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Methods for studying pulmonary lymphatics

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The pulmonary lymphatics are critical for proper lung function, yet seldom considered in lung pathology. Newer and more convenient methods for studying lung lymphatics are now available and might create new diagnosis and treatment opportunities. <https://bit.ly/3ldJGeo>

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The pulmonary lymphatic system comprises a vast network of lymph vessels and lymph nodes that unite the interstitial space with the vascular system, serving an essential role in fluid balance and immune response [1]. Although ubiquitous in the lung parenchyma and mandatory for normal physiology, pulmonary lymph vessels are often not considered when describing the pathophysiology of pulmonary diseases [2]. In the past, the study of pulmonary lymphatics represented a difficult challenge due to their small size, thin walls, variable routes, complex interconnections and the lack of reliable identification techniques. Advances in many areas now allow for more precise and less complicated identification of lymph vessels in the pulmonary parenchyma. Consequently, they permit the study of the role of lymph vessels in pathological states and their potential role as a therapeutic target or route to deliver therapeutics to manage respiratory diseases. We aim to outline a few key methods that have been used to study pulmonary lymph vessels.

