

## PoCUS4COVID

Expedited Delphi consensus process on the use of Point of Care UltraSound for COVID Diagnosis and Management

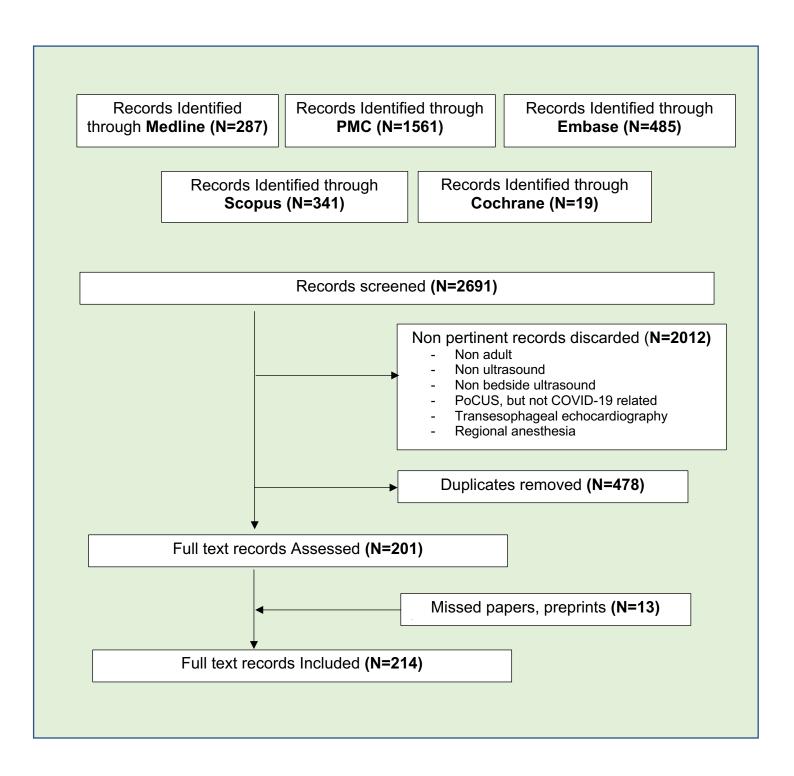


Ν	Family Name	Name	Gender	Country	Specialty
1	HUSSAIN	Arif	М	KSA	INTENSIVE CARE - ANESTHESIA
2	ALSAAWI	Abdulmohsen	М	KSA	EMERGENCY MEDICINE
3	SALAMAH	Majid	М	KSA	EMERGENCY MEDICINE
4	NERI	Luca	М	KSA	EMERGENCY MEDICINE
5	ARABI	Yaseen	М	KSA	INTENSIVE CARE
6	GRACI	Carmela	F	ITALY	PREHOSPITAL EMERGENCY MEDICINE
7	CORRADI	Francesco	М	ITALY	EMERGENCY MEDICINE
8	PIVETTA	Emanuele	М	ITALY	EMERGENCY MEDICINE
9	COPETTI	Roberto	М	ITALY	EMERGENCY MEDICINE
0	NAZERIAN	Peiman	М	ITALY	EMERGENCY MEDICINE
1	TAVAZZI	Guido	М	ITALY	INTENSIVE CARE - ANESTHESIA
2	MOJOLI	Francesco	М	ITALY	INTENSIVE CARE - ANESTHESIA
3	BENDJELID	Karim	М	SWITZERLAND	INTENSIVE CARE - ANESTHESIA
14	VIA	Gabriele	М	SWITZERLAND	INTENSIVE CARE - ANESTHESIA
5	NESKOVIC	Aleksandar N	M	SERBIA	CARDIOLOGY
6	PROSEN	Gregor	M	SLOVENIA	PREHOSPITAL EMERGENCY MEDICINE
7	BALIK	Martin	M	CZECK REPUBLIC	INTENSIVE CARE - ANESTHESIA
8	POELAERT	Jan	M	BELGIUM	INTENSIVE CARE - ANESTHESIA
9	MEINERI	Massimiliano	M	GERMANY	INTENSIVE CARE - ANESTHESIA
20	BREITKREUTZ	Roul	M	GERMANY	EMERGENCY MEDICINE
21	LAURSEN	Christian	M	DENMARK	PULMONOLOGY
22	BOUHEMAD	Belaid	M	FRANCE	INTENSIVE CARE - ANESTHESIA
23	PETROVIC	Tomislav	M	FRANCE	
24	ZIELESKIEWICZ	Laurent	M	FRANCE	
25	PRICE	Susanna	F	UK	
26	WONG	Adrian	M	UK	INTENSIVE CARE - ANESTHESIA
27	CONNOLLY	Jim	М	UK	EMERGENCY MEDICINE
28	NOGUE	Ramon	М	SPAIN	EMERGENCY MEDICINE
29	TUNG-CHEN	Yale	М	SPAIN	EMERGENCY MEDICINE
30	VILLEN	Tomas	М	SPAIN	EMERGENCY MEDICINE
31	WELLS	Mike	М	SOUTH AFRICA	EMERGENCY MEDICINE
32	GOFFI	Alberto	М	CANADA	INTENSIVE CARE
33	ROLA	Philippe	М	CANADA	EMERGENCY MEDICINE
34	MA	Irene	F	CANADA	INTERNAL MEDICINE
35	DENAULT	André	М	CANADA	INTENSIVE CARE - ANESTHESIA
