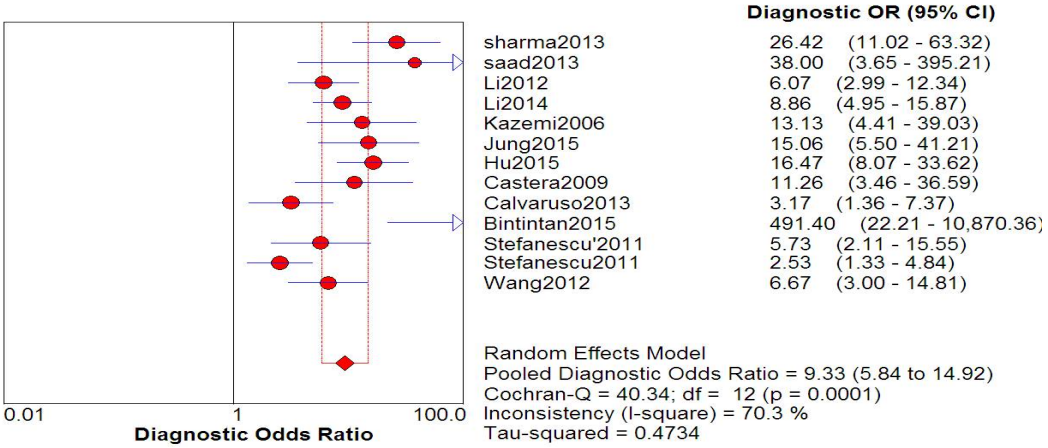
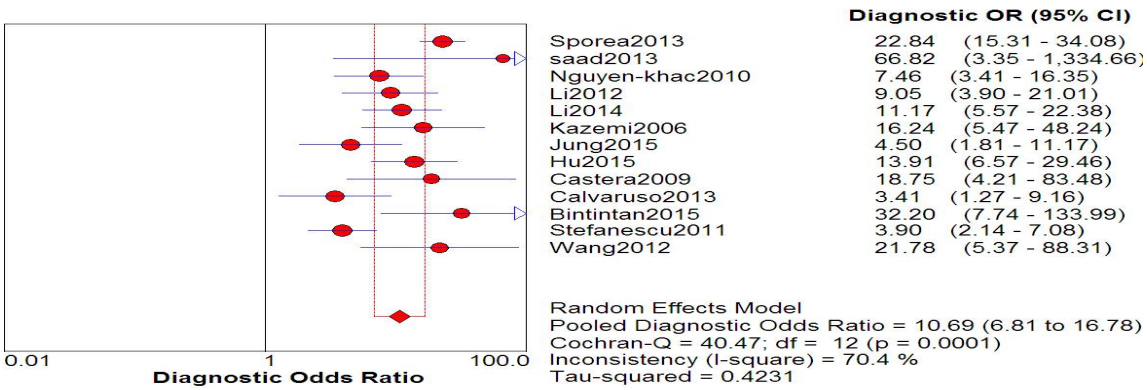
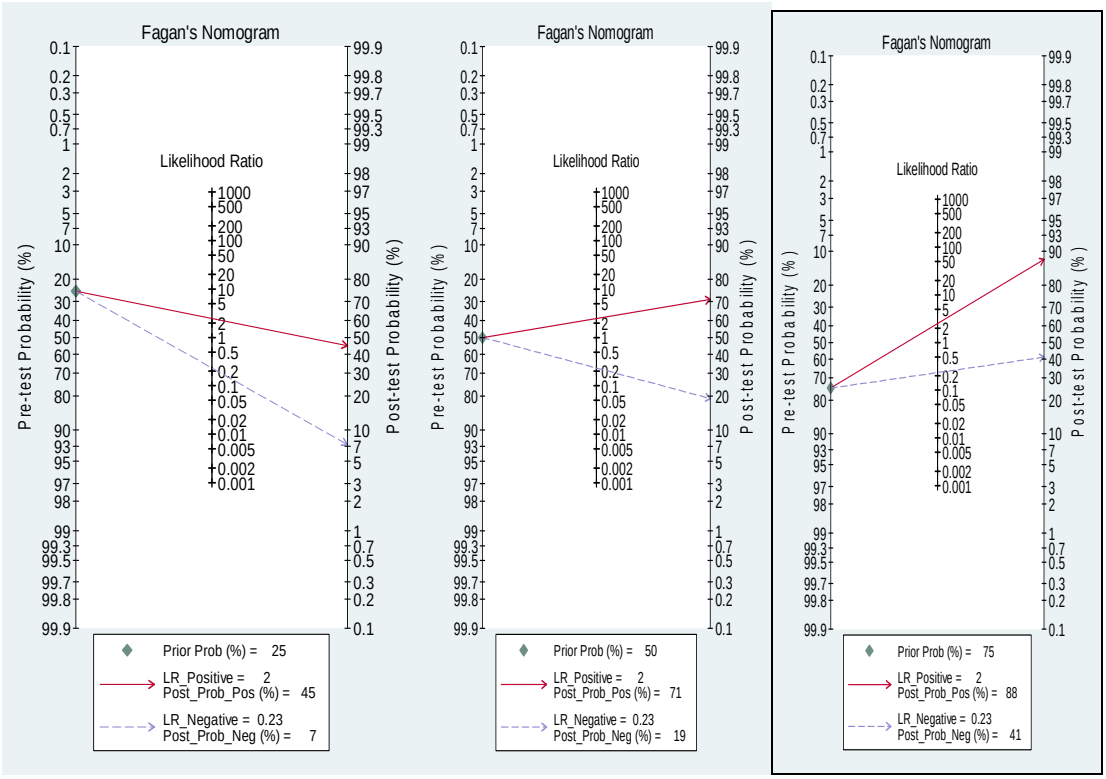
Supplementary Figures



