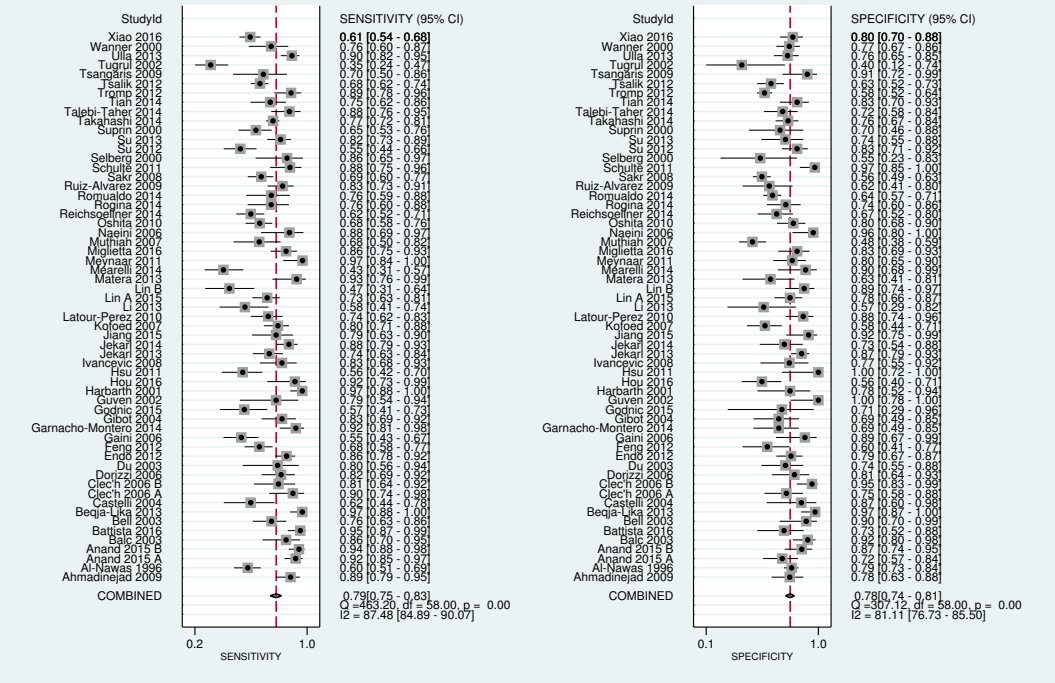
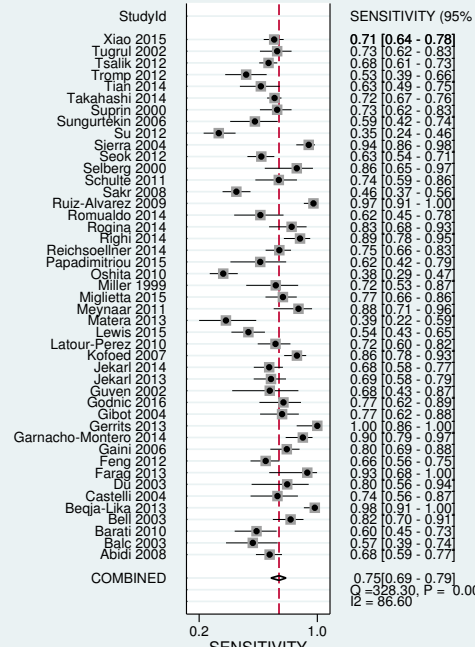
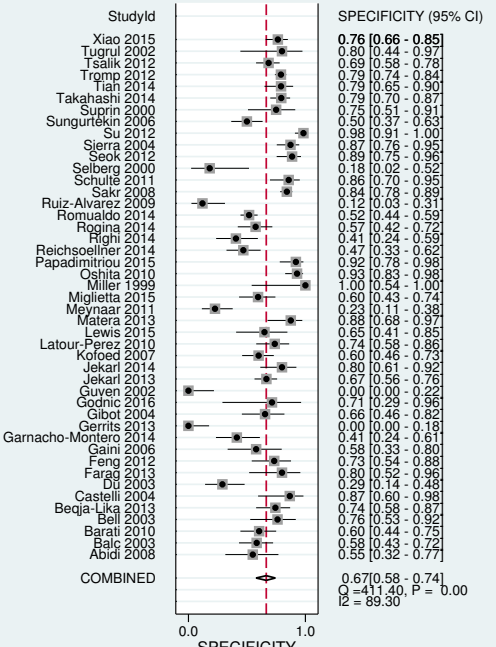
S3. Forest plots of biomarkers for diagnosis of sepsis