36	HOPPMANN	Richard	М	USA	INTERNAL MEDICINE
37	NOBLE	Vicki	F	USA	EMERGENCY MEDICINE
88	DEAN	Anthony	М	USA	EMERGENCY MEDICINE
89	MELNIKER	Larry	М	USA	EMERGENCY MEDICINE
0	LANSPA	Micheal	М	USA	INTENSIVE CARE
11	LIU	Rachel	F	USA	EMERGENCY MEDICINE
2	NELSON	Brett	М	USA	EMERGENCY MEDICINE
13	PEREIRA	Elmo	М	BRASIL	INTENSIVE CARE
4	PAZELI	José	М	BRASIL	INTERNAL MEDICINE
5	CALDERON	Juan	М	MEXICO	INTENSIVE CARE
6	HURTADO	Laura	F	ARGENTINA	INTERNAL MEDICINE
17	MONTORFANO	Miguel	M	ARGENTINA	EMERGENCY MEDICINE
8	BLANCO	Pablo	M	ARGENTINA	INTENSIVE CARE
9	BARCA	Diego	M	ARGENTINA	EMERGENCY MEDICINE
0	RODRIGUEZ	Shalim	M	PERÚ	EMERGENCY MEDICINE
1	BRAVO-FIGUEROA	Pablo	M	CHILE	INTENSIVE CARE
2	KAMEDA	Toru	M	JAPAN	INTENSIVE CARE
3	LEE	Frances	M	SINGAPORE	EMERGENCY MEDICINE
3 4	OSMAN	Adi	M	MALAYSIA	EMERGENCY MEDICINE
55 10	ABDULWAHAB	Mahatar	M	MALAYSIA	
56 	XIAOTING	Wang	M	CHINA	
57	ZHEN	Wang	M	CHINA	
58	HA	Young-Rock	M	SOUTH KOREA	EMERGENCY MEDICINE
59	GOVIL	Deepak	M	INDIA	INTENSIVE CARE
60	ROYSE	Colin	M	AUSTRALIA	ANESTHESIA



## LITERATURE SEARCH

A literature search of Pubmed, Pubmed Central, Embase, Scopus and Cochrane library databases was conducted by 2 independent researchers for the period Jan 1st 2020-August 1<sup>st</sup> 2020 to identify all publications on point of care ultrasound in COVID-19 adult patients, using English language restriction, and the following MeSH query: (("lung" AND "ultrasound") OR "echocardiography" OR "Focused cardiac ultrasound" OR "point of care ultrasound" OR "venous ultrasound") AND ("COVID-19" OR "SARS-CoV2"). Non-pertinent findings were discarded. The references of relevant papers were also scanned for any missed paper. Duplicates were removed. An additional search of pre-print publications was made through ResearchGate, preprint online repositories and social medias.