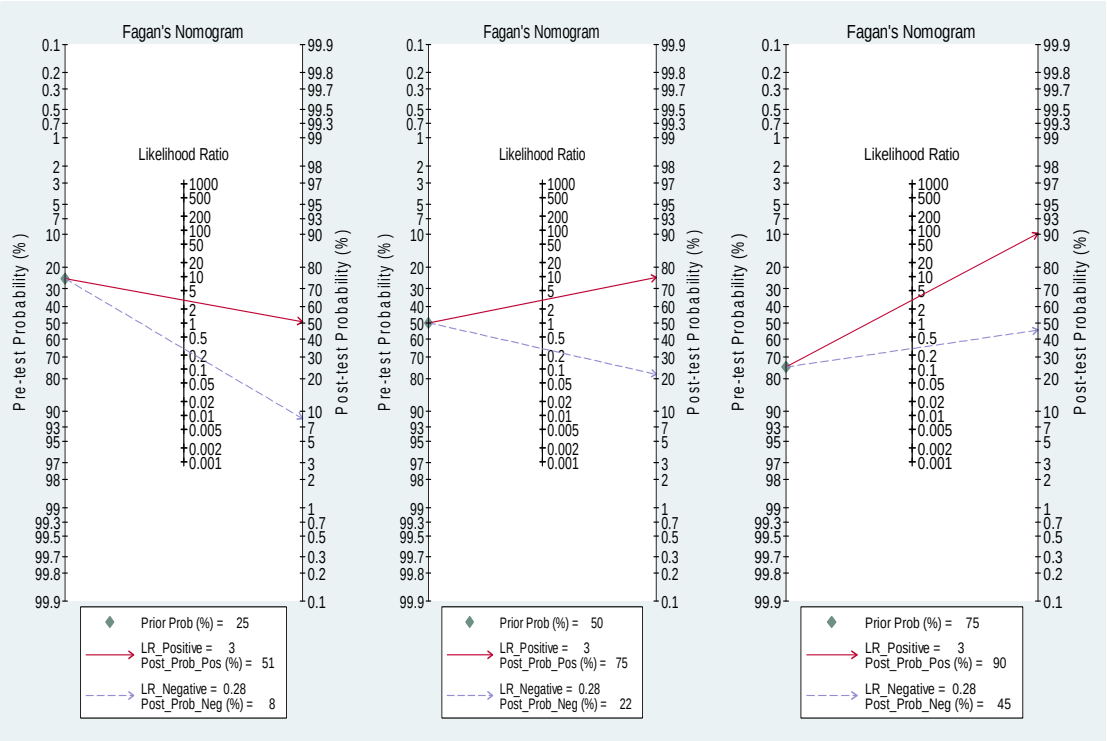
Supplementary Figure 1 The diagnostic odds ratio of FibroScan for the detection of esophageal varices.



