



## Amgen And Novartis Partner With Karamo Brown To Support And Empower People Living With Migraine

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**The Know Migraine Mission Initiative Seeks to Challenge Misconceptions and Start new Conversations About Migraine  
Karamo Brown to Connect Directly with People Affected by Migraine to Share Experiences and Advice During This  
Challenging Time**

**COVID-19 has had a Significant Impact on People who Live With Migraine,(1) so it's More Important Than Ever to Offer  
Compassion and Understanding Around the Disease**

THOUSAND OAKS, Calif., Dec. 7, 2020 /PRNewswire/ -- Amgen (NASDAQ:AMGN) today announced a partnership with Karamo Brown, Emmy-nominated host from Netflix's hit show "Queer Eye," to support and empower people living with migraine. Karamo, who is known for helping people open up about themselves, is discussing his own struggles with migraine for the first time to help spread knowledge and acceptance. The [Know Migraine Mission](#) is a national effort by the companies behind Aimovig® (erenumab-aooe) to challenge public misconceptions, start new conversations and make the world a more migraine-friendly place. As part of the initiative, Karamo, who is not an Aimovig® patient but has dealt with migraine for years, will share his thoughts with people personally affected by migraine along with their friends, families and coworkers to help increase understanding of the disease.

"We've all been feeling the stress of this year, and it's compounded if you live with migraine like me. However, some people don't realize how challenging this disease can be, which is why I'm excited to lend my voice to the Know Migraine Mission," said Karamo. "For people with migraine, talking about it can help make a real difference in their lives. Those conversations are important, even though they might look different today – so, whether it's a social-distanced lunch date with a friend or a video call with a doctor, it's important to take control where possible."

Migraine is a complex neurological disease that impacts millions of people in the U.S.<sup>2-5</sup> Despite its prevalence and severity, migraine is often misunderstood and dismissed as being "just a headache."<sup>6</sup> Research shows people may often feel stigmatized for missing time with friends, family and co-workers because of their migraine.<sup>2,6</sup>

Karamo has struggled with migraine since he was in high school. The disease has impacted many parts of his life, including his ability to spend time with his two sons and other family and friends. As part of this partnership, Karamo is answering questions and sharing his thoughts with others who are living with this disease. On [KnowMigraineMission.com](#) and social media, including the Aimovig [Facebook](#) and [Instagram](#) pages, Karamo will address how others can start new conversations to help reduce the stigma around migraine.<sup>6</sup>

Aimovig, co-marketed in the U.S. by Amgen and Novartis, is the first Food and Drug Administration (FDA)-approved treatment indicated to prevent migraine in adults by targeting the calcitonin gene-related peptide (CGRP) receptor.<sup>7</sup> Clinical study results have established the efficacy and safety profile of Aimovig across a spectrum of people living with both episodic and chronic migraine.<sup>8,9</sup>

"Aimovig is proven to reduce monthly migraine days and for some, can cut the number of monthly migraine days in half or more, allowing patients to be there more in their everyday lives," said Darryl Sleep, M.D., senior vice president, Global Medical, and chief medical officer at Amgen. "But while treatment has evolved, progress still needs to be made to change the conversation around migraine and better support people living with this debilitating disease. Through the Know Migraine Mission, we want to educate the broader community about the impact of migraine and empower people to speak up about their disease and seek treatment options that may be appropriate for them."

To learn more about Karamo's story and for additional information and resources, visit [www.KnowMigraineMission.com](#) and follow Aimovig on [Facebook](#) and [Instagram](#).

### **About the Know Migraine Mission**

The Know Migraine Mission is a national effort by Amgen and Novartis to challenge public misconceptions, start new conversations and make the world a more migraine-friendly place. The way migraine can be treated has changed,<sup>7</sup> but the way people with migraine are treated still has a long way to go. Amgen and Novartis believe the more vocal and visible people with migraine are, the more others will recognize the debilitating effects of this disease.<sup>5</sup>

### **About Aimovig® (erenumab-aooe)**

Aimovig, co-marketed in the U.S. by Amgen and Novartis, is the first FDA-approved migraine preventive treatment that targets the calcitonin gene-related peptide (CGRP) receptor, which is associated with migraine.<sup>7,11</sup> Aimovig has been studied in several large, global, randomized, double-blind, placebo-controlled studies to assess its efficacy and safety in migraine prevention.<sup>9,10</sup> Aimovig is self-administered once monthly via the easy-to-use SureClick® autoinjector, without a required loading dose.<sup>7,12</sup> More than 3,000 patients participated in registrational trials of Aimovig across four placebo-controlled Phase 2 and Phase 3 clinical studies and their open-label extensions.<sup>8,9,10,13,14</sup>

Aimovig is also being evaluated through CATALYST, a comprehensive evidence generation program initiated by Amgen and Novartis that includes over 7,500 patients across ongoing clinical trials and a robust assessment of real-world evidence. Spanning over 39 countries globally, CATALYST clinical trials will explore the role of Aimovig in comparative studies, assessing impact on novel migraine outcomes, understanding predictive biomarkers and investigating Aimovig's use in additional study populations. To date, more than 480,000 patients worldwide have been prescribed Aimovig for the preventive treatment of migraine in adults.<sup>15</sup>

### **AIMOVIG INDICATION**

Aimovig® (erenumab-aooe) is indicated for the preventive treatment of migraine in adults.