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	Abramowicz JA. Abrams E.	WOFUMB POSITION STATEMENT HOW TO PERFORM A SAFE ULTRASOUND EXAMINATION AND CLEAN EQUIPMENT IN THE CONTEXT OF COVID-19 Lung Ultrasound in COVID-19	ULTRASOUND MED BIOL ACEP	2020 2020
3	Abrams ER.	POINT-OF-CARE ULTRASOUND IN THE EVALUATION OF COVID-19	J EMERG MED	2020
	Akl EA Alkafaji M.	Use of Chest Imaging in the Diagnosis and Management of COVID-19/ a WHO Rapid Advice Guide Visual Case Discussion. A Case of Lung Ultrasound Findings in a 73-year-old male with COVID-19	RADIOLOGY VIS J EMERG MED	2020 2020
6	Allinovi M.	Lung ultrasound may support diagnosis and monitoring of COVID-19 pneumonia	ULTRASOUND MED BIOL	2020
	Anile A Antunez-Montes OY.	COVID/ the new ultrasound alphabet in SARS-CoV-2 era RATIONALE FOR THE ROUTINE APPLICATION OF LUNG ULTRASOUND IN THE MANAGEMENT OF CORONAVIRUS DISEASE 2019 (COVID-19) PATIENTS IN MIDDLE- TO LOW-INCOME COUNTRIES	ANESTH ANALG ULTRASOUND MED BIOL	2020 2020
9	Antunez-Montes OY.	Routine use of Point-of-Care lung ultrasound during the COVID-19 pandemic	MED INTENSIVA	2020
11	Artifoni M. Avinash A.	Systematic assessment of venous thromboembolism in COVID-19 patients receiving thromboprophylaxis/incidence and role of D-dimer as predictive factors Lung Ultrasound in COVID-19	J THROMB THROMBOL AFR J EM MED	2020 2020
12	Baker K.	Lung ultrasound in a COVID pandemic - choosing wisely	AUSTRALAS J ULTRASOUND MED	2020
14	Bar S. Benchoufi M.	Association of lung ultrasound images with COVID-19 infection in an emergency room cohort Lung injury in patients with or suspected COVID-19 / a comparison between lung ultrasound and chest CT-scanner severity assessments, an observational study	ANAESTH medXRiv	2020 2020
15	Bhandari S.	Evaluation of Clinico-Radiological Profile and Correlation with Ultrasonography of the Chest in Coronavirus Disease 2019 Pneumonia	INDIAN J MED SPEC	2020
17	Bhayana R. Bhimji-Hewitt S.	Abdominal Imaging Findings in COVID-19/ Preliminary Observations Can the Use of Bedside Lung Ultrasound Reduce Transmission Rates in The Case of The COVID-19 Patient? - A Narrative Review	RADIOLOGY POCUS	2020
18	Bhoi S.	Point-of-care ultrasound in COVID-19 pandemic	POSTGRAD MED J	2020
20	Boero E. Bonadia N.	The role of lung ultrasonography in COVID-19 disease management Lung Ultrasound findings are associated with mortality and need of intensive care admission in COVID-19 patients evaluated in the Emergency Department	JACEP ULTRASOUND MED BIOL	2020 2020
21	Bom J.	POCOVID-Net/ AUTOMATIC DETECTION OF COVID-19 FROM A NEW LUNG ULTRASOUND IMAGING DATASET (POCUS) arXiv	arXiv	2020
23	Buda N. Buda N.	Consensus of the Study Group for Point-of-Care Lung Ultrasound in the intensive care management of COVID-19 patients Lung ultrasound in the diagnosis of COVID-19 infection - A case series and review of the literature	ANAESTHESIOL INTENSIVE THER ADVANC MED SCI	2020 2020
24	Buonsenso D.	Clinical role of lung ultrasound for the diagnosis and monitoring of COVID-19 pneumonia in pregnant women	ULTRASOUND OBSTET GYNECOL	2020
26	Buonsenso D. Buonsenso D.	COVID-19 outbreak; less stethoscope, more ultrasound Effectiveness of a 'fast lung ultrasound teaching program' for gynecologists/obstetricians dealing with pregnant women with suspicion of COVID-19 infection	LANCET RESP ULTRASOUND OBSTET GYNECOL	2020 2020
27	Buonsenso D. Cameli M.	Point-of-Care Lung Ultrasound findings in novel coronavirus disease-19 pnemoniae; a case report and potential applications during COVID-19 outbreak	EUR REV MED PHARMACOL SCI REV CARDIOVASC RES	2020
