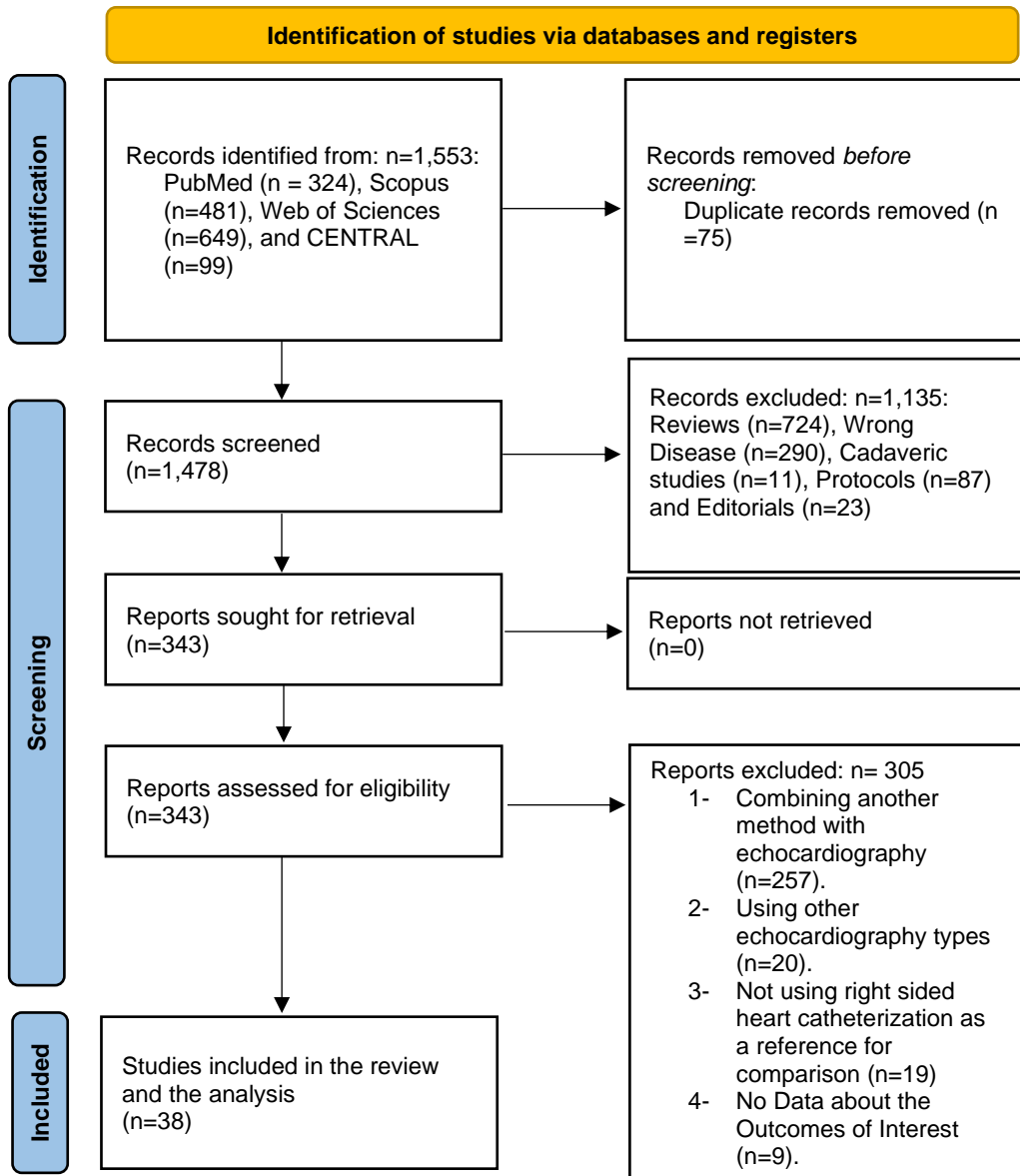


Supplementary Figure 1. PRISMA Flow Chart



\*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).

\*\*If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71

For more information, visit: <http://www.prisma-statement.org/>

Supplementary Table 1. Quality Assessment and Characteristics of the Included Studies

