

SUPPLEMENTAL DATA

Xu et al: SWE accuracy in liver fibrosis staging

Diagnostic accuracy of two-dimensional shear wave elastography and point shear wave elastography in identifying different stages of liver fibrosis in patients with metabolic dysfunction-associated steatotic liver disease: A meta-analysis

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Table S1. Search strategy

PubMed	#1	Non-alcoholic Fatty Liver Disease[MeSH Terms]	25554
	#2	(((((((Non-alcoholic Fatty Liver Disease[Title/Abstract]) OR (Non alcoholic Fatty Liver Disease[Title/Abstract])) OR (NAFLD[Title/Abstract])) OR (Nonalcoholic Fatty Liver Disease[Title/Abstract])) OR (Nonalcoholic Fatty Liver[Title/Abstract])) OR (Nonalcoholic Fatty Livers[Title/Abstract])) OR (Nonalcoholic Steatohepatitis[Title/Abstract])) OR (Nonalcoholic Steatohepatitides[Title/Abstract])) OR (Metabolic dysfunction-associated steatotic liver disease[Title/Abstract])	39499
	#3	(Non-alcoholic Fatty Liver Disease[MeSH Terms]) OR (((((((Non-alcoholic Fatty Liver Disease[Title/Abstract]) OR (Non alcoholic Fatty Liver Disease[Title/Abstract])) OR (NAFLD[Title/Abstract])) OR (Nonalcoholic Fatty Liver Disease[Title/Abstract])) OR (Nonalcoholic Fatty Liver[Title/Abstract])) OR (Nonalcoholic Fatty Livers[Title/Abstract])) OR (Nonalcoholic Steatohepatitis[Title/Abstract])) OR (Nonalcoholic Steatohepatitides[Title/Abstract])) OR (Metabolic dysfunction-associated steatotic liver disease[Title/Abstract])	42912
	#4	((((((((((((two-dimensional shear wave elastography[Title/Abstract]) OR (2-D shear wave elastography[Title/Abstract])) OR (2-D-SWE[Title/Abstract])) OR (2D-shear wave elastography[Title/Abstract])) OR (2D-SWE[Title/Abstract])) OR (acoustic radiation force impulse imaging[Title/Abstract])) OR (point shear wave elastography[Title/Abstract])) OR (ARFI[Title/Abstract])) OR (pSWE[Title/Abstract])) OR (Elasticity Imaging Techniques[Title/Abstract])) OR (Elasticity Imaging Technique[Title/Abstract])) OR (Acoustic Radiation Force Impulse Imaging[Title/Abstract])) OR (ARFI Imaging[Title/Abstract])) OR (ARFI Imagings[Title/Abstract])) OR (shear wave elasticity imaging[Title/Abstract])) OR (shear wave elastography[Title/Abstract])	5020
	#5	((Non-alcoholic Fatty Liver Disease[MeSH Terms]) OR (((((((Non-alcoholic Fatty Liver Disease[Title/Abstract]) OR (Non alcoholic Fatty Liver Disease[Title/Abstract])) OR (NAFLD[Title/Abstract])) OR (Nonalcoholic Fatty Liver Disease[Title/Abstract])) OR (Nonalcoholic Fatty Liver[Title/Abstract])) OR (Nonalcoholic Fatty Livers[Title/Abstract])) OR (Nonalcoholic Steatohepatitis[Title/Abstract])) OR (Nonalcoholic Steatohepatitides[Title/Abstract])) OR (Metabolic dysfunction-associated steatotic liver disease[Title/Abstract]))) AND (((((((((((two-dimensional shear wave elastography[Title/Abstract]) OR (2-D shear wave elastography[Title/Abstract])) OR (2-D-SWE[Title/Abstract])) OR (2D-shear wave elastography[Title/Abstract])) OR (2D-SWE[Title/Abstract])) OR (acoustic radiation force impulse imaging[Title/Abstract])) OR (point shear wave elastography[Title/Abstract])) OR (ARFI[Title/Abstract])) OR (pSWE[Title/Abstract])) OR (Elasticity Imaging Techniques[Title/Abstract])) OR (Elasticity Imaging Technique[Title/Abstract])) OR (Acoustic Radiation Force Impulse Imaging[Title/Abstract])) OR (ARFI Imaging[Title/Abstract])) OR (ARFI Imagings[Title/Abstract])) OR (shear wave elasticity imaging[Title/Abstract])) OR (shear wave elastography[Title/Abstract]))	242
	#1	MeSH descriptor: [Non-alcoholic Fatty Liver Disease] explode all trees	1835