29	Chen L.	Safe performance of echocardiography during the COVID-19 pandemic_ a practical guide Novel Coronavirus-Induced Right Ventricular Failure and Point of Care Echocardiography; A Case Report	CARDIOLOGY	2020 2020
	Chliem A. Cho YJ.	Pick Up Your Probes A Call for Clinically Oriented Point-of-Care Ultrasound Research in COVID-19 Lung ultrasound for early diagnosis and severity assessment of pneumonia in patients with coronavirus disease 2019	J ULTRASOUND MED KOREAN J INTERN MED	2020 2020
	Chun-Hei Cheung J.	POCUS in COVID-19/ pearls and pitfalls	LANCET RESP MED	2020
33	Churchill TW. Consoli L.	Echocardiographic Features of COVID-19 Illness and Association with Cardiac Biomarkers 2019 novel coronavirus (COVID-19) pneumonia complications/ the importance of lung ultrasound	JASE J ULTRASOUND	2020 2020
35	Convissar D.	Application of Lung Ultrasound During the Coronavirus Disease 2019 Pandemic; A Narrative Review	ANESTHA ANALG	2020
36	Copetti R. Cosyns B.	First comes the A, then the B; what we learned from the COVID-19 outbreak The role of cardiovascular imaging for myocardial injury in hospitalized COVID-19 patients	EUR J INTERN MED EUR HEART J CARDIOVASC IMAGING	2020 2020
38	Cui S.	Prevalence of venous thromboembolism in patients with severe novel coronavirus pneumonia	J THROMB HAEMOST	2020
	Danzi GB. Dargent A.	Acute pulmonary embolism and COVID-19 pneumonia/ a random association? Lung ultrasound score to monitor COVID-19 pneumonia progression in patients with ARDS	EUR HEART J PLOS ONE	2020 2020
41	Davoodi L.	COVID-19 Presented With Deep Vein Thrombosis; An Unusual Presenting	J INVEST MED HIGH IMPACT CASE REP	2020
	Demelo-Rodriguez P. Denault AY.	Incidence of asymptomatic deep vein thrombosis in patients with COVID-19 pneumonia and elevated D-dimer levels A proposed lung ultrasound and phenotypic algorithm for the care of COVID-19 patients with acute respiratory failure	THROMB RES CAN J ANESTH	2020 2020
44	Deng Q.	Suspected myocardial injury in patients with COVID-19/ Evidence from front-line clinical observation in Wuhan, China	INTERN J CARDIOL	2020
	Deng Q. Di Serafino M.	Semiquantitative lung ultrasound scores in the evaluation and follow-up of critically ill patients with COVID-19/ a single-center study The lung ultrasound; facts or artifacts? In the era of COVID-19 outbreak	ACTA RADIOL RADIOL MED	2020 2020
47	Dong D.	The role of imaging in the detection and management of COVID-19; a review	IEEE XPLORE	2020
	Drake DH. Dubois-Silva A.	Echocardiography in Pandemic; Front-Line Perspective, Expanding Role of Ultrasound, and Ethics of Resource Allocation Pulmonary embolism and screening for concomitant proximal deep vein thrombosis in noncritically ill hospitalized patients with coronavirus disease 2019	JASE INTERNAL EM MED	2020 2020
50	Duclos G.	"No dose" lung ultrasound correlation with "low dose" CT scan for early diagnosis of SARS-COV-2 pneumonia	INTENSIVE CARE MED	2020
	Dudea S. Dugar S.	Ultrasonography and SARS-CoV 2 infection; a review of what we know and do not yet know Spontaneous echo contrast in venous ultrasound of severe COVID-19 patients	MED ULTRASON INTENSIVE CARE MED	2020 2020
53	Duggan NM.	BEST PRACTICE RECOMMENDATIONS FOR POINT-OF-CARE LUNG ULTRASOUND IN PATIENTS WITH SUSPECTED COVID-19	ULTRASOUND EM MED	2020
	Duggan NM. Dweck MR.	Using Lung Point-of-care Ultrasound in Suspected COVID-19; Case Series and Proposed Triage Algorithm Global evaluation of echocardiography in patients with COVID-19	CLIN PRACT CASES EM MED EUR HEART J CARDIOVASC IMAGING	2020 2020
56	Farrow II R. Fiala M.I.	Early Multi-organ Point-of-Care Ultrasound Evaluation of Respiratory Distress During SARS-CoV-2 Outbreak; Case Report	CLIN PRACT CASES EM MED	2020
