Axalbion

AX-8

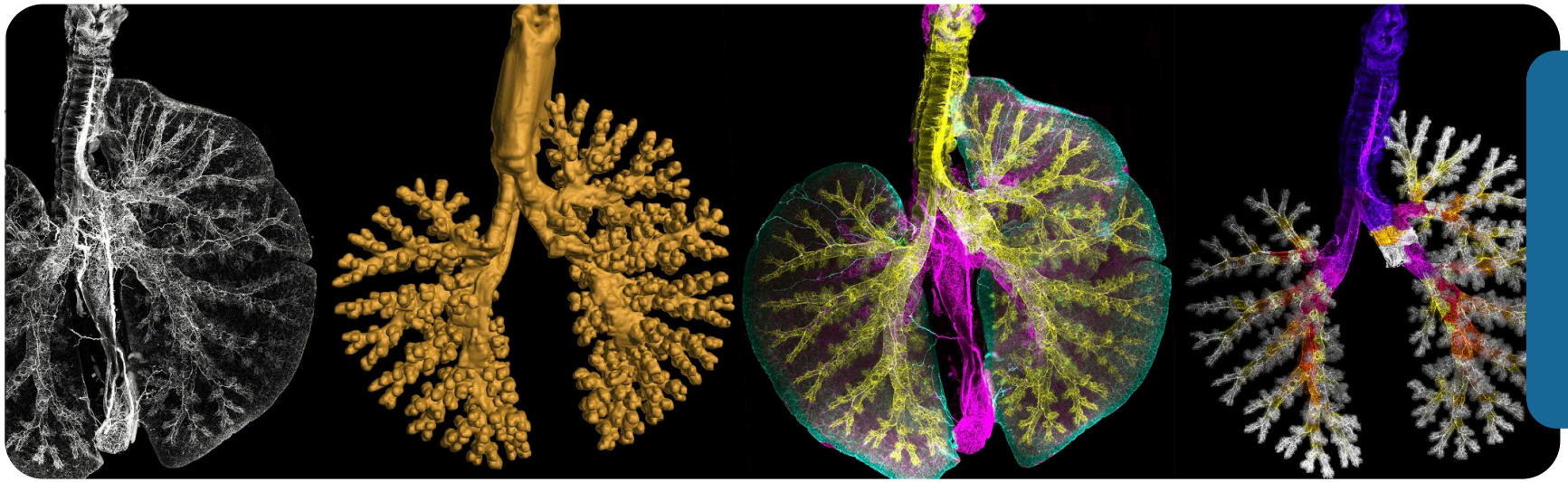
The next generation
chronic cough therapy

Axalbion is a clinical-stage pharmaceutical company

Our business was founded in 2016 in Lausanne, Switzerland, and our parent company was incorporated in Manchester, UK in 2021

Developing AX-8, a next generation therapy for refractory chronic cough (RCC)

AX-8 is a Phase IIb-ready candidate for RCC backed by compelling clinical data



Over
US$20m
raised to date

Axalbion is led by an experienced leadership and advisory group

Management

Ashley Woodcock
MD BSc MB ChB FRCP FERS FMedSci

Executive Chairman

Professor of Respiratory Medicine and Consultant Respiratory Physician at Manchester University

Olivier Poirot
PhD PMP®

Chief Scientific Officer

Brings over 20 years of experience in ion channels and peripheral neuropathies in academic and pharmaceutical R&D

Jonathan Senior
MD

Chief Finance Officer

Experienced CFO and physician

Axalbion Therapeutics Board

Ashley Woodcock
Chairman

Adrian Field
MGL Director

Thomas Courtney
SPL Director

Paul Glyer
Independent Director

Observers

Frank Keane
(Vitalograph)

Peter Vitins

Edward McKenna

Clinical and scientific advisors

Prof. Jaclyn Smith

Prof. Brendan Canning

Prof. Peter Dicpinigaitis

Prof. Surinder Birring

Prof. Lorcan McGarvey

Prof. James Hull

Dr. Sean Parker

Dr. Michael Kitt

Dr. Melissa Faris

Refractory chronic cough is a long-term, debilitating condition

Refractory Chronic Cough (RCC) does not respond to treatment for the underlying cause or is unexplained

It is a **sensory neuropathic condition** in which a sensation of throat discomfort drives a dry and irritating cough

RCC has a **significant impact on patients' quality of life**, impacting social, physical, and psychological well-being

Yet there are no FDA-approved treatments for this condition

Existing treatments are ineffective, potentially addictive and can have unwanted systemic side effects

9 million
patient population in the US[1]

9 million
patient population in Europe and the UK[1]

7 million
patient population in China

AX-8
is targeting a substantial unmet need

Clinical studies indicate that AX-8 is a rapid and safe local treatment for patients with RCC

1. LifeSci Capital, report for BELLUS Health, December 22, 2022

RCC treatment is a **multi-billion-dollar market**

Total RCC treatment market projected to grow to

US$14.7bn

by 2035[1]