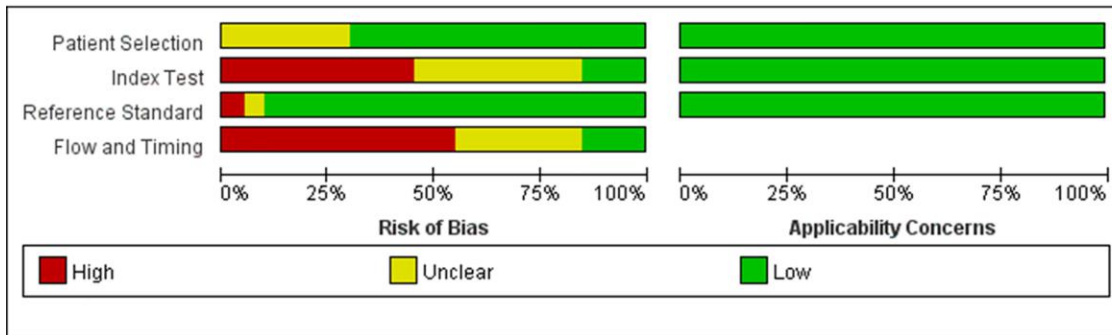
Cochrane Library	#2	("Non-alcoholic Fatty Liver Disease"):ti,ab,kw OR (Non alcoholic Fatty Liver Disease):ti,ab,kw OR (NAFLD):ti,ab,kw OR (Nonalcoholic Fatty Liver Disease):ti,ab,kw OR (Nonalcoholic Fatty Liver):ti,ab,kw	4598
	#3	(Nonalcoholic Fatty Livers):ti,ab,kw OR (Nonalcoholic Steatohepatitis):ti,ab,kw OR (Nonalcoholic Steatohepatitides):ti,ab,kw OR (Metabolic dysfunction-associated steatotic liver disease):ti,ab,kw	1850
	#4	#1 or #2 or #3	5053
	#5	("two-dimensional shear wave elastography"):ti,ab,kw OR ("2-D shear wave elastography"):ti,ab,kw OR ("2-D-SWE"):ti,ab,kw OR ("2D-shear wave elastography"):ti,ab,kw OR ("2D-SWE"):ti,ab,kw	19
	#6	(acoustic radiation force impulse imaging):ti,ab,kw OR (point shear wave elastography):ti,ab,kw OR (ARFI):ti,ab,kw OR (pSWE):ti,ab,kw OR (Elasticity Imaging Techniques):ti,ab,kw	331
	#7	(Elasticity Imaging Technique):ti,ab,kw OR (Acoustic Radiation Force Impulse Imaging):ti,ab,kw OR (ARFI Imaging):ti,ab,kw OR (ARFI Imagings):ti,ab,kw OR (shear wave elasticity imaging):ti,ab,kw	137
	#8	(shear wave elastography):ti,ab,kw	235
	#9	#5 or #6 or #7 or #8	502
	#10	#4 and #9	82
	Web of Science	#1	TS=(Non alcoholic Fatty Liver Disease or NAFLD or Nonalcoholic Fatty Liver Disease or Nonalcoholic Fatty Liver or Nonalcoholic Fatty Livers or Nonalcoholic Steatohepatitis or Nonalcoholic Steatohepatitides or Metabolic dysfunction-associated steatotic liver disease) AND TS=(two-dimensional shear wave elastography or 2-D shear wave elastography or 2-D-SWE or 2D-shear wave elastography or 2D-SWE? or acoustic radiation force impulse imaging or point shear wave elastography or ARFI or pSWE or Elasticity Imaging Techniques or Elasticity Imaging Technique or Acoustic Radiation Force Impulse Imaging or ARFI Imaging or ARFI Imagings or shear wave elasticity imaging or shear wave elastography)
Embase	#1	'nonalcoholic fatty liver'/exp	73519
	#2	'non-alcoholic fatty liver disease':ab,ti OR 'non alcoholic fatty liver disease':ab,ti OR nafld:ab,ti OR 'nonalcoholic fatty liver disease':ab,ti OR 'nonalcoholic fatty liver':ab,ti OR 'nonalcoholic fatty livers':ab,ti OR 'nonalcoholic	61982