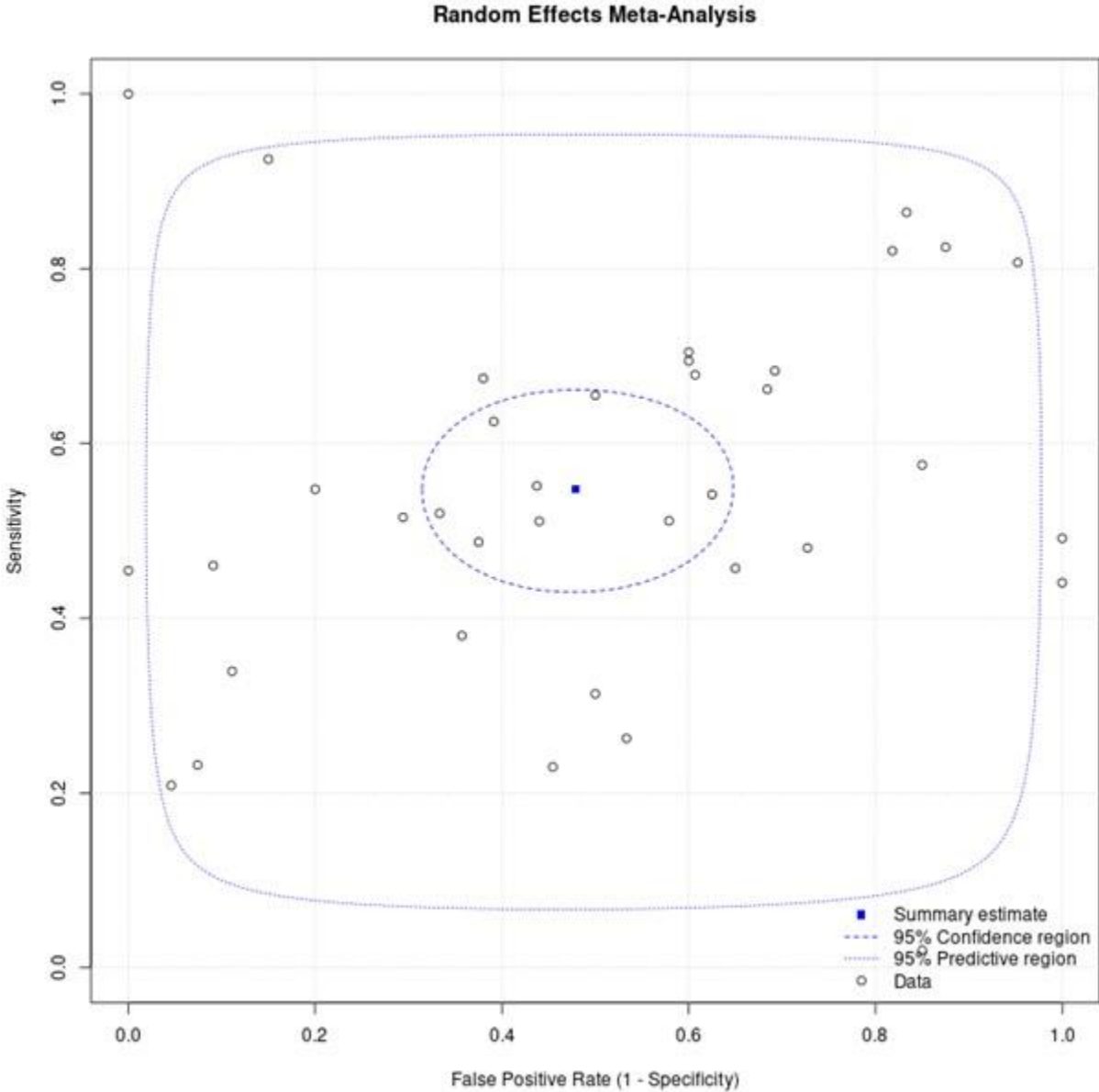
Author	Year	Country	Pulmonary Hypertension Group	Quality assessment (Each category is scored by *, *=1 point)			
				Selection	Comparability	Outcome/Exposure	Total
Rallidis et al	2021	Greece	Group 1	***	**	***	8
Kooranifar et al	2021	Iran	Group 1	**	**	*	5
Bournia et al	2020	Greece	Group 1	****	**	****	9
El-Yafawi et al	2019	United States	Multiple Groups	****	**	****	9
Sawada et al	2019	Japan	Multiple Groups	***	**	***	8
Schneider et al	2018	Austria	Multiple Groups	***	**	****	9
Broderick-Forsgren et al	2017	United States	Multiple Groups	***		***	6
Zhao et al	2017	China	Multiple Groups	**	**	**	6

Roodpeyma et al	2015	Iran	Group 2	**		**	4
Codullo et al	2013	Italy	Group 1	***		***	6
Lafitte et al	2013	France	Multiple Groups	***		***	6
Lange et al	2013	Germany	Multiple Groups	***		****	7
Kouzu et al	2009	Japan	Multiple Groups	***		****	7
Denton et al	1997	United Kingdom	Group 1	***		****	7
Cai et al	1990	China	Group 3	**		**	4
Bertoli et al	1989	Italy	Group 3	**		***	5
Oswald-Mammosser et al	1987	France	Group 3	***		***	6
Jiang et al	2017	China	Group 3	***		****	7
Sadauskas et al	2010	Lithuania	Multiple Groups	***	**	***	8
Shiino et al	2015	Japan	Group 4	***	**	***	8
Lee et al	2016	Korea	Multiple Groups	***		***	6

