

## Special Issue

# Molecular Perspectives in Lung Diseases: Pathogenesis, Diagnosis, and Treatment

### Message from the Guest Editor

This Special Issue focuses on the intricate molecular mechanisms underlying lung diseases, with a focus on pathogenesis, diagnosis, and treatment. We aim to explore cutting-edge research on lung cancer models, cancer stem cells, and the tumor microenvironment. Our interests span a wide array of molecular and cellular aspects, including the role of BMI1 in cancer stem cell regulation, the use of murine models to study disease progression and resistance to therapy, and the application of single-cell RNA sequencing (scRNAseq) and spatial transcriptomics to uncover novel targeting strategies. We also emphasize the importance of gene regulation, transcription factors, miRNAs, single-cell interaction networks, as well as KRAS and EGFR mutations, among others, in lung cancer biology. This Issue aims to provide a comprehensive overview of the current state of lung disease research and highlight the potential personalized medicine options. We invite contributions that offer new perspectives and innovative approaches to understanding and treating lung diseases.

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### Guest Editor

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### Deadline for manuscript submissions

closed (20 November 2025)



## International Journal of Molecular Sciences

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### Message from the Editor-in-Chief

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