58	Flower L.	Ultrasound in COVID-19; a timeline of ultrasound findings in relation to CT The Use of Point-of-Care Lung Ultrasound and Echocardiography in the Management of Coronavirus Disease 2019 (COVID-19)	J CARDIOTHORAC VASC ANESTH	2020
	Fox S. Gackowski A.	Point-of-care ultrasound and COVID-19 Echocardiography during the coronavirus disease 2019 (COVID-19) pandemic; expert opinion of the Working Group on Echocardiography of the Polish Cardiac Society	CLEV CLIN MED J KARDIOLOGIA POLSKA	2020 2020
61	Gargani L.	Why, when, and how to use lung ultrasound during the COVID-19 pandemic/ enthusiasm and caution	EUR HEART J CV IMAGING	2020
	Glannini A. Goldsmith AJ.	Lung ultrasound for pregnant women admitted to ICU for Covid-19 pneumonia Remodeling Point-of-care Ultrasound Education in the Era of COVID-19	MINERVA ANEST AEM EDU AND TRAINING	2020 2020
64	Gravell RJ.	Radiological manifestations of COVID-19; key points for the physician	BR J HOSP MED	2020
66	Guarracino F. AIUM	Lung, Heart, Vascular, and Diaphragm Ultrasound Examination of COVID-19 Patients; A Comprehensive Approach Guidelines for Cleaning and Preparing External- and Internal-Use Ultrasound Transducers and Equipment Between Patients as well as Safe Handling and Use of Ultrasound Coupling Gel	J CARDIOTHOR VASC ANESTH AIUM	2020 2020
67	Haaksma ME.	LUS findings in patients with novel SARS-CoV2	medXRiv	2020
	Hankins A. Hasanin A.	Point of care lung ultrasound is useful when screening for CoVid-19 in Emergency Department patients Evaluation of fluid responsiveness during COVID-19 pandemic/ what are the remaining choices?	medXRiv J ANESTH	2020 2020
70	Heldeweg M. Helms J.	Lung ultrasound and computed tomography to monitor COVID-19 pneumonia in critically ill patients/ a two-center prospective cohort study High risk of thrombosis in patients in severe SARS-CoV-2 infection; a multicenter prospective cohort study	RES SQUARE preprint INTENSIVE CARE MED	2020 2020
72	Hu H.	Coronavirus fulminant myocarditis treated with glucocorticoid and human immunoglobulin	EUR HEART J	2020
73	Hua A. Huang J.	Life-threatening cardiac tamponade complicating myo-pericarditis in COVID-19 Development of a COVID-19 Point-of-Care Ultrasound Protocol	EUR HEART J JASE	2020 2020
75	Huang Y.	A preliminary study on the ultrasonic manifestations of peripulmonary lesions of non-critical novel coronavirus pneumonia (COVID-19)	medXRiv	2020
77	Inchingolo R. Inciardi RM.	The diagnosis of pneumonia in a pregnant woman with coronavirus disease 2019 using maternal lung ultrasound Cardiac Involvement in a Patient With Coronavirus Disease 2019 (COVID-19)	AM J OBSTETRICS JAMA CARDIOL	2020 2020
78	Jain SS.	Indications and Findings on Transthoracic Echocardiography in COVID-19	JASE	2020
	Johri AM. Jung EM.	ASE Statement on PoCUS in COVID-19 Contrast enhanced ultrasonography (CEUS) to detect abdominal microcirculatory disorders in severe cases of COVID-19 infection; First experience	JASE CLIN HEMORHEOL MICROCIRC	2020 2020
81	Kalafat E.	Lung ultrasound and computed tomographic findings in pregnant woman with COVID-19	ULTRASOUND OBSTET GYNECOL	2020
83	Kaminski A. Kariyanna PT.	Answering to the Call of Critically III Patients/ Limiting Sonographer Exposure to COVID-19 with Focused Protocols Apical Takotsubo Cardiomyopathy in a COVID-19 Patient Presenting with Stroke; A Case Report and Pathophysiologic Insights	JASE AM J MED CASE REPORTS	2020 2020
84	Kariyanna PT.	Thrombus in Transit and Impeding Pulmonary Embolism Detected on POCUS in a Patient with COVID-19 Pneumonia Lunu Ultrasound in COVID-19 Pneumonia; Prospects and Limitations	AM J MED CASE REPORTS	2020