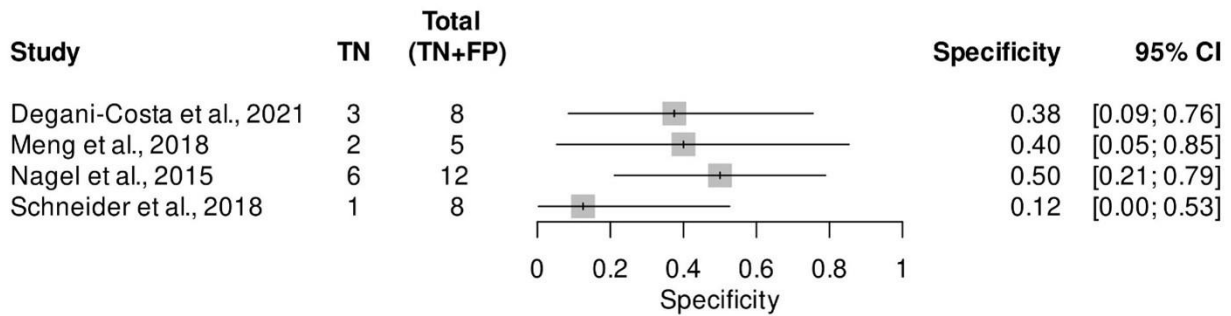
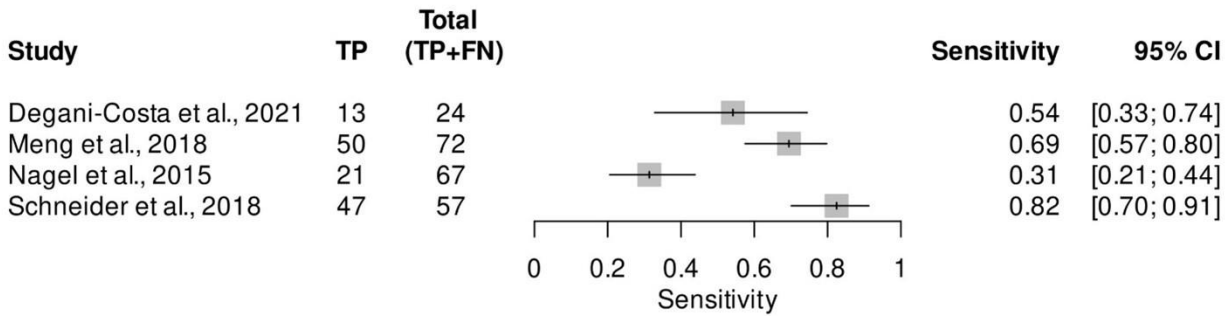
Rallidis et al	2021	Greece	Group 1	***		***	6
Nagel et al	2015	Germany	Group 1	***	**	****	9
Meng et al	2018	China	Multiple Groups	***	**	***	8
Meng et al	2021	China	Group 4	***		***	6
Kim et al	2000	United States	Multiple Groups	***	**	***	8
Willens et al	2008	United States	Multiple Groups	***		***	6
Degani-Costa et al	2021	Brazil	Group 3	***		***	6
Balci et al	2016	Turkey	Group 3	***		**	5
Wang et al	2013	China	Group 2	***	**	****	9
Nowak et al	2018	Poland	Group 3	***		**	5
Li et al	2018	China	Group 4	***		***	
Hou et al	2016	China	Multiple Groups	***		***	6
Rajaram et al	2012	United Kingdom	Group 1	***	**	***	8
Shujaat et al	2018	United States	Multiple Groups	***	**	****	9

Migures et al	1990	France	Group 3	***	**	****	9
Ge et al	1989	China	Group 2	**		**	4
Haddad et al	1981	Canada	Multiple Groups	***		**	5

Supplementary figure 2. Meta-analysis for studies that were included in summary of ROC.



Supplementary figure 3. Meta-analysis for studies that were included in the sub-group analysis of Exercise Echocardiography.



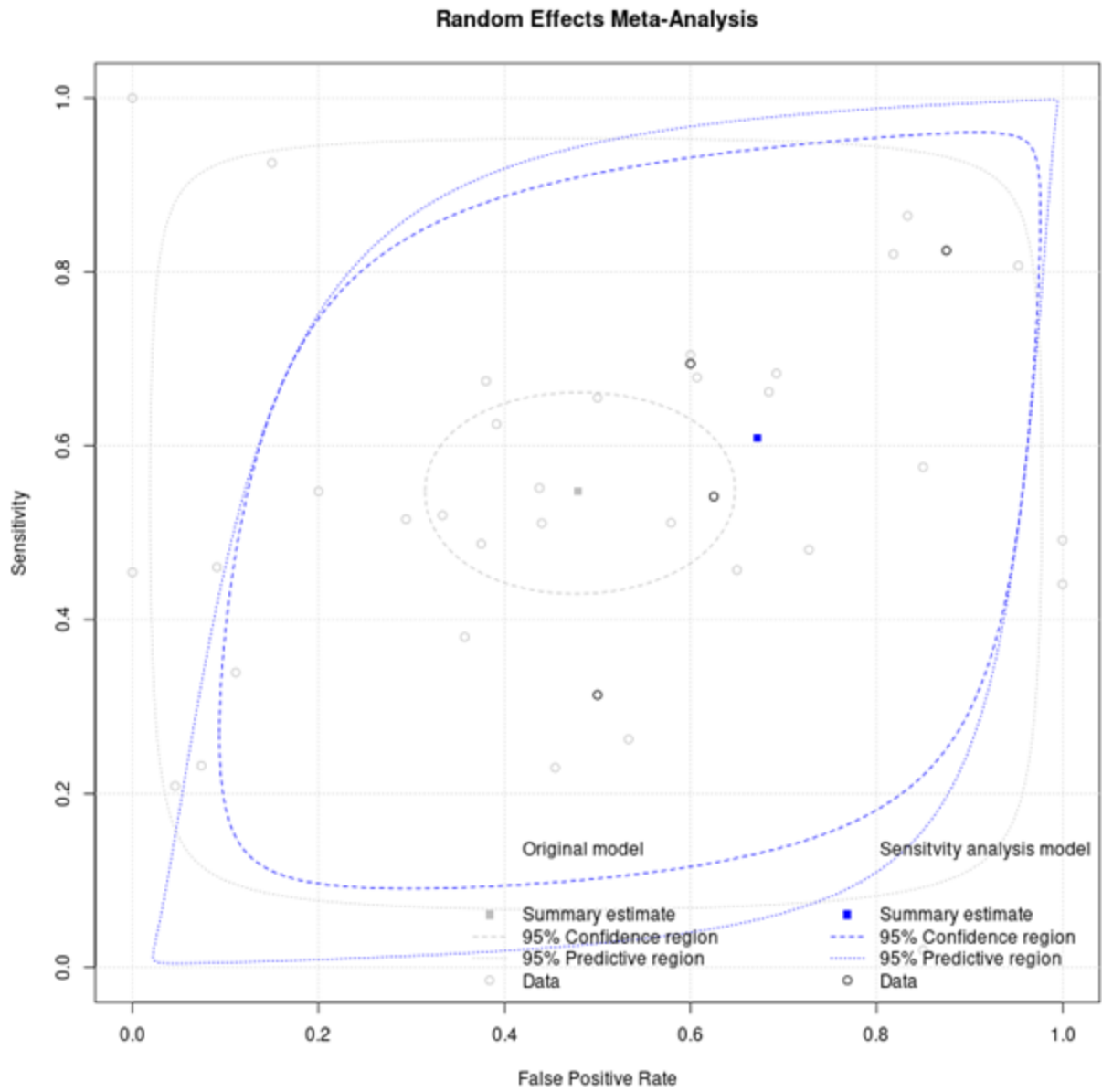
Supplementary table 2. Meta-analysis for studies that were included in summary of ROC