PCT

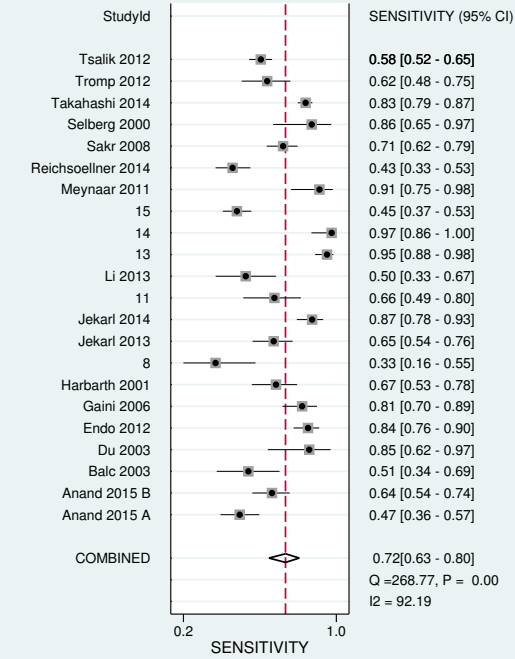


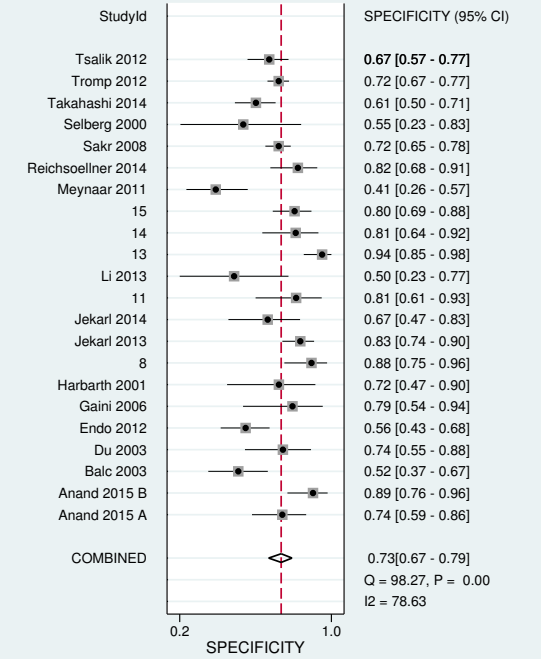
CRP


StudyId
SENSITIVITY (95% CI)
Xiao 2015 0.71 [0.64 - 0.78]
Tugrul 2002 0.73 [0.62 - 0.83]
Tsalik 2012 0.68 [0.61 - 0.73]
Tromp 2012 0.53 [0.39 - 0.66]
Tian 2014 0.63 [0.49 - 0.75]
Takahashi 2014 0.72 [0.67 - 0.76]
Suprin 2000 0.73 [0.62 - 0.83]
Sungurtekin 2006 0.58 [0.42 - 0.74]
Su 2012 0.35 [0.24 - 0.46]
Sierra 2004 0.94 [0.86 - 0.98]
Seok 2012 0.63 [0.54 - 0.71]
Selberg 2000 0.86 [0.65 - 0.97]
Schulte 2011 0.74 [0.59 - 0.86]
Sakr 2008 0.46 [0.37 - 0.56]
Ruiz-Alvarez 2009 0.97 [0.91 - 1.00]
Romualdo 2014 0.62 [0.45 - 0.78]
Rogina 2014 0.83 [0.68 - 0.93]
Righi 2014 0.89 [0.78 - 0.95]
Reichsoellner 2014 0.75 [0.66 - 0.83]
Papadimitriou 2015 0.62 [0.42 - 0.79]
Oshita 2010 0.38 [0.29 - 0.47]
Miller 1999 0.72 [0.53 - 0.87]
Miglietta 2015 0.77 [0.66 - 0.86]
Meynaar 2011 0.88 [0.71 - 0.96]
Matera 2013 0.39 [0.22 - 0.59]
Lewis 2015 0.54 [0.43 - 0.65]
Latour-Perez 2010 0.72 [0.60 - 0.82]
Kofoed 2007 0.86 [0.78 - 0.93]
Jekarl 2014 0.68 [0.58 - 0.77]
Jekarl 2013 0.69 [0.58 - 0.79]
Guven 2002 0.68 [0.43 - 0.87]
Godnic 2016 0.77 [0.62 - 0.89]
Gibot 2004 0.77 [0.62 - 0.88]
Gerrits 2013 1.00 [0.86 - 1.00]
Garnacho-Montero 2014 0.90 [0.79 - 0.97]
Gaini 2006 0.80 [0.69 - 0.88]
Feng 2012 0.66 [0.56 - 0.75]
Farag 2013 0.93 [0.68 - 1.00]
Dü 2003 0.80 [0.56 - 0.94]
Castelli 2004 0.74 [0.56 - 0.87]
Beqja-Lika 2013 0.98 [0.91 - 1.00]
Bell 2003 0.82 [0.70 - 0.91]
Barati 2010 0.60 [0.45 - 0.73]
Balc 2003 0.57 [0.39 - 0.74]
Abidi 2008 0.68 [0.59 - 0.77]
COMBINED 0.75[0.69 - 0.79]
Q =328.30, P = 0.00
I2 = 86.60
0.2
1.0
SENSITIVITY