Supplementary Figure 2 The diagnostic odds ratio of FibroScan for the detection of large esophageal varices.

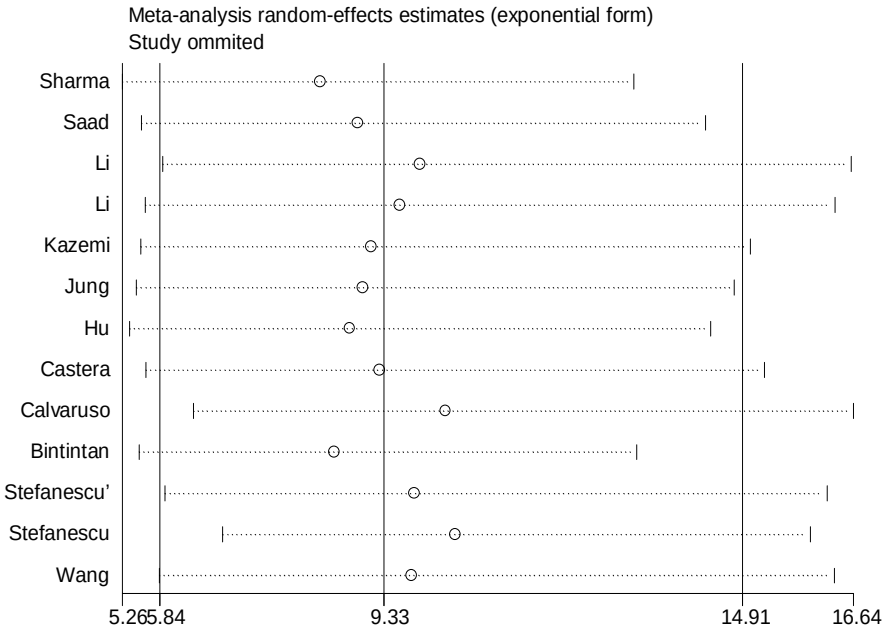


Supplementary Figure 3 Fagan nomogram analysis elucidating the post-test probability of FibroScan in detection of the presence of esophageal varices, basing on the clinical utility of liver transient elastography. A: Pre-test probability = 25% (low hypothesis as is the case in cirrhotic patients with A of CTP classification); B: pre-test probability = 50% (moderate suspicion as is in patients with Child-Pugh B cirrhosis); C: pre-test probability = 75% (as is in cirrhotic patients with Child-Pugh C). The Fagan plot consisted of 3 perpendicular axes respectively representing the pre-test probability (left), the likelihood ratio (middle) and the post-test probability (right).