Parameter	Estimate	2.5% CI	97.5% CI
Sensitivity	0.548	0.457	0.636
Specificity	0.521	0.39	0.649
False Positive Rate	0.479	0.351	0.61
Diagnostic Odds Ratio	1.321	0.695	2.51
Likelihood Ratio +ve	1.145	0.83	1.579
Likelihood Ratio -ve	0.867	0.628	1.197
Accuracy	0.534		

Supplementary table 3. Sub-group analysis for studies that were included in summary of Exercise Echocardiography ROC

<b>Parameter</b>	<b>Estimate</b>	<b>2.5% CI</b>	<b>97.5% CI</b>
Sensitivity	0.609	0.394	0.788
Specificity	0.328	0.159	0.558
False Positive Rate	0.672	0.442	0.841
Diagnostic Odds Ratio	0.759	0.312	1.846
Likelihood Ratio +ve	0.906	0.658	1.246
Likelihood Ratio -ve	1.194	0.671	2.124
Accuracy	0.463		

Supplementary figure 4. Sub-group analysis for studies that were included in summary of Exercise Echocardiography ROC.



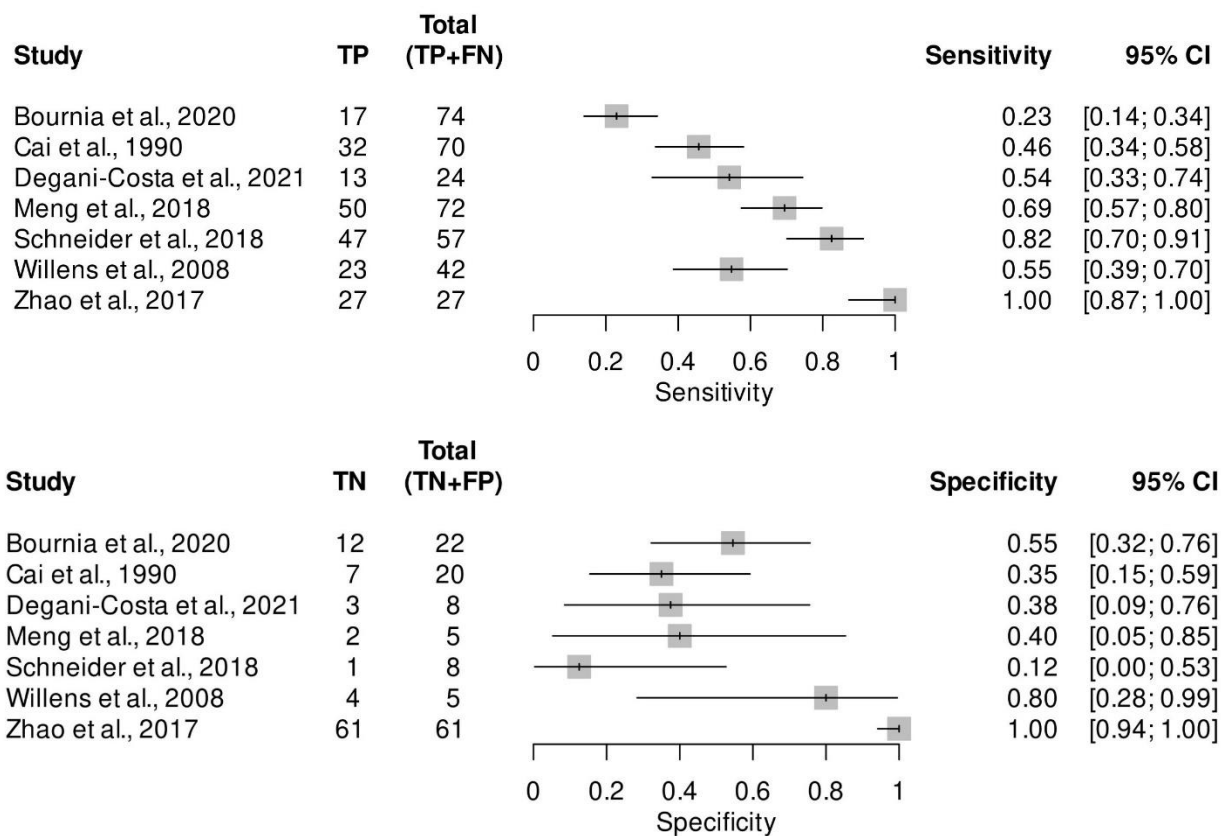
Supplementary Table 4. Sub-group analysis for studies that were included in summary of Group 1 Pulmonary HTN ROC

Parameter	Estimate	2.5% CI	97.5% CI
Sensitivity	0.685	0.385	0.884
Specificity	0.628	0.248	0.896

