

Air³Gel

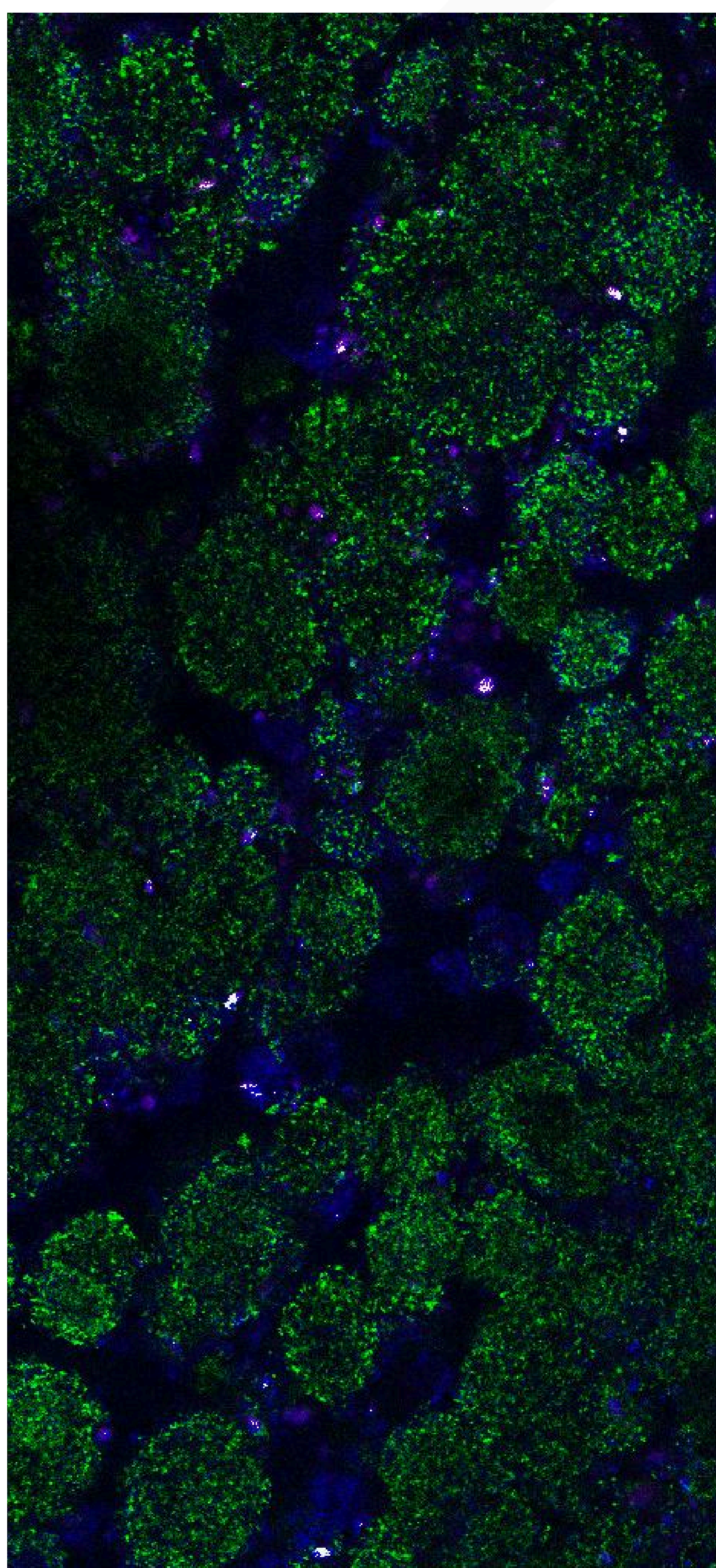
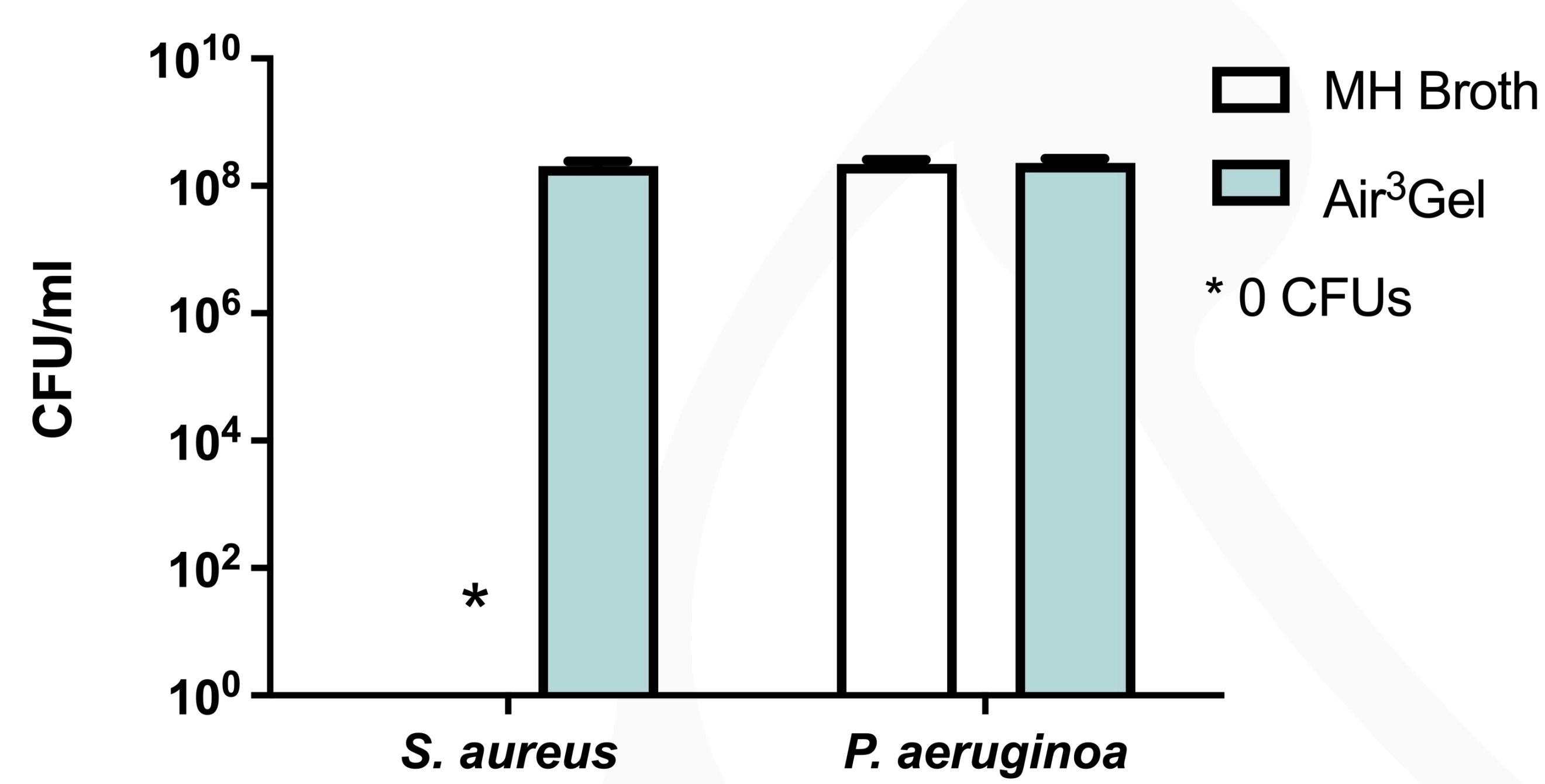
Advanced In Vitro Model for Airway Microbiota Culture