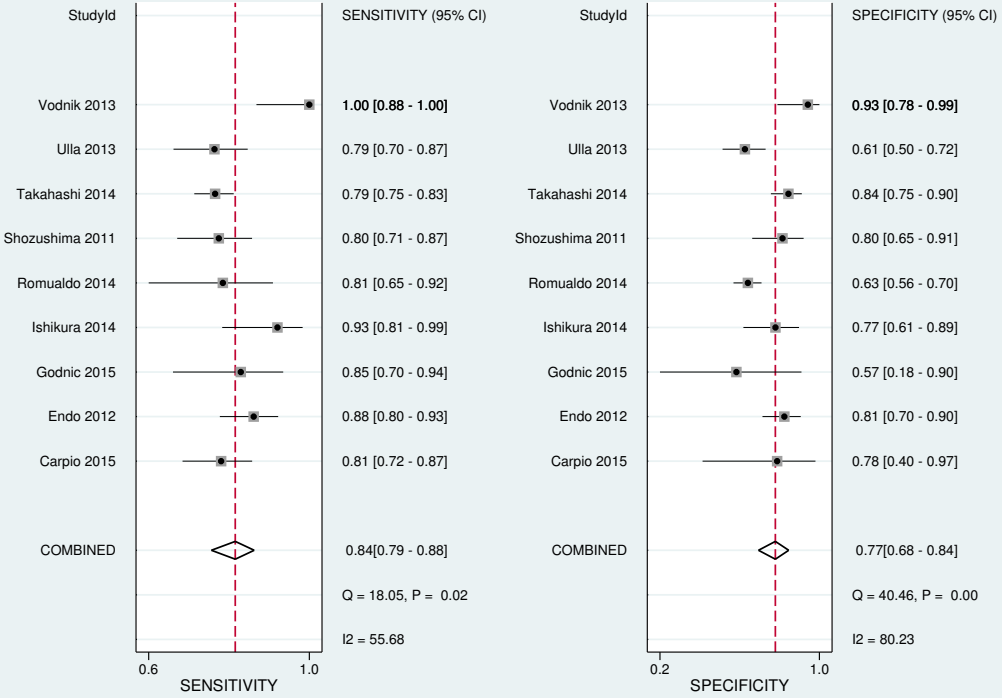

StudyId
SPECIFICITY (95% CI)
Xiao 2015 0.76 [0.66 - 0.85]
Tugrul 2002 0.80 [0.44 - 0.97]
Tsalik 2012 0.69 [0.58 - 0.78]
Tromp 2012 0.79 [0.74 - 0.84]
Tian 2014 0.79 [0.65 - 0.90]
Takahashi 2014 0.79 [0.70 - 0.87]
Suprin 2000 0.75 [0.51 - 0.91]
Sungurtekin 2006 0.50 [0.37 - 0.63]
Su 2012 0.98 [0.91 - 1.00]
Sierra 2004 0.87 [0.76 - 0.95]
Seok 2012 0.89 [0.75 - 0.96]
Selberg 2000 0.18 [0.02 - 0.52]
Schulte 2011 0.86 [0.70 - 0.95]
Sakr 2008 0.84 [0.78 - 0.89]
Ruiz-Alvarez 2009 0.12 [0.03 - 0.31]
Romualdo 2014 0.52 [0.44 - 0.59]
Rogina 2014 0.57 [0.42 - 0.72]
Righi 2014 0.41 [0.24 - 0.59]
Reichsoellner 2014 0.47 [0.33 - 0.62]
Papadimitriou 2015 0.92 [0.78 - 0.98]
Oshita 2010 0.93 [0.83 - 0.98]
Miller 1999 1.00 [0.54 - 1.00]
Miglietta 2015 0.60 [0.43 - 0.74]
Meynaar 2011 0.23 [0.11 - 0.38]
Matera 2013 0.88 [0.68 - 0.97]
Lewis 2015 0.65 [0.41 - 0.85]
Latour-Perez 2010 0.74 [0.58 - 0.86]
Kofoed 2007 0.60 [0.46 - 0.73]
Jekarl 2014 0.80 [0.61 - 0.92]
Jekarl 2013 0.67 [0.56 - 0.76]
Guven 2002 0.00 [0.00 - 0.22]
Godnic 2016 0.71 [0.29 - 0.96]
Gibot 2004 0.66 [0.46 - 0.82]
Gerrits 2013 0.00 [0.00 - 0.18]
Garnacho-Montero 2014 0.41 [0.24 - 0.61]
Gaini 2006 0.58 [0.33 - 0.80]
Feng 2012 0.73 [0.54 - 0.88]
Farag 2013 0.80 [0.52 - 0.96]
Dü 2003 0.29 [0.14 - 0.48]
Castelli 2004 0.87 [0.60 - 0.98]
Beqja-Lika 2013 0.74 [0.58 - 0.87]
Bell 2003 0.76 [0.53 - 0.92]
Barati 2010 0.60 [0.44 - 0.75]
Balc 2003 0.58 [0.43 - 0.72]
Abidi 2008 0.55 [0.32 - 0.77]
COMBINED 0.67[0.58 - 0.74]
Q =411.40, P = 0.00
I2 = 89.30
0.0
1.0
SPECIFICITY