86	Khalili N. Kiamanesh O.	Lung Ultrasound for Cardiologists in the Time of COVID-19	ACADEMIC RADIOLOGY CAN J CARDIOL	2020 2020
87	Kim DJ.	Just the facts_recommendations_on_pointofcare_ultrasound_use_and_machine_infection_control_during_the_coronavirus_disease_2019_pandemic Lung ultrasonography in a woman with COVID-19/ This examination could be remote	CJEM	2020
89	Kirkpatrick AW. Klok FA.	Incidence of thrombotic complications in critically ill ICU patients with COVID-19	CMAJ THROMB RES	2020 2020
	Koleialat I. Koratala A.	Clinical characteristics of acute lower extremity deep venous thrombosis diagnosed by duplex in patients hospitalized for coronavirus disease 2019 Need for Objective Assessment of Volume Status in Critically III Patients with COVID-19; The Tri-POCUS Approach	J VASC SURG VEN LYMPH DISORDERS CARDIORENAL MED	2020 2020
92	Kraemer AXE.	POCUS series; point-of-care lung ultrasound in patients with COVID-19	NETH J CRIT CARE	2020
93	Kulkami S. Kumar A.	Point-of-care lung ultrasound in intensive careduring the COVID-19 pandemic Lung Ultrasound Findinas in Patients Hospitalized with Covid-19	CLIN RADIOL medXRiv	2020 2020
95	Lazzeri C.	Pulmonary embolism and screening for concomitant proximal deep vein thrombosis in noncritically ill hospitalized patients with coronavirus disease 2019	INTERNAL EM MED	2020
96 97	Lepri G. Li J.	The emerging role of lung ultrasound in COVID-19 pneumonia Response to letter to the editor/ "Lung Ultrasound early detection and monitoring in Covid-19 Pneumonia; fact and fiction"	EUR J RHEUMATOLOGY QJM	2020 2020
98	LI J.	Serial bedside lung ultrasonography in a critically ill COVID-19 patient	QJM	2020
	Liu R. Liu X.	Ultrasound on the Frontlines of COVID-19/ Report From an International Webinar Critical Care Ultrasonography and Its Application for COVID-19	ACAD EMERG MED ADV ULTRASOUND DIAG THER	2020 2020
101	Llitjos JF.	High incidence of venous thromboembolic events in anticoagulated severe COVID-19 patients	J THROMB HAEMOST	2020
	Lodigiani C. Lomoro P.	Venous and arterial thromboembolic complications in COVID-19 patients T admitted to an academic hospital in Milan, Italy COVID-19 pneumonia manifestations at the admission on chest ultrasound, radiographs, and CT; single-center study and comprehensive radiologic literature review	THROMB RES 2020 EUR J RADIOL OPEN	2020 2020
104	Longchamp A.	Venous thromboembolism in critically III patients with COVID-19/ Results of a screening study for deep vein thrombosis	RES PRACT THROMB HAEMOST	2020
106	Lu W. Lu W.	A Clinical Study of Noninvasive Assessment of Lung Lesions in Patients with Coronavirus Disease-19 (COVID-19) by Bedside Ultrasound Response to Letter to the editor/Lung Ultrasound in COVID-19 Patients – More Shadows Than Information – Letter to the Editor on the Article "W. LU et al. Ultraschall in Med. 2020 Apr 15	ULTRASCHALL MED ULTRASCHALL MED	2020 2020
107	Ma IWY.	Canadian Internal Medicine Ultrasound (CIMUS) Recommendations Regarding Internal Medicine Point-of-Care Ultrasound (POCUS) use during Coronavirus (COVID-19) pandemic	CAN J GEN INTERN MED ADVANCED ULTRASOUND DIAG THER	2020
0.00	Ma J. Manivel V.	Critical Care Ultrasound_ A Necessary and Mandatory Tool for Novel Coro-navirus Pneumonia CLUE/ COVID-19 Lung Ultrasound in Emergency Department	EMERG MED AUSTRALAS	2020 2020
109	Mathews BK.	Clinical Progress Note/ Point-of-Care Ultrasound Applications in COVID-19 Combatting COVID-19: Is Ultrasound an Important Piece in the Diagnostic Puzzle?	J HOSP MED RESEARCHGATE Preprint	2020 2020
109 110	McDermott C.			