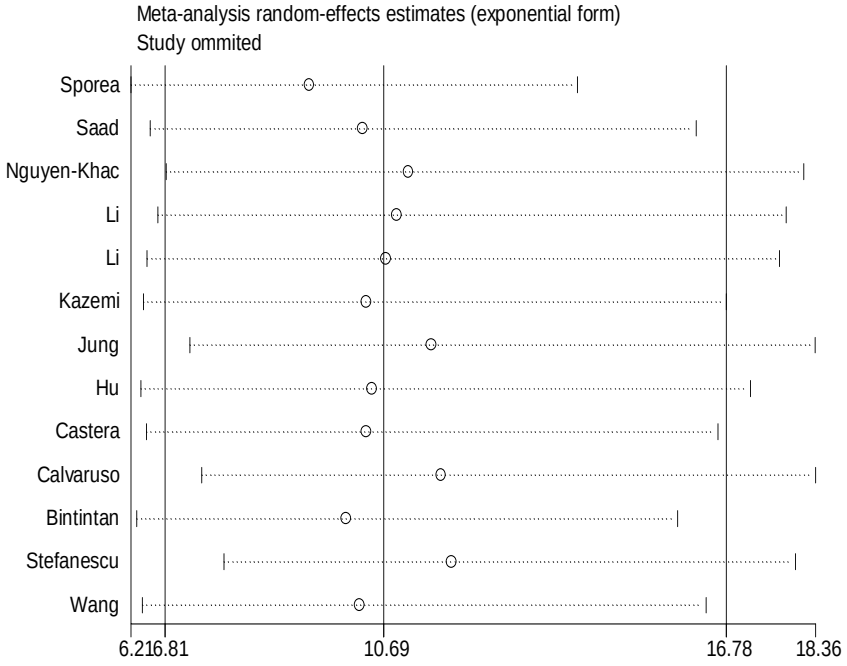


Supplementary Figure 4 Fagan plot illustrating the post-test probability of FibroScan in diagnosis of the large esophageal varices, depending on the clinical utility of liver transient elastography. A: Pre-test probability = 25% (low hypothesis as is the case in cirrhotic patients with A of CTP classification); B: pre-test probability = 50% (moderate suspicion as is in patients with Child-Pugh B cirrhosis); C: pre-test probability = 75% (as is in cirrhotic patients with Child-Pugh C). The Fagan plot constituted of 3 vertical axes respectively representing the pre-test probability (left), the likelihood ratio (middle) and the post-test probability (right).