IL-6

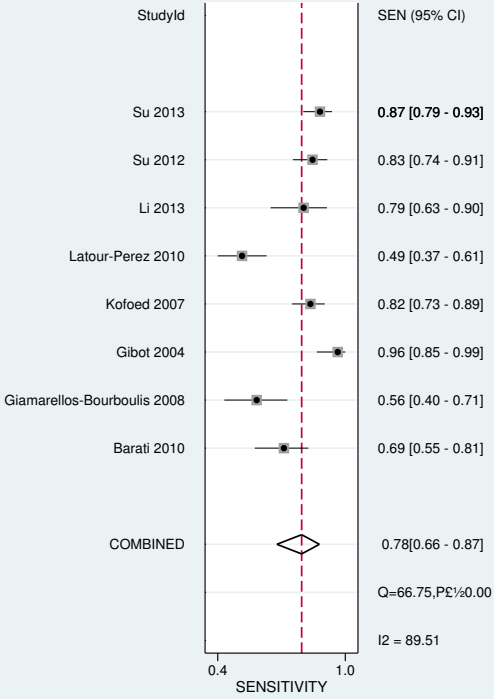

StudyId
SENSITIVITY (95% CI)
Tsalik 2012
0.58 [0.52 - 0.65]
Tromp 2012
0.62 [0.48 - 0.75]
Takahashi 2014
0.83 [0.79 - 0.87]
Selberg 2000
0.86 [0.65 - 0.97]
Sakr 2008
0.71 [0.62 - 0.79]
Reichsoellner 2014
0.43 [0.33 - 0.53]
Meynaar 2011
0.91 [0.75 - 0.98]
15
0.45 [0.37 - 0.53]
14
0.97 [0.86 - 1.00]
13
0.95 [0.88 - 0.98]
Li 2013
0.50 [0.33 - 0.67]
11
0.66 [0.49 - 0.80]
Jekarl 2014
0.87 [0.78 - 0.93]
Jekarl 2013
0.65 [0.54 - 0.76]
8
0.33 [0.16 - 0.55]
Harbarth 2001
0.67 [0.53 - 0.78]
Gaini 2006
0.81 [0.70 - 0.89]
Endo 2012
0.84 [0.76 - 0.90]
Du 2003
0.85 [0.62 - 0.97]
Balc 2003
0.51 [0.34 - 0.69]
Anand 2015 B
0.64 [0.54 - 0.74]
Anand 2015 A
0.47 [0.36 - 0.57]
COMBINED
0.72[0.63 - 0.80]
Q =268.77, P = 0.00
I2 = 92.19
0.2
1.0
SENSITIVITY

