Supplementary Table S1: Reason for exclusion. Paper excluded from the review and reasons for exclusion.

ID	Motivation	Reference
1	Population	Götschi T, Hanimann J, Schulz N, Huser S, Held V, Frey WO, Snedeker JG, Spörri J. Patellar Tendon Shear Wave Velocity Is Higher and has Different Regional Patterns in Elite Competitive Alpine Skiers than in Healthy Controls. Front Bioeng Biotechnol. 2022 Jun 9;10:858610. doi: 10.3389/fbioe.2022.858610. PMID: 35757800; PMCID: PMC9218688.
2	Population	Selcuk Can T, Ozdemir S, Yilmaz BK. Shear-Wave Elastography of Patellar Ligament and Achilles Tendon in Semiprofessional Athletes: Comparing With Nonexercising Individuals. J Ultrasound Med. 2022 Sep;41(9):2237-2246. doi: 10.1002/jum.15908. Epub 2021 Dec 3. PMID: 34862639.
3	Population	Romer C, Czupajllo J, Zessin E, Fischer T, Wolfarth B, Lerchbaumer MH. Stiffness of Muscles and Tendons of the Lower Limb of Professional and Semiprofessional Athletes Using Shear Wave Elastography. J Ultrasound Med. 2022 Dec;41(12):3061-3068. doi: 10.1002/jum.16062. Epub 2022 Jul 28. PMID: 35900250.
4	Population	Saha D, Prakash M, Sinha A, Singh T, Dogra S, Sharma A. Role of Shear-Wave Elastography in Achilles Tendon in Psoriatic Arthritis and Its Correlation with Disease Severity Score, Psoriasis Area and Severity Index. Indian J Radiol Imaging. 2022 Jul 13;32(2):159-165. doi: 10.1055/s-0042-1743116. PMID: 35924126; PMCID: PMC9340198.
5	Population	Karataş A, Artaş H, Uğur K, Koca SS. Sonoelastrographic finding of Achilles tendon in patients with ankylosing spondylitis and acromegaly. Eur J Rheumatol. 2022 Jul;9(3):122-125. doi: 10.5152/eujrheum.2022.21132. PMID: 35156618.
6	Population	Chen L, Cheng Y, Zhou L, Zhang L, Deng X. Quantitative shear wave elastography compared to standard ultrasound (qualitative B-mode grayscale sonography and quantitative power Doppler) for evaluation of achillotendinopathy in treatment-naïve individuals: A cross-

sectional study. Adv Clin Exp Med. 2022 Aug;31(8):847-854. doi: 10.17219/acem/147878. PMID: 35593220.

7 Other focus Aggouras AN, Chimenti RL, Samuel Flemister A, Ketz J, Slane LC, Buckley MR, Richards MS. Impingement in Insertional Achilles Tendinopathy Occurs Across a Larger Range of Ankle Angles and Is Associated With Increased Tendon Thickness. Foot Ankle Int. 2022 May;43(5):683-693. doi: 10.1177/10711007211069570. Epub 2022 Jan 27. PMID: 35081809; PMCID: PMC9240994.

8 Other focus Schillizzi G, Alviti F, D'Ercole C, Elia D, Agostini F, Mangone M, Paoloni M, Bernetti A, Pacini P, Polti G, Minafra P, Cantisani V. Evaluation of plantar fasciopathy shear wave elastography: a comparison between patients and healthy subjects. J Ultrasound. 2021 Dec;24(4):417-422. doi: 10.1007/s40477-020-00474-7. Epub 2020 May 16. PMID: 32418168; PMCID: PMC8572281.

9 Other focus Zhou JP, Yu JF, Feng YN, Liu CL, Su P, Shen SH, Zhang ZJ. Modulation in the elastic properties of gastrocnemius muscle heads in individuals with plantar fasciitis and its relationship with pain. Sci Rep. 2020 Feb 17;10(1):2770. doi: 10.1038/s41598-020-59715-8. PMID: 32066869; PMCID: PMC7026110.

10 Other focus Zhang C, Duan L, Liu Q, Zhang W. Application of shear wave elastography and B-mode ultrasound in patellar tendinopathy after extracorporeal shockwave therapy. J Med Ultrason (2001). 2020 Jul;47(3):469-476. doi: 10.1007/s10396-019-00979-7. Epub 2019 Nov 21. Erratum in: J Med Ultrason (2001). 2020 Jun 11;: PMID: 31754888.