Projections of data from Apex Research indicate **AX-8** has a circa

US$2.6bn

global market

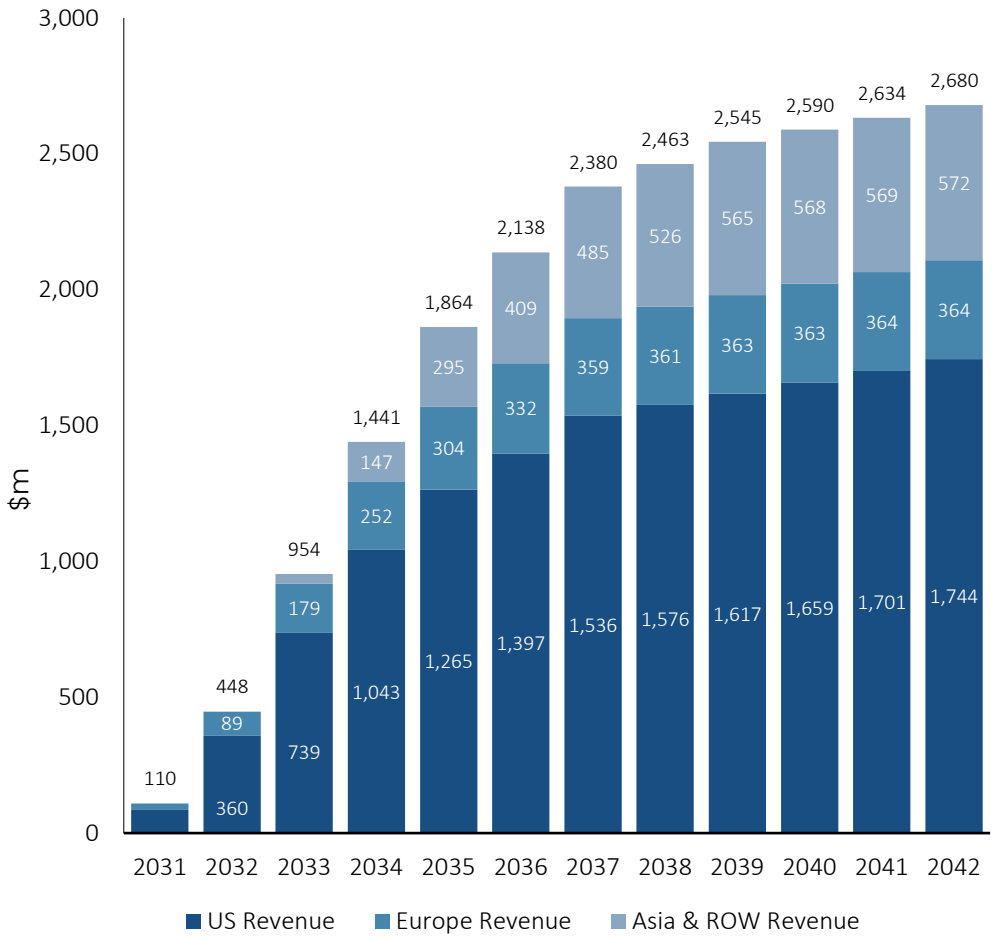
Based on an average monthly price of

US$450 in the US and **US$115 in other markets**

Research also indicates strong support from US payers[2]

AX-8 presents a long-term option to dominate the RCC market, or a billion-dollar exit opportunity at the end of Phase 2b (2028) in an established M&A market backdrop

For example, at the end of Phase 2b, BELLUS was acquired by GSK for **US$2bn,** and Afferent was acquired by Merck for **US$1.25bn**



AX-8 global financial projections for RCC treatment

1. IMARC Group, Chronic Refractory Cough Market Size, Epidemiology, In-Market Drugs Sales, Pipeline Therapies, and Regional Outlook 2025-2035
2. Axalbion's US Payer Research Report

AX-8
has strong support from key opinion leaders and physicians

"The results of this proof-of-concept study are promising and compare well with molecules of other classes currently under investigation. AX-8 addresses a novel mechanism of action for the treatment of chronic cough"

Prof. Jaclyn Smith

"AX-8, through selective TRPM8 activation, engages this physiological inhibitory mechanism to reduce cough sensitivity, representing a rational and targeted antitussive approach for refractory chronic cough"

Prof. Brendan Canning

US physicians are highly likely to prescribe AX-8 due to its fast onset, good safety profile, and ease of administration[1]

"Very impressive improvement in all outcome measures of refractory and unexplained chronic cough, with rapid onset of action and minimal adverse events. I also like the unique mechanism of action"

Pulmonologist

"It seems to be safe and easy to take. I like the idea of a topical therapy with poor bioavailability. I also like that it is fast acting"

Allergist

"I'm impressed that it acts locally rather than systemically. Systemic side effects are worrisome with current meds"

Ear, nose, and throat specialist

1. Axalbion's US Physician Quantitative Research Report

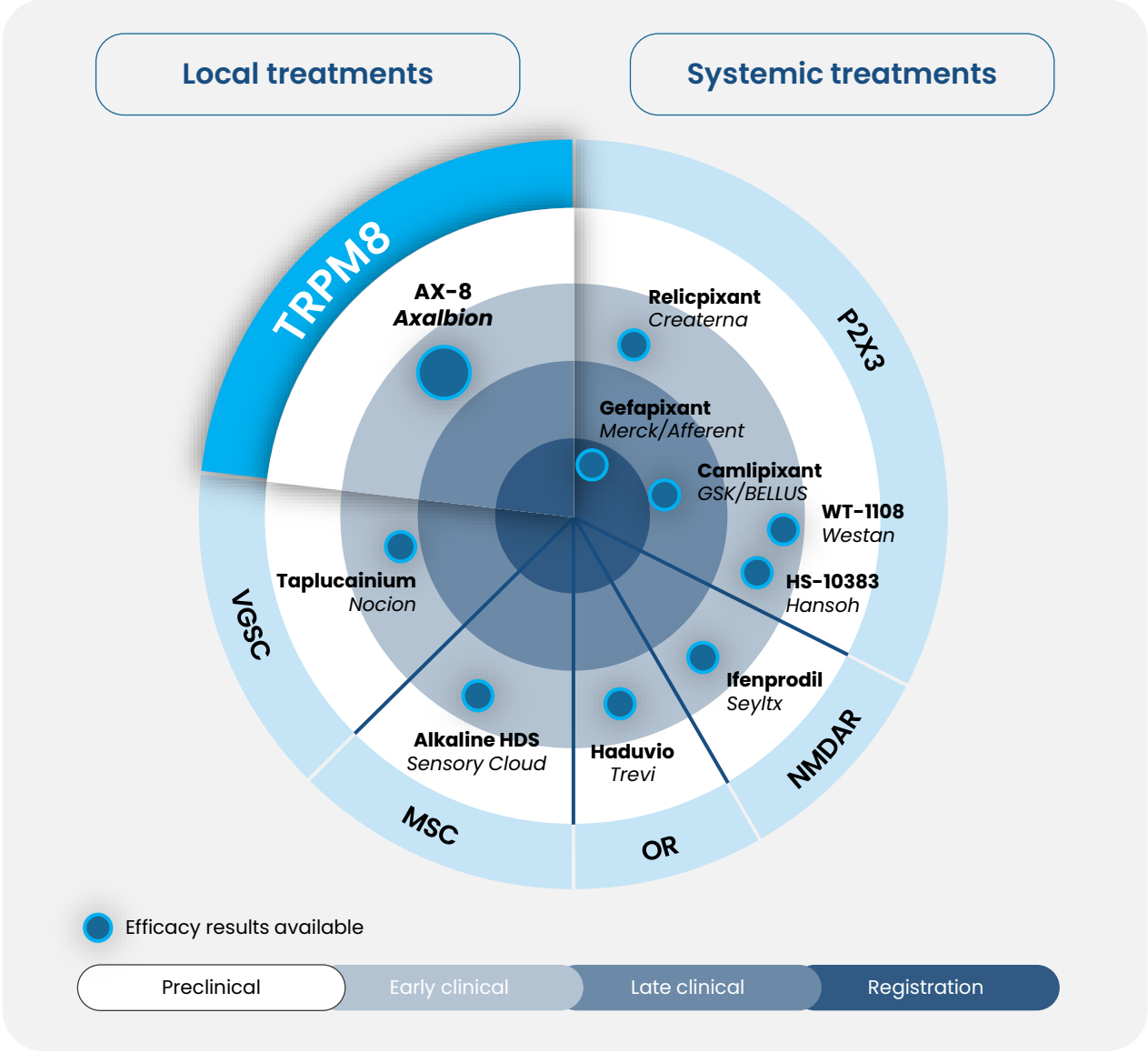
AX-8
is unique in the RCC treatment market