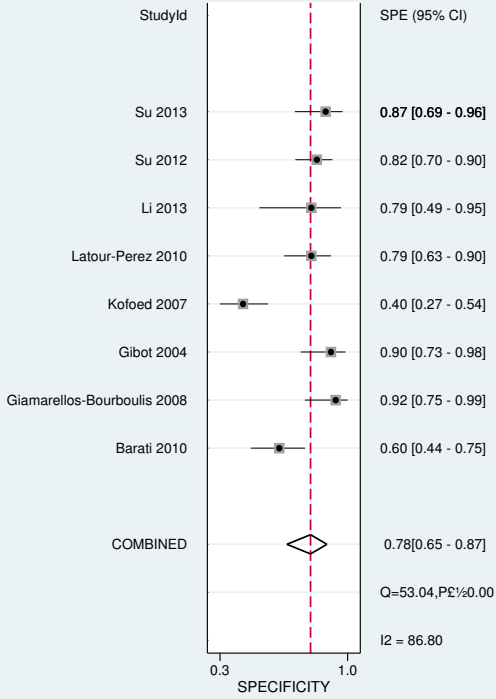

StudyId
SPECIFICITY (95% CI)
Tsalik 2012
0.67 [0.57 - 0.77]
Tromp 2012
0.72 [0.67 - 0.77]
Takahashi 2014
0.61 [0.50 - 0.71]
Selberg 2000
0.55 [0.23 - 0.83]
Sakr 2008
0.72 [0.65 - 0.78]
Reichsoellner 2014
0.82 [0.68 - 0.91]
Meynaar 2011
0.41 [0.26 - 0.57]
15
0.80 [0.69 - 0.88]
14
0.81 [0.64 - 0.92]
13
0.94 [0.85 - 0.98]
Li 2013
0.50 [0.23 - 0.77]
11
0.81 [0.61 - 0.93]
Jekarl 2014
0.67 [0.47 - 0.83]
Jekarl 2013
0.83 [0.74 - 0.90]
8
0.88 [0.75 - 0.96]
Harbarth 2001
0.72 [0.47 - 0.90]
Gaini 2006
0.79 [0.54 - 0.94]
Endo 2012
0.56 [0.43 - 0.68]
Du 2003
0.74 [0.55 - 0.88]
Balc 2003
0.52 [0.37 - 0.67]
Anand 2015 B
0.89 [0.76 - 0.96]
Anand 2015 A
0.74 [0.59 - 0.86]
COMBINED
0.73[0.67 - 0.79]
Q = 98.27, P = 0.00
I2 = 78.63
0.2
1.0
SPECIFICITY

