



**Axalbion Announces First Patients Treated in Phase 2 Clinical Trial in Chronic Cough with AX-8, a Novel TRPM8 Agonist**

*TRPM8 Pathway May Play Antitussive and Counterirritant Role in Chronic Cough;  
Data Expected Mid 2022*

**Manchester, UK and Mountain View, Calif, October [20], 2021** – Axalbion, a clinical-stage biopharmaceutical company focused on developing novel medicines to treat cough, today announced that the first patients have been treated in a Phase 2 clinical study in chronic cough with AX-8, its lead compound. AX-8 is a potent and selective oral agonist of the transient receptor potential melastatin 8 (TRPM8) ion channel.

“We are thrilled to announce that Axalbion has launched a Phase 2 clinical trial with AX-8 in chronic cough, a disease with significant unmet needs,” said Michael Kitt, MD, chief executive officer of Axalbion. “AX-8 has a novel mechanism of action targeting the TRPM8 ion channel, which may help normalize upper airway sensitivity in chronic cough patients, distinguishing it from other strategies in development. With its safety profile and ease of administration, AX-8 has the potential to be a first-in-class drug to treat chronic cough.”

The Phase 2 trial is a randomized, double-blind, placebo-controlled, crossover study evaluating the efficacy and safety of AX-8 in approximately 50 patients with refractory or unexplained chronic cough. Patients will receive 40 mg of the drug twice daily or matching placebo for two weeks, followed by a seven-day washout period, before crossing over to the opposite treatment for two weeks. AX-8 is an orally disintegrating tablet (ODT) placed on the back of the tongue. Cough frequency will be assessed with an objective cough recording device. The primary efficacy endpoint will be the placebo-adjusted change in cough frequency compared to baseline. The study will take place at multiple centers in the U.K. For more information, please visit [clinicaltrials.gov: NCT04866563](https://clinicaltrials.gov/ct2/show/study/NCT04866563). Data are expected in mid 2022.

“We look forward to testing AX-8 in this proof-of-concept study, as there are currently no approved treatments for chronic cough. By activating TRPM8, our goal is to decrease the upper airway sensitivity in chronic cough patients, and reduce coughing and throat irritation,” said principal investigator Jacky Smith, MD, professor of respiratory medicine at the University of Manchester, UK.

Axalbion plans to conduct additional clinical trials to test the safety and efficacy of AX-8 in 2022.

**About AX-8 and TRPM8**

AX-8, a potent and selective transient receptor potential melastatin 8 (TRPM8) agonist, is in development as a treatment for chronic cough. TRPM8 is expressed in many of the sensory fibers innervating the upper airways. Axalbion believes that activating TRPM8-expressing fibers with AX-8 will normalize the upper airway sensitivity in chronic cough patients, decreasing coughing (antitussive effect) and irritation of the throat (counterirritant effect). In a previous open-label pilot study in 12 patients with refractory/unexplained chronic cough, AX-8 appeared to reduce cough when given as a single 5 mg ODT ([EudraCT Number 2017-003108-27](#)).

The 2021 Nobel Prize in Physiology or Medicine was recently awarded to David Julius, PhD, and Ardem Patapoutian, PhD, for their discoveries of thermal and mechanical transducers, including the discovery

of TRPM8. Since its cloning in 2002, extensive research has identified TRPM8 as a potential target to relieve symptoms or cure several diseases. Animal models have shown that activation of TRPM8-expressing fibers in the skin inhibits sensory hypersensitivity in peripheral neuropathy and inflammation, as well as itching. Additionally, activation of TRPM8 in corneal trigeminal fibers has been shown to increase basal tear secretion and relieve neuropathic ocular pain in patients with dry eye disease.

AX-8 properties suggest that it could be a promising drug candidate to treat dry eye.

### **About Chronic Cough**

Chronic cough is defined as a cough lasting for more than eight weeks. While underlying causes such as gastro-intestinal reflux disease (GERD), asthma or chronic obstructive pulmonary disease may contribute to cough in some chronic cough patients, cough still remains a significant problem for many patients even with treatment for these underlying causes. There are no approved drugs for the treatment of chronic cough, making it a significant unmet need affecting more than 26 million people in the U.S. alone, with approximately three million having refractory or unexplained chronic cough lasting for more than a year and approximately six million having refractory or unexplained chronic cough lasting more than eight weeks and under one year.

### **About Axalbion**

Axalbion is a privately held, clinical-stage biotechnology company developing novel medicines for the millions of patients who suffer from chronic respiratory disorders such as chronic cough. The company, founded in December 2016, is based in Manchester, United Kingdom, a region known for its centers of excellence in respiratory research, with offices in Lausanne, Switzerland and Mountain View, CA. For further information, please visit [www.axalbion.com](http://www.axalbion.com).

### **Contacts:**

Michael Kitt, M.D.  
Chief Executive Officer  
Axalbion Therapeutics Limited  
[investor@axalbion.com](mailto:investor@axalbion.com)

or  
Susan Kinkead  
Kinkead Communications  
[susan@kinkeadcomm.com](mailto:susan@kinkeadcomm.com)  
(415) 509-3610