



## 23andMe Releases New Report Revealing Likelihood of Developing Lupus

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### 23andMe+ members can now gain insights on the chronic autoimmune condition

SOUTH SAN FRANCISCO, Calif., May 09, 2023 (GLOBE NEWSWIRE) -- 23andMe Holding Co. (Nasdaq: ME) (23andMe), a leading human genetics and biopharmaceutical company, today released a new report on lupus, a chronic autoimmune disease that can in some severe cases lead to permanent tissue damage, and may affect the skin, joints, heart, lungs, kidneys, circulating blood cells, or brain. The report, which is powered by data from consenting 23andMe research participants, is available for its [23andMe+](#) members.

As we recognize [Lupus Awareness Month](#), 23andMe's new report includes helpful insight into a customer's likelihood of developing this hard to diagnose autoimmune disease. Because lupus is so [difficult to diagnose](#), there are a wide range of estimates on how many people are living with the condition that range from about 160,000 to more than [1.5 million in the United States](#), according to the Lupus Foundation of America. In 2021, the [CDC estimated that about 200,000 people](#) in the U.S. are living with systemic lupus erythematosus (SLE), the most common form of lupus.

"Lupus is notoriously difficult to diagnose," said Noura Abul-Husn, MD, PhD, Vice President of Genomic Health at 23andMe. "Although the cause of lupus is not yet fully understood, researchers believe that a mix of genetics and environmental factors trigger an overactive immune (or "autoimmune") response. Understanding one's genetic likelihood of developing the disease could help them better understand their overall risk."

23andMe's new report uses machine learning techniques to estimate an individual's likelihood of being diagnosed with lupus. The estimate is made using a statistical model that includes more than 1,900 genetic markers and information on an individual's ethnicity and sex assigned at birth. You can learn more about the science and methodology behind our new report in this [white paper](#).

Note that 23andMe's report on lupus can provide users with helpful information on their estimated genetic likelihood of being diagnosed with the condition. Still, it is not a substitute for clinical diagnosis and treatment.

### About Lupus

Lupus is a group of autoimmune conditions that can occur in several forms, ranging from a minor rash to severe disease that can affect multiple organs in the body. While there are several types of lupus, SLE is the most common type.

Symptoms typically come and go throughout life in flares, but lupus can have serious health consequences if left untreated. Common symptoms include fatigue and muscle and joint pain. In addition, some of those with lupus may experience symptoms like periodic fevers, skin lesions, or a butterfly-shaped rash on the face.

One of the many confounding aspects of the disease is that it can impact almost any part of the body — the skin, joints, or various organs like the heart or the lungs. In addition, the parts of the body affected by lupus can be different between people and have different symptoms associated with them. This wide range of symptoms, and the fact that those symptoms can change over time, make diagnosing the disease challenging.

According to the [Lupus Foundation of America](#), like many autoimmune diseases, lupus impacts females at a higher rate than males — nine out of ten people diagnosed with lupus are female. And among women, it is women of color who are disproportionately impacted. Black, Latina, and Asian women are two to three times more likely to develop lupus than white women.

Although the cause of lupus is not yet fully understood, researchers believe that a mix of genetics and environmental factors trigger an overactive immune (or "autoimmune") response. It's that autoimmune response that can result in damage to the body. For those with lupus, certain non-genetic factors can trigger flares of disease symptoms. These include viral infections, certain medications, sunlight, and stress.

Scientists have identified dozens of genes associated with an increased likelihood of developing the disease. These genes are involved in various immune system functions, including the production of antibodies, the regulation of inflammation, and the clearance of immune complexes.

A [four-year study](#) by 23andMe and Pfizer of about 6,000 people with lupus found that about 28 percent of those who participated also had a parent, child, or sibling with lupus. Additionally, we learned that among participants in our study, more than three-quarters reported joint and muscle pain.

However, we also learned that the impact of living with lupus went beyond just those symptoms; many of those participating in our study reported other health impacts. For instance, people with lupus participating in our study were four times more likely to have major depression compared to research participants without the condition. We also found that 44 percent of those in our study reported having high blood pressure.

### About 23andMe

23andMe is a genetics-led consumer healthcare and biopharmaceutical company empowering a healthier future. For more information, please visit [www.23andMe.com](http://www.23andMe.com).

### Forward Looking Statements

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including, without limitation, statements regarding the future performance of 23andMe's businesses in consumer genetics and therapeutics and the growth and potential of its proprietary research platform. All statements, other than statements of historical fact, included or incorporated in this press release, including statements regarding 23andMe's strategy, financial position, funding for continued operations, cash reserves, projected costs, plans, and objectives of management, are forward-looking statements. The words "believes," "anticipates," "estimates," "plans," "expects," "intends," "may," "could," "should," "potential," "likely," "projects," "predicts," "continue," "will,"

"schedule," and "would" or, in each case, their negative or other variations or comparable terminology, are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These forward-looking statements are predictions based on 23andMe's current expectations and projections about future events and various assumptions. 23andMe cannot guarantee that it will actually achieve the plans, intentions, or expectations disclosed in its forward-looking statements and you should not place undue reliance on 23andMe's forward-looking statements. These forward-looking statements involve a number of risks, uncertainties (many of which are beyond the control of 23andMe), or other assumptions that may cause actual results or performance to differ materially from those expressed or implied by these forward-looking statements. The forward-looking statements contained herein are also subject generally to other risks and uncertainties that are described from time to time in the Company's filings with the Securities and Exchange Commission, including under Item 1A, "Risk Factors" in the Company's most recent Annual Report on Form 10-K, as filed with the Securities and Exchange Commission, and as revised and updated by our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. The statements made herein are made as of the date of this press release and, except as may be required by law, 23andMe undertakes no obligation to update them, whether as a result of new information, developments, or otherwise.

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