Axalbion is currently the only company developing a local TRPM8 treatment

AX-8's unique mechanism of action and good safety profile means it can be used as a stand-alone or combination therapy

Most treatments under development are P2X3 antagonists, which can have systemic effects

AX-8 has a first-in-class potential
AX-8 is unique in having Rx → OTC potential



AX-8

has counter-sensory and anti-tussive effects in RCC patients

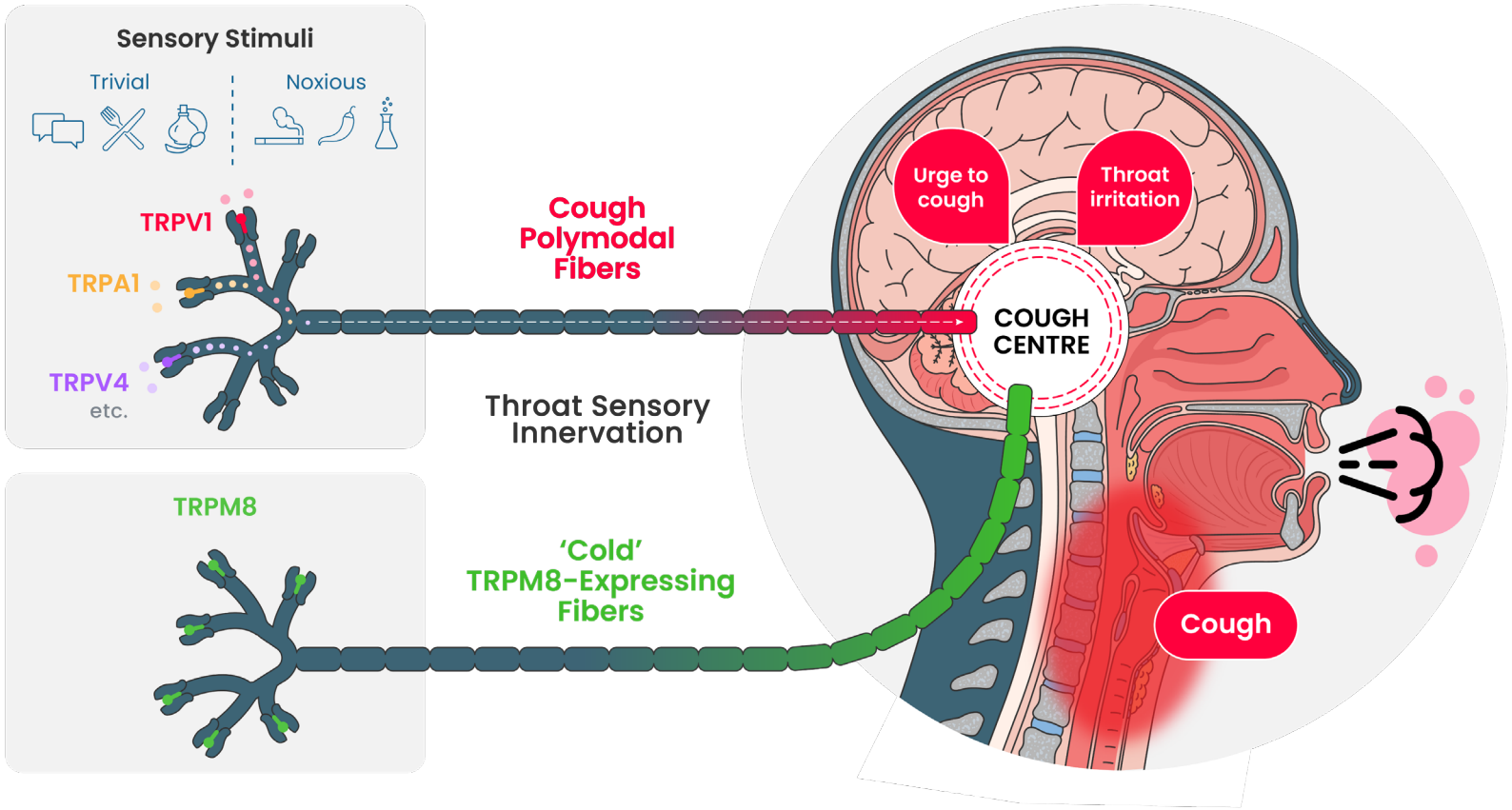
TRPM8

Transient Receptor Potential Melastatin 8 (TRPM8) ion channel

Detects cool temperatures and cooling compounds

Expressed in a subgroup of cold-sensitive small sensory afferents

Throat is highly innervated by “cold” fibers



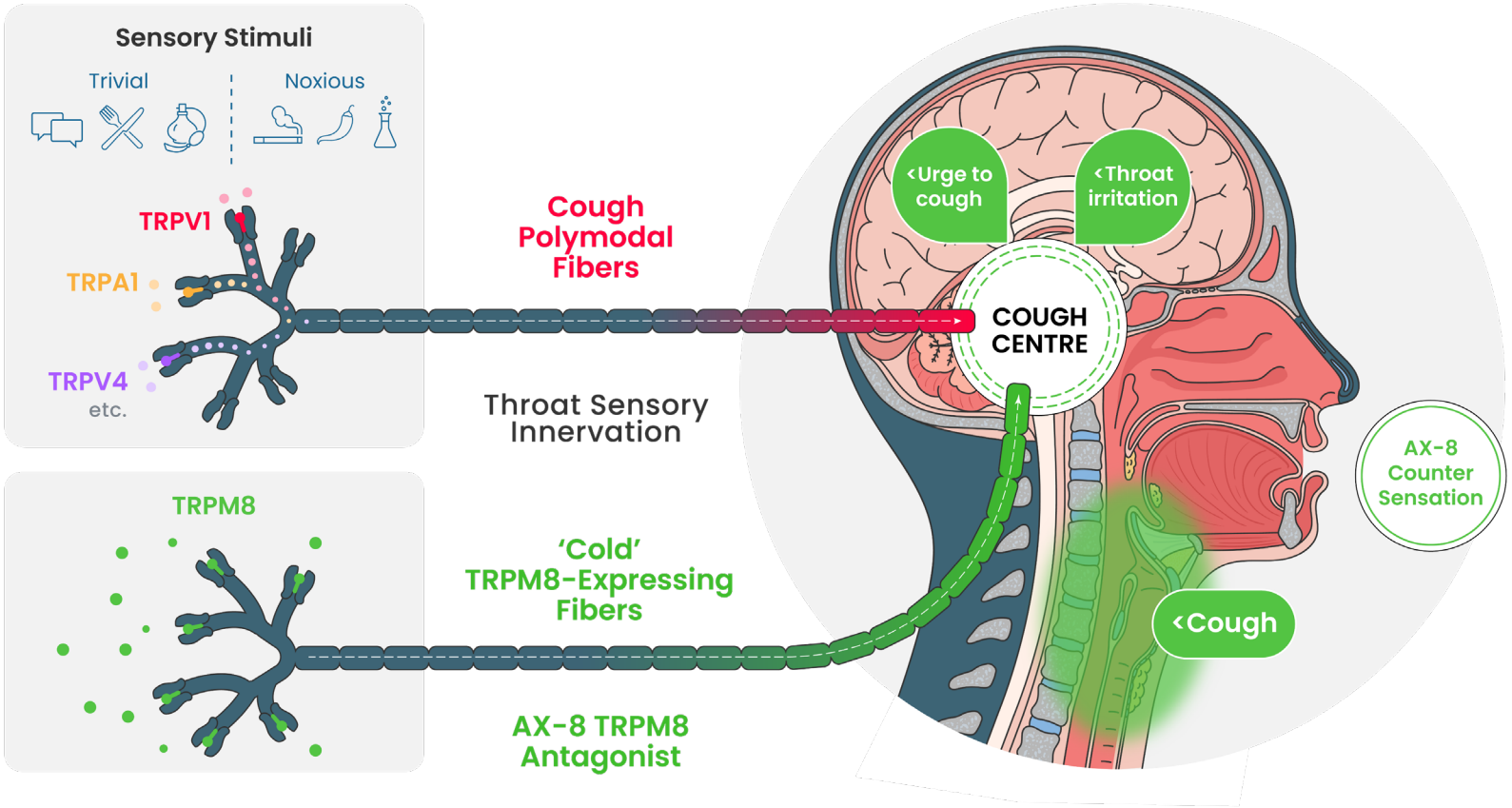
AX-8
has counter-sensory and anti-tussive effects in RCC patients

AX-8 Mechanism of Action (MoA)

AX-8 activates TRPM8 in cold fibers in the throat

Cold fibers inhibit inputs in the cough center from cough fibers that drive throat irritation and coughing in hypersensitive patients

MoA transferable to other cough indications, e.g., post-infectious



Our business owns

100% of AX-8

intellectual property

Method of use patent for the treatment of RCC

Entirely positive International Preliminary Report on Patentability (IPRP) on PCT application

Moved to the national phase worldwide

Already granted in over 20 countries and country groups, including the US, EU, Japan, and China