109 110 111 112	McMahon SR.	Tablet-Based Limited Echocardiography to Reduce Sonographer Scan and Decontamination Time during the COVID-19 Pandemic	JASE	2020
109 110 111 112 113		Tablet-Based Limited Echocardiography to Reduce Sonographer Scan and Decontamination Time during the COVID-19 Pandemic Current Concepts Imaging in COVID-19 and the Challenges for Low and Middle Income Countries Incidence of venous thromboembolism in hospitalized patients with COVID-19	JASE J GLOBAL RADIOL J THROMB HAEMOSTH	2020 2020 2020
109 110 111 112 113 114 115	McMahon SR. Mendel J.	Current Concepts Imaging in COVID-19 and the Challenges for Low and Middle Income Countries	J GLOBAL RADIOL	2020



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118 N	fiddeldorp S.	Incidence of venous thromboembolism in hospitalized patients with COVID-19 - J THROMB HAEMOSTH 2020.pdf	J THROMB HAEMOSTH	2020
119 N	lojoli F.	Our recommendations for acute management of COVID-19	CRIT CARE	2020
	foller-Sorensen H. fongodi S.	COVID-19 Assessment with Bedside Lung Ultrasound in a Population of Intensive Care Patients Treated with Mechanical Ventilation and ECMO LUNG ULTRASOUND IN PATIENTS WITH ACUTE RESPIRATORY PALLURE REPORTONAL IMAGING AND HEALTH CARE PROVIDER EXPOSURE TO COVID-19	DIAGNOSTICS ULTRASOUND MED BIOL	2020 2020
122 N	Noore S.	Point of care and intensive care lung ultrasound; A reference guide for practitioners during COVID-19	RADIOGRAPHY	2020
123 N 124 N		Prevention, Diagnosis, and Treatment of VTE in Patients With Coronavirus Disease 2019 CHEST Guideline and Expert Panel Report How to perform lung ultrasound in prognant women with suspected COVID-19 - ULTRASOUND DESTET GYNECOL 2020.pdf	CHEST ULTRASOUND OBSTET GYNECOL	2020 2020
		Trev to perform any autosound in pregnant woment wan suspected COVID-19 - OL INACOUND OSIELT OTNECOL 2220-001 Frequency of Abnormalities Detected by Point-of-Care Lung Ultrasound in Symptomatic COVID-19 Patients' Systematic Review and Meta-Analysis	AM J TROP MED HYG	2020
		Venous Thrombosis Among Critically III Patients With Coronavirus Disease 2019 (COVID-19)	JAMA NETWORK OPEN	2020
		Deep venous thrombosis in a non-critically III patient with novel COVID-19 infection Specific Considerations for the Protection ofPatients and Echocardiography ServiceProviders When Performing Perioperative orPeriprocedural TransesophagealEchocardiography during the 2019 NovelCoronavir.	THROMB RES JASE	2020 2020
	louvenne A.	Specific Considerations for the Procession of a series and calculatiography denote horizons minimed reforming Periodenaive or enviced and reasoning each object and graphy during the 2 of a revelocition and calculation of a control in COVID-19 Photomonic Correlations with Chest CT on Hospital admission	RESPIRATION	2020
130 C		Practical diagnosis and treatment of suspected venous thromboembolism during COVID-19 Pandemic	J VASC SURG VEN LYMPH DIS	2020
131 C		Routine use of Point-of-Care lung ultrasound during the COVID-19 pandemic COVID-19 - More Lung Pocus and Sparing Use of Stathscope, Chest X-Ray and Lung CT	MED INTENSIVA PRAXIS	2020 2020
		The role of echoardiography in SARS-CoV-2 pandemic; a compromise among appropriateness, safety and clinical impact	MONALDI ARCH CHEST DIS	2020
		Daily Evaluation of COVID-19 Patients Primarily Based on Lung Ultrasound/ In Times of Emergency, It's Time to Change Some Paradigms	AM J TROP MED HYG	2020
135 P		Point-of-care Lung Ultrasound is More Sensitive than Chest Radiograph for Evaluation of COVID-19 The evolution of ultrasound role in COVID-19 pandemic/from triage to screening	ANEST J EM MED	2020 2020
137 P	ata D.	Chest Computed Tomography and Lung Ultrasound Findings in COVID-19 Pneumonia; A Pocket Review for Non-radiologists	FRONT MED	2020
138 P		Lung ultrassound in a Singapore COVID-19 intensive care unit patient and a review of its potential clinical utility in pandemic	JULTRASOUND	2020
