



Carlisle

Surface tack reduction in uncured rubber sheet processing

Industrial materials

Background

Allergic rhinitis—triggered by airborne irritants such as pollen, dust mites, mold, and pet dander—causes congestion, sneezing, rhinorrhea, and ocular itching that disrupt sleep and productivity. Current over-the-counter options (oral antihistamines, decongestants, intranasal sprays) can be slow to act, sedating, or difficult to use consistently, leading to poor adherence and sub-optimal control. Advances in drug formulation, digital health, and materials science create an opportunity to reinvent consumer-friendly therapies that combine rapid, durable efficacy with personalized guidance, minimal side effects, and environmentally responsible design.

What we're looking for

We are looking for technology-driven OTC solutions that deliver rapid, sustained relief from allergic rhinitis while improving user adherence, safety, and overall experience.

Solutions of interest include:

- Muco-adhesive nasal mists or gels
- Rapid-dissolving oral films/tablets with non-sedating antihistamines
- Skin or nasal micro-patches enabling timed trans-mucosal delivery
- Dry-powder or soft-mist inhalers targeting the upper airway only
- Drug-free barrier sprays or nasal filters with proven allergen blocking
- AI-enabled mobile apps for symptom tracking & dose reminders
- Wearable or IoT sensors that link pollen counts to adaptive dosing
- Modular platforms that allow easy add-on of new actives or data services
- Portable vibrating-mesh nebulizers for targeted nasal deposition

Our must-have requirements are:

- Clinically supported onset of action ≤ 15 min and duration ≥ 8 hr
- Demonstrated or strongly reasoned safety profile for adolescent (13+) and adult use
- User-friendly design enabling accurate self-administration in ≤ 3 steps

Our nice-to-have's are:

- Manufacturable at a commercial scale
- Non-drowsy
- Refillable, propellant-free devices using plant-based or PCR plastics
- Demonstrated or strongly reasoned pediatric safety

What's out of scope:

- Prescription-only biologics or allergen immunotherapy regimens
- Systemic corticosteroid products requiring medical supervision
- Invasive implantable or surgically placed devices
- Solutions dependent on cold-chain distribution or single-use propellants
- Complex medical devices that are difficult to use at home
- Technologies requiring health care provider supervision

Acceptable technology readiness levels (TRL): Levels 4-9

1. Basic principles observed
2. Concept development
3. Experimental proof of concept
4. Validated in lab conditions
5. Validated in relevant environment
6. Demonstrated in relevant environment
7. Regulatory approval
8. Product in production
9. Product in market

What we can offer you

- Eligible partnership models:
 - Sponsored research
 - Licensing
 - Supply/purchase
 - Co-development

Benefits:

Sponsored Research

Funding is proposal-dependent, starting with a proof-of-concept project that has the potential for expansion based on results and opportunities. The funding range is typically from \$25,000 to \$100,000 for a six-month project.

Expertise

We also offer the expertise of our team of scientists for collaboration and guidance during the project's development. Possible partnerships with us include, but are not limited to, sponsored research, joint development, supply, consulting, and licensing.

Who we are

Our global team is dedicated to developing and collaborating on future-facing, scientifically proven, consumer-focused innovations and technologies. We believe that true innovation comes from collaboration and partnerships with start-ups, academia, health tech pioneers, and innovators.

Haleon has a strong portfolio of consumer health brands and plays a vital role for people all around the world, in a sector that is growing and more relevant than ever. We have five brand categories: Oral Health, Vitamins, Minerals and Supplements(VMS), Pain, Respiratory & Digestive. Our trusted brands like Sensodyne, Advil, Centrum & Voltaren improve the lives of millions globally.

Reviewers

Clotilde Aubertin

External Innovation Director

Matteo Gasbarri

External Innovation Senior Scientist

Bikash Rajkarnikar

Innovation Ecosystem Lead

Leela Ganesh

Innovation Ecosystem Lead

Please contact the University of South Florida Technology Transfer office representative for submission - Karla Schramm at kschramm@usf.edu