The development of an inhalation product is an interdisciplinary team exercise. The cooperation between different disciplines such as Chemistry, Pharmacology, Physics, Medicine and Engineering is a critical success factor for the development of a new product. In the course of the presentation an overview on key respiratory diseases, treatment concepts and existing types of inhalation products will be given. Beside the key question how to transport the active pharmaceutical ingredient to the receptors in the lung and how to achieve a high lung deposition, a special focus will be spent on the interface between pharmaceutical and clinical development. By means of selected examples the respective challenges for the different disciplines will be illustrated.