

Epithelix

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Prix FENRIV, 24/02/2024

Maladies respiratoires en constante augmentation

- ✓ Bronchite obstructive chronique (BPCO)
 - Estimation: 3,2 Millions morts/an - 3ème cause de décès en 2030

- ✓ Cancer du poumon
 - 1,8 Millions morts/an

- ✓ Asthme
 - Estimation: 235 Millions

- ✓ Mucoviscidose
 - France = 7'000 cas – Mediane survie = 5ans (1960) ->40ans (2021)

- ✓ Allergies respiratoires
 - France = 3,8% de la population en 1963 vs 30% en 2021

- ✓ Infections bactériennes et virales
 - SARS-CoV-2 (COVID19) = 772 Millions de cas – 7 Millions de morts

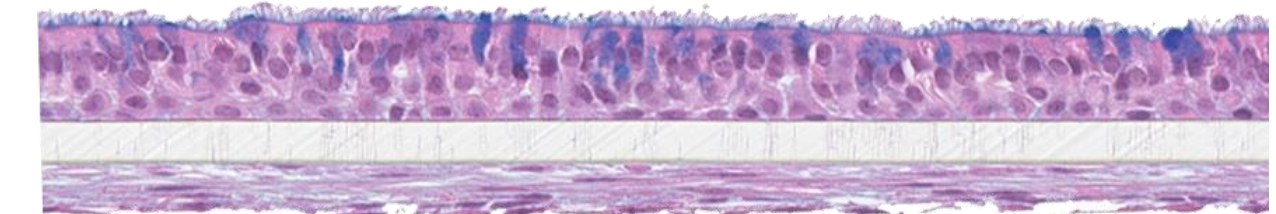
Modèles de recherche pour le traitement des maladies respiratoires