11 Other focus Gatz M, Betsch M, Dirrichs T, Schrading S, Tingart M, Michalik R, Quack V. Eccentric and Isometric Exercises in Achilles Tendinopathy Evaluated by the VISA-A Score and Shear Wave Elastography. Sports Health. 2020 Jul/Aug;12(4):373-381. doi: 10.1177/1941738119893996. Epub 2020 Jan 31. PMID: 32003647; PMCID: PMC7787566.

12 Other focus Seo JB, Yoon SH, Lee JY, Kim JK, Yoo JS. What Is the Most Effective Eccentric Stretching Position in Lateral Elbow Tendinopathy? Clin

		Orthop Surg. 2018 Mar;10(1):47-54. doi: 10.4055/cios.2018.10.1.47. Epub 2018 Feb 27. PMID: 29564047; PMCID: PMC5851854.
13	Other focus	Zhang ZJ, Ng GYF, Lee WC, Fu SN. Increase in passive muscle tension of the quadriceps muscle heads in jumping athletes with patellar tendinopathy. Scand J Med Sci Sports. 2017 Oct;27(10):1099-1104. doi: 10.1111/sms.12749. Epub 2016 Aug 19. PMID: 27539811.
14	Other focus	Leong HT, Hug F, Fu SN. Increased Upper Trapezius Muscle Stiffness in Overhead Athletes with Rotator Cuff Tendinopathy. PLoS One. 2016 May 9;11(5):e0155187. doi: 10.1371/journal.pone.0155187. PMID: 27159276; PMCID: PMC4861275.
15	Other focus	Lin YH, Chiou HJ, Wang HK, Lai YC, Chou YH, Chang CY. Management of rotator cuff calcific tendinosis guided by ultrasound elastography. J Chin Med Assoc. 2015 Oct;78(10):603-9. doi: 10.1016/j.jcma.2015.05.006. Epub 2015 Jul 2. PMID: 26143386.
16	No Ultrasonography	Finnamore E, Waugh C, Solomons L, Ryan M, West C, Scott A. Transverse tendon stiffness is reduced in people with Achilles tendinopathy: A cross-sectional study. PLoS One. 2019 Feb 20;14(2):e0211863. doi: 10.1371/journal.pone.0211863. PMID: 30785895; PMCID: PMC6382130.
17	No Ultrasonography	Zhang Q, Cai Y, Hua Y, Shi J, Wang Y, Wang Y. Sonoelastography shows that Achilles tendons with insertional tendinopathy are harder than asymptomatic tendons. Knee Surg Sports Traumatol Arthrosc. 2017 Jun;25(6):1839-1848. doi: 10.1007/s00167-016-4197-8. Epub 2016 Jun 24. PMID: 27342984.
18	Study design	Götschi T, Franchi MV, Schulz N, Fröhlich S, Frey WO, Snedeker JG, Spörri J. Altered regional 3D shear wave velocity patterns in youth competitive alpine skiers suffering from patellar tendon complaints - a prospective case-control study. Eur J Sport Sci. 2022 Jul 5:1-9. doi: 10.1080/17461391.2022.2088404. Epub ahead of print. PMID: 35699187.
19	Study design	Gatz M, Bode D, Betsch M, Quack V, Tingart M, Kuhl C, Schrading S, Dirrichs T. Multimodal Ultrasound Versus MRI for the Diagnosis and Monitoring of Achilles Tendinopathy: A Prospective Longitudinal

Study. Orthop J Sports Med. 2021 Apr 13;9(4):23259671211006826. doi: 10.1177/23259671211006826. PMID: 33912619; PMCID: PMC8047827.

20	Study design	Zhou J, Yang DB, Wang J, Li HZ, Wang YC. Role of shear wave elastography in the evaluation of the treatment and prognosis of supraspinatus tendinitis. World J Clin Cases. 2020 Jul 26;8(14):2977-2987. doi: 10.12998/wjcc.v8.i14.2977. PMID: 32775379; PMCID: PMC7385596
21	Study design	Corrigan P, Cortes DH, Pohlig RT, Grävare Silbernagel K. Tendon Morphology and Mechanical Properties Are Associated With the Recovery of Symptoms and Function in Patients With Achilles Tendinopathy. Orthop J Sports Med. 2020 Apr 30;8(4):2325967120917271. doi: 10.1177/2325967120917271. PMID: 32426410; PMCID: PMC7218994
22	Study design	Brage K, Juul-Kristensen B, Hjarbaek J, Boyle E, Kjaer P, Ingwersen KG. Strain Elastography and Tendon Response to an Exercise Program in Patients With Supraspinatus Tendinopathy: An Exploratory Study. Orthop J Sports Med. 2020 Dec 16;8(12):2325967120965185. doi: 10.1177/2325967120965185. PMID: 33403207; PMCID: PMC7747122.
23	Study design	Dirrichs T, Quack V, Gatz M, Tingart M, Rath B, Betsch M, Kuhl CK, Schrading S. Shear Wave Elastography (SWE) for Monitoring of Treatment of Tendinopathies: A Double-blinded, Longitudinal Clinical Study. Acad Radiol. 2018 Mar;25(3):265-272. doi: 10.1016/j.acra.2017.09.011. Epub 2017 Nov 16. PMID: 29153963.