A



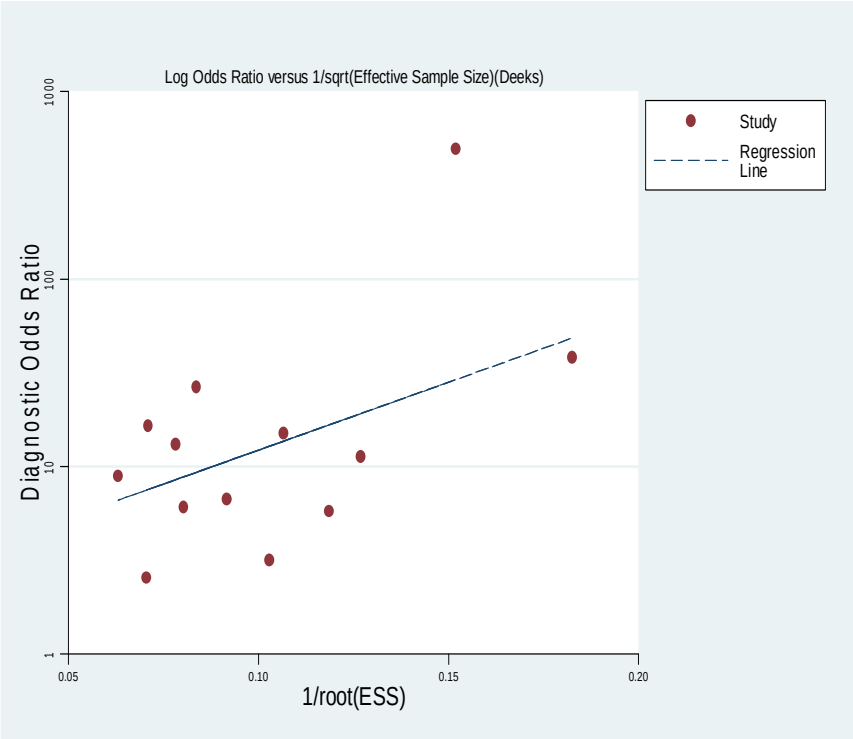
B



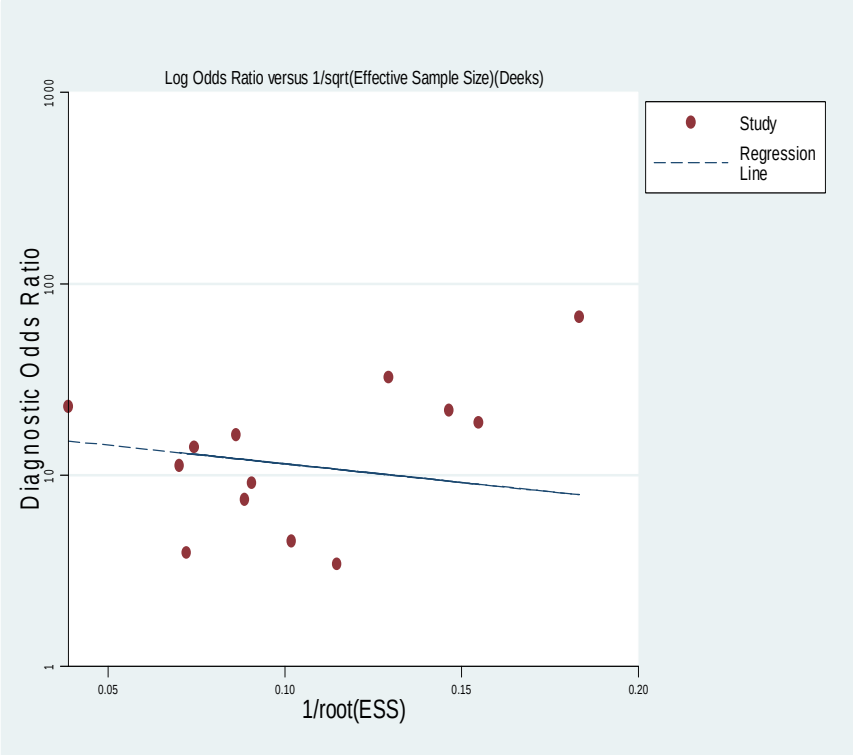
Supplementary Figure 5 Sensitivity analysis in the diagnostic performance of

FibroScan for predicting the presence of esophageal varices (A) and significant esophageal varices (B) in cirrhotic patients. As were shown in figures, the results were robustness, and no study dominated the overall results or contributed to the heterogeneity mainly.

A


Log Odds Ratio versus 1/sqrt(Effective Sample Size)(Deeks)
Diagnostic Odds Ratio
1000
100
10
1
0.05
0.10
0.15
0.20
1/root(ESS)
Study
Regression Line

B


Log Odds Ratio versus 1/sqrt(Effective Sample Size)(Deeks)
Diagnostic Odds Ratio
1000
100
10
1
0.05
0.10
0.15
0.20
1/root(ESS)
Study
Regression Line

Supplementary Figure 6 Deek's funnel plots to estimate publication bias for diagnosing the presence of esophageal varices (A) and significant esophageal varices (B) in cirrhotic patients with FibroScan. No evidence of publication bias was explored.

Supplementary Tables

Supplementary Table 1 (A, B, C, D) Meta-regression (inverse variance weights) of FibroScan detecting the presence of esophageal varices

Supplementary Table 1A

Var	Coeff.	Std. Err	*P* value	RDOR	[95%CI]
Cte.	-0.733	1.5702	0.6547	----	----
S	-0.379	0.3261	0.2830	----	----
Publishyear	0.741	0.6349	0.2813	2.10	(0.47; 9.42)
Location	0.702	0.6008	0.2807	2.02	(0.49; 8.36)
Etiology	0.865	0.3908	0.0626	2.37	(0.94; 5.98)
Cutoff	0.288	0.5322	0.6054	1.33	(0.38; 4.69)

Tau-squared estimate = 0.5378 (Convergence is achieved after 8 iterations)

Restricted Maximum Likelihood estimation (REML)

No. studies = 13

Filter OFF

Add 1/2 to all cells of the studies with zero

Supplementary Table 1B

Var	Coeff.	Std. Err	*P* value	RDOR	[95%CI]
Cte.	-0.527	1.5007	0.7344	----	----
S	-0.386	0.3130	0.2521	----	----
Publishyear	0.791	0.5967	0.2214	2.21	(0.56; 8.73)
Location	0.653	0.5814	0.2942	1.92	(0.50; 7.34)
Etiology	0.863	0.3748	0.0503	2.37	(1.00; 5.62)