	steatohepatitis':ab,ti OR 'nonalcoholic steatohepatitides':ab,ti OR 'Metabolic dysfunction-associated steatotic liver disease':ab,ti	
#3	'shear wave elastography'/exp	5123
#4	'two-dimensional shear wave elastography':ab,ti OR '2-d shear wave elastography':ab,ti OR '2 d swe':ab,ti OR '2d-shear wave elastography':ab,ti OR '2d swe':ab,ti OR 'point shear wave elastography':ab,ti OR arfi:ab,ti OR pswe:ab,ti OR 'elasticity imaging techniques':ab,ti OR 'elasticity imaging technique':ab,ti OR 'acoustic radiation force impulse imaging':ab,ti OR 'arfi imaging':ab,ti OR 'arfi imagings':ab,ti OR 'shear wave elasticity imaging':ab,ti OR 'shear wave elastography':ab,ti	6965
#5	#1 OR #2	81905
#6	#3 OR #4	8088
#7	#5 AND #6	717

Table S2-D SWE and pSWE measurement failure rates

Technical		Number of patients, n	Technical failure, %
PSWE	Attia 2016 (Germany)	97	1
	Cassinotto 2013 (France)	60	1.6
	Cassinotto 2016 (France)	236	18.9
	Cui 2016 (USA)	125	2.4
	Fierbinteanu-Braticevici (Romania)	2013 64	0
	Joo 2018 (South Korea)	315	9.7
	Karlas 2015 (Germany)	89	NA
	Lee 2017 (South Korea)	83	11.7
	Medellin 2019 (Canada)	51	42.6
	Palmeri 2011 (USA)	135	21.5
	Zhang 2014 (China)	67	NA
	Argalia 2022 (Italy)	50	NA
	Leong 2020 (Malaysia)	100	NA
	2-D SWE	Cassinotto 2016 (France)	232
Lee 2017 (South Korea)		83	26.6
Takeuchi 2018 (Japan)		71	2.7
Ozturk 2020 (USA)		116	12.1
Jamialahmadi 2019 (Iran)		111	2.7
Ogino 2023 (Japan)		107	NA
Seo 2023 (Korea)		105	0
Sharpton 2020 (USA)		118	0.008
Sugimoto 2020 (Japan)		111	NA

A



B



Figure S1. Quality of the included studies according to the revised Quality Assessment for Studies of Diagnostic Accuracy tool (QUADAS-2)