Air³Gel is a cutting-edge 3D in vitro model of the airway mucus layer that enables the representative study of airway microbiota dynamics and drug permeability assessment.



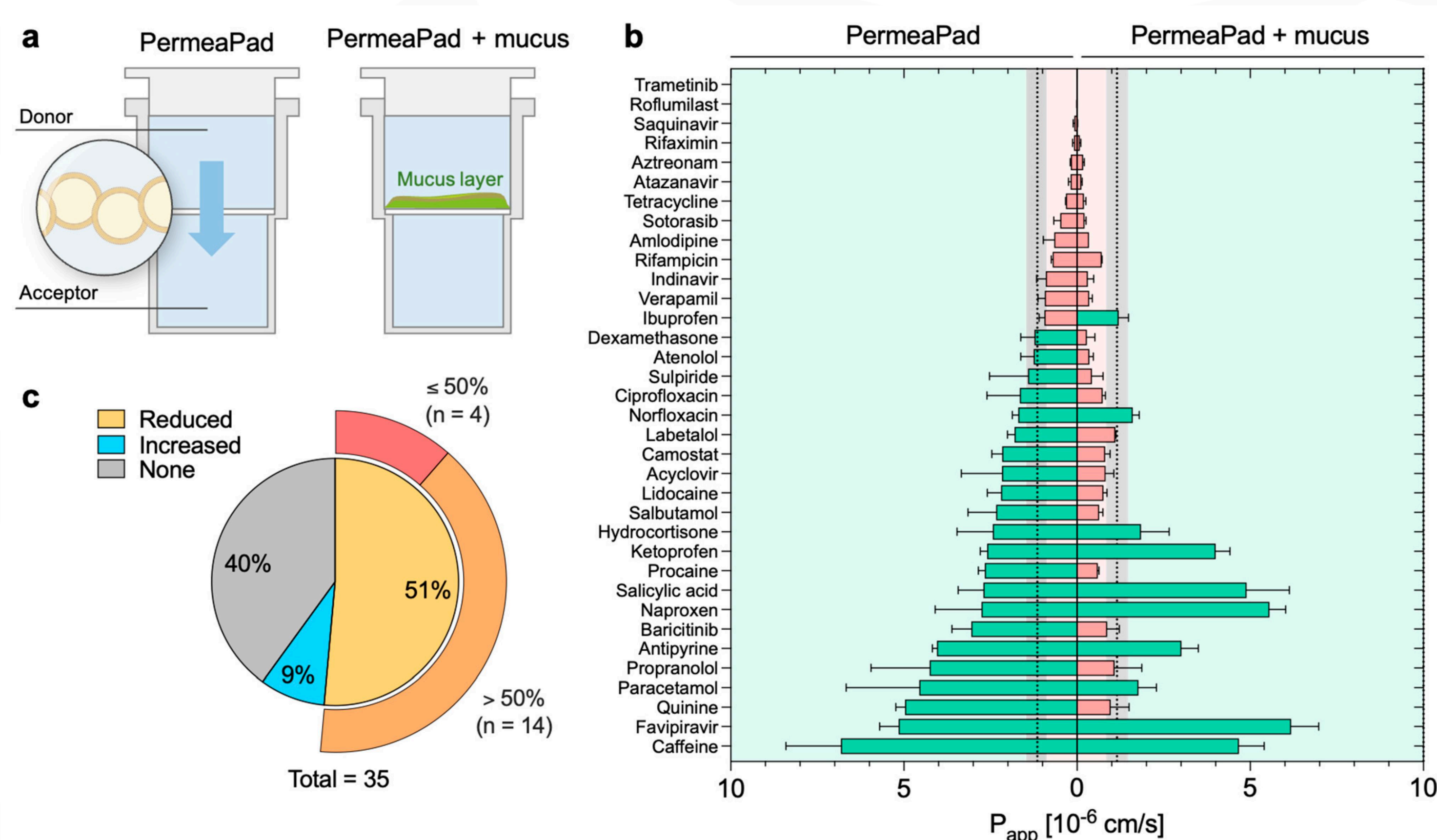
Key Features

- **Physiologically Relevant:** Replicates airway mucus properties, as chemical composition, nutrient content, and viscoelasticity.
- **Condition-Specific:** Available in physiological and cystic fibrosis-like formulations.
- **Microbiota-Friendly:** Supports growth of key species (e.g., *Pseudomonas aeruginosa*, *Staphylococcus aureus*, and *Klebsiella pneumoniae*).
- **Lab-Compatible:** Ready for standard equipment and high-throughput setups.



Like in the human body, competitive bacteria coexist in Air³Gel, which is not seen in traditional media.

This manuscript is available in the following [link](#).



The presence of Air³Gel led to the reduction of diffusion of 51% of tested drugs, but also increased the permeability of 9% of tested molecules.

This manuscript is available in the following [link](#).

Applications

- Evaluation of the efficacy of antimicrobial agents, probiotics, and prebiotics.
- Evaluate the permeability of drug across the airway mucus.
- Development of personalised therapies for conditions like cystic fibrosis.

Interested in knowing more about Vag³Gel? Contact us at contact@bac3gel.com or visit www.bac3gel.com