Tau-squared estimate = 0.4737 (Convergence is achieved after 7 iterations)

Restricted Maximum Likelihood estimation (REML)

No. studies = 13

Filter OFF

Add 1/2 to all cells of the studies with zero

Supplementary Table 1C

Var	Coeff.	Std. Err	*P* value	RDOR	[95%CI]
Cte.	0.943	0.6493	0.1809	----	----
S	-0.247	0.2508	0.3508	----	----
Publishyear	0.427	0.4481	0.3659	1.53	(0.56; 4.22)
Etiology	0.643	0.2754	0.0469	1.88	(1.01; 3.51)

Tau-squared estimate = 0.2953 (Convergence is achieved after 6 iterations)

Restricted Maximum Likelihood estimation (REML)

No. studies = 13

Filter OFF

Add 1/2 to all cells of the studies with zero

Supplementary Table 1D

Var	Coeff.	Std. Err	*P* value	RDOR	[95%CI]
Cte.	1.287	0.5074	0.0296	----	----
S	-0.316	0.2344	0.2073	----	----
Etiology	0.620	0.2672	0.0428	1.86	(1.02; 3.37)

Tau-squared estimate = 0.2664 (Convergence is achieved after 6 iterations)

Restricted Maximum Likelihood estimation (REML)

No. studies = 13

Filter OFF

Add 1/2 to all cells of the studies with zero

Supplementary Table 2 (A, B, C, D) Meta-regression (inverse variance weights) of FibroScan detecting the presence of significant EV

Table 2A

Var	Coeff.	Std. Err	*P* value	RDOR	[95%CI]
Cte.	1.031	1.6254	0.5460	----	----
S	-0.007	0.3255	0.9844	----	----
Publishyear	0.599	0.7330	0.4405	1.82	(0.32; 10.30)
Location	0.475	0.5673	0.4300	1.61	(0.42; 6.15)
Etiology	0.095	0.3043	0.7641	1.10	(0.54; 2.26)
Cutoff	-0.064	0.6109	0.9201	0.94	(0.22; 3.98)

Tau-squared estimate = 0.5674 (Convergence is achieved after 8 iterations)

Restricted Maximum Likelihood estimation (REML)

No. studies = 13

Filter OFF

Add 1/2 to all cells of the studies with zero

Table 2B

Var	Coeff.	Std. Err	*P* value	RDOR	[95%CI]
Cte.	0.926	1.2819	0.4906	----	----
S	-0.003	0.2975	0.9923	----	----
Publishyear	0.643	0.5968	0.3124	1.90	(0.48; 7.54)
Location	0.473	0.5204	0.3901	1.60	(0.48; 5.33)
Etiology	0.113	0.2770	0.6943	1.12	(0.59; 2.12)

Tau-squared estimate = 0.4562 (Convergence is achieved after 8 iterations)

Restricted Maximum Likelihood estimation (REML)

No. studies = 13

Filter OFF

Add 1/2 to all cells of the studies with zero

Table 2C

Var	Coeff.	Std. Err	*P* value	RDOR	[95%CI]
Cte.	1.178	1.0871	0.3067	----	----
S	-0.020	0.2821	0.9459	----	----
Publishyear	0.624	0.5724	0.3042	1.87	(0.51; 6.81)
Location	0.474	0.5042	0.3721	1.61	(0.51; 5.02)

Tau-squared estimate = 0.4079 (Convergence is achieved after 7 iterations)

Restricted Maximum Likelihood estimation (REML)

No. studies = 13

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Table 2D

Var	Coeff.	Std. Err	*P* value	RDOR	[95%CI]
Cte.	2.120	0.3938	0.0003	----	----
S	0.001	0.2754	0.9972	----	----
Publishyear	0.359	0.4831	0.4750	1.43	(0.49; 4.20)

Tau-squared estimate = 0.3799 (Convergence is achieved after 6 iterations)

Restricted Maximum Likelihood estimation (REML)

No. studies = 13

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