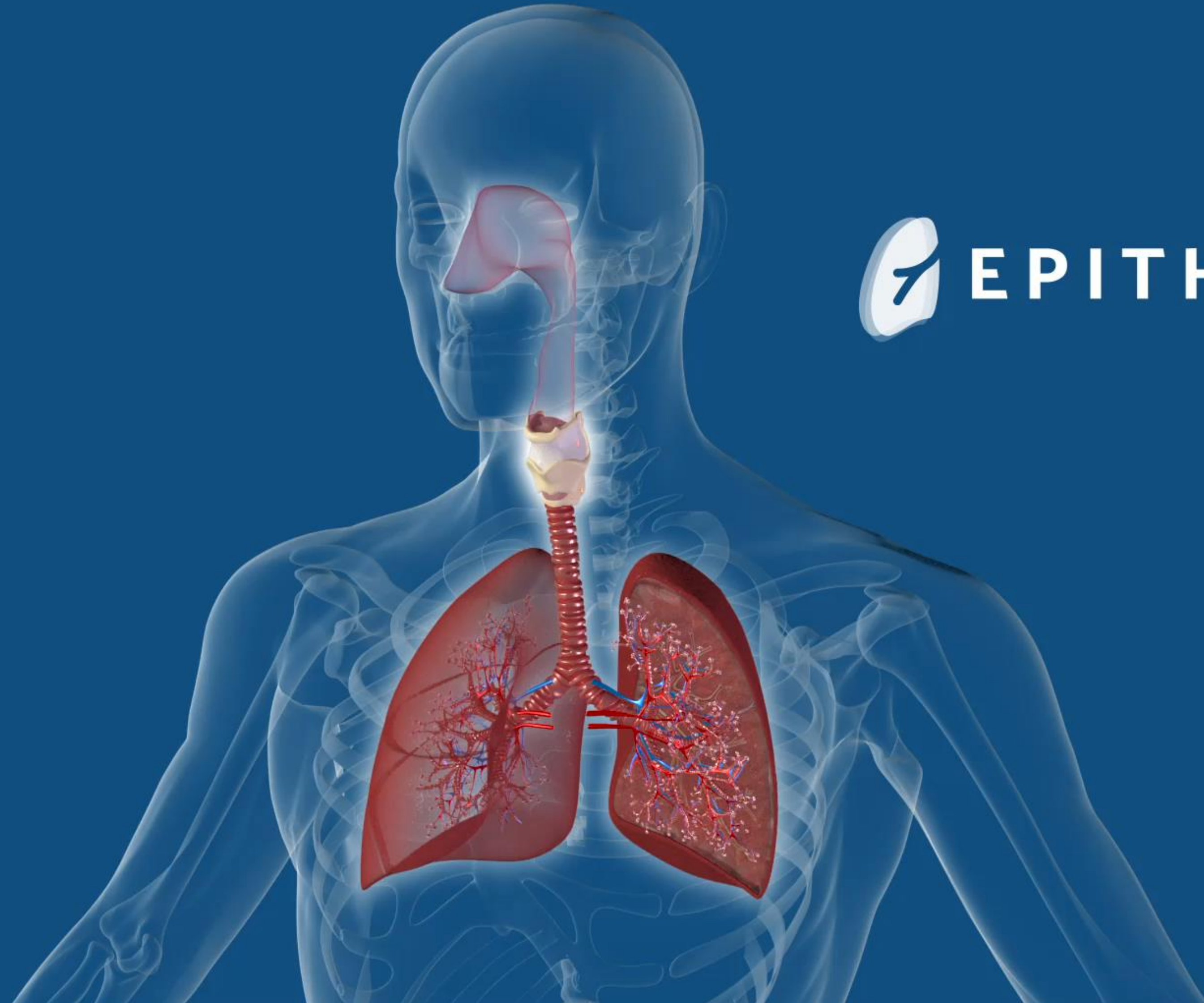
Humain



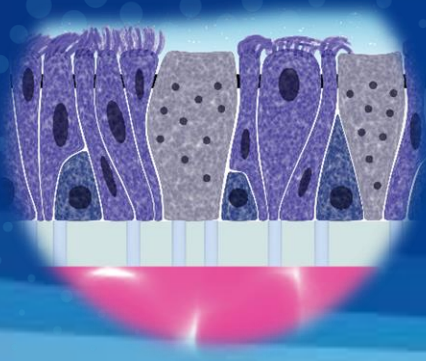
- + Relevant
- + Efficace