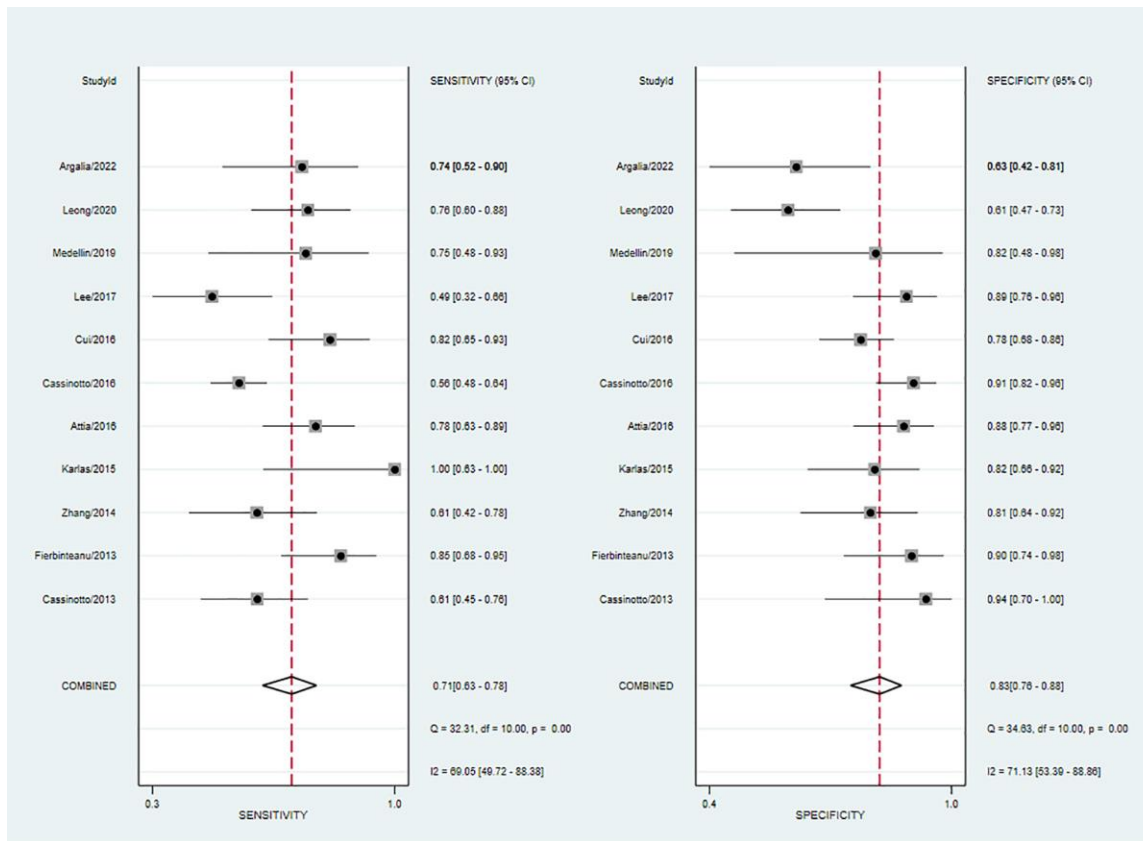


Figure S2. Forest plot of sensitivity and specificity for the diagnosis of significant fibrosis ($\geq F2$) using pSWE