		Accuracy of Emergency Department Clinical Findings for Diagnosis of Coronavirus Disease 2019 Echocardiography in the Time of COVID-19	ANN EM MED JASE	2020 2020
141 P		Clarifying the role of lung ultrasonography in COVID-19 respiratory disease	CMAJ	2020
		The Utrasound-Guided Triage/ A New Tool for Prehospital Management of COVID-19 Pandemic	ANESTH ANALG	2020
143 P 144 P		Benefits, Open questions and Challenges of the use of Ultrasound in the COVID-19 pandemic era. The views of a panel of worldwide international experts Lung ultrasound for the diagnosis of SARS-CoV-2 pneumonia in the Emergency Department	ULTRASCHALL MED ANN EMERG MED	2020 2020
	oggiali E.	Can Lung US Help Critical Care Clinicians in the Early Diagnosis of Novel Coronavirus (COVID-19) Pneumonia?	RADIOLOGY	2020
		Triage decision-making at the time of COVID-19 infection/ the Placenza strategy	INTERN EM MED	2020
147 C		A valuable and affordable handheld ultrasound in combating COVID-19 Findings of lung ultrasonography of novel corona virus pneumonia during the 2019–2020 epidemic	CRIT CARE INTENSIVE CARE MED	2020 2020
	≀ian-Yi P.	Using echocardiography to guide the treatment of novel coronavirus pneumonia	CRIT CARE	2020
		Point of Care Ultrasound During the Covid-19 Pandemic Should Screen for Inter-Artial Shunt	ADVANCED ULTRASOUND DIAGN THER	2020
151 R		Lung ultrasound/ a valuable tool for the assessment of dialysis patients with COVID-19 Extremely High Incidence of Lower Extremity Deep Venous Thrombosis in 48 Patients With Severe COVID-19 in Wuhan	CLIN EXPERIM NEPHROL CIRCULATION	2020 2020
152 R		Extensity migrimulation of Lower Extensity Deep vehicles in non-zero term in Severe Covid-16 in Wullah Computed forwards with the control of the severe covid-16 in Wullah	J AM COLL EM PHYS OPEN	2020
154 R	loy S.	Deep Learning for Classification and Localization of COVID-19 Markers in Point-of-Care Lung Ultrasound	IEEE TRANSACT MED IMAGING 2020	2020
	lubulotta F. antiago M.	Technologies to Optimize the Care of Severe Coronavirus Disease 2019 Patients for Health Care Providers Challenged by Limited Resources Use of US to execute diagnosise of PE in COVID-19 Patient Use of US to execute diagnosise of PE in COVID-19 Patient	ANESTH ANALG VISUAL J EM MED	2020 2020
	antoliquido A.	Des of the to expende dagross of the income the income of the analysis of the income o	J THROMB HAEMOSTH	2020
		Challenges and Opportunities for Lung Ultrasound in Novel Coronavirus Disease (COVID-19)	AM J TROP MED HYG	2020
159 S 160 S		Vascular access in COVID-19 patients; Smart decisions for maximal safety Lung Utrasound in COVID-19; Not Novel, but Necessary	J VASC ULTRASOUND RESPIRATION	2020 2020
		Lung Unassound monitoring in patients with COVID-19, not necessary	AM J EM MED	2020
		Whole body point-care ultrasound for COVID-19/ a multi-system approach to a multi-system disease	ANAESTHESIA	2020
		Should point-of-care ultrasound become part of healthcare worker testing for COVID?	ROYAL COLLEGE PHYS	2020
	margiassi A. mith MJ.	Lung ultrasonography for early management of patients with respiratory symptoms during COVID-19 pandemic Point-of-care lung ultrasound in patients with COVID-19 - a natrive review	J ULTRASOUND ANAESTHESIA	2020 2020
166 S	occorsa S.	Thoracic ultrasound and SARS-COVID-19; a pictorial essay	J ULTRASOUND	2020
167 S		Rational and practical use of imaging in COVID-19 pneumonia	PAK J MED SCI 2020	2020
		Contrast-Enhanced Ultrasound in Patients With COVID-19 Pherumonia, Acute Respiratory Distress Syndrome, or Something Else? On Lung Ultrasound Patterns Specificity in the Management of COVID-19 Patients On Lung Ultrasound Patterns Specificity in the Management of COVID-19 Patients	J ULTRASOUND MED	2020 2020
		Proposal for international standardization of the use of lung ultrasound for COVID-19 patients; a simple, quantitative, reproducible method	J ULTRASOUND MED	2020
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