

## Technology Development Board supports startup to redefine pneumonia treatment

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### Novel technology represents a paradigm shift in antibiotic delivery



The Technology Development Board (TDB), Department of Science and Technology, Government of India, has extended support to Aadh Lifesciences, based in Hyderabad, for development of Indigenous Antibiotic Nebulisation Suspension for Pneumonia (AONEUM-04) and Antimicrobial Resistance (AMR).

The novel technology represents a paradigm shift in antibiotic delivery. Unlike conventional oral or intravenous therapies, AONEUM-04 enables direct, localized delivery of Antibiotic through nebulization, ensuring higher drug concentration at the site of infection in the lungs while reducing systemic side effects. Its unique formulation combines sustained release, strong mucoadhesion, and biofilm disruption capabilities, thereby enhancing efficacy and reducing the likelihood of antibiotic resistance. This makes it particularly relevant for India, where pneumonia is a leading cause of child mortality and AMR is a fast-emerging healthcare crisis.

The innovation has successfully cleared pre-clinical trials and will undergo Phase III clinical trials before commercialisation. With a demonstrated ability to improve treatment compliance and affordability, the technology holds promise not only for India but also for global markets.

Rajesh Kumar Pathak, Secretary, TDB, said, "This project represents a significant stride in addressing pneumonia and

antimicrobial resistance, two pressing healthcare challenges in India and worldwide. By supporting indigenous innovation like AONEUM-04, TDB is reinforcing India's capability to deliver affordable, scalable, and globally relevant healthcare solutions."

The promoters of Aodh Lifesciences added, "With TDB's support, we are poised to advance AONEUM-04 through final clinical trials and bring a truly patient-centric antibiotic therapy to market. Our mission is to make effective, safe, and affordable treatments accessible to the masses while contributing to the global fight against antimicrobial resistance."