- + Economique
- + Ethique



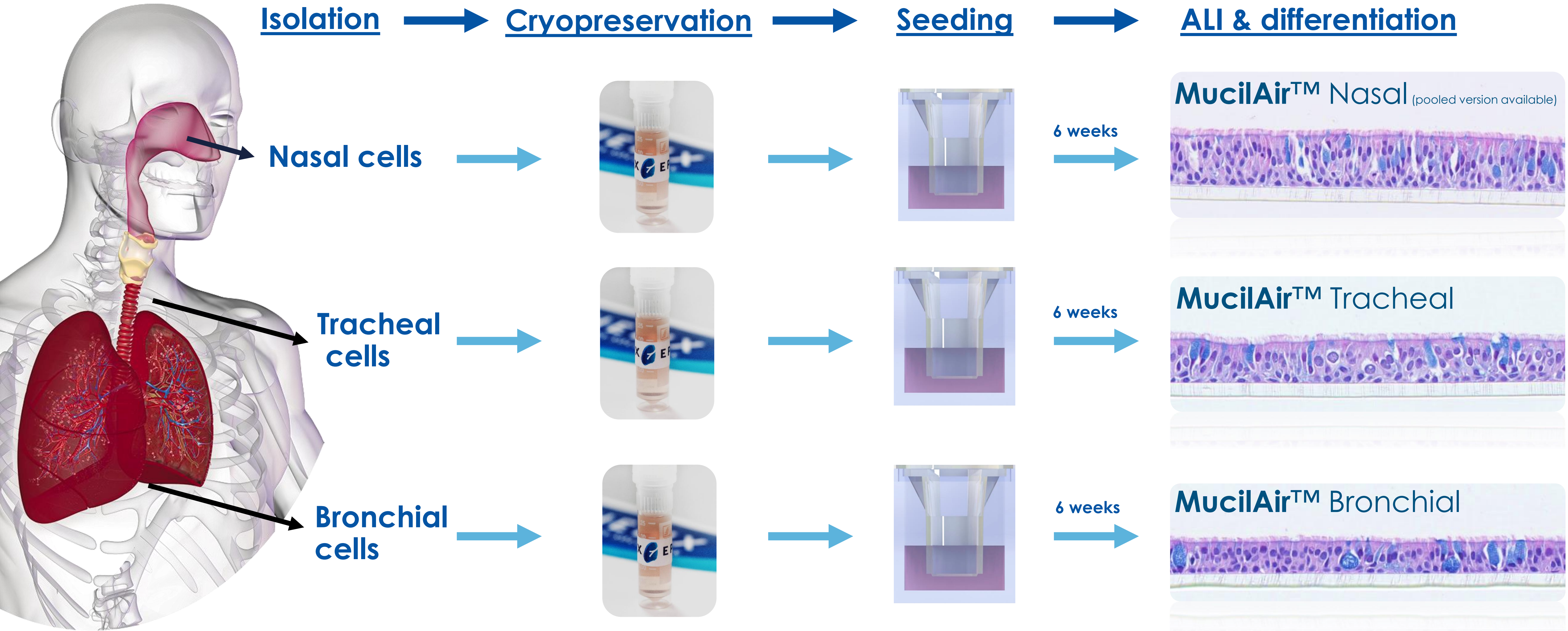
Tissus
respiratoires
humain
reconstruits in vitro

