



Supplementary Table 1. Characteristics of 47 studies included in previously published meta-analyses

Technique	Meta-analyses	Ref. No.	First author	Year	Country	Study design	Patients with NAFLD (n)	Mean age (years)	Mean BMI (m/kg ²)	Male sex, n (%)	Histological score	Noninvasive methods
VCTE	Xiao	1	Wong	2008	Hong Kong	Prospective	34	Unclear	Unclear	Unclear	Brunt	M probe
	Kwok, Jiang	2	Yoneda	2008	Japan	Prospective	97	51.8	26.6	40 (41.2%)	Brunt	M probe
	Xiao	3	Friedrich-Rust	2010	Germany	Unclear	50	44	29	27 (54%)	Kleiner	M probe, XL probe
	Kwok, Xiao, Jiang	4	Lupsor	2010	Romania	Prospective	72	42	28.71	51 (70.8%)	Brunt	5-MHz ultrasound transducer probe
	Kwok, Jiang	5	Myers	2010	Canada	Unclear	50	Unclear	Unclear	Unclear	Kleiner	M probe
	Kwok, Xiao, Jiang	6	Wong	2010	France/ Hong Kong	Unclear	246	51	28	135 (54.9%)	Kleiner	M probe, AST/ALT ratio, APRI, BARD score, FIB-4, NFS
	Kwok, Jiang	7	Yoneda	2010	Japan	Unclear	54	50.6	Male, 28.2 Female, 26.2	25 (46.3%)	Brunt	M probe, pSWE, hyaluronic acids, type IV collagen 7S domain
	Kwok, Xiao, Jiang	8	Gaia	2011	Italy	Unclear	72	48	27.5	52 (72.2%)	Brunt	M probe
	Kwok, Xiao	9	Petta	2011	Italy	Unclear	146	44.1	29.1	104 (71%)	Kleiner	M probe
	Xiao, Jiang	10	Myers	2012	Canada	Prospective	127	Unclear	Unclear	Unclear	Kleiner	M probe, XL probe
	Xiao	11	Wong	2012	France /Hong Kong	Unclear	193	Unclear	Unclear	Unclear	Unclear	M probe, XL probe
	Xiao	12	Alkhouri	2013	Italy	Unclear	67 (children)	Unclear	Unclear	46 (68.7%)	Kleiner	S probe
	Xiao	13	Frossard	2013	Switzerland	Prospective	Unclear	Unclear	Unclear	Unclear	Metavir	M probe, AST/ALT ratio, APRI, FIB-4

	Kwok, Xiao, Jiang	14	Kumar	2013	India	Unclear	120	39.1	26.1	90 (75%)	Kleiner	M probe, AST/ALT ratio, APRI, BARD score, FIB-4, NFS
	Xiao	15	Mahadeva	2013	Malaysia	Unclear	131	49.9	Unclear	69 (52.7%)	Kleiner	M probe, APRI
	Xiao	16	Aykut	2014	Turkey	Unclear	88	46	30.3	50 (56.8%)	Kleiner	M probe, XL probe, FibroMeter™ NAFLD, NFS
	Xiao	17	Naveau	2014	France	Prospective	100	42.5	42.3	19 (19%)	Kleiner	M probe, XL probe
	Xiao	18	Chan	2015	Malaysia	Prospective	147	50.5	29.3	80 (54.4%)	Kleiner	M probe, NFS
	Xiao	19	Petta	2015	Italy	Unclear	253	45.2	29.1	177 (70%)	Kleiner	M probe
	Xiao	20	Petta	2015	Italy	Retrospective	321	Unclear	Unclear	Unclear	Kleiner	M probe, AST/ALT ratio, APRI, BARD score, FIB-4, NFS
	Jiang	21	Attia	2016	Germany	Prospective	97	50	31	46 (47.4%)	Kleiner	M probe, XL probe, pSWE
	Xiao	22	Boursier	2016	France	Unclear	452	55.9	31.1	271 (60.0%)	Kleiner	M probe, APRI, BARD score, FIB-4, FibroMeter ^{NAFLD} , FibroMeter ^{V2G} , FibroTest, NFS, Hepascore
	Jiang	23	Cassinotto	2016	France	Prospective	291	56.7	32.1	172 (59.1%)	Kleiner	M probe, pSWE, 2D-SWE
	Xiao, Jiang	24	Imajo	2016	Japan	Unclear	142	57.5	28.1	81 (57.0%)	Brunt	M probe, MRE
pSWE	Liu, Jiang, Lin	25	Osaki	2010	Japan	Unclear	23	Unclear	Unclear	Unclear	Brunt	pSWE
	Kwok, Jiang	7	Yoneda	2010	Japan	As above.						
	Liu, Jiang, Lin	26	Palmeri	2011	USA	Retrospective/ Prospective	172	Unclear	Unclear	65 (37.8%)	Kleiner	pSWE, APRI
	Liu, Lin	27	Friedrich-Rust	2012	Germany	Unclear	57	45	28	30 (52.6%)	Kleiner	M probe, XL probe, pSWE
	Liu, Lin	28	Guzmán-Aroca	2012	Spain	Prospective	32	43.7	Male, 44.3 Female, 45.1	18 (56.3%)	Brunt, Matteoni	pSWE
	Liu, Jiang	29	Cassinotto	2013	France	Prospective	Unclear	Unclear	Unclear	Unclear	Kleiner	M probe, XL probe, pSWE,

