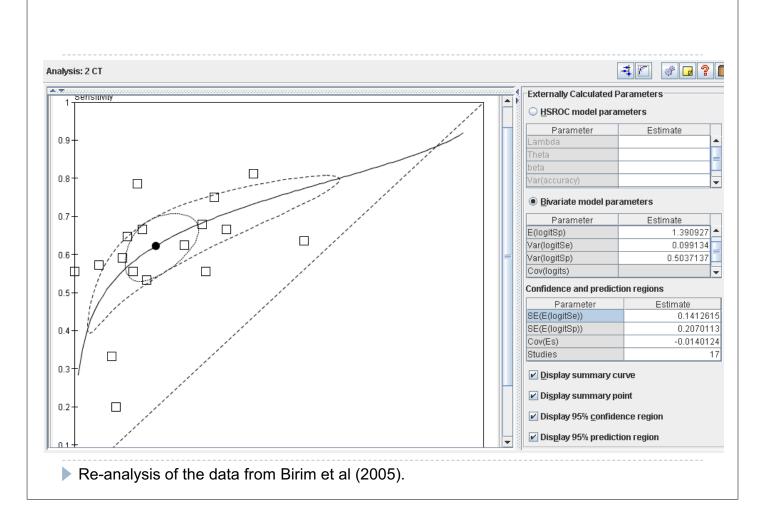
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🔜 Figures

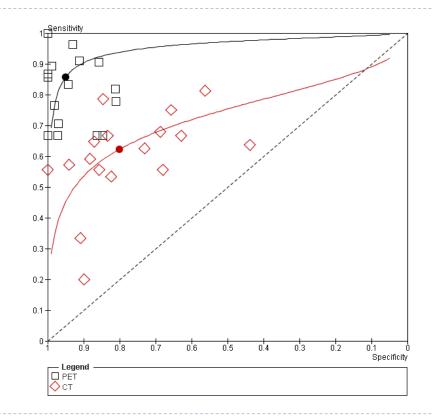
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😴 Sources of support 😲 Feedback 🗎 Appendices





Comparison between the performance of tests



Re-analysis of the data from Birim et al (2005).

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