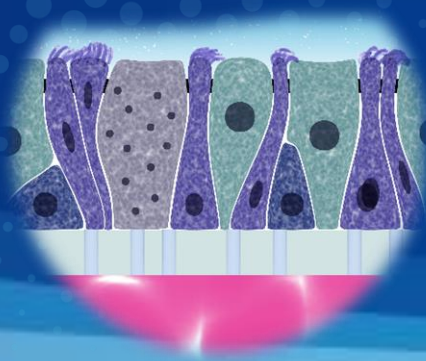


 EPITHELIX

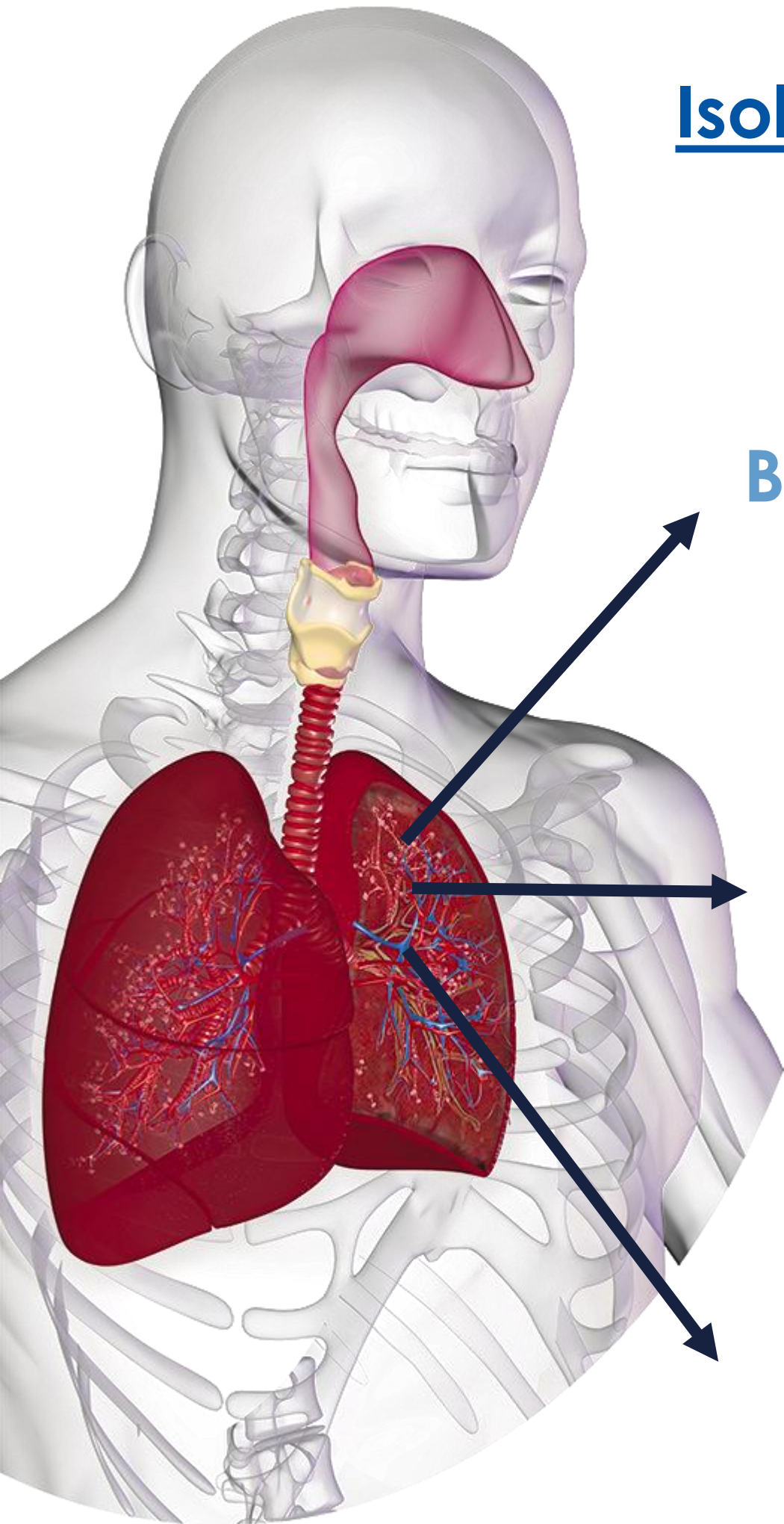


Reconstitution process | MucilAir™



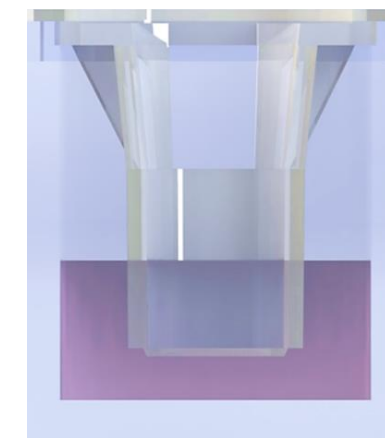


Reconstitution process SmallAir™ | AlveolAir™ Macrophages

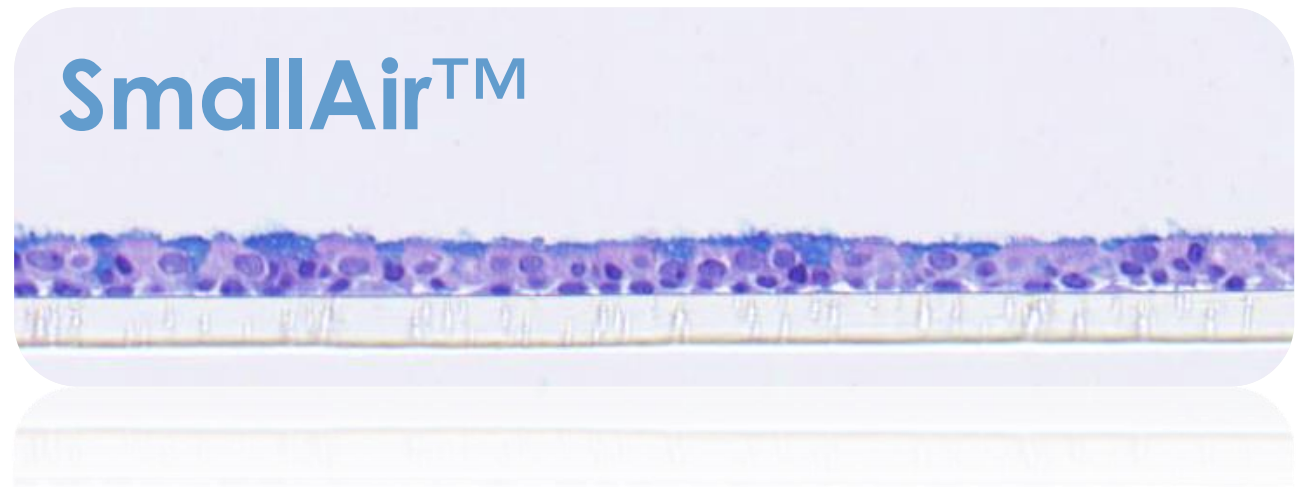


Isolation → Cryopreservation → Seeding → ALI & differentiation

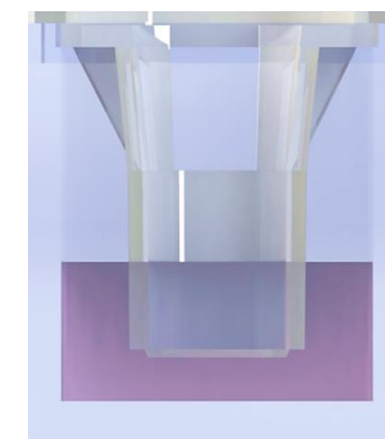
Bronchiolar cells