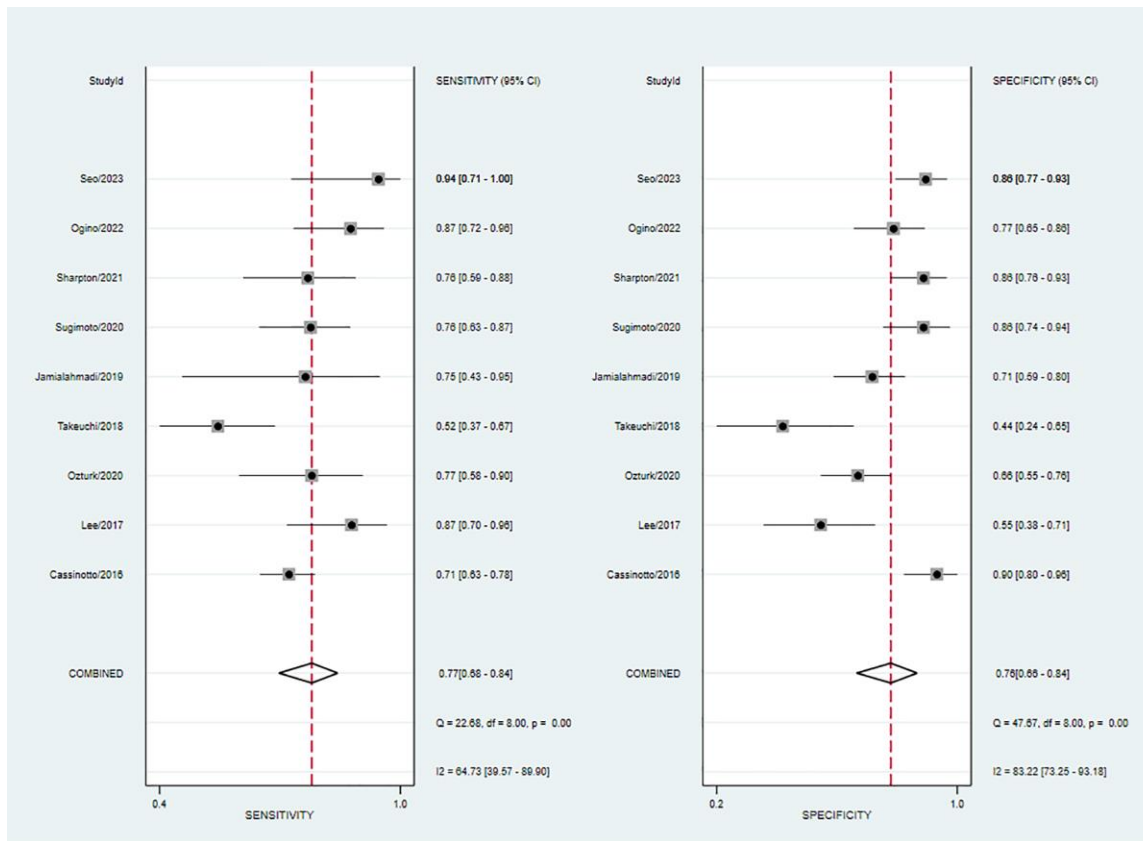


Figure S3. Forest plot of sensitivity and specificity for the diagnosis of significant fibrosis (\geq F2) using 2-D SWE