Supplementary Table S2: Study characteristics, concerning: Study population, pathology, US machine characteristics, patient position and, location of the probe.

Authors (year)	**Study population**	**Pathology**	**Tendon**	**US Information**	**Patient position**	**Probe position and examination plane**
Sprague et al, 2022 [41]	S	Tendinopathy	Patellar Tendon	LOGIC e, GE Healthcare Linear probe, 13-5 MHz B-mode + SWE	Prone	Probe was positioned at the midline of the tendon from the ischial tuberosity to the inferior pole of the patella – Longitudinal plane Probe was positioned 1 cm distal to the inferior pole of the patella – Transversal plane
Ito et al, 2022 [42]	S + AS	Tendinopathy	Patellar Tendon	Ultrasonix, Vancouver, BC, Canada Linear probe, 14-5 MHz B-mode + SWE	Seated	Probe was placed 1 cm distal to the inferior pole of the patella Longitudinal plane
Elsayed et al, 2022 [43]	S	Lateral epicondylitis	Common Extensor Tendon	Toshiba Aplio 500, Toshiba Medical Systems Corporation, Tokyo, Japan Linear probe, 12 MHz B-mode + SWE	Seated	Probe should be applied perpendicular to the lateral epicondyle. A scan of common extensor tendon attached to the humeral lateral epicondyle was acquired Longitudinal plane
Corrigan et al, 2022 [44]	S	Tendinopathy	Achilles Tendon	LOGIQ, GE Healthcare Linear probe, 13-5 MHz B-mode + SWE	Prone	Probe was applied on Achilles Tendon Longitudinal and Transversal planes

Kandil et al, 2021 [22]	S	Tendinopathy	Achilles Tendon	Aplio mx, Toshiba Medical Systems, Japan Linear probe, 12-7 Mhz B-mode + SE	Prone	Examination included the full length of the tendon Longitudinal and Transverse planes
Ozel et al, 2021 [38]	S	Tendinopathy	Supraspinatus and Subscapularis Tendons	Esaote Mylab Seven eHD crystalline Linear probe, 11-3 MHz B-mode + SE	Seated	The transducer was placed anterior to the acromioclavicular joint and was oriented at an angle of 45° anteriorly to examine the supraspinatus tendon. Longitudinal plane
Frere et al, 2021 [23]	S	Tendinopathy	Subscapularis, Supraspinatus, Infraspinatus and Teres Minors Tendons	LOGIQ E9, GE Healthcare Linear probe, 15-6 Mhz B-mode + SE	Seated	EULAR guidelines Longitudinal and Transverse planes
Bang et al, 2021 [24]	S	Tendinopathy	Common Flexor Tendons	LOGIQ E9, GE Healthcare Linear probe, 15-6 MHz B-mode + SE+ SWE	Seated	From the insertion on the medial epicondyle to the musculotendinous junction Longitudinal plane
Wada et al, 2020 [45]	S	Frozen Shoulder	Supraspinatus, Infraspinatus, Long Head Biceps Tendons, and Posterior Capsule Region	Aixplorer, Supersonic Imagine Linear probe, 10-2 MHz B-mode + SWE	Seated	Alignment of the US transducer with the fiber orientation was achieved for all tissues. All muscles were measured at almost the middle of the muscles.

						Longitudinal and Transverse planes
Gatz et al, 2020 [46]	S + AS	Tendinopathy	Achilles Tendon	Aixplorer, Supersonic Imagine Linear probe, 18-4 MHz B-mode + PD + SWE + UTC	Prone	ROIs were a circle of 3 mm of diameter and an individual area covering the whole tendon. Longitudinal and Transverse plane
Breda et al, 2020 [47]	S + AS	Tendinopathy	Patellar Tendon	LOGIQ E9, GE Healthcare Linear probe, 15-5 MHz (B-mode, PD); 10-3 MHz (SWE) B-mode + SWE	Supine	Inferior patellar pole just in the field of view Longitudinal and Transverse planes: B-mode + PD Longitudinal plane: SWE
Zhu et al, 2019 [25]	S	Tendinopathy	Common Extensor Tendon	Aixplorer, SuperSonic Imagine Linear probe, 15-4 MHz B-mode + SWE	Seated	Probe was placed perpendicularly to the lateral epicondyle onto the skin surface with light contact Longitudinal plane
Yurdaisik et al, 2019 [48]	S	Tendinopathy	Patellar Tendon	Mindray Resona Linear probe, 9-3 MHz SWE	Supine	Probe perpendicular to the tendon Longitudinal plane
Yun et al, 2019 [49]	S + AS	Idiopathic Adhesive Capsulitis	Supraspinatus and infraspinatus Tendons	LOGIQ E9, GE Healthcare Probe and frequency not declared B-mode + SE + SWE	Seated	Transducer at the distal portion of infraspinatus and supraspinatus, with an oblique coronal plane Longitudinal plane

