



Message to the Friedreich Ataxia Community

Lexeo Therapeutics' Friedreich Ataxia Portfolio Plans

September 22, 2026

Dear Advocacy Partners and FA community members,

We are pleased to share an [update on Lexeo's partnerships and plans for new research in Friedreich ataxia \(FA\)](#). Lexeo will expand its portfolio to include multiple investigational therapies that may be able to treat FA. Lexeo is focused on continuing to develop LX2006, our investigational gene therapy, as a potential treatment for individuals living with Friedreich ataxia cardiomyopathy (FA-CM). In addition to developing LX2006, we also look forward to conducting research on potential new therapies that can help treat both neurological and cardiac symptoms of FA.

Highlights:

- Lexeo Therapeutics has agreed to buy Mantle Therapeutics Inc. including its four FA programs.
- The Mantle programs use different methods that aim to increase or replace a protein called frataxin, which is needed for organs and tissues to function properly. These approaches are different than the LX2006 gene therapy, and include approaches intended to reach the brain.
- Lexeo also announced three research agreements to study ways of giving a second dose of gene therapy treatment to the brain and spinal cord after an earlier dose of LX2006.
- Most of these programs are in early stages of development. More research will be conducted to assess if they are safe and effective in people.
- Lexeo plans to study the new programs on their own and together with LX2006. The company expects future trials of these programs to include a group of people who previously received LX2006.

Why is this important?

FA is a condition that can affect several parts of the body, including the heart and nervous system. People with FA have low levels of frataxin, a protein that helps cells make energy. Lexeo will now study several new ways to increase or replace frataxin, in addition to the LX2006 gene therapy already being studied.

What did Lexeo announce?

On September 22, 2026, Lexeo announced that it has agreed to acquire Mantle Therapeutics, a private company developing treatments being studied for FA. When the transaction to acquire Mantle Therapeutics is completed, Lexeo will add four programs to its research portfolio:

- **LX3010 (MTL-104)** is an oral combination treatment being studied in people. It is designed to increase frataxin and address how cells make energy and respond to oxidative stress, a type of cell damage. In early data from 11 people with FA, the average frataxin level in muscle samples was about 9 times the starting level. After 16 weeks, mFARS scores decreased by about 6 points. A lower score means fewer signs of FA on this scale. Further studies will be conducted to confirm whether LX3010 is safe and effective.
- **LX3030 (MTL-707)** is an oral small-molecule treatment in preclinical testing. It is designed to enter tissues and help the body make more frataxin in the brain and spinal cord. Laboratory and animal studies showed increases in frataxin. LX3030 has not yet been tested in people.
- **LX3050 (MTL-501)** is in preclinical testing. It combines lab-made human frataxin with a carrier designed to cross the blood-brain barrier and deliver frataxin to the brain. Laboratory studies showed changes in measures of cell energy function that increased with dose. It has not yet been tested in people.
- **LX3070 (MTL-801)** is in the discovery stage. It uses an antisense oligonucleotide, a short piece of genetic material, joined to a carrier designed to reach the brain. The goal is to help cells make more frataxin. Laboratory studies showed frataxin increases that rose with dose. It has not yet been tested in people.

What will happen after the acquisition?

After the acquisition is completed, Lexeo plans to review the programs and decide which program(s) to study further based on scientific, clinical, strategic and financial criteria. Lexeo will give an update on the prioritized program(s) in early 2027 and expects to submit an Investigational New Drug application to the FDA for its next FA candidate in 2027. Lexeo plans to study the new programs on their own and together with LX2006. The company expects future trials to include a group of people who previously received LX2006.

What other research agreements were announced?

Lexeo also announced three agreements to study ways of giving a gene therapy dose to the brain and spinal cord after an earlier IV infusion of LX2006.

- **Weill Cornell Medicine research collaboration:** Lexeo will study giving a second dose of LX2006 into the fluid around the brain and spinal cord, after an earlier IV

infusion of LX2006, in large-animal models. The work will also examine doses and medicines that reduce immune activity.

- **Vivet Therapeutics agreement:** Lexeo obtained the right to negotiate and secure an exclusive license for VTX-PID, an enzyme designed to break down certain antibodies. The aim is to study whether this approach could help some people with antibodies against adeno-associated virus, or AAV, safely receive LX2006 for the first time or safely receive a second dose.
- **Apertura agreement:** Lexeo obtained the right to negotiate and secure a license for a new gene therapy carrier designed to cross the blood-brain barrier after injection into a vein. The aim is to study a less invasive way to give a second dose of a gene therapy that can reach the brain.

Next Steps for the LX2006 program:

Lexeo Therapeutics is continuing to test LX2006 in the SUNRISE-FA 2 pivotal study, which remains the company's highest priority. SUNRISE-FA 2 is currently enrolling participants. The study is open to individuals living with FA-CM.

We're excited to share this update with this community as we continue our work on LX2006 and expand our FA portfolio for an opportunity to offer multiple treatment options. We are grateful to the individuals living with FA, their families, caregivers, investigators, and advocacy partners who make our research possible.

The Lexeo Team