

Lung Basics Supporting Literature:

General Information: Many specialties are now incorporating lung ultrasound into specific scenarios faced by each one in routine basis. Several new studies over the past ten years with growing terminologies with differences in evaluation, approach, nomenclature, and techniques of evaluation have led to international evidence based recommendations for point of care lung ultrasound [1]. Many times transportation of emergently ill patients is impossible and the ability to evaluate the lung at bedside can be very helpful in decision making for the treatment plan. Each of the individual applications below will be discussed and then combined to form the basis of evaluation of patients in shock from hypoxia or respiratory failure. The ‘BLUE’ protocol and “ICU Sound” protocol both found that diagnostic accuracy of lung ultrasound to differentiate dyspneic patients is increased greatly [2, 3].

[1]. Volpicelli, G., Elbarbary, M., Blaivas, M., Lichtenstein, D. A., Mathis, G., Kirkpatrick, A. W., ... & Petrovic, T. (2012). International evidence-based recommendations for point-of-care lung ultrasound. *Intensive care medicine*, 38(4), 577-591.

[2]. Manno E, Navarra M, Faccio L, Motevallian M, Bertolaccini L, Mfochive A, Pesce M, Evangelista A. Deep Impact of Ultrasound in the Intensive Care Unit: The ICU sound protocol. *Anesthesiology* V 117 No 4; 2012: 117:801-809

[3]. Lichtenstein, D. A., & Meziere, G. A. (2008). Relevance of Lung Ultrasound in the Diagnosis of Acute Respiratory Failure The BLUE Protocol. *CHEST Journal*, 134(1), 117-125.