Vasishta et al, 2019 [39]	S	Tendinopathy	Supraspinatus Tendon	Philips Affiniti 70 Linear probe, 12-5 MHz B-mode + SE	Seated	Probe perpendicular to the supraspinatus, to avoid anisotropy Longitudinal plane
Shin et al, 2019 [26]	S + AS	Tendinopathy	Common Flexor Tendons	Hitachi HiVISION Ascend Linear probe, 12-5 MHz B-mode + PD + SE	Seated	Probe parallel to the longitudinal axis of the common flexor tendon to minimize anisotropy Longitudinal plane
Sahan et al, 2018 [27]	S + AS	Tendinopathy	Long head of Biceps Tendon	LOGIQ E9, GE Healthcare Linear probe, 15-6 MHz B-mode + SE + SWE	Seated	Tendon was examined in the bicipital groove Longitudinal and Transverse planes
Ghandour et al, 2018 [28]	S + AS	De Quervain Tenosynovitis	Abductor Pollicis Longus and the Extensor Pollicis Brevis Tendons	Philips iU22 xMatrix Linear probe, 12-5 MHz B-mode + SE	Seated	Abductor pollicis longus and the extensor pollicis brevis tendons were imaged Longitudinal and Transverse planes
El Badry et al, 2018 [29]	S + AS	Tendinopathy	Achilles tendon	US machine not declared Linear probe, 12 MHz B-mode + SWE + Transient elastography	Prone	The Achilles tendon was divided into three segments for imaging evaluation: (I) proximal (musculotendinous junction), (II) middle (2–6 cm above insertion at the calcaneus) and (III) distal (insertion at the calcaneus) Longitudinal and Transverse planes

Arslan et al, 2018 [30]	S + AS	Tendinopathy	Common Extensor Tendon	Toshiba Aplio 500 Linear probe, 14 MHz B-mode + PD + SE	Seated	The entire tendon from anterior to posterior margin was imaged Longitudinal plane
Turkay et al, 2017 [31]	S + AS	De Quervain Tenosynovitis	First Extensor Compartment of the Hand	Toshiba Aplio 500 Linear probe, 12 MHz B-mode + SWE	Seated	Short axis of the tendon was imaged Transverse plane
Coombes et al, 2017 [32]	S + AS	Tendinopathy	Patellar and Achilles Tendons	Aixplorer vers. 8.2 Linear probe, 15-4 MHz B-mode + SE	Prone (Achilles Tendon) Supine (Patellar Tendon)	Tendons were imaged in the plane with the collagen fibers Longitudinal plane
Chimenti et al, 2017 [50]	S	Tendinopathy	Achilles Tendon	Ultrasonix Linear probe, 18-4 MHz B-mode + SE	Standing	Probe was placed over the tendon insertion Longitudinal plane
Ooi et al, 2016 [34]	S	Tendinopathy	Patellar Tendon	Philips iU22 Linear probe, 17-5 MHz B-mode + PD + SWE	Supine	Probe was placed over the tendon Longitudinal and Transverse planes
Lee et al, 2016 [51]	S	Tendinopathy	Supraspinatus Tendon	Hitachi Medical System Linear probe, frequency not declared B-mode + SE	Seated	Probe was placed anterior to the acromioclavicular joint and oriented at an angle of 45° anteriorly Longitudinal plane
Kocyigit et al, 2016 [52]	S	Sub Acromial Impingement Syndrome	Supraspinatus Tendon	LOGIQ E9, GE Healthcare Linear probe, 15-9 MHz	Seated	Probe was positioned perpendicular to avoid anisotropy