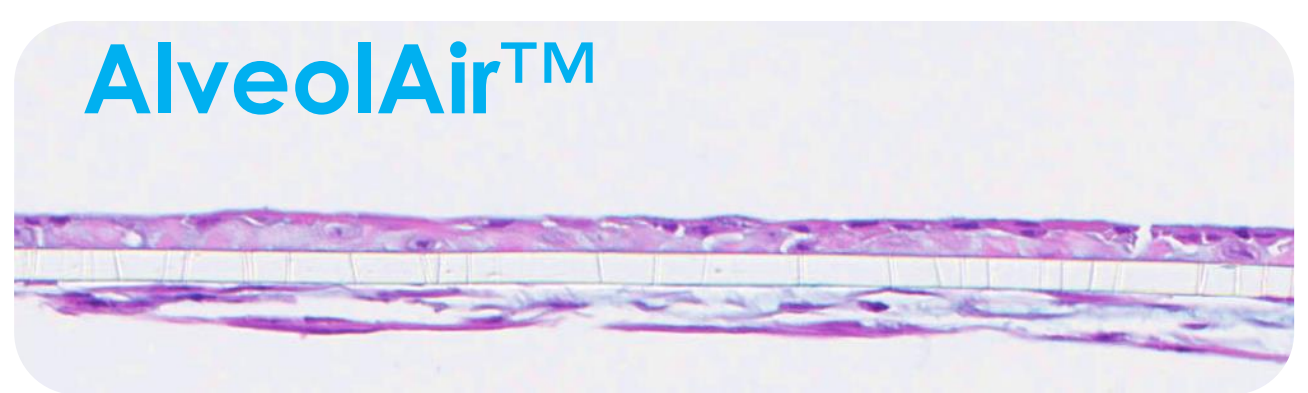
7 weeks



Pneumocytes & endothelial cells



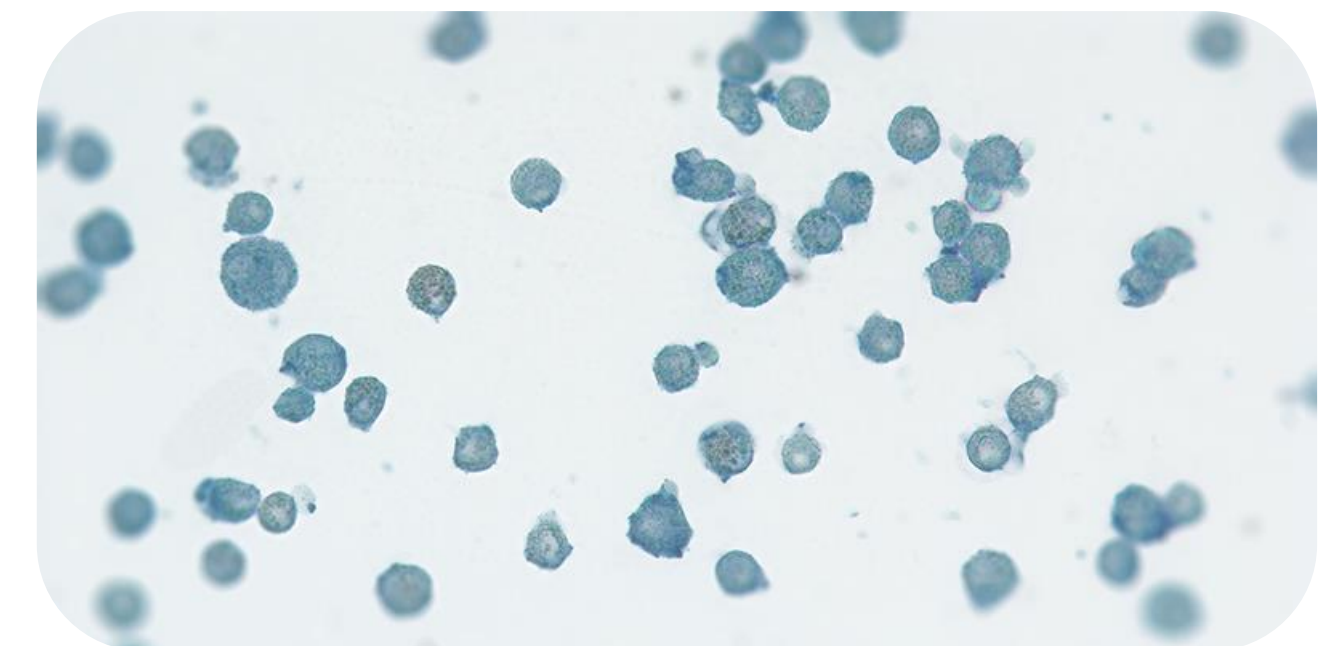
2 weeks



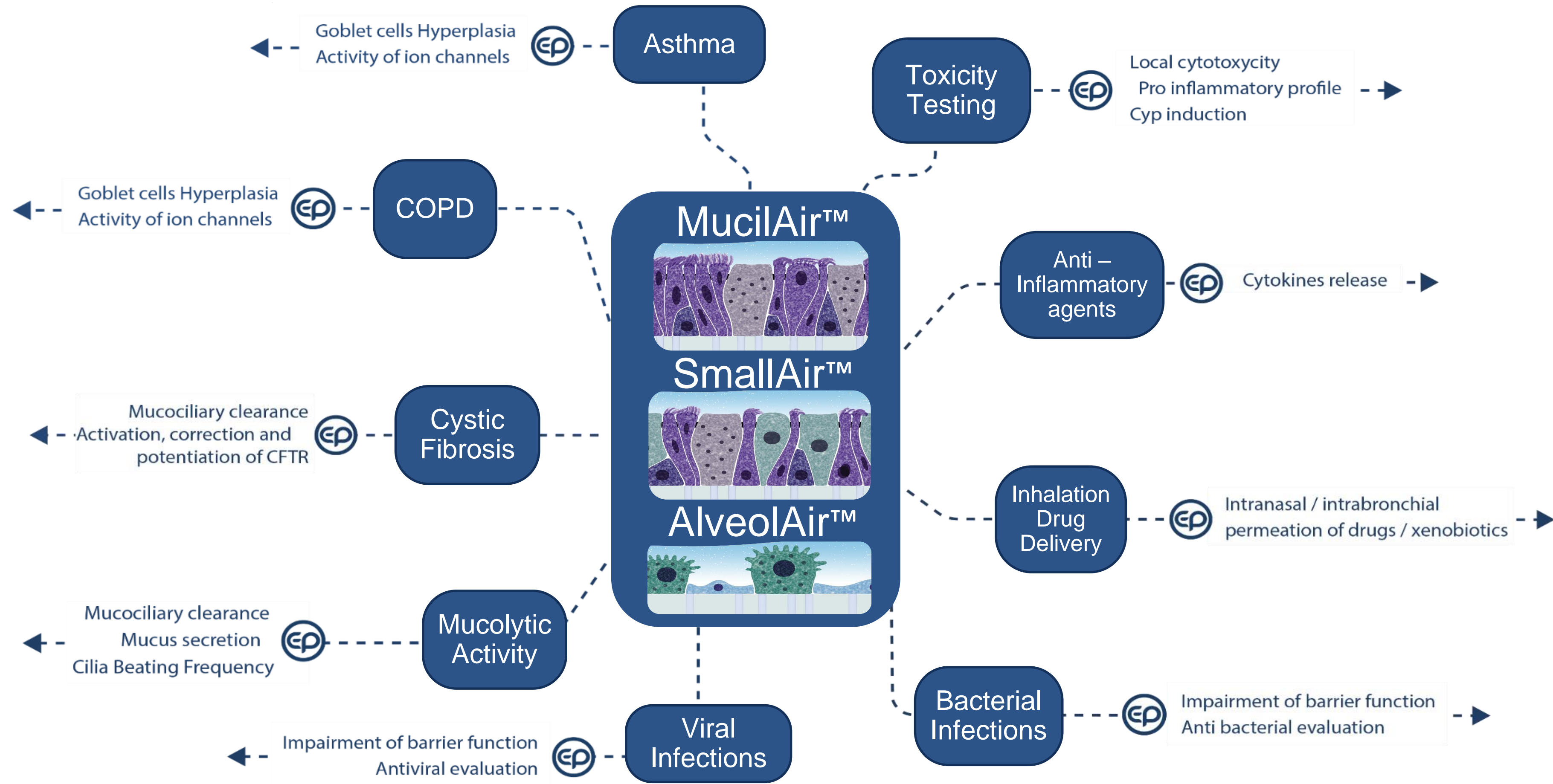
Isolation

Cryopreservation

Alveolar Macrophages

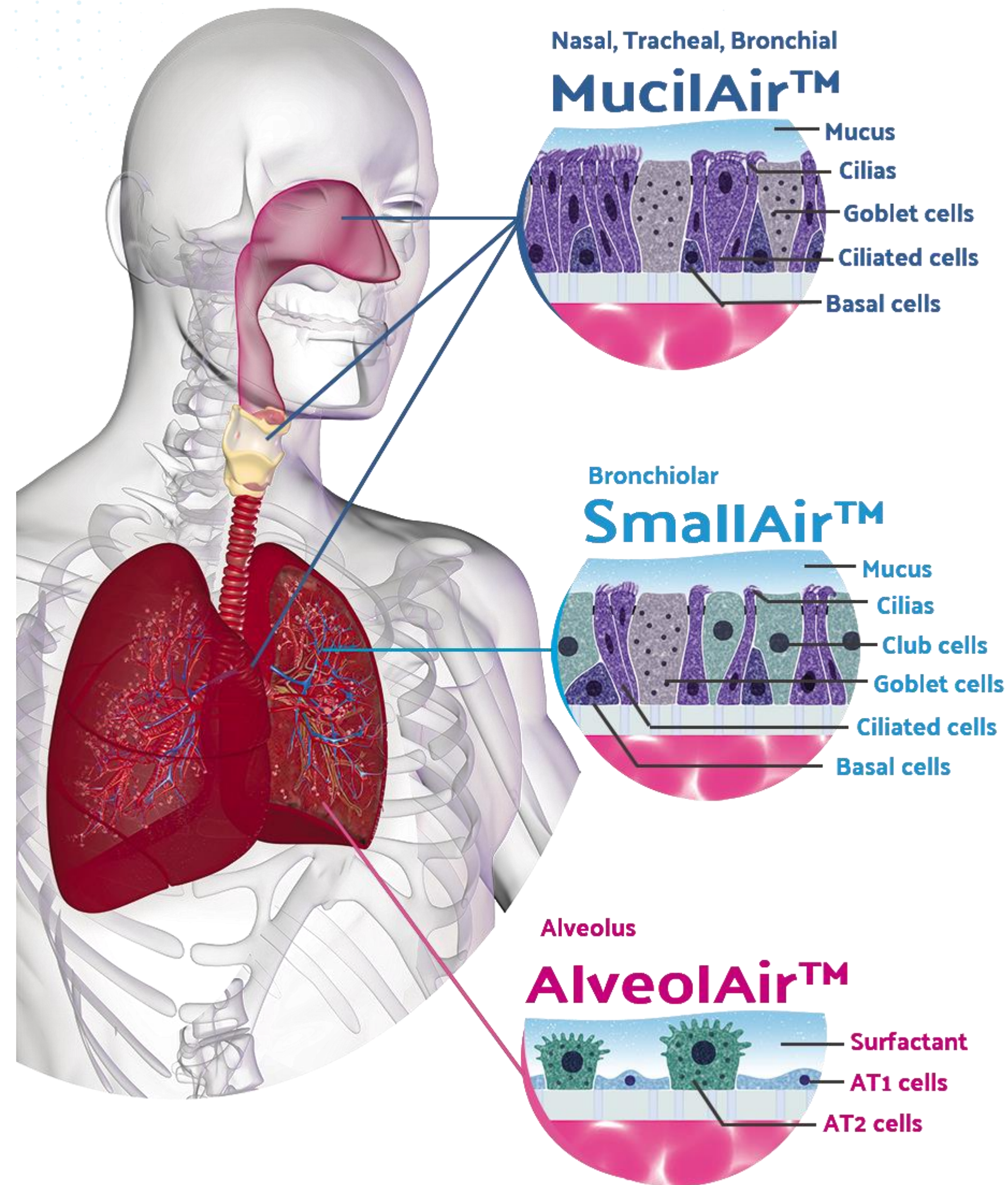


Services de tests



- Sàrl Fondée in 2006
- Indépendante, Auto financée et profitable depuis 2008
- USPs: - Reconstitution de tissus humains à longue durée de vie