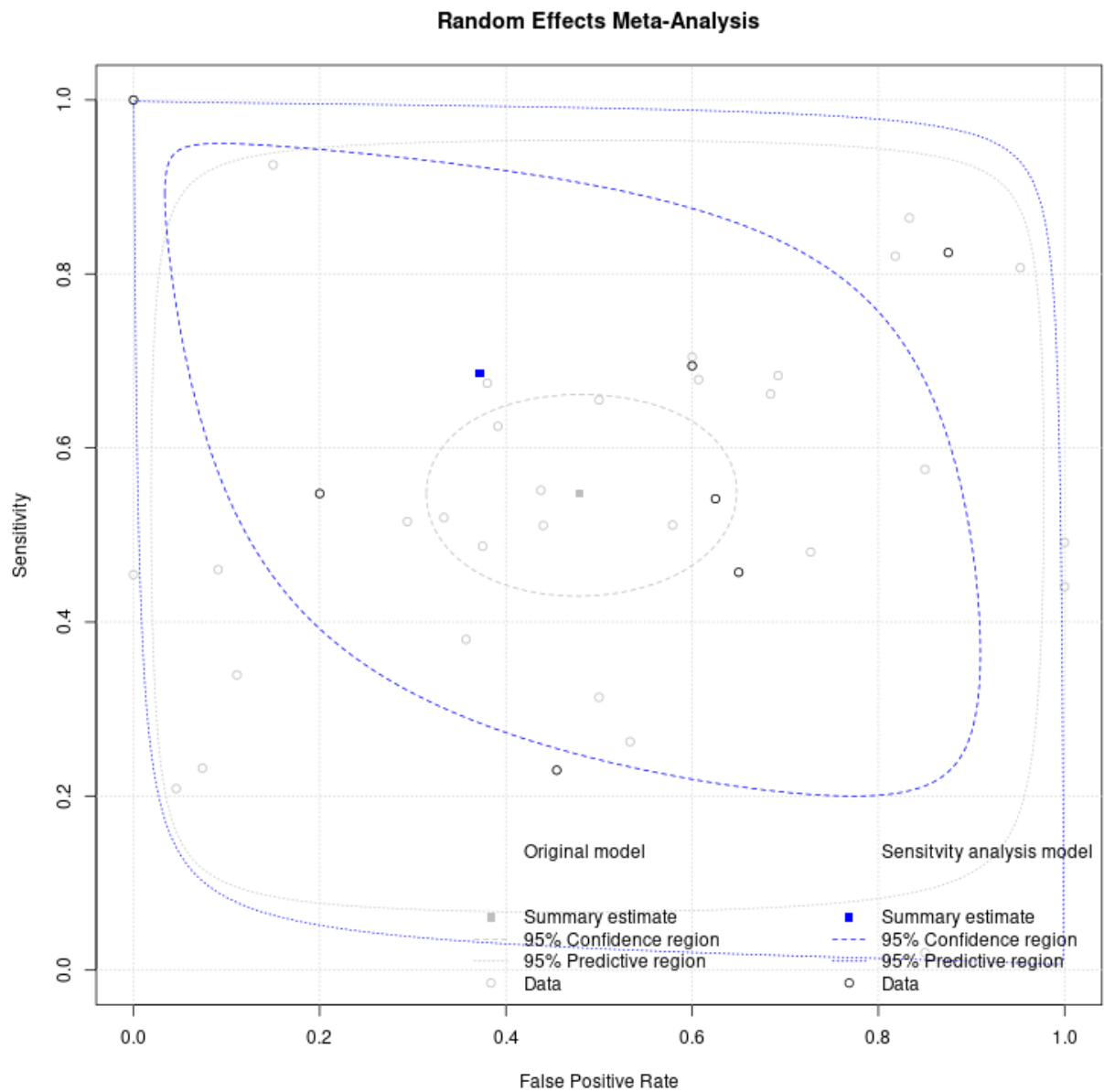


Parameter	Estimate	2.5% CI	97.5% CI
False Positive Rate	0.372	0.104	0.752
Diagnostic Odds Ratio	3.684	0.275	49.368
Likelihood Ratio +ve	1.844	0.5	6.801
Likelihood Ratio -ve	0.501	0.134	1.872
Accuracy	0.655		

Supplementary Figure 5. Meta-analysis for studies that were included in the sub-group analysis of Group 1 Pulmonary HTN



Supplementary Figure 6. Sub-group analysis for studies that were included in summary of Group 1 Pulmonary HTN ROC