Final expiry 2045 *(with patent term extension)*

Data and market exclusivity

5 to 10 years, depending on jurisdiction

Composition of matter patent

Granted internationally, excluding the US

Final expiry 2036 *(with patent term extension)*

Method of use patent for topical oral administration

Granted in the US

Final expiry 2036 *(with patent term extension)*

New patent applications for maximizing the scope and longevity of patent protection

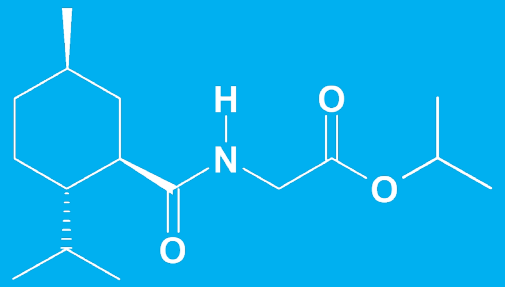
AX-8
with its unique anti-tussive mechanism of action has a first-in-class potential

AX-8 is a **new chemical entity**, a small lipophilic molecule

AX-8 is an **agonist that activates TRPM8 sensors in the throat** to create counter-sensory and antitussive effects

AX-8 is a **local treatment** administered as an orally disintegrating tablet (ODT) on the tongue (compressed lozenge under development)

Primarily developed to treat RCC, but has **potential usage as an antitussive in other cough conditions**



AX-8 chemical structure

Has a good safety profile, with no systemic effects on the body

Designed to persist in the throat to deliver a long-lasting effect

Acts rapidly and locally to reduce hypersensitivity

Can be used on its own or combined with other RCC treatments

Has the potential to be used for both maintenance and on-demand treatment in RCC patients