-Expertise en modelisation de maladies respiratoires *in vitro*
- 25 Employés (dont 5 PhD + 12 MSc)
- 2 Sites: - Suisse; Plan-les-Ouates (700 m²)
- France, Archamps (400 m²)
- 18 Prix:





- >50'000 animaux/an épargnés grâce aux produits et méthodes d'Epithelix.
- La 1^{ère} méthode mondiale de remplacement de tests de toxicité par inhalation sur Rats utilise MucilAir™ (OCDE N°367).
- >850 publications basées sur les modèles in vitro d'Epithelix.


 **French Lab**

- Carole Bertinetti
- Mendy Bouveret
- Christine CaulFuty
- Mireille CaulFuty
- Laureen Jaupart
- Ophélie Verbeke
- Laurent Wiszniewski
- Dr. Ludovic Wiszniewski

**AWESOME
TEAM
YOU
ROCK!**

- Paul Alouani
- Dr. Ghislaine Arib
- Denisa Balkova
- Guy Barbin
- Sacha Benaoudia
- Dr. Bernadett Boda
- Rosy Bonfante
- Caroline Chojnacki
- Charlène Constant
- Guillaume Dechanet

Swiss Lab

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- Cindia Ferreira
- Emilie Ferreira
- Ina Fureraaj
- Matia Gojun
- Dr. Song Huang
- Xiao-Yann Huang
- Faten Hussein
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- Marc Lanzillo
- Loris Levet
- Maxim Marfin
- Melany Monachino
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- Rebecca Pimenta
- Florian Shala
- Nicolas Simonnet
- Jimmy Vernaz
- Karin Weber