GRÜNENTHAL GROUP Press Release





German Pain Specialist Grünenthal and 23andMe Explore the Genetics of Pain to Help **Identify New Treatments for Patients**

May 3, 2017 - Mountain View, Calif., USA, and Aachen, Germany - Today 23andMe, Inc. and Grünenthal announced a joint study to better understand how genes influence pain. Together, they seek to enroll 20,000 participants from the U.S. The study will be one of the largest of its kind to combine data on genetics and response to pain, including a pain tolerance experiment. The Grünenthal Group is an entrepreneurial, science-based German pharmaceutical company specializing in pain, gout and inflammation; 23andMe is a leading personal genetics company.

23andMe will invite eligible genotyped customers who have consented to participate in the pain study to provide information about their experience with pain via online surveys designed by Grünenthal and 23andMe. In addition, participants will be asked to self-administer a wellestablished pain endurance test — the Cold Pressor Test — to determine pain tolerance. The combined data set of survey answers and genetic information will be studied by scientists from 23andMe and Grünenthal to learn more about the differences in how people experience pain, and how best to manage pain with more targeted treatments.

"This collaboration demonstrates our continued commitment to pain supporting our ambition to deliver four to five new products to patients in diseases with high unmet needs by 2022, as it is Grünenthal's first step into generating Big Data which plays an increasingly important role in drug development and is essential to drive innovation. One perspective in the context of precision medicine is to use human DNA as guidance for which drugs work best in which patients. We aim to use the outcome of the study to identify starting points for the development of innovative, highly effective medicines," emphasizes Gabriel Baertschi, CEO of the Grünenthal Group.

"Pain is a complex disease. As a worldwide leader in pain, we are continuously striving to expand the body of knowledge to offer solutions for those patients who don't have a treatment option today," said Klaus-Dieter Langner, PhD, CSO of the Grünenthal Group. "We are very much looking forward to working with our expert collaborators at 23andMe to learn about the causal relationship between genetic patterns and different aspects to pain. Ultimately, our goal is to research and develop innovative, highly effective medicines for patients in need," Langner concludes.

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"The goal of this study is to understand genetic factors associated with the experience of pain and response to medications designed to alleviate pain," said Emily Drabant Conley, Ph.D., Vice President of Business Development, 23andMe. "Pain is often a unique experience for each individual, and therefore complex to understand and treat. By leveraging large amounts of genetic and phenotypic data this study may help develop a more personalized approach to pain management."

The new 23andMe and Grünenthal study could shed more light on why these differences occur by understanding genetic factors associated with pain sensitivity, progression, severity, and response to treatments.

About Grünenthal

The Grünenthal Group is an entrepreneurial, science-based pharmaceutical company specialized in pain, gout and inflammation. Our ambition is to deliver four to five new products to patients in diseases with high unmet medical need by 2022 and become a €2 billion company. We are a fully integrated research & development company with a long track record of bringing innovative pain treatments and state-of-the-art technologies to patients. By sustainably investing in our R&D above the industrial average, we are strongly committed to innovation.

Grünenthal is an independent, family-owned company headquartered in Aachen, Germany. We are present in 32 countries with affiliates in Europe, Latin America and the US. Our products are sold in more than 155 countries and approx. 5,500 employees are working for the Grünenthal Group worldwide. In 2016, Grünenthal achieved revenues of approx. € 1.4 bn. More information: www.grunenthal.com

About 23andMe

23andMe, Inc. is the leading personal genetics company. Founded in 2006, the mission of the company is to help people access, understand and benefit from the human genome. 23andMe has more than two million customers worldwide, with over 80 percent consented to participate in research. 23andMe, Inc. is located in Mountain View, CA. More information is available at www.23andMe.com

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