

About Aimovig® (erenumab) in migraine prevention

Media factsheet

About migraine

Migraine is a distinct neurological disease.¹ It involves recurrent attacks of moderate to severe head pain and may be associated with nausea, vomiting and sensitivity to light, sound and odors.² It is one of the top 10 causes of years lived with disability for men and women according to the World Health Organisation.³ It remains under-recognized and under-treated.¹

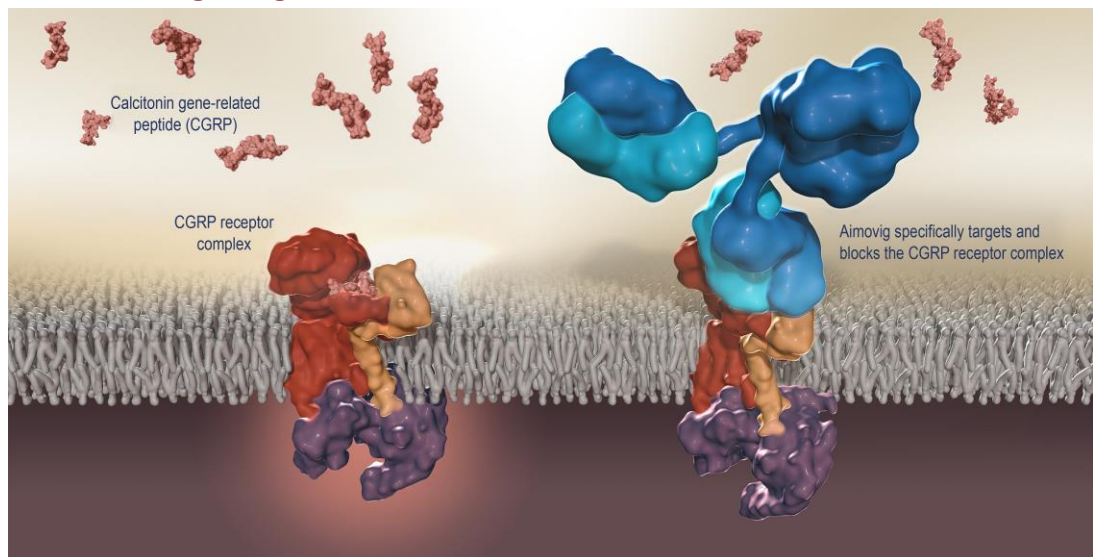
People with migraine are in urgent need of new preventive treatment options as up to 80% of patients with chronic migraine discontinue preventive medication within a year.⁴ Furthermore, currently available preventive treatments have generally been repurposed from other areas rather than designed with migraine as a target.² Also, most available treatments aim to relieve symptoms rather than prevent migraine attacks. Frequent use of medications to treat headaches when they occur can lead to medication-overuse headache which can result in entering a destructive cycle of medication use.⁵

About Aimovig®

Overview

Aimovig is the first and only FDA- and EMA-approved CGRP-targeted therapy for migraine prevention. It has also been approved in Canada, Australia, Switzerland, the UAE and Singapore. It is a novel therapeutic approach, the first and only medication specifically developed to prevent migraine by blocking the calcitonin gene-related peptide receptor (CGRP-R), which is believed to play a critical role in migraine.⁶ Aimovig is self-administered or can be administered by another trained person once every four weeks via an autoinjector pen and does not require a loading dose. Some patients may benefit from a dosage of 140 mg once every four weeks.

How is Aimovig thought to work?



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CGRP is a protein that binds to the CGRP receptor complex and is thought to be responsible for transmitting the pain signals associated with migraine.⁶ In people with migraine, CGRP levels increase at the onset of pain and return to normal when migraine pain subsides.⁷

Aimovig specifically blocks the CGRP receptor. It is the first and only fully human monoclonal antibody of its kind designed to do this.

What is the clinical evidence?

Data from clinical trials on Aimovig involving more than 3,000 patients have shown meaningful and sustained benefits in patients across the spectrum of migraine including reduced migraine days, even in difficult-to-treat patients.⁸⁻¹¹

How was Aimovig developed?

Aimovig is being co-developed by Novartis and Amgen. In August 2015, Novartis entered into a global collaboration with Amgen to develop and commercialize pioneering treatments in the field of migraine and Alzheimer's disease. The collaboration focuses on investigational Amgen drugs in the migraine field, including Aimovig and AMG 301 (currently in Phase II development). In April 2017, the collaboration was expanded to include co-commercialization of Aimovig in the United States. For the migraine program, Amgen retains exclusive commercialization rights in Japan, and Novartis has exclusive commercialization rights in Europe, Canada and rest of world.

References

1. Migraine Research Foundation. Migraine facts. <http://www.migraineresearchfoundation.org/fact-sheet.html>. Accessed October 2018.
2. National Institute for Neurological Disorders and Stroke. Migraine Information Page. <https://www.ninds.nih.gov/Disorders/All-Disorders/Migraine-Information-Page>. Accessed October 2018.
3. World Health Organization. Headache disorders. <http://www.who.int/mediacentre/factsheets/fs277/en/>. Accessed October 2018.
4. Hepp Z, Dodick DW, Varon SF, et al. Adherence to oral migraine-preventive medications among patients with chronic migraine. *Cephalalgia*. 2015; 35(6):478-88.
5. Headache Classification Committee of the International Headache Society, 2013
6. Bigal ME, Walter S, Rapoport AM. Calcitonin gene-related peptide (CGRP) and migraine: Current understanding and state of development. *Headache*. 2013;53(8):1230-1244.
7. Lassen LH, Hadersley PA, Jacobsen VB, et al. CGRP may play a causative role in migraine. *Cephalalgia*. 2002;22(1):54-61.
8. Dodick DW, Ashina M, Brandes JL, et al. ARISE: A phase 3 randomized trial of erenumab for episodic migraine. *Cephalalgia*. 2018; 38(6):1026-1037.
9. Goadsby PJ, Reuter U, Hallström Y, et al. A controlled trial of erenumab for episodic migraine. *N Engl J Med*. 2017;30;377(22):2123-2132
10. Tepper S, Ashina M, Reuter U, et al. Safety and efficacy of erenumab for preventive treatment of chronic migraine: a randomised, double-blind, placebo-controlled phase 2 trial. *Lancet Neurol*. 2017;16(6):425-434.
11. Reuter U, Goadsby PJ, Lanteri-Minet M, et al. Efficacy and tolerability of erenumab in episodic migraine patients who previously failed 2-4 preventive treatments. *Lancet*. 2018 Oct.

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