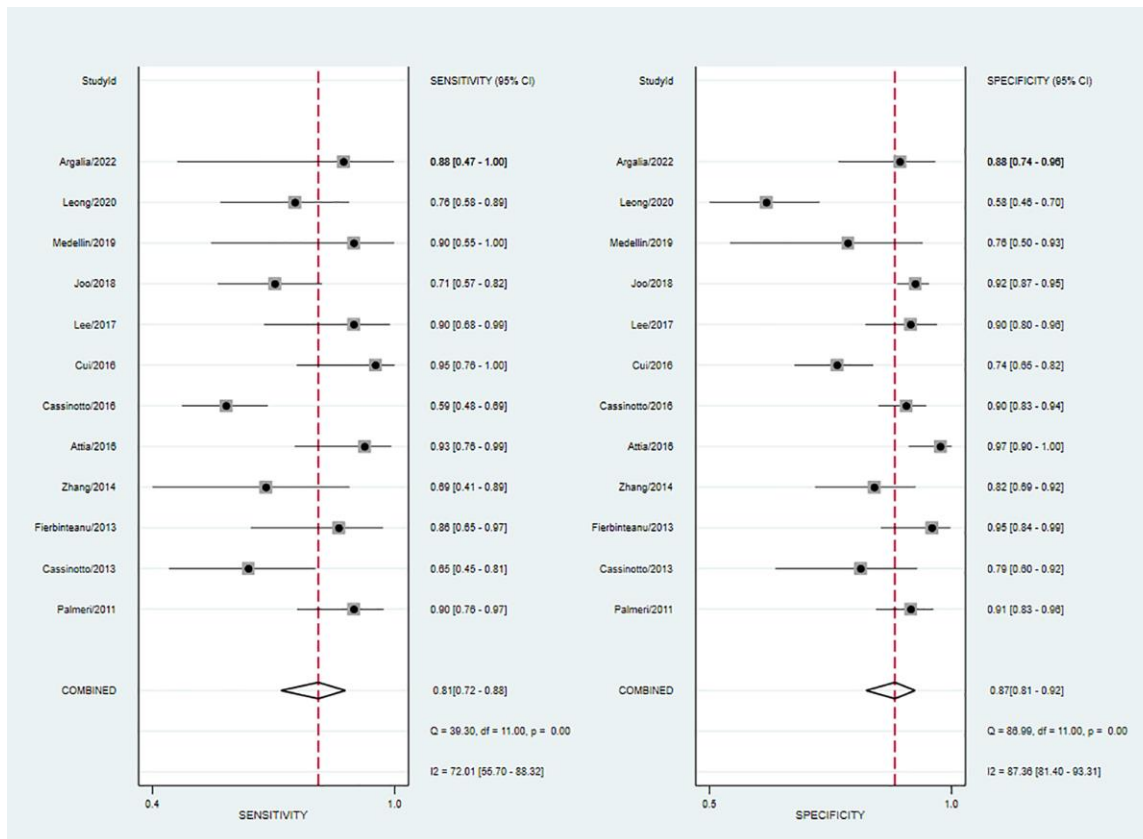


Figure S4. Forest plot of sensitivity and specificity for the diagnosis of advanced fibrosis ($\geq F3$) using pSWE

