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# ADDRESSING THE UNMET NEED IN RESPIRATORY VIRUSES

An interdisciplinary analysis of product  
development pipeline in Asia

## Colophon

Title: Addressing the unmet need in respiratory viruses: an interdisciplinary analysis of product development pipeline in Asia.

Key words: respiratory tract infections, non-influenza respiratory viruses, respiratory diagnostics, patents, clinical trials (CTs).

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# Abstract

**Background:** Respiratory tract infections (RTIs) pose a significant burden on health systems worldwide. Progress has been booked in reducing RTI disease burden through development of diagnostics, therapeutics and vaccines, though most efforts often fail to address the contribution of non-influenza viruses. Increasing awareness and the prevailing unmet need has resulted in the establishment of initiatives that aim to explore ways in which to extend innovation efforts for influenza to the broad range of respiratory viruses. This study will provide a detailed description of the state of the RTI market in Asia.

**Methods:** By developing a dataset containing data from patent documents and clinical trials (CTs) we aimed to provide a detailed description of the RTI market in Asia.

**Results:** We found a downward patent filing trend in respiratory diagnostics but a high number of phase 3 studies. A strong preference for the development of therapeutics and vaccines targeting bacterial pneumonia and influenza became apparent, whereas less attention is given towards product development targeting non-influenza viruses.

**Conclusions:** The findings indicate a mature respiratory diagnostics market with minor industrial interest but at the same time an evolving RTI CT market with a strong late-stage pipeline. Asia represents only a handful of studies related to non-influenza viruses, mostly conducted by non-profit organisations. The business segment appears to focus upon product development for more profitable respiratory infections thereby suggesting that involvement and engagement of the industry within global initiatives and efforts to increase innovation for non-influenza viruses is not optimal.

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