FSIG Connection
The Official Newsletter of the Fabry Support & Information Group
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FSIG Connection

"LIFE-CHANGING"

"ONE-AND-DONE"

Five-year results of the world's first Fabry gene therapy trial

PLUS: Cardiologist Q&A • 5 tips for Fabry teens • Results of latest trial for oral treatment

FALL 2025

INSIDE

FSIG Connection

News from the Fabry Support & Information Group

GENE THERAPY OUTLOOK

Therapy still ‘life changing’ 5 years later

Trial suggests Fabry can be edited out

By Melissa James
FSIG Contributor

In the world’s first gene therapy clinical trial to be completed for Fabry, results were overwhelmingly positive.

In the 2025 report “Lentivirus-mediated gene therapy for Fabry disease: 5-year End-of-Study results from the Canadian FACTs trial,” researchers announced four of five patients showed significant biomarker improvements, and three were able to stop their enzyme replacement therapy entirely. These results give hope that a “one-and-done” treatment is possible.

The study’s other highlights included:

- There were no adverse events of any grade attributable to the cellular gene therapy intervention or host conditioning throughout the follow-up interval of 5 years.
- After reduced-intensity melphalan treatment, all patients engrafted their autologous modified α-gal A expressing cells.
- All patients synthesized and secreted α-gal A throughout the course of the study.
- Expression of α-gal A resulted in a decrease in plasma lyso-Gb3 in four of five patients and stabilization of kidney symptoms in all patients.

Find out more: bit.ly/GTTrial

Entire gene study cost same as 5 years’ ERT

By Melissa James
FSIG Contributor

In an eye-opening revelation, Canadian researcher Dr. Michael West said the country’s FACTs gene therapy study is saving almost as much money for the five patients’ enzyme replacement therapy as the study itself costs.

West, a kidney specialist who co-authored the study, told The Canadian Press in July that the overall ERT savings have been $3.7 million, against research costs to date of about $4 million—which was largely funded by the federal Canadian Institutes of Health Research. ERT costs about $300,000 annually

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Uniqure’s AMT-191 therapy increases enzyme in trial

By Marisa Wexler, MS
FabryDiseaseNews.com

(Sept. 11, 2025) Treatment with the experimental gene therapy AMT-191 led to increases in levels of the enzyme whose deficit causes Fabry disease for four patients in an early clinical trial. As a result, enzyme replacement therapy was discontinued for all patients.

AMT-191 is being developed by Uniqure, which presented the findings at the International Congress of Inborn Errors of Metabolism in Kyoto, Japan.

“The early data highlight the potential of

See UNIQURE, Page 2

WELCOME

Dear Friends,

Welcome to the 58th edition of FSIG Connection! Each issue reminds me how far our community has come — and how much hope continues to grow for everyone affected by Fabry disease.

In this issue, we share updates on existing therapies and clinical trials that are shaping the future of Fabry care. You'll also find an insightful interview with a heart specialist who works closely with Fabry patients, offering valuable information about cardiac health and management.

We're honored to include a patient story that captures the courage and resilience at the heart of our community. Alongside these features, you'll find articles designed to inform, support and connect those living with Fabry and their families.

Thank you for staying engaged and for being part of this journey. Together, we continue to advance awareness, education, and hope for all those affected by Fabry disease.

Jack

Jack Johnson,
Executive Director

COST: cont'd from p.1

in Canada. West said that while the research needs larger-scale studies before it becomes conventional treatment, he believes it's worth pursuing due in part to the costs and "the burden to patients" of the existing therapy. He added that the ultimate cost of gene therapy per patient has yet to be determined.

Read full story: bit.ly/RIDresearch

Sangamo gene therapy shows Fabry kidney improvement

By Marisa Wexler, MS
FabryDiseaseNews.com

(June 26, 2025) Fabry disease patients showed improvements in kidney function in the year following a single dose of gene therapy ST-920 (isaralgagene civaparvovec), and reductions in disease severity were seen at a median of two years after treatment.

That's according to top-line data from the Phase 1/2 STAAR trial (NCT04046224). The findings were announced by Sangamo Therapeutics, the company developing ST-920 and sponsoring the trial.

"These data demonstrate the potential for a single dose of ST-920 to provide meaningful clinical benefits above current standards of care and to treat the underlying [disease biology] of Fabry disease," Nathalie Dubois-Stringfellow, PhD, Sangamo's chief development officer, said in a company press release. "We want to thank the patients and investigators who participated in this study and look forward to sharing these data with health authorities." Based on the positive findings, Sangamo plans to ask the U.S. Food and Drug Administration (FDA) to grant accelerated approval to ST-920. Accelerated approval is a form of conditional approval in which the FDA allows a therapy to be brought to market while requiring the treatment's developer to conduct additional tests to prove it gives clinical benefits to patients.

The FDA previously indicated that data from the STAAR study could serve as a basis for accelerated approval of ST-920, and Sangamo said it expects to have an application submitted as soon as early 2026.

Read full story: bit.ly/FabrySTAAR

UNIQURE: continued from p. 1

AMT-191 as a transformative one-time treatment option for people living with Fabry disease," Walid Abi-Saab, MD, Uniqure's chief medical officer, said in a company press release. Phase 1/2 clinical trial of AMT-191 still recruiting at 8 US sites

Fabry disease is caused by mutations in the gene that provides instructions to make alpha-galactosidase A (alpha-Gal A), an enzyme needed to break down certain fatty molecules. Reduced activity of this enzyme in people with Fabry disease leads to fatty molecules building up to toxic levels in cells, causing damage that ultimately drives disease symptoms.