				B-mode + SE		Longitudinal Plane
Kocyigit et al, 2016 [53]	S	Lateral Epicondylitis	Common Extensor Tendon	LOGIQ E9, GE Healthcare Linear probe, 15-9 MHz B-mode + SE	Seated	Probe was placed parallel to the common extensor tendon. The entire tendon origin from the anterior edge to the posterior edge was scanned. Longitudinal plane
Dirrichs et al, 2016 [54]	S	Tendinopathy	Achilles, Patellar and Common Extensor Tendons	Aixplorer, SuperSonic Imagine Linear probe, 15-4 MHz B-mode + PD + SWE	Supine (Achilles Tendon) Prone (Patellar Tendon) Seated (Common Extensor Tendon)	Analysis was performed in three representative locations of the proximal, mid and distal portions of the tendons Longitudinal plane
Tudisco et al, 2015 [55]	S	Small tendon tear	Supraspinatus Tendon	Philips iU22 Linear probe, 7.5 MHz B-mode + SE	Seated	Probe was perpendicular to the tendon; light repetitive compressions were applied over the ROI Longitudinal and Transverse planes
Seo et al, 2015 [40]	S	Tendinopathy	Supraspinatus Tendon	Siemens Acuson S2000 Linear probe, 12 MHz B-mode + SE	Seated	Probe was perpendicular to supraspinatus tendon. Longitudinal plane.
Ooi et al, 2015 [33]	S + AS	Tendinopathy	Achilles Tendon	Philips iU22 Linear probe, 17-5 MHz B-mode + SE	Prone	Tendon was imaged from calcanear insertion to myotendinous junction Longitudinal and Transverse plane

Galletti et al, 2015 [37]	S	Tendinopathy; Surgical treatment	Elbow (not specified); Shoulder (not specified); Patellar tendon and Plantar Fascia	Hitachi Preyrus Linear probe, 15-6 MHz B-mode + PD + SE	Not declared	Care was taken to hold the probe perpendicular to the target tissues Plane not declared
Aubry et al, 2015 [56]	S + AS	Tendinopathy	Achilles Tendon	Aixplorer, SuperSonic Imagine Linear probe, 12 MHz B-mode + PD + SWE	Prone	Probe was placed on the tendon Longitudinal and Transverse planes
Zhang et al, 2014 [57]	S + AS	Tendinopathy	Patellar Tendon	Aixplorer, Supersonic Imagine Linear probe, 15-4 MHz B-mode + SWE	Supine	Probe was located at the inferior pole of the patella Longitudinal plane
Seo et al, 2014 [35]	S + AS	Tendinopathy	Biceps Tendon	Siemens Acuson S2000 Linear probe, 9-4 MHz B-mode + SE	Seated	Probe was placed perpendicular to long head of biceps at the anterior aspect of the shoulder Longitudinal and Transverse planes
Giyuoung et al, 2014 [36]	S	Tendinopathy	Common Extensor Tendon	Acuson Antares, premium edition, Siemens Healthcare	Seated	Tendon was imaged from the musculotendinous junction to the insertion of the lateral epicondyle Longitudinal and Transverse planes

Ahn et al, 2014 [58]	S + AS	Tendinopathy	Common Extensor Tendon	Philips iU22 Linear probe, 12-5 MHz B-mode + PD + SE	Seated	The entire tendon was imaged, from anterior to posterior edges Longitudinal planes
Sconfienza et al, 2010 [59]	S + AS	Tendon pain due to overuse	Achilles Tendon	Logos EUB 8500, Hitachi Linear probe, 10-6 MHz B-mode + SE	Prone	The probe was placed on the calcaneal enthesis and above the retrocalcaneal Bursa Longitudinal lane
Abbrev: S: symptomatic; AS: asymptomatic; PD: power doppler; SE: strain elastography; SWE: shear wave elastography						

Supplementary Table S3: Shear wave elastographic values, classified in: Shear wave velocity (m/s) and Shear modulus (kPa)

Study	US information	Shear Wave Velocity (m/s)	Shear Modulus (kPa)
Sprague et al, 2022 [41]	LOGIC e, GE Healthcare Linear probe, 13-5 MHz B-mode + SWE		Patellar Tendinopathy 68.30 ± 23.30 mean
Ito et al, 2022 [42]	Ultrasonix, Vancouver, BC, Canada Linear probe, 14-5 MHz B-mode + SWE		Patellar Tendinopathy 83.30 ± 16.40 mean
Elsayed et al, 2022 [43]	Toshiba Aplio 500, Toshiba Medical Systems Corporation, Tokyo, Japan Linear probe, 12 MHz B-mode + SWE	Common Extensor Tendinopathy Affected elbow: 9.50 ± 0.80 mean Healthy elbow: 11.20 ± 0.70 mean	
Corrigan et al, 2022 [44]	LOGIQ, GE Healthcare Linear probe, 13-5 MHz B-mode + SWE		Achilles Tendinopathy Most symptomatic limb: 88.90 ± 34.30 Least symptomatic limb: 85.10 ± 31.50
Bang et al, 2021 [24]	LOGIQ E9, GE Healthcare Linear probe, 15-6 MHz B-mode + SE+ SWE	Epicondylitis Group with Medial Epicondylitis: 1.69 ± 0.40 mean Group without Medial Elbow Pain: 3.65 ± 0.60 mean	Epicondylitis Group with Medial Epicondylitis: 9.77 ± 4.65 mean Group without Medial Elbow Pain: 43.93 ± 14.76 mean