AX-8
Development summary

Early development

AX-8 was invented by Dr Eddie Wei, Professor Emeritus of Pharmacology at UC Berkeley

A strong safety profile

Pre-clinical:

- AX-8 is a potent and selective TRPM8 agonist
- No target organ toxicity or safety concerns at any dose
- Good local tolerance
- Low risk of drug interactions

Clinical pharmacology:

- Two studies involving 32 healthy participants
- Doses from one 5 mgs AX-8 ODT a day, to two 40 mgs AX-8 ODT a day (BID)
- Very good tolerance and safety profile

Proof-of-concept study (AX8-003)

A two-week, double-blind, placebo-controlled crossover study in RCC patients with two parts

Part 1:

- 40 mgs AX-8 ODT twice a day
- Primary endpoint was the change from baseline in eight-hour cough frequency on day 1
- Cough monitored using VitaloJAK® recorder from Vitalograph on days 1 and 14 of treatment

Part 2:

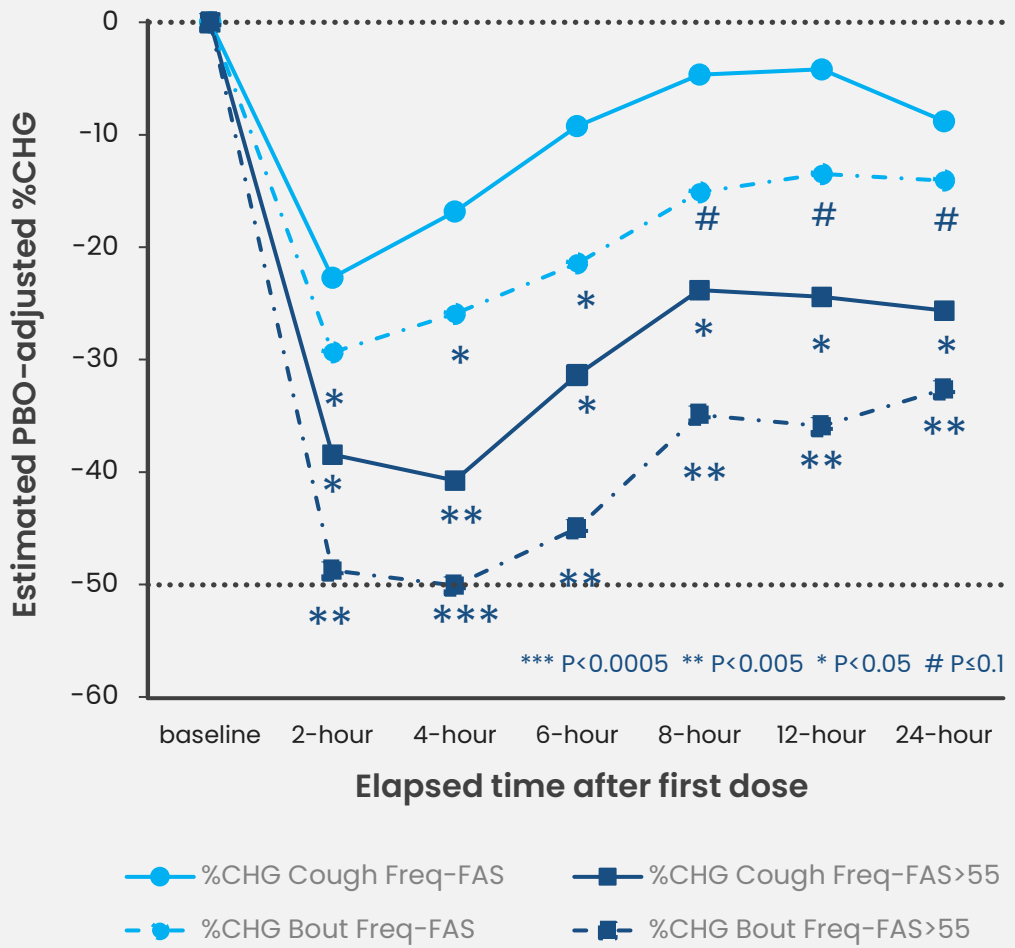
- 40 mgs AX-8 ODT three times a day
- Two primary endpoints: the change from baseline in four-hour cough frequency and the change from baseline in four-hour bout frequency on day 1
- Cough monitored using VitaloJAK® recorder from Vitalograph on days 1, 3, 7, and 14 of treatment
- Patient population enriched based on throat discomfort

Part 1 study (AX8–003)

Significant reduction in cough and bout frequencies in RCC patients with higher throat discomfort

- In the 51 enrolled patients, AX-8 **reduced cough frequency** compared to placebo for **over four hours**, with **onset of action in the first 15 minutes**[1]
- **Significant** decrease in cough frequency compared to placebo in **patients with greater throat discomfort**[2]
- Greater and **significant reduction in cough bout frequency in all patients and in subgroup**
- **Patient-reported outcomes significantly improved** after two weeks compared to placebo[2]
- AX-8 demonstrated a **good safety profile** with no severe or serious adverse events

Placebo-adjusted percentage of change after AX-8 in cough and bout frequency on day 1



1. Full analysis set (FAS), overall sample size of 51 and 49 for placebo and AX-8 per protocol set, respectively
2. As measured by the Visual Analogue Scale (100 mm), with a VAS score ≥ the median at baseline of 55 mm (N= 26 and 25 for placebo and AX-8, respectively)
3. A bout is a cluster of ≥2 coughs separated by ≤2 seconds

Part 2 study (AX8–003)

A study to confirm the observed benefit in patients with throat discomfort

- The part 2 study had a similar design to part 1
- **The target population was patients with throat discomfort (VAS score at screening ≥ 50mm)**
- 57 patients were enrolled, with 32 in academic (NHS) sites and 25 in commercial sites

Dose frequency increased to 40 mgs taken three times a day, four hours apart

Primary endpoints were the change from baseline in four-hour cough frequency and the change from baseline in four-hour bout frequency