AMT-191 is a one-time gene therapy designed to deliver a gene encoding a functional version of the alpha-Gal A enzyme to the body's cells. According to Uniqure, the goal is to achieve supraphysiological enzyme levels—levels higher than are typically seen in healthy people who don't have Fabry disease.

The company is sponsoring a Phase 1/2 clinical trial (NCT06270316) to test AMT-191 in men with Fabry disease ages 18 to 50. The study is still recruiting participants at eight sites across the U.S.

The new data come from the first four participants in the study, all of whom received a single infusion of AMT-191 at a dose of 60 trillion genome copies per kilogram of body weight (gc/kg; one genome copy is essentially one particle of gene therapy).

Read full story: bit.ly/DataAMT-191

Q&A with cardiologist Dr. Daniele Massera

For this edition of our Physician Spotlight, we are honored to feature Dr. Daniele Massera, an accomplished cardiologist and associate director of the Hypertrophic Cardiomyopathy Program at NYU Langone Health, who is dedicated to understanding, treating and advancing knowledge of heart disease, including its impact on people living with Fabry. Dr. Massera's research and clinical care have helped shape new insights into how Fabry affects the heart, making a lasting impact on patients, families and the broader Fabry community.

Q: What inspired you to pursue a career in healthcare? I've always liked science, and I've always liked people. When I was choosing careers, I knew I wanted to combine those two passions, and medicine turned out to be the perfect fit. I chose this path and have never looked back. I can't imagine another field that would have been as rewarding.

Q: What are your specializations, and what drew you to Fabry? I'm a cardiologist who specializes in conditions that cause the heart muscle to become abnormally thick. The most common "thick heart muscle condition" is hypertrophic cardiomyopathy, or HCM. About 99% of my work focuses on that condition. When I first started in this field about seven years ago, I began diagnosing a small percentage of patients—around one to two percent—who appeared to have HCM with Fabry disease. The two can look nearly identical and I realized that I need to make sure I don't miss this. That realization sparked my interest and, in many ways, my mission: to find the "needle in the haystack." It's critical that cardiologists identify these patients early, because Fabry disease affects multiple organs and systems, and there are targeted treatments that can make a real difference if started in time. As I diagnosed more and more Fabry patients, I became fascinated by the disease and its complexity. That interest led to collaborations with pharmaceutical companies working in this area. It's been a very rewarding journey—one that, honestly, found me by surprise.

Q: Why is heart health such an important part of the picture for people living with Fabry? That's a great question and a multifaceted one. In some Fabry patients, the heart is the organ that is *most* affected. If those cases aren't recognized as Fabry heart disease, they may never get the correct diagnosis. Heart health is vital for everyone, but especially for those with Fabry, because heart problems are one of the main reasons Fabry patients become seriously ill or die from complications. It's so important to keep up with cardiac testing and have a strong relationship with a cardiologist who understands Fabry. Be proactive, be preventive—heart care really is central to living well with this condition.

Q: Can you describe a particularly challenging case that shaped your approach to Fabry? I actually cared for several patients who underwent surgery for what was believed to be HCM. During the operations, the surgeon removed a piece of thickened heart muscle to relieve outflow obstruction and to improve blood flow. When the pathologist examined that tissue, they discovered it wasn't HCM—it was Fabry disease. Those were humbling experiences. I realized I should have recognized the signs earlier. One of the few ways to confirm Fabry heart disease is through genetic testing, but there are real barriers: cost, access, insurance coverage, or even fear about how genetic results might affect life or disability insurance. Because of that, some people don't get diagnosed until much later in the course of the disease.

Q: What advancements in Fabry research, tools or treatments get you most excited right now? There's a lot to be excited about. First, new drugs are being developed specifically to help improve cardiomyopathy in Fabry patients. Some are now in clinical trials, and if they truly reduce the thickness of the heart muscle, that would be a tremendous breakthrough. Second, gene therapy holds enormous potential—not only to treat Fabry, but to prevent major complications of Fabry disease. And third, I'm encouraged by the growing use of cardiac MRI. It's a powerful imaging tool that allows us to see heart characteristics that a standard ultrasound might miss. These advances together could really change the outlook for Fabry heart care.

Q: What advancements in Fabry research, tools or treatments get you most excited right now? My hope is that new technologies, such as artificial intelligence and advanced imaging, will help us identify Fabry patients earlier and predict who will benefit from specific therapies. If we can combine those tools with diligent, proactive care, we can prevent heart failure, and hopefully even death. Early detection really is the key.

Q: How do you approach conversations about Fabry treatment options with patients? My focus is on the heart. I don't prescribe enzyme replacement or chaperone therapies myself, but I do play a crucial role in identifying the patients who need them. I manage things like heart failure, arrhythmia and obstruction of blood flow, and I work closely with geneticists and other specialists who determine which Fabry-specific therapy is best. If there's clear evidence of Fabry in the heart, that's a strong sign that treatment should start as early as possible.

Q: If you could share one piece of advice with Fabry patients, what would it be? Listen to your heart—literally. If you feel something unusual, such as discomfort, chest pain or shortness of breath when climbing stairs or exercising, don't ignore it. Tell your Fabry specialist and make sure you're also seeing a cardiologist who understands how Fabry can affect the heart. Small symptoms can be important clues.

Q: What are some of your passions outside of healthcare? My family, especially my two wonderful children—they're my greatest joy. Outside of work, I also love music and playing the violin.

Q: What keeps you motivated in your field, and what do you find most rewarding about working with the Fabry community? What drives me is the gap between how things should be and the care we're actually delivering. That gap pushes me to keep educating both the medical community and patients about what high-quality Fabry cardiac care should look like. There's a lot of work to do, but