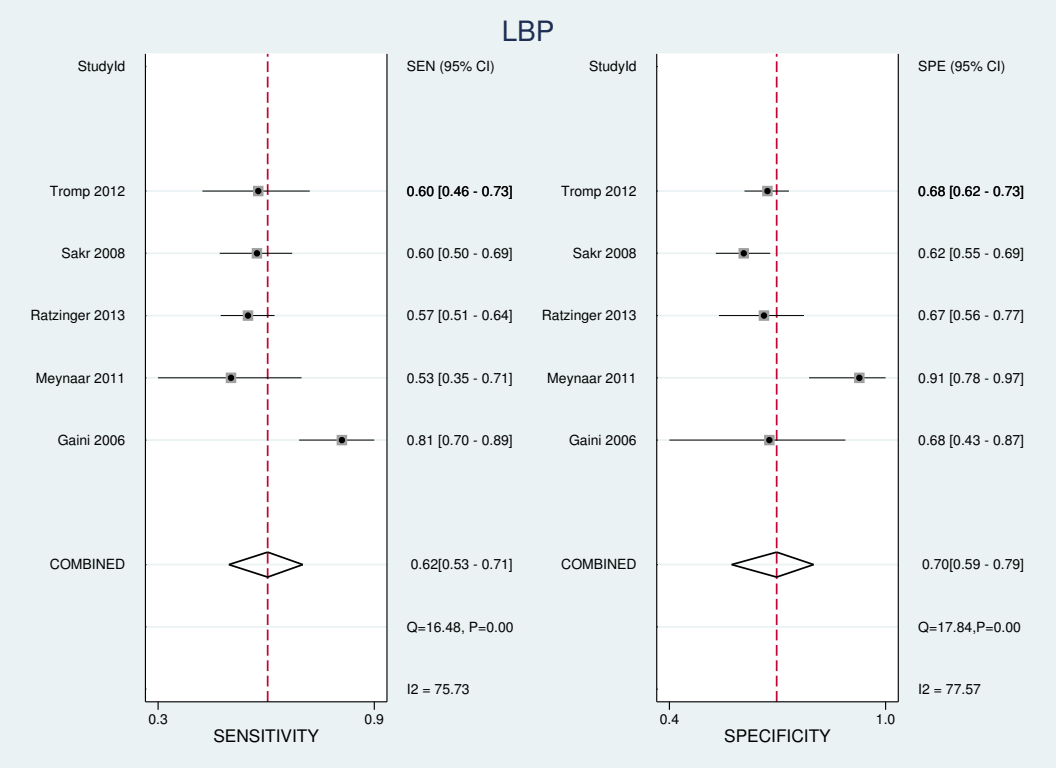
Presepsin

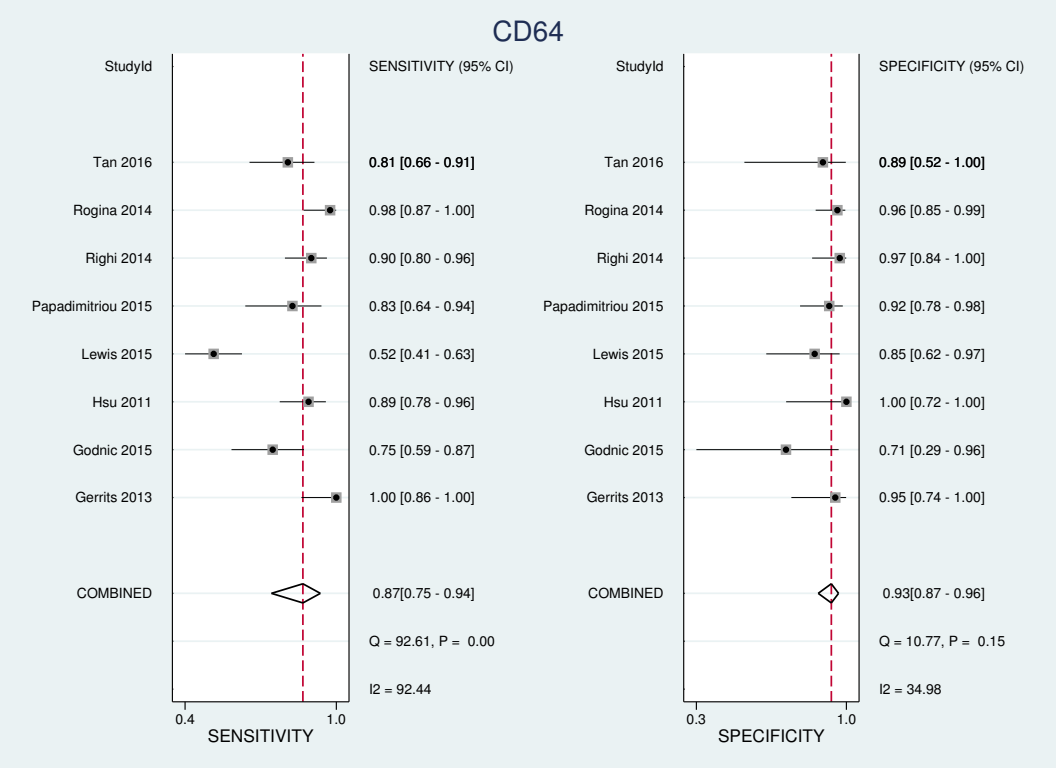

StudyId
SENSITIVITY (95% CI)
Vodnik 2013
1.00 [0.88 - 1.00]
Ulla 2013
0.79 [0.70 - 0.87]
Takahashi 2014
0.79 [0.75 - 0.83]
Shozushima 2011
0.80 [0.71 - 0.87]
Romualdo 2014
0.81 [0.65 - 0.92]
Ishikura 2014
0.93 [0.81 - 0.99]
Godnic 2015
0.85 [0.70 - 0.94]
Endo 2012
0.88 [0.80 - 0.93]
Carpio 2015
0.81 [0.72 - 0.87]
COMBINED
0.84[0.79 - 0.88]
Q = 18.05, P = 0.02
I2 = 55.68
0.6
1.0
SENSITIVITY
StudyId
SPECIFICITY (95% CI)
Vodnik 2013
0.93 [0.78 - 0.99]
Ulla 2013
0.61 [0.50 - 0.72]
Takahashi 2014
0.84 [0.75 - 0.90]
Shozushima 2011
0.80 [0.65 - 0.91]
Romualdo 2014
0.63 [0.56 - 0.70]
Ishikura 2014
0.77 [0.61 - 0.89]
Godnic 2015
0.57 [0.18 - 0.90]
Endo 2012
0.81 [0.70 - 0.90]
Carpio 2015
0.78 [0.40 - 0.97]
COMBINED
0.77[0.68 - 0.84]
Q = 40.46, P = 0.00
I2 = 80.23
0.2
1.0
SPECIFICITY