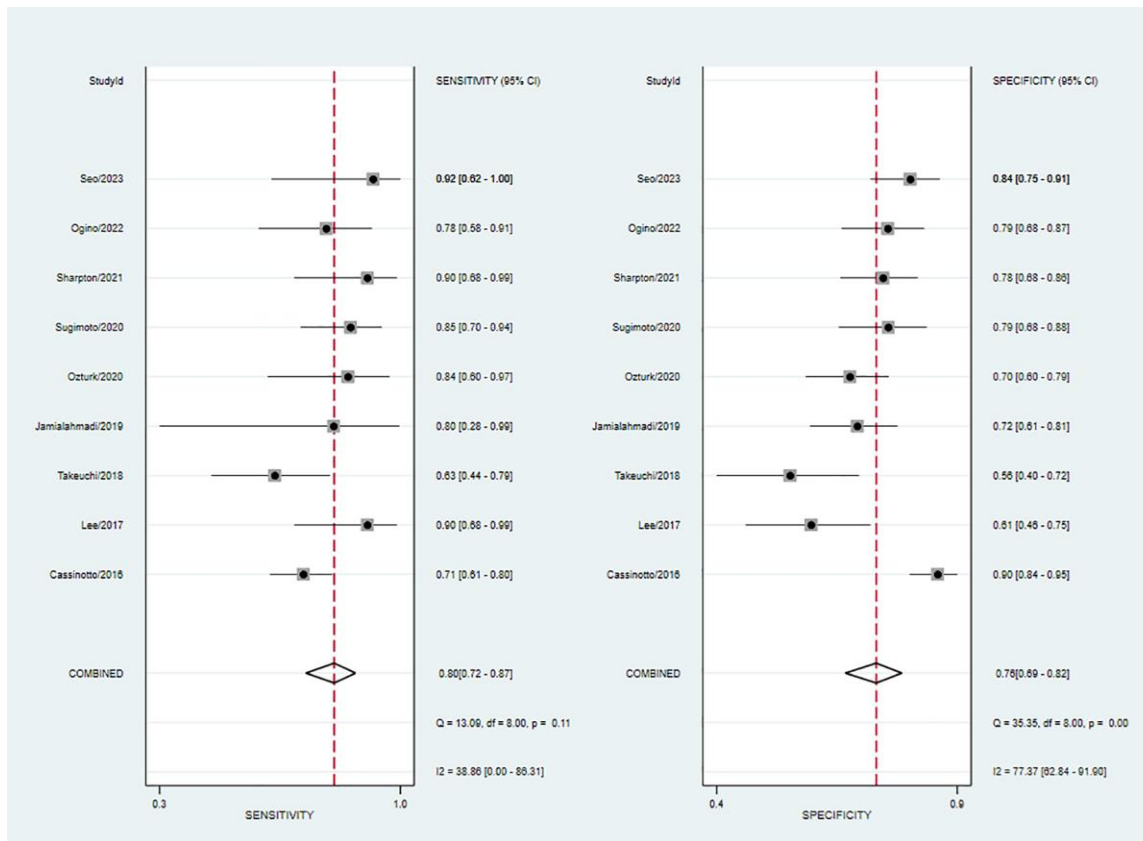


Figure S5. Forest plot of sensitivity and specificity for the diagnosis of advanced fibrosis (\geq F3) using 2-D SWE

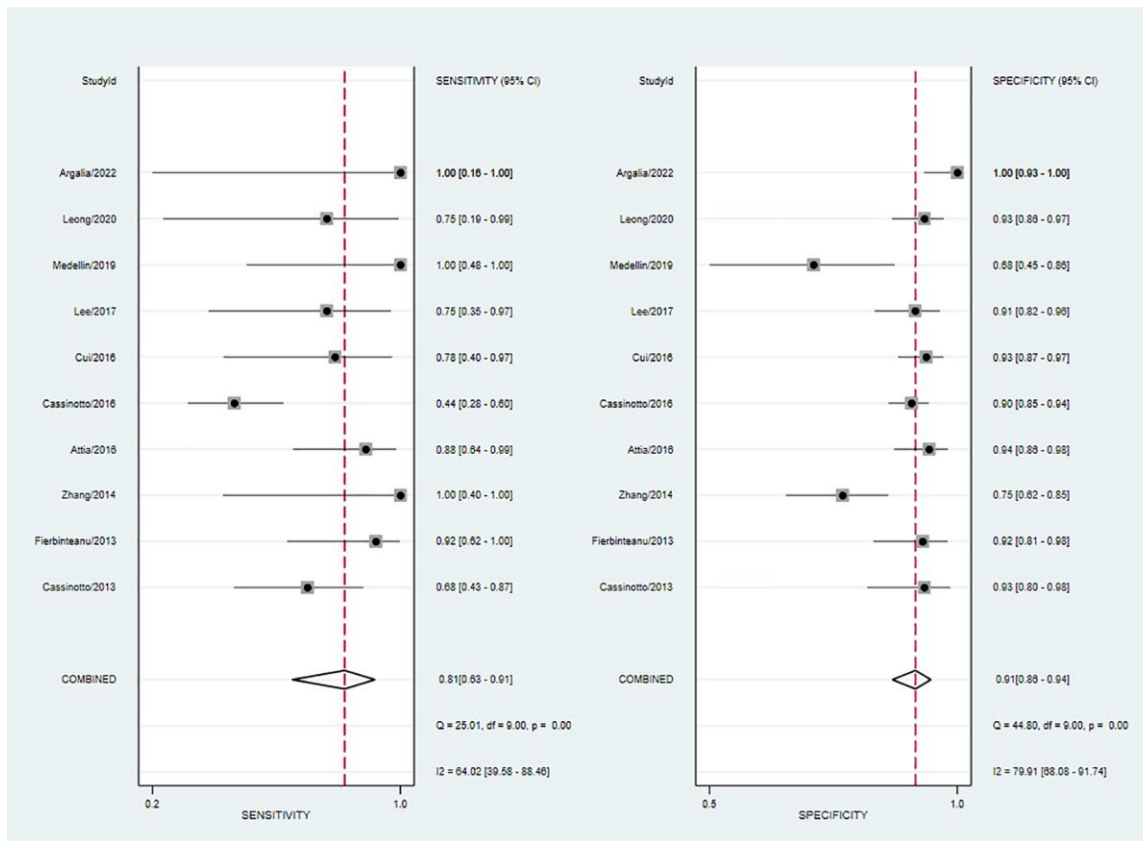


Figure S6. Forest plot of sensitivity and specificity for the diagnosis of cirrhosis (F4) using pSWE