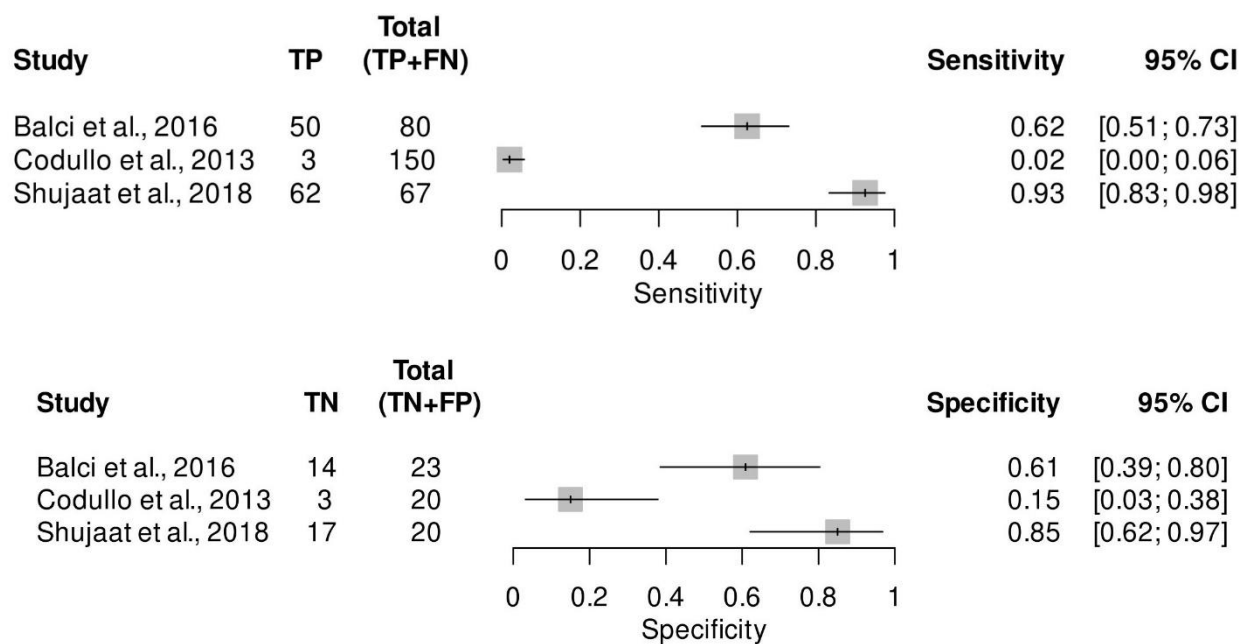


Supplementary Table 5. Sub-group analysis for studies that were included in summary of Group 2 Pulmonary HTN ROC

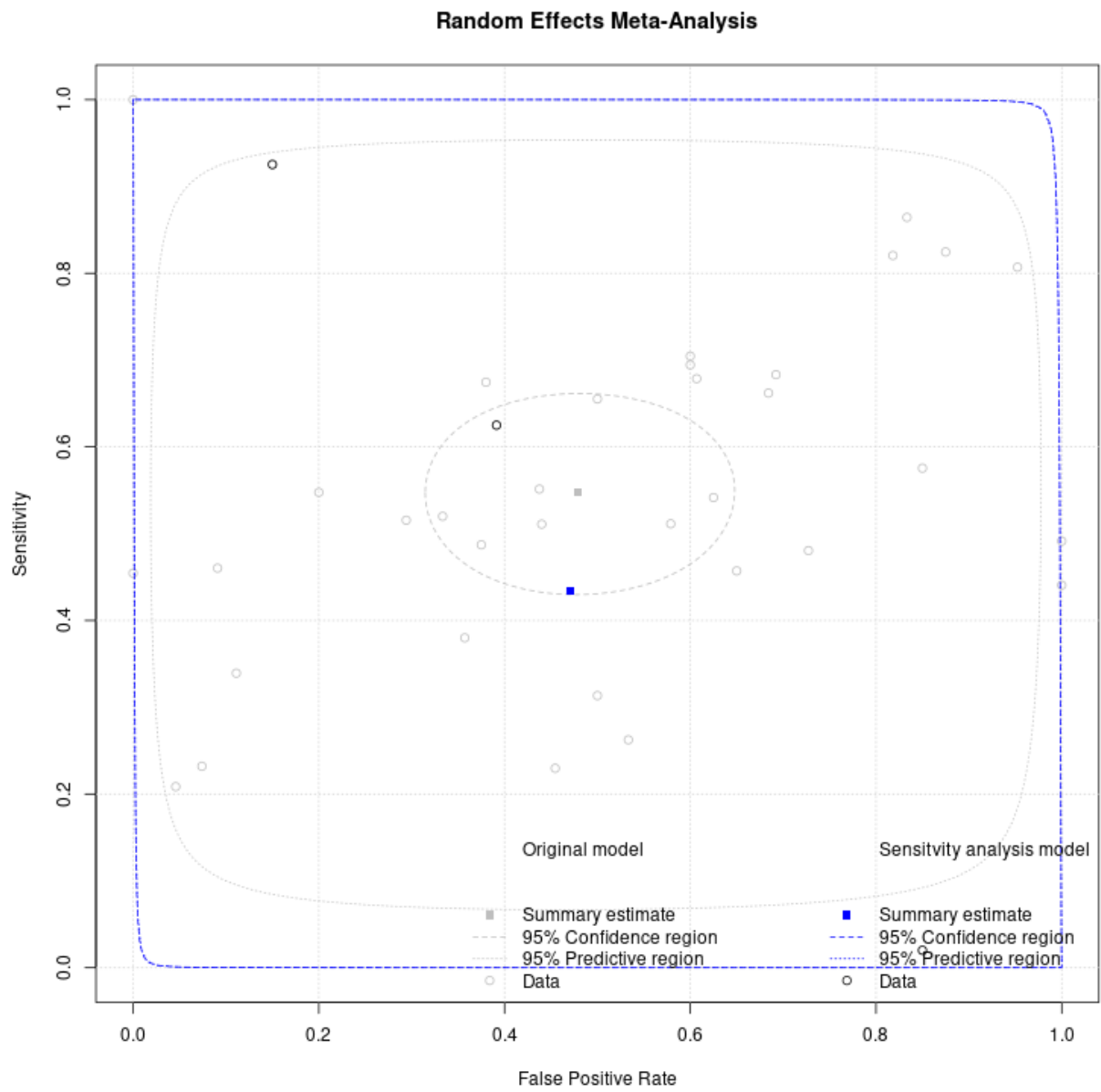
Parameter	Estimate	2.5% CI	97.5% CI
Sensitivity	0.434	0.034	0.944
Specificity	0.53	0.169	0.862

Parameter	Estimate	2.5% CI	97.5% CI
False Positive Rate	0.47	0.138	0.831
Diagnostic Odds Ratio	0.865	0.008	97.357
Likelihood Ratio +ve	0.924	0.068	12.585
Likelihood Ratio -ve	1.068	0.129	8.82
Accuracy	0.484		

Supplementary Figure 7. Meta-analysis for studies that were included in the sub-group analysis of Group 2 Pulmonary HTN



Supplementary Figure 8. Sub-group analysis for studies that were included in summary of Group 2 Pulmonary HTN ROC

