



# Introduction

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Interstitial lung disease (ILD) describes a very comprehensive variety of pulmonary disorders of differing aetiology. As ILD can affect all the compartments of the lung and usually affect both lungs, they are also termed diffuse parenchymal lung disease. More specifically, an ILD is understood as a diffuse lung disorder arising on an inflammatory or fibro-proliferative basis, or a combination of both. In addition, tumorous and infectious lung diseases may also mimic diffuse pulmonary disorders, and it is sometimes difficult to distinguish these from other inflammatory and fibrotic processes.

The recognition of specific entities in the vast forms of ILD is not straightforward, and it requires the ability to combine individual clinical, laboratory, radiological and histopathological findings. Based on this combination one can determine either the definitive diagnosis or at least the character of the lung disorder, and thus significantly narrow the differential diagnosis. The topic of ILDs has until recently attracted only fans with an interest in unexplored, problematic and unusual cases, as treatment for many of these diseases was unavailable. In addition, there was a general awareness that they were uncommon or even a rare diagnosis. However, if the possibility of an ILD is taken into account when considering the symptoms that lead to a differential of pulmonary disease, we then suddenly find more cases that would have otherwise been missed, or possibly mistaken for another diagnosis, often until the death of the patient. The breakthrough of treatment for one of the most serious interstitial diseases, idiopathic pulmonary fibrosis (IPF), has escalated an interest in these diseases amongst professionals and in the general public. It was soon discovered that there was a lack of experts involved with these disorders amongst respiratory physicians, radiologists and pathologists. Thanks to the fact that there are still enthusiasts in the field of medicine who are attracted by the unexplored, and who

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want to learn new things, a network of pneumological departments dealing with patients with ILD was formed. Furthermore, pneumologist began to search for enthusiast within their radiology and pathology counterparts to fulfil the philosophy of a multidisciplinary approach.

It is important to note that it is the radiological findings of diffuse pulmonary disease that are essential for directing us towards the correct diagnosis or being diagnostic in itself. However, for the radiological findings to be accurate and evaluated effectively, radiologist need intensive and long-term training, though it is appreciated that they have multiple other radiological interpretations to analyse other than the lungs or specifically ILD. Nevertheless, the most enthusiastic radiologists have learned the most and then taught us respiratory physicians in return as part of the multidisciplinary approach.

This book is structured and targeted to guide both radiologists and pneumologist. In the overview, it reveals the key in recognition and differential diagnosis when studying radiological findings of an ILD. Further, clinical-radiological cases demonstrate the role of a multidisciplinary approach, with an emphasis on the evaluation of radiological findings in practice.