Wada et al, 2020 [45]	Aixplorer, Supersonic Imagine Linear probe, 10-2 MHz B-mode + SWE		Rotator Cuff Tendons in Frozen Shoulder Freezing Phase Unaffected Side Supraspinatus Tendon: 178.10 ± 73.30 mean Affected Side Supraspinatus Tendon: 280.40 ± 125.30 mean Unaffected side Infraspinatus Tendon: 240.80 ± 91.50 mean Affected Side infraspinatus Tendon: 318.40 ± 110.70 mean Frozen Phase Unaffected Side Supraspinatus Tendon: 244.30 ± 100.90 mean Affected Side Supraspinatus Tendon: 245.00 ± 76.00 mean Unaffected side Infraspinatus Tendon: 285.70 ± 88.50 mean Affected Side infraspinatus Tendon: 268.80 ± 116.60 mean
Gatz et al, 2020 [46]	Aixplorer, Supersonic Imagine Linear probe, 18-4 MHz B-mode + PD + SWE + UTC		Achilles Tendinopathy Insertion Asymptomatic Unilateral Group 1: 334.4 (76) SWE area Symptomatic Unilateral Group 2: 284.7 (63) SWE area Reference Group 3: 424.9 (71) SWE area Midportion Asymptomatic Unilateral Group 1: 395.4 (64) SWE area Symptomatic Unilateral Group 2:

			352.6 (72) SWE area Reference Group 3: 465.4 (60) SWE area
Breda et al, 2020 [47]	LOGIQ E9, GE Healthcare Linear probe, 15-5 MHz (B-mode, PD); 10-3 MHz (SWE) B-mode + SWE	Patellar Tendinopathy Athletes with Patellar Tendinopathy Analysis 1: 74.9 (56.4-105.4); Analysis 2: 69.9 (54.7-100.3) mean value Healthy Athletes Examiner 1: 35.7 (29.2-43.6); Examiner 2: 30.4 (24.8-38.9) mean value	
Zhu et al, 2019 [25]	Aixplorer, SuperSonic Imagine Linear probe, 15-4 MHz B-mode + SWE	Common Extensor Tendon in Lateral Epicondylitis Lateral Epicondylitis: 9.60 ± 1.40 mean value Healthy Elbows: 13.60 ± 1.10 mean value	
Yurdaisik et al, 2019 [48]	Mindray Resona Linear probe, 9-3 MHz SWE		Patellar Tendinopathy SWE 83.80 ± 34.3 mean pSWE (point-SWE) 29.30 ± 33.80 mean
Yun et al, 2019 [49]	LOGIQ E9, GE Healthcare Probe and frequency not declared B-mode + SE + SWE	Idiopathic Adhesive Capsulitis Supraspinatus Tendon ACS Group: 3.29 (2.01-4.34) mean Supraspinatus Tendon Control Group: 1.04 (0.83-1.29) mean Infraspinatus Tendon ACS Group: 2.67 (2.11-4.68) mean Infraspinatus Tendon Control Group:	Idiopathic Adhesive Capsulitis Supraspinatus Tendon ACS Group: 32.55 (12.14-56.41) mean Supraspinatus Tendon Control Group: 3.24 (2.08-5.02) mean Infraspinatus Tendon ACS Group: 19.49 (13.39-65.98) mean Infraspinatus Tendon Control Group:

		1.11 (0.94-1.32) mean	3.49 (2.66-5.25) mean
Sahan et al, 2018 [27]	LOGIQ E9, GE Healthcare Linear probe, 15-6 MHz B-mode + SE + SWE	Tendinosis of the Long Head of Biceps Tendon LHB Tendinosis Group: transverse plane 38.32 ± 7.00 (28.4-55.9) mean longitudinal plan 39.42 ± 7.4 (28-54) mean Control Group: transverse plane 18.60 ± 3.40 (14.3-28.8) mean longitudinal plane 20.62 ± 4.6 (13.3-30) mean	
El Badry et al, 2018 [29]	US machine not declared Linear probe, 12 MHz B-mode + SWE + Transient elastography	Achilles Tendinopathy Musculotendinous Junction: 8.45 ± 4.97 mean Middle (2-6 cm above CI) and Calcaneous Insertion: 1.25 ± 0.99 mean Control Proximal segment 7.55 ± 4.06 mean Control Middle segment 8.24 ± 6.18 mean	
Turkay et al, 2017 [31]	Toshiba Aplio 500 Linear probe, 12 MHz B-mode + SWE		De Quervain Tenosynovitis Patient Group : 29.75 ± 8.02 (18-47) mean Control Group: 69.17 ± 22.45 (30-128) mean
Coombes et al, 2017 [32]	Aixplorer vers. 8.2 Linear probe, 15-4 MHz	Achilles and Patellar Tendinopathies Mid Achilles:	

	B-mode + SE	10.60 ± 0.95 mean; Insertional Achilles: 9.90 ± 1.40 mean; Mid Patellar: 6.10 ± 0.80 mean; Proximal Patellar: 6.40 ± 1.20 mean;	
Dirrichs et al, 2016 [54]	Aixplorer, SuperSonic Imagine Linear probe, 15-4 MHz B-mode + PD + SWE	Achilles Tendon Symptomatic: 4.22 ± 2.78 mean Asymptomatic: 7.17 ± 3.07 mean Patellar Tendon Symptomatic: 4.33 ± 2.47 mean Asymptomatic: 7.66 ± 2.46 mean Epicondylitis Humeri Symptomatic: 4.62 ± 3.13 mean Asymptomatic: 7.66 ± 2.46 mean	Achilles Tendon Symptomatic: 53.40 ± 23.20 mean Asymptomatic: 154.20 ± 28.30 mean Patellar Tendon Symptomatic: 56.30 ± 18.30 mean Asymptomatic: 176.20 ± 18.20 mean Epicondylitis Humeri Symptomatic: 64.10 ± 29.30 mean Asymptomatic: 176.20 ± 18.20 mean
Aubry et al, 2015 [56]	Aixplorer, SuperSonic Imagine Linear probe, 12 MHz B-mode + PD + SWE	Achilles Tendon Position 1: maximal plantar flexion Healthy Tendons of Volunteers: sagittal mean velocity: 6.58 axial mean velocity: 5.02 Asymptomatic Tendons of Patients: sagittal mean velocity: 6.90 axial mean velocity: 4.75 Position 2: 0° flexion Healthy Tendons of Volunteers: sagittal mean velocity: 15.75 axial mean velocity: 5.51 Asymptomatic Tendons of Patients: sagittal mean velocity: 15.58	

		axial mean velocity: 5.37	
Zhang et al, 2014 [57]	Aixplorer, Supersonic Imagine Linear probe, 15-4 MHz B-mode + SWE		Patellar Tendinopathy Patellar Tendinopathy Group: 43.60 ± 17.90 mean Control Group: 27.50 ± 11.30 Painful Side: 43.60 ± 17.90 mean Non-Painful Side: 25.80 ± 10.60 mean Dominant Side: 27.50 ± 11.30 mean Non Dominant Side: 27.90 ± 8.40 mean

Supplementary Table S4: Strain elastographic values, classified in Strain ratio

Study	US information	Strain Ratio
Ozel et al, 2021 [38]	Esaote Mylab Seven eHD crystalline Linear probe, 11-3 MHz B-mode + SE	Supraspinatus Tendinopathy correlation with MRI Grade 0 1 2 3 4 Grade 0: 0.80 ± 0.18 mean Grade I: 0.54 ± 0.23 mean Grade II: 0.33 ± 0.24 mean Grade III: 0.15 ± 0.27 mean Grade IV: NA
Bang et al, 2021 [24]	LOGIQ E9, GE Healthcare Linear probe, 15-6 MHz B-mode + SE+ SWE	Epicondylitis Group with Medial Epicondylitis: 0.48 ± 0.22 mean Group without Medial Elbow Pain: 0.95 ± 0.16 mean
Yun et al, 2019 [49]	LOGIQ E9, GE Healthcare Probe and frequency not declared B-mode + SE + SWE	Idiopathic Adhesive Capsulitis Supraspinatus Tendon ACS Group: 0.13 (0.07-0.17) mean Supraspinatus Tendon Control Group: 0.38 (0.33-0.50) mean Infraspinatus Tendon ACS Group: 0.17 (0.07-0.19) mean Infraspinatus Tendon Control Group: 0.43 (0.33-0.50) mean
Vasishta et al, 2019 [39]	Philips Affiniti 70 Linear probe, 12-5 MHz B-mode + SE	Supraspinatus Tendinopathy Grade I: 0.76 ± 0.32 Grade II: 0.59 ± 0.40 Grade III: 0.31 ± 0.10 Grade IV: 0.15 ± 0.02 Mean value: 0.54 ± 0.36