												FibroTest
	Liu, Jiang, Lin	30	Fierbinteanu Braticevici	2013	Romania	Unclear	64	Unclear	Unclear	Unclear	Unclear	pSWE
	Jiang	-	Zhang Da-kun and Yang	2014	Not in PubMed.							
	Lin	31	Guerra	2015	Brazil	Unclear	7	Unclear	Unclear	Unclear	Metavir	pSWE
	Lin	32	Karlas	2015	Germany	Unclear	41	45.7	46	13 (32%)	Kleiner	M probe, XL probe, pSWE, ELF
	Jiang	-	Li	2016	Not in PubMed.							
	Jiang, Lin	21	Attia	2016	Germany	As above.						
	Jiang	23	Cassinotto	2016	France	As above.						
	Lin	33	Cui	2016	USA	Prospective	125	48.9	31.8	57 (45.6%)	Kleiner	pSWE, MRE
	Lin	34	Harris	2016	Australia	Retrospective	Unclear	Unclear	Unclear	Unclear	Metavir	pSWE
	Lin	35	Lee	2017	Korea	Prospective	94	55.5	27.1	41 (43.6%)	Kleiner	M probe, pSWE, 2D-SWE
	MRE	Sigh	36	Yin	2007	USA	Unclear	10	Unclear	Unclear	Unclear	Brunt
Sigh		37	Asbach	2008	Germany	Unclear	Unclear	Unclear	Unclear	Unclear	Unclear	MRE
Sigh		38	Asbach	2010	Germany	Prospective	8	Unclear	Unclear	Unclear	Desmet	MRE
Sigh		39	Chen	2011	USA	Retrospective	58	51.5	38.3	10 (17.2%)	Brunt	MRE
Sigh		40	Wang	2011	USA	Prospective	8	Unclear	Unclear	Unclear	Brunt	MRE
Sigh		41	Godfrey	2012	UK	Unclear	7	Unclear	Unclear	Unclear	Kleiner	MRE
Sigh		42	Rustogi	2012	USA	Retrospective	1	Unclear	Unclear	Unclear	Brunt	MRE
Xiao		43	Kim	2013	Korea	Retrospective	142	52.8	36.32	38 (26.8%)	Kleiner	MRE, AST/ALT ratio, APRI, BARD score, FIB-4, NFS, Simple panel
Sigh, Xiao		44	Loomba	2014	USA	Prospective	117	50.1	32.4	51 (43.6%)	Kleiner	MRE
Xiao		45	Cui	2015	USA	Prospective	102	51.3	31.7	60 (58.8%)	Kleiner	MRE, AST/ALT ratio, APRI, Bonacini CDS, BARD score, FIB-4, Lok index, NASH CRN model, NFS

	Xiao	33	Cui	2016	USA	As above.
	Xiao	24	Imajo	2016	Japan	As above.

NAFLD, non-alcoholic fatty liver disease; BMI, body mass index; AST, aspartate aminotransferase; ALT, alanine aminotransferase; VCTE, vibration-controlled transient elastography; pSWE, point shear wave elastography; 2D-SWE; two-dimensional SWE; MRE, magnetic resonance elastography; APRI, aspartate aminotransferase-to-platelet ratio index; Bonacini CDS, Bonacini cirrhosis discriminant score; ELF, enhanced liver function score; FIB-4, fibrosis-4 index; NASH CRN model, Nonalcoholic Steatohepatitis Clinical Research Network model; NFS, non-alcoholic fatty liver disease fibrosis score.

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