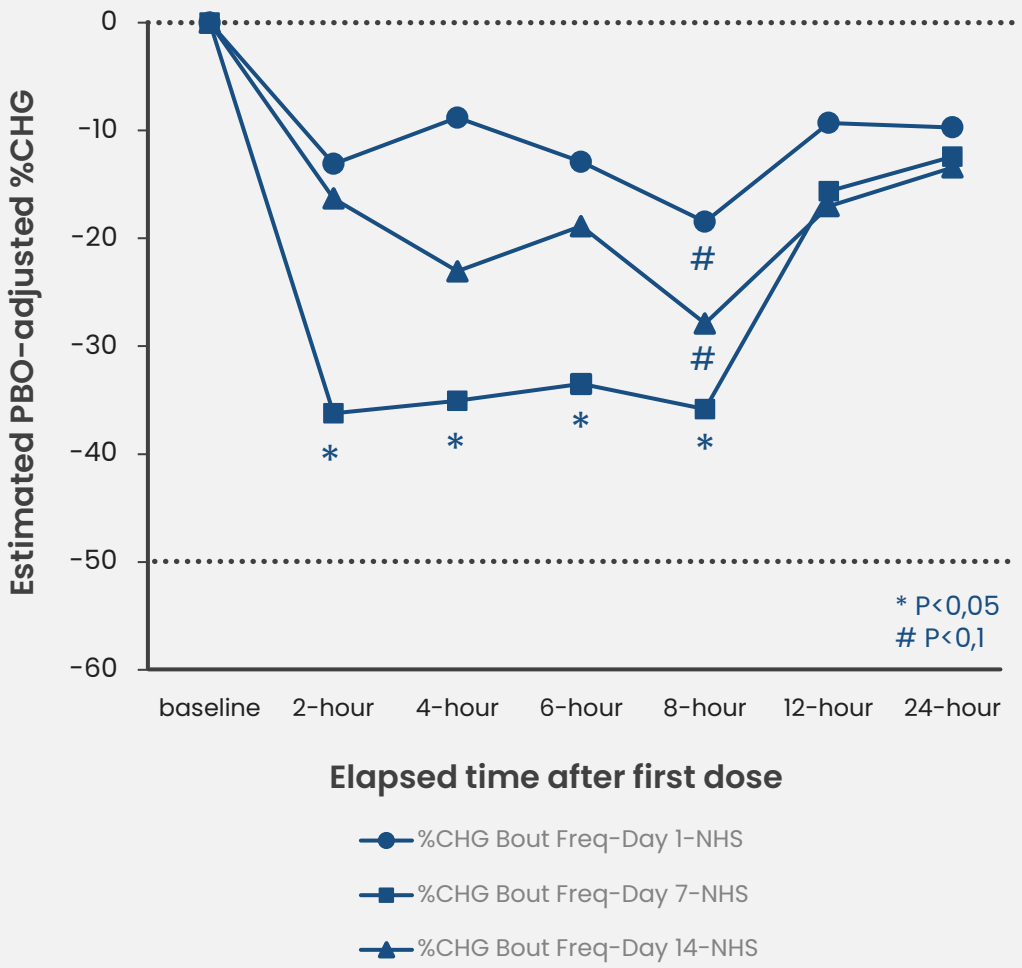
24-hour tolerance assessments were taken on days 1, 3, 7, and 14

Part 2 study (AX8–003)

At NHS sites, AX-8 reduced cough and bout frequency compared to placebo

- AX-8 delivered results that were consistent with our part 1 study, although the effect was smaller
- For eight hours, significant results were observed on day 7, and results were nearly significant on days 1 (P=0.08) and 14 (P=0.06)
- No tolerance or tachyphylaxis were detected at days 7 and 14
- Patient-reported outcomes improved compared to placebo after two weeks
- No severe or serious adverse events were reported

Placebo-adjusted percentage of change after AX-8 in bout frequency on days 1, 7, and 14 – NHS sites



Consistent objective study results

RCC patients with throat discomfort experienced a significant improvement

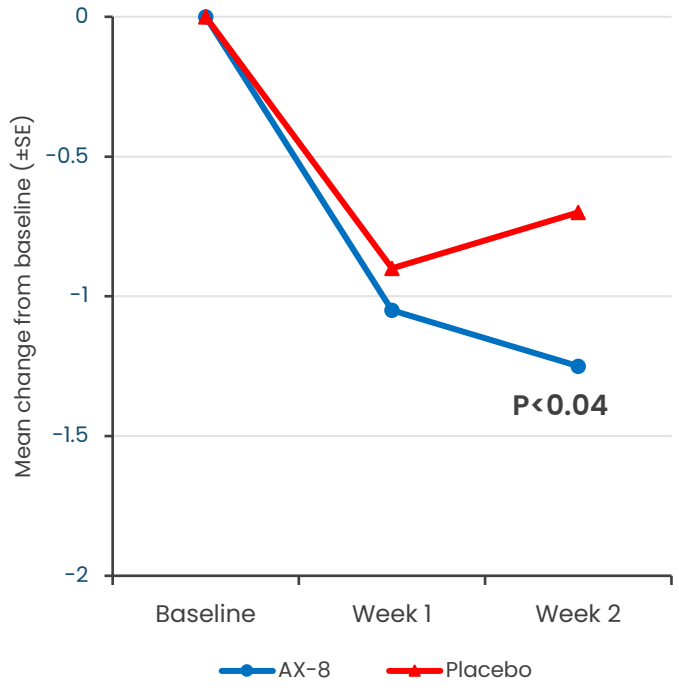
- AX-8 provides greatest benefit for coughing bouts
- Onset of effect in less than 15 minutes
- Maximum efficacy for 4-6 hours
- Persistent benefit over 2 weeks