sTREM-1


StudyId
SEN (95% CI)
Su 2013
0.87 [0.79 - 0.93]
Su 2012
0.83 [0.74 - 0.91]
Li 2013
0.79 [0.63 - 0.90]
Latour-Perez 2010
0.49 [0.37 - 0.61]
Kofoed 2007
0.82 [0.73 - 0.89]
Gibot 2004
0.96 [0.85 - 0.99]
Giamarellos-Bourboulis 2008
0.56 [0.40 - 0.71]
Barati 2010
0.69 [0.55 - 0.81]
COMBINED
0.78[0.66 - 0.87]
Q=66.75,P£½0.00
I2 = 89.51
0.4
1.0
SENSITIVITY


StudyId
SPE (95% CI)
Su 2013
0.87 [0.69 - 0.96]
Su 2012
0.82 [0.70 - 0.90]
Li 2013
0.79 [0.49 - 0.95]
Latour-Perez 2010
0.79 [0.63 - 0.90]
Kofoed 2007
0.40 [0.27 - 0.54]
Gibot 2004
0.90 [0.73 - 0.98]
Giamarellos-Bourboulis 2008
0.92 [0.75 - 0.99]
Barati 2010
0.60 [0.44 - 0.75]
COMBINED
0.78[0.65 - 0.87]
Q=53.04,P£½0.00
I2 = 86.80
0.3
1.0
SPECIFICITY


LBP
StudyId
SEN (95% CI)
Tromp 2012
0.60 [0.46 - 0.73]
Sakr 2008
0.60 [0.50 - 0.69]
Ratzinger 2013
0.57 [0.51 - 0.64]
Meynaar 2011
0.53 [0.35 - 0.71]
Gaini 2006
0.81 [0.70 - 0.89]
COMBINED
0.62[0.53 - 0.71]
Q=16.48, P=0.00
I2 = 75.73
0.3
0.9
SENSITIVITY
StudyId
SPE (95% CI)
Tromp 2012
0.68 [0.62 - 0.73]
Sakr 2008
0.62 [0.55 - 0.69]
Ratzinger 2013
0.67 [0.56 - 0.77]
Meynaar 2011
0.91 [0.78 - 0.97]
Gaini 2006
0.68 [0.43 - 0.87]
COMBINED
0.70[0.59 - 0.79]
Q=17.84,P=0.00
I2 = 77.57
0.4
1.0
SPECIFICITY


CD64
StudyId
SENSITIVITY (95% CI)
Tan 2016
0.81 [0.66 - 0.91]
Rogina 2014
0.98 [0.87 - 1.00]
Righi 2014
0.90 [0.80 - 0.96]
Papadimitriou 2015
0.83 [0.64 - 0.94]
Lewis 2015
0.52 [0.41 - 0.63]
Hsu 2011
0.89 [0.78 - 0.96]
Godnic 2015
0.75 [0.59 - 0.87]
Gerrits 2013
1.00 [0.86 - 1.00]
COMBINED
0.87[0.75 - 0.94]
Q = 92.61, P = 0.00
I2 = 92.44
0.4
1.0
SENSITIVITY
StudyId
SPECIFICITY (95% CI)
Tan 2016
0.89 [0.52 - 1.00]
Rogina 2014
0.96 [0.85 - 0.99]
Righi 2014
0.97 [0.84 - 1.00]
Papadimitriou 2015
0.92 [0.78 - 0.98]
Lewis 2015
0.85 [0.62 - 0.97]
Hsu 2011
1.00 [0.72 - 1.00]
Godnic 2015
0.71 [0.29 - 0.96]
Gerrits 2013
0.95 [0.74 - 1.00]
COMBINED
0.93[0.87 - 0.96]
Q = 10.77, P = 0.15
I2 = 34.98
0.3
1.0
SPECIFICITY