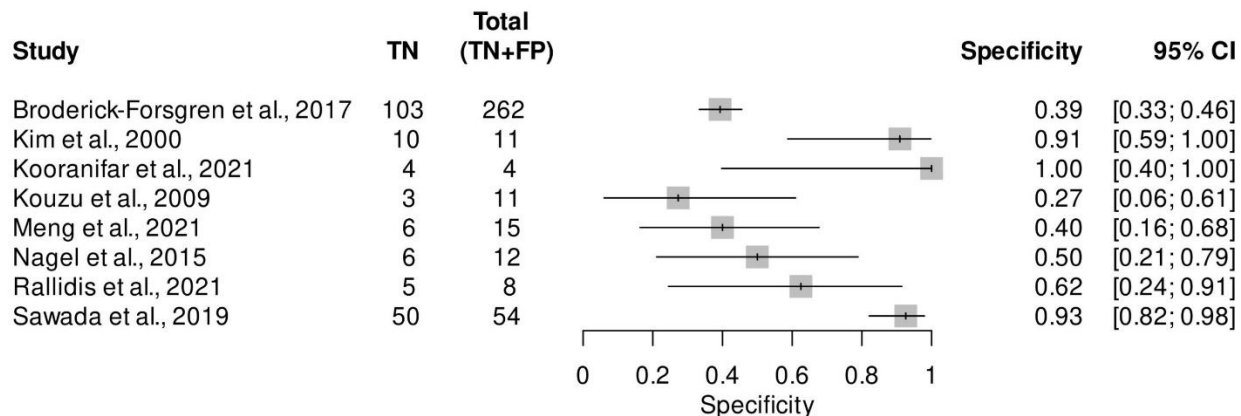
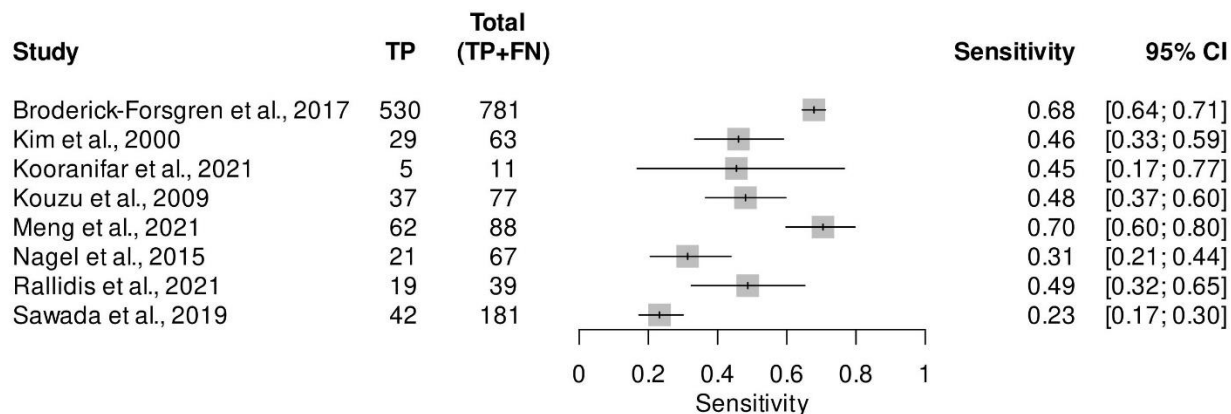


Supplementary Table 6. Sub-group analysis for studies that were included in summary of Group 3 Pulmonary HTN ROC

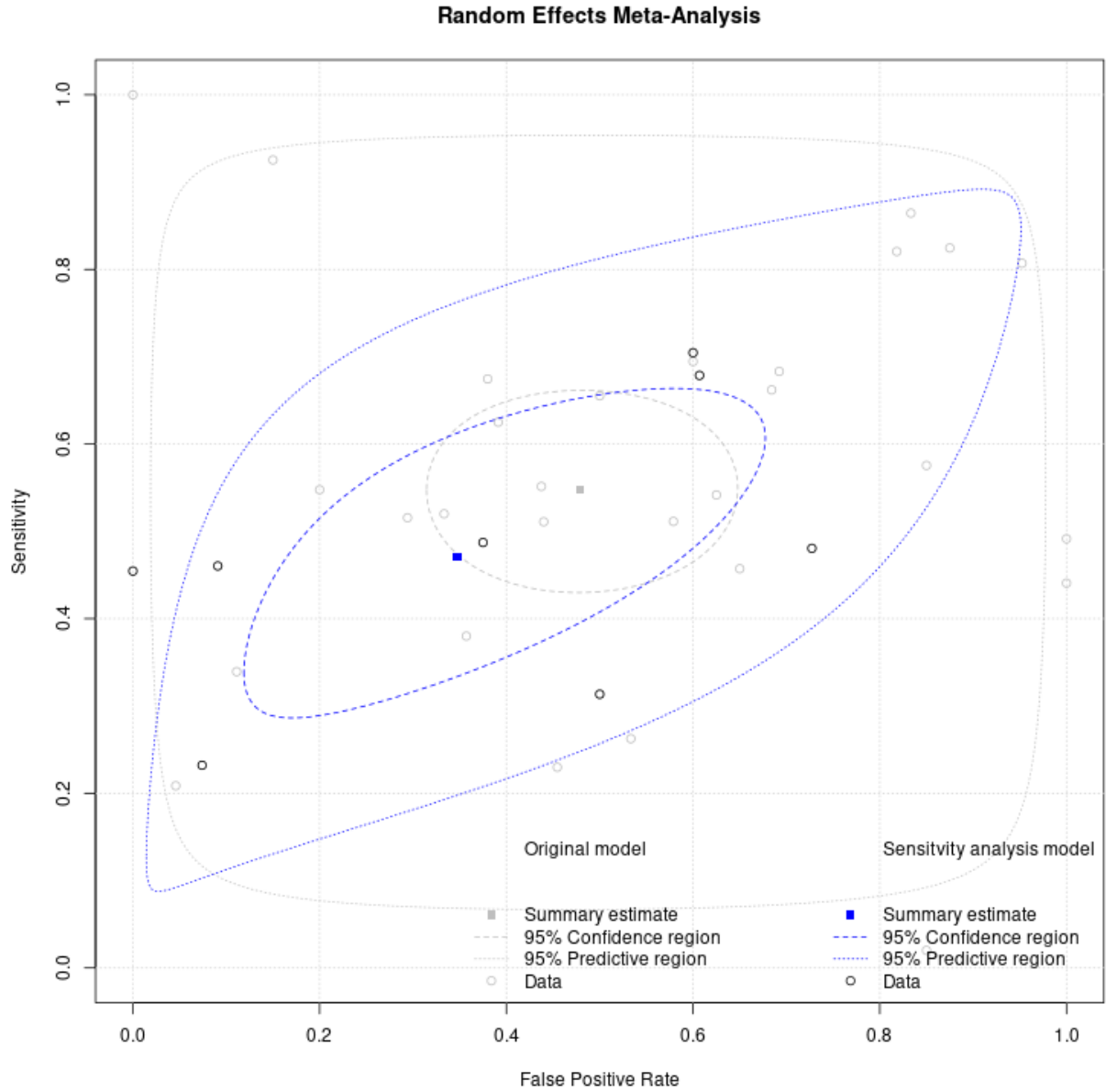
Parameter	Estimate	2.5% CI	97.5% CI
Sensitivity	0.471	0.353	0.591