Cough monitoring is recorded on VitaloJAK® devices from Vitalograph

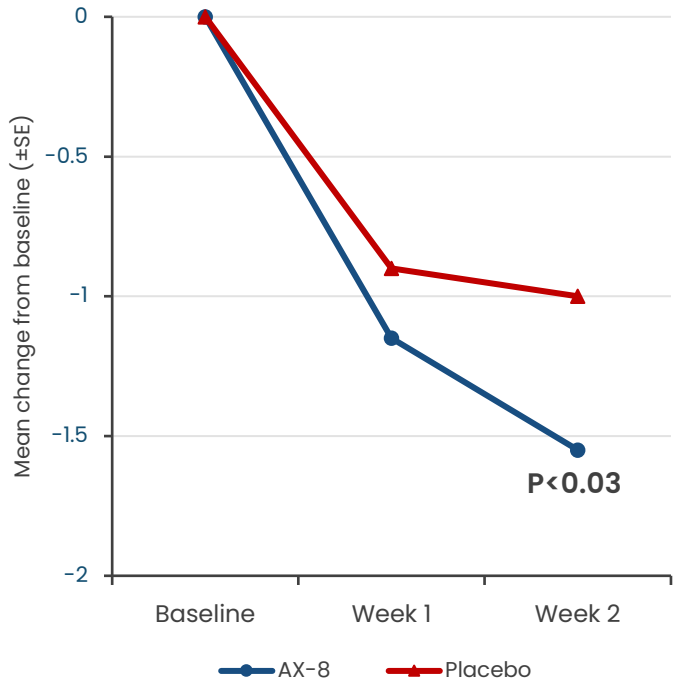
Consistent subjective study results

Patient-reported outcomes expressed a consistent improvement in symptoms and quality of life for all patients

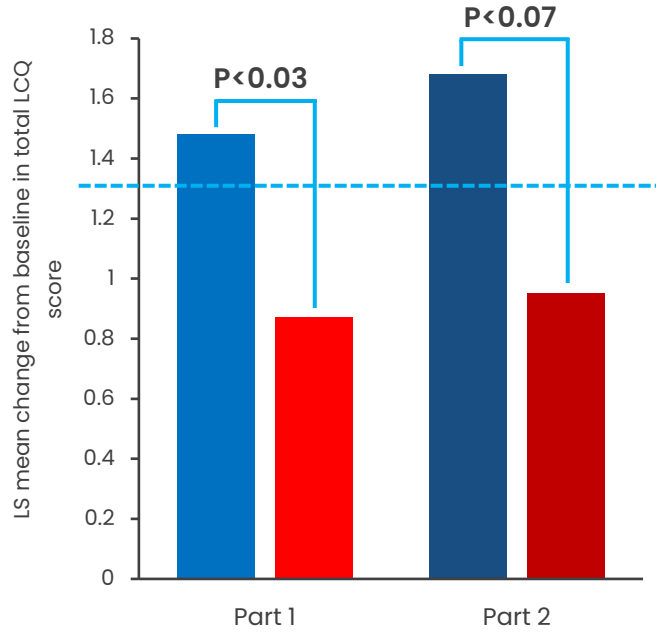
Cough Severity Diary for Part 1 study in full analysis set (FAS)



Cough Severity Diary for Part 2 study in FAS[1]



Leicester Cough Questionnaire of Quality of Life in FAS



A change ≥1.3 is considered clinically meaningful

1. Full analysis set (FAS) in the part 2 study was patients with throat discomfort only

Axalbion is seeking investors or partners to fund the next phase of development

Target is to raise up to
US$10m + US$35m =
US$45m

to prepare and undertake the Phase 2b study scheduled for the second half of 2027

This will be a
4-week parallel study
with a placebo run-in to exclude patients with high variability and placebo effect

Existing investors will maintain their support to the company

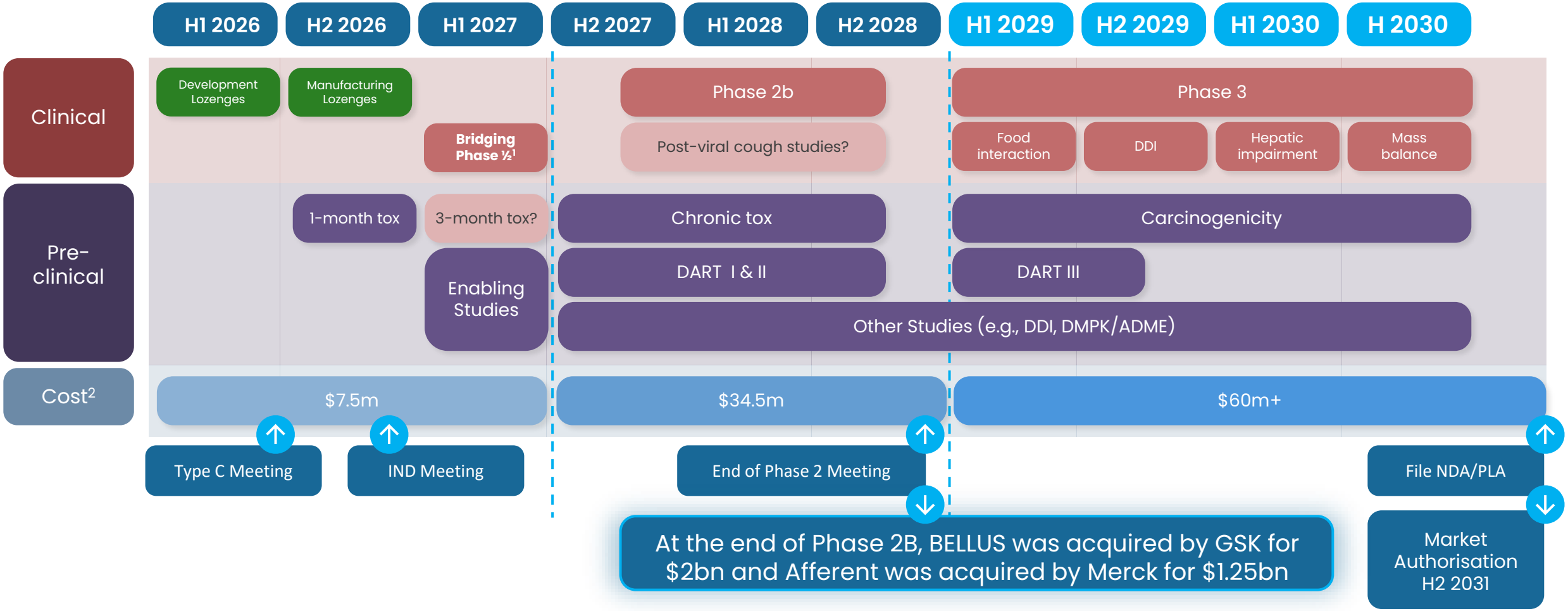
Objective is to confirm the efficacy, safety, and dosing to be Phase 3 ready

