Special Issue

Optimizing Aerosol Therapy: Strategies for Pulmonary Drug Delivery

Message from the Guest Editors

Aerosol therapy delivers drugs directly to the lungs, offering rapid onset, improved efficacy, fewer side effects, and better patient compliance. It is especially effective for pulmonary diseases and infections but can also enable systemic delivery of biologics and vaccines. However, optimizing aerosol therapy involves challenges, including formulation development, inhalation device advancement, and translating lab findings to clinical practice. This Special Issue of *Pharmaceutics*, 'Optimizing Aerosol Therapy: Strategies for Pulmonary Drug Delivery', focuses on innovative solutions and recent advances. We invite original research, reviews, and perspectives on topics like:

- Novel formulations and particle engineering for inhaled drugs, biologics, and vaccines;
- Advances in inhalation devices and aerosol generation;
- Analytical tools, modeling, and bioequivalence for aerosol performance;
- Clinical, patient-centric, and regulatory aspects of inhaled therapies.

By bringing together experts across fields, this Special Issue aims to deepen understanding and accelerate the development of next-gen pulmonary drug delivery systems. We look forward to your contributions!

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Editor-in-Chief

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