Shin et al, 2019 [26]	Hitachi HiVISION Ascend Linear probe, 12-5 MHz B-mode + PD + SE	Medial Epicondylitis Group with Medial Epicondylitis: 0.39 ± 0.17 mean Group without Medial Elbow Pain: 1.07 ± 0.28 mean
Ghandour et al, 2018 [28]	Philips iU22 xMatrix Linear probe, 12-5 MHz B-mode + SE	De Quervain Tenosynovitis Patient Group: 2.30 mean Control Group: 6.10 mean
Arslan et al, 2018 [30]	Toshiba Aplio 500 Linear probe, 14 MHz B-mode + PD + SE	Lateral Epicondylosis Symptomatic Tensons: 2.85 ± 1.99 mean Asymptomatic Tendons: 7.41 ± 2.24 mean
Chimenti et al, 2017 [50]	Ultrasonix Linear probe, 18-4 MHz B-mode + SE	Insertional Achilles Tendinopathy Transverse Compressive Strain (%) Standing IAT Group Deep Region: -5.57 ± 3.28; Control Group Deep Region: -10.63 ± 3.87 IAt Group Superficial Region: -4.90 ± 2.83; Control Group Superficial Group: -6.95 ± 3.18 Transverse Compression Strain (%) Partial Squat IAT Group Deep Region: -9.44 ± 6.83; Control Group Deep Region -20.06 ± 6.58 IAT Group Superficial region: -9.29 ± 6.23; Control Group Superficial Region: -14.69 ± 5.98 Axial tensile Strain (%) Standing IAT Group Deep Region: 1.36 ± 1.20; Control Group Deep Region: 3.33 ± 0.97 IAT Group Superficial Region: 2.03 ± 1.07;

		Control Group Superficial Region: 3.57 ± 0.94 Axial Tensile Strain (%) Partial Squat IAT Group Deep Region: 4.87 ± 3.71; Control Group Deep Region: 10.43 ± 5.91 IAT Group Superficial Region: 6.18 ± 3-34; Control Group Superficial Region: 9.66 ± 4.65
Lee et al, 2016 [51]	Hitachi Medical System Linear probe, frequency not declared B-mode + SE	Rotator Cuff Tendinopathy Fat/T index 6.92 ± 7.73 mean (Fat/T strain ration of subcutaneous fat to the tendon) Pad/T index 40.25 ± 41.06 mean (Pad/T strain ratio of the gel pad to the tendon)
Kocyigit et al, 2016 [52]	LOGIQ E9, GE Healthcare Linear probe, 15-9 MHz B-mode + SE	Supraspinatus Tendons in Subacromial Impingement Syndrome Shoulder with SIS: 0.71 ± 0.25 mean Healthy Shoulder: 0.24 ± 0.10 mean
Kocyigit et al, 2016 [53]	LOGIQ E9, GE Healthcare Linear probe, 15-9 MHz B-mode + SE	Lateral Epicondylitis Elbow with LE: Medial portion: 0.45 ± 0.12 mean Elbow with LE: Middle portion: 0.44 ± 0.8 mean Elbow with LE: Lateral portion: 0.47 ± 0.19 mean Healthy Elbow: Medial portion: 0.18 ± 0.13 mean Healthy Elbow: Middle portion: 0.21 ± 0.13 mean Healthy Elbow: Lateral portion: 0.20 ± 0.14 mean
Tudisco et al, 2015 [55]	Philips iU22 Linear probe, 7.5 MHz B-mode + SE	Unilateral Supraspinatus Tendon Tear Affected Shoulder: 0.75 ± 0.08 mean Healthy Shoulder: 1.01 ± 0.07 mean
Ooi et al, 2015 [33]	Philips iU22 Linear probe, 17-5 MHz	Achilles Tendinopathy Asymptomatic group:

	B-mode + SE	0.76 ± 0.30 (0.21-1.90) mean Symptomatic group: 1.70 ± 0.84 (0.50-4.5) mean
Ahn et al, 2014 [58]	Philips iU22 Linear probe, 12-5 MHz B-mode + PD + SE	Lateral Epicondylosis Symptomatic Tendons: 1.45 ± 0.45 mean Asymptomatic Tendons: 2.07 ± 0.70 mean