Test three doses of AX-8 versus placebo, and the new compressed lozenge formulation

Opportunity to partner for Phase 3 or to exit at the end of Phase 2

Development and approval roadmap

Axalbion is seeking funding by the end of 2026 to complete the Phase 2b study and achieve a billion-dollar Value Inflection Point at the end of 2028



1. PK, PD, and tolerance study with new lozenge formulation in healthy subjects and RCC patients
2. Overall cost including nonclinical studies, CMC, and G&A. No contingency included

In summary

01. Refractory Chronic cough is a significant unmet clinical need with a multi-billion-dollar market

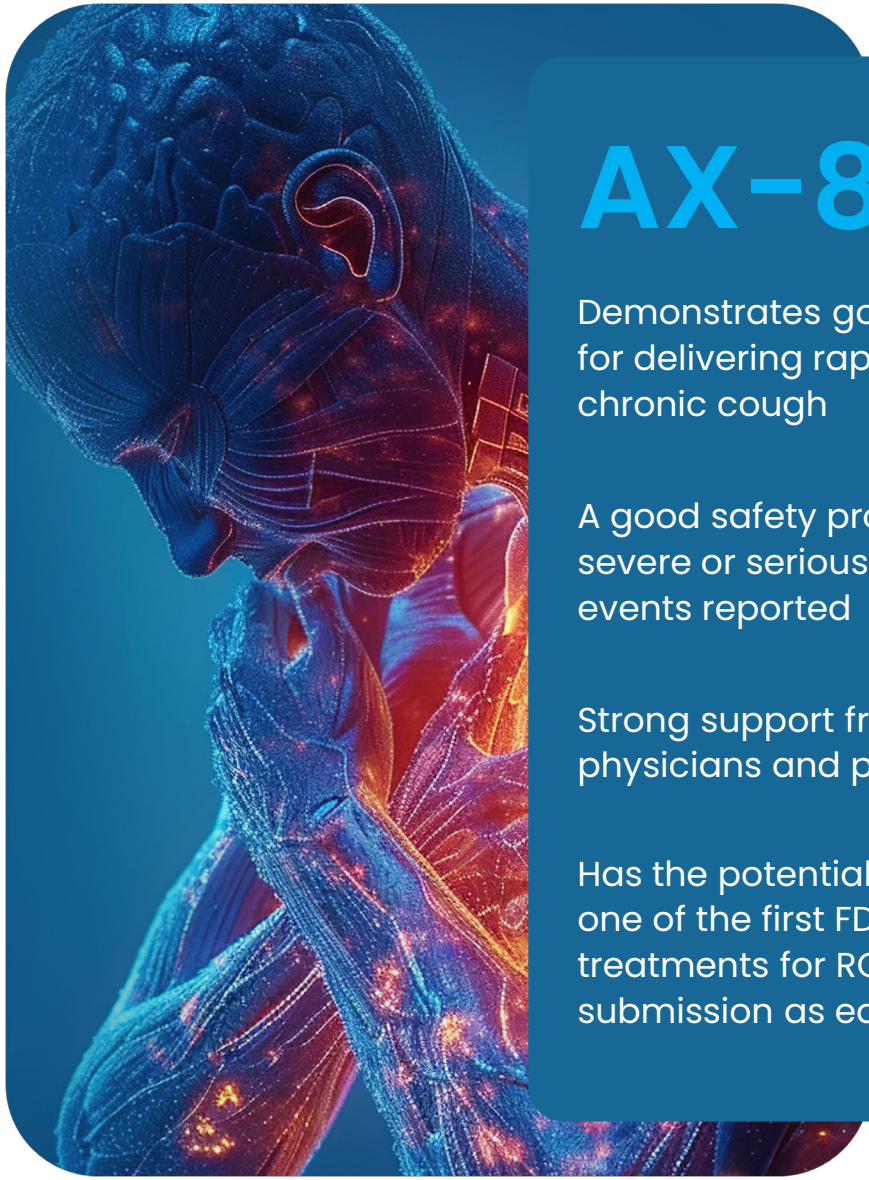
02. AX-8 is a unique local treatment with a new mechanism of action

03. Axalbion has an experienced leadership team with strong support from key opinion leaders

04. There is a billion-dollar exit opportunity at the end of Phase 2b (2028) in an established M&A market backdrop

05. Axalbion holds all of its IP and has exclusivity in major markets up to 2045

06. Unique opportunities beyond RCC and especially for Rx to over-the-counter switch



AX-8

Demonstrates good efficacy for delivering rapid relief from chronic cough

A good safety profile with no severe or serious adverse events reported

Strong support from KOLs, US physicians and payers

Has the potential to become one of the first FDA-approved treatments for RCC, with submission as early as 2031

AX-8: a scalable antitussive platform beyond RCC

- **Rapid-acting, locally delivered antitussive** for dry, irritating cough with a **good safety profile**
- **Flexible use profile:**
  - **Standalone** or **combination therapy**
  - Suitable for **as-needed dosing** and **prophylactic use** in chronic cough and exacerbations
- **Phase 2b in RCC as a platform study:** A successful 2b program in chronic cough would provide safety data and further validate the MoA for other cough trials
- **Clear expansion opportunities beyond RCC:**
  - Chronic cough associated with **idiopathic pulmonary fibrosis (IPF)**
  - **Cough exacerbations** in RCC and IPF
  - **Acute (<3 weeks) and subacute (3-8 weeks) postinfectious cough** (e.g., pertussis, post-viral cough)
- **Long-term lifecycle potential**: strong candidate for **Rx-to-OTC transition**, enabling broader access and brand expansion over time

Thank you

Contact

Ashley Woodcock
Executive Chairman

awoodcock@axalbion.com

Olivier Poirot
Chief Scientific Officer

opoirot@axalbion.com

Disclaimer