Parameter	Estimate	2.5% CI	97.5% CI
Specificity	0.653	0.448	0.813
False Positive Rate	0.347	0.187	0.552
Diagnostic Odds Ratio	1.672	0.906	3.086
Likelihood Ratio +ve	1.356	0.897	2.05
Likelihood Ratio -ve	0.811	0.656	1.002
Accuracy	0.565		

Supplementary Figure 9. Meta-analysis for studies that were included in the sub-group analysis of Group 3 Pulmonary HTN



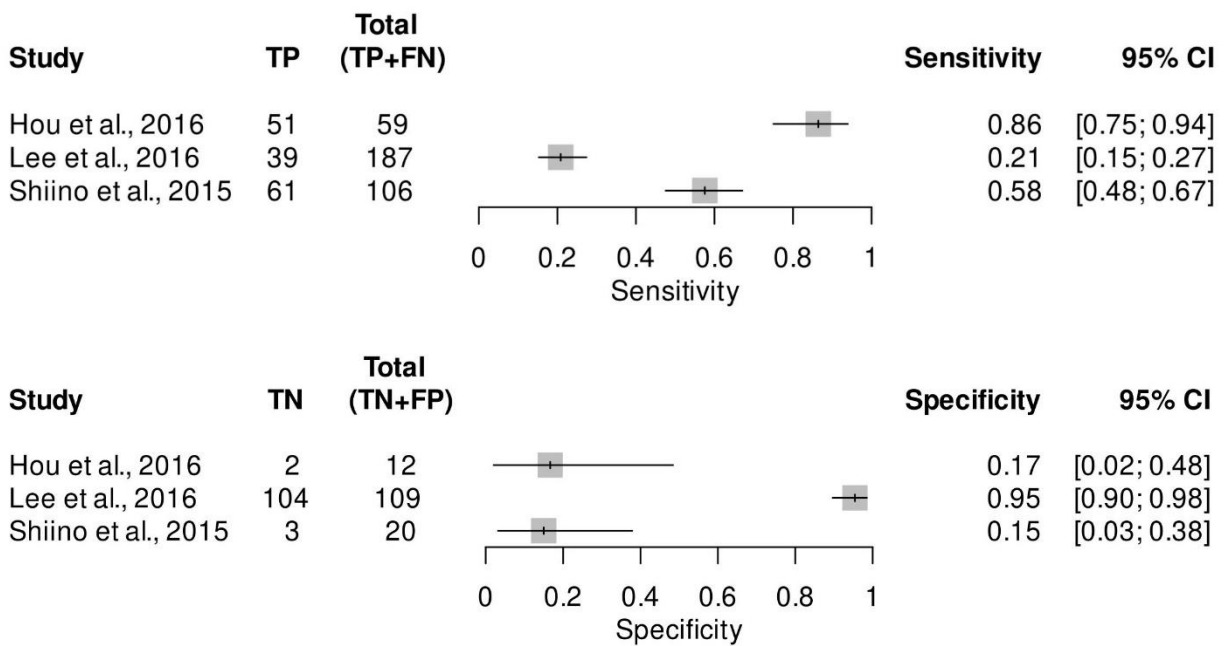
Supplementary Figure 10. Sub-group analysis for studies that were included in summary of Group 3 Pulmonary HTN ROC



Supplementary Table 7. Sub-group analysis for studies that were included in summary of Group 4 Pulmonary HTN ROC

Parameter	Estimate	2.5% CI	97.5% CI
Sensitivity	0.554	0.231	0.837
Specificity	0.445	0.048	0.928
False Positive Rate	0.555	0.072	0.952
Diagnostic Odds Ratio	0.995	0.19	5.204
Likelihood Ratio +ve	0.998	0.478	2.081
Likelihood Ratio -ve	1.003	0.4	2.514
Accuracy	0.498		

Supplementary Figure 11. Meta-analysis for studies that were included in the sub-group analysis of Group 4 Pulmonary HTN



Supplementary Figure 12. Sub-group analysis for studies that were included in summary of Group 4 Pulmonary HTN ROC

### Random Effects Meta-Analysis