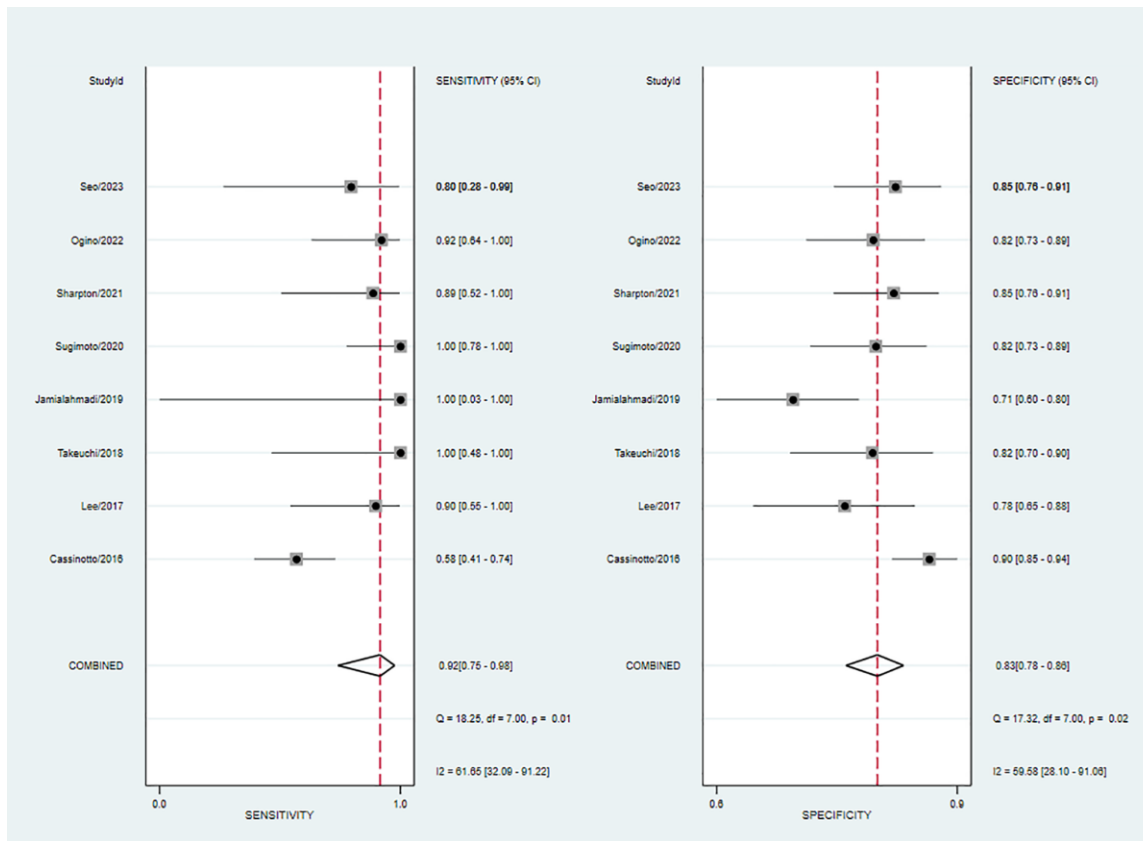


Figure S7. Forest plot of sensitivity and specificity for the diagnosis of cirrhosis (F4) using 2-D SWE