## IMPORTANT SAFETY INFORMATION

**Contraindication:** Aimovig<sup>®</sup> is contraindicated in patients with serious hypersensitivity to erenumab-aooe or to any of the excipients. Reactions have included anaphylaxis and angioedema.

**Hypersensitivity Reactions:** Hypersensitivity reactions, including rash, angioedema, and anaphylaxis, have been reported with Aimovig<sup>®</sup> in post marketing experience. Most reactions were not serious and occurred within hours of administration, although some occurred more than one week after administration. If a serious or severe reaction occurs, discontinue Aimovig<sup>®</sup> and initiate appropriate therapy.

**Constipation with Serious Complications:** Constipation with serious complications has been reported following the use of Aimovig<sup>®</sup> in the postmarketing setting. There were cases that required hospitalization, including cases where surgery was necessary. The onset of constipation was reported after the first dose in a majority of these cases, but patients also reported later on in treatment. Aimovig<sup>®</sup> was discontinued in most reported cases. Constipation was one of the most common (up to 3%) adverse reactions reported in clinical studies.

Monitor patients treated with Aimovig<sup>®</sup> for severe constipation and manage as clinically appropriate. Concurrent use of medications associated with decreased gastrointestinal motility may increase the risk for more severe constipation and the potential for constipation-related complications.

**Hypertension:** Development of hypertension and worsening of pre-existing hypertension have been reported following the use of Aimovig<sup>®</sup> in the postmarketing setting. Many of the patients had pre-existing hypertension or risk factors for hypertension. There were cases requiring pharmacological treatment and, in some cases, hospitalization. Hypertension may occur at any time during treatment but was most frequently reported within seven days of dose administration. In the majority of the cases, the onset or worsening of hypertension was reported after the first dose. Aimovig<sup>®</sup> was discontinued in many of the reported cases.

Monitor patients treated with Aimovig<sup>®</sup> for new-onset hypertension, or worsening of pre-existing hypertension, and consider whether discontinuation of Aimovig<sup>®</sup> is warranted if evaluation fails to establish an alternative etiology.

**Adverse Reactions:** The most common adverse reactions in clinical studies ( $\geq 3\%$  of Aimovig<sup>®</sup>-treated patients and more often than placebo) were injection site reactions and constipation.

Please see Aimovig<sup>®</sup> full [Prescribing Information](#).

### About Migraine

People with frequent migraine attacks may lose more than half their life to migraine.<sup>16,17</sup> One attack could last up to three days.<sup>16</sup> They endure debilitating pain, physical impairment, and live in constant dread of the next attack – all of which is compounded by a widespread misperception of the disease.<sup>5,6</sup> The 2017 Global Burden of Disease Study ranks migraine among the top 10 causes of years lived with disability worldwide.<sup>18</sup> Migraine is associated with personal and societal burdens of pain, disability and financial cost, and it remains under-recognized and under-treated.<sup>2,19</sup>

### About Amgen and Novartis Neuroscience Collaboration

In August 2015, Amgen entered into a global collaboration with Novartis to develop and commercialize pioneering treatments in the field of migraine. The collaboration focuses on investigational Amgen drugs in the migraine field, including Aimovig (approved by the FDA in May 2018 for the preventive treatment of migraine in adults).<sup>7</sup> In April 2017, the collaboration was expanded to include co-commercialization of Aimovig in the U.S. For the migraine programs, Amgen retains exclusive commercialization rights in the U.S. (other than for Aimovig as described above) and Japan, and Novartis has exclusive commercialization rights in Europe, Canada and rest of world. At the center of the Amgen and Novartis neuroscience collaboration is the shared mission to fight migraine and the stereotypes and misperceptions surrounding this debilitating disease.

### About Amgen

Amgen is committed to unlocking the potential of biology for patients suffering from serious illnesses by discovering, developing, manufacturing and delivering innovative human therapeutics. This approach begins by using tools like advanced human genetics to unravel the complexities of disease and understand the fundamentals of human biology.

Amgen focuses on areas of high unmet medical need and leverages its expertise to strive for solutions that improve health outcomes and dramatically improve people's lives. A biotechnology pioneer since 1980, Amgen has grown to be one of the world's leading independent biotechnology companies, has reached millions of patients around the world and is developing a pipeline of medicines with breakaway potential.

For more information, visit [www.amgen.com](http://www.amgen.com) and follow us on [www.twitter.com/amgen](https://www.twitter.com/amgen).

### Amgen Forward-Looking Statements

This news release contains forward-looking statements that are based on the current expectations and beliefs of Amgen. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements, including any statements on the outcome, benefits and synergies of collaborations, or potential collaborations, with any other company, including BeiGene, Ltd. or any collaboration or potential collaboration in pursuit of therapeutic antibodies against COVID-19 (including statements regarding such collaboration's, or our own, ability to discover and develop fully-human neutralizing antibodies targeting SARS-CoV-2 or antibodies against targets other than the SARS-CoV-2 receptor binding domain, and/or to produce any such antibodies to potentially prevent or treat COVID-19), or the Otezla<sup>®</sup> (apremilast) acquisition (including anticipated Otezla sales growth and the timing of non-GAAP EPS accretion), as well as estimates of revenues, operating margins, capital expenditures, cash, other financial metrics, expected legal, arbitration, political, regulatory or clinical results or practices, customer and prescriber patterns or practices, reimbursement activities and outcomes, effects of pandemics or other widespread health problems such as the ongoing COVID-19 pandemic on our business, outcomes, progress, or effects relating to studies of Otezla as a potential treatment for COVID-19, and other such estimates and results. Forward-looking statements involve significant risks and uncertainties, including those discussed below and more fully described in the Securities and Exchange Commission reports filed by Amgen, including our most recent annual report on Form 10-K and any subsequent periodic reports on Form 10-Q and current reports on Form 8-K. Unless otherwise noted, Amgen is providing this information as of the date of this news release and does not undertake any obligation to update any forward-looking statements contained in this document as a result of new information, future events or otherwise.

No forward-looking statement can be guaranteed and actual results may differ materially from those we project. Discovery or identification of new product candidates or development of new indications for existing products cannot be guaranteed and movement from concept to product is uncertain; consequently, there can be no guarantee that any particular product candidate or development of a new indication for an existing product will be successful and become a commercial product. Further, preclinical results do not guarantee safe and effective performance of product candidates in humans. The complexity of the human body cannot be perfectly, or sometimes, even adequately modeled by computer or cell culture systems or animal models. The length of time that it takes for us to complete clinical trials and obtain regulatory approval for product marketing has in the past varied and we expect similar variability in the future. Even when clinical trials are successful, regulatory authorities may question the sufficiency for approval of the trial endpoints we have selected. We develop product candidates internally and through licensing collaborations, partnerships and joint ventures. Product candidates that are derived from relationships may be subject to disputes between the parties or may prove to be not as effective or as safe as we may have believed at the time of entering into such relationship. Also, we or others could identify safety, side effects or manufacturing problems with our products, including our devices, after they are on the market.

Our results may be affected by our ability to successfully market both new and existing products domestically and internationally, clinical and regulatory developments involving current and future products, sales growth of recently launched products, competition from other products including biosimilars, difficulties or delays in manufacturing our products and global economic conditions. In addition, sales of our products are affected by pricing pressure, political and public scrutiny and reimbursement policies imposed by third-party payers, including governments, private insurance plans and managed care providers and may be affected by regulatory, clinical and guideline developments and domestic and international trends toward managed care and healthcare cost containment. Furthermore, our research, testing, pricing, marketing and other operations are subject to extensive regulation by domestic and foreign government regulatory authorities. Our business may be impacted by government investigations, litigation and product liability claims. In addition, our business may be impacted by the adoption of new tax legislation or exposure to additional tax liabilities. If we fail to meet the compliance obligations in the corporate integrity agreement between us and the U.S. government, we could become subject to significant sanctions. Further, while we routinely obtain patents for our products and technology, the protection offered by our patents and patent applications may be challenged, invalidated or circumvented by our competitors, or we may fail to prevail in present and future intellectual property litigation. We perform a substantial amount of our commercial manufacturing activities at a few key facilities, including in Puerto Rico, and also depend on third parties for a portion of our manufacturing activities, and limits on supply may constrain sales of certain of our current products and product candidate development. An outbreak of disease or similar public health threat, such as COVID-19, and the public and governmental effort to mitigate against the spread of such disease, could have a significant adverse effect on the supply of materials for our manufacturing activities, the distribution of our products, the commercialization of our product candidates, and our clinical trial operations, and any such events may have a material adverse effect on our product development, product sales, business and results of operations. We rely on collaborations with third parties for the development of some of our product candidates and for the commercialization and sales of some of our commercial products. In addition, we compete with other companies with respect to many of our marketed products as well as for the discovery and development of new products. Further, some raw materials, medical devices and component parts for our products are supplied by sole third-party suppliers. Certain of our distributors, customers and payers have substantial purchasing leverage in their dealings with us. The discovery of significant problems with a product similar to one of our products that implicate an entire class of products could have a material adverse effect on sales of the affected products and on our business and results of operations. Our efforts to collaborate with or acquire other companies, products or technology, and to integrate the operations of companies or to support the products or technology we have acquired, may not be successful. A breakdown, cyberattack or information security breach could compromise the confidentiality, integrity and availability of our systems and our data. Our stock price is volatile and may be affected by a number of events. Our business performance could affect or limit the ability of our Board of Directors to declare a dividend or our ability to pay a dividend or repurchase our common stock. We may not be able to access the capital and credit markets on terms that are favorable to us, or at all.

Any scientific information discussed in this news release relating to new indications for our products is preliminary and investigative and is not part of the labeling approved by the U.S. Food and Drug Administration for the products. The products are not approved for the investigational use(s) discussed in this news release, and no conclusions can or should be drawn regarding the safety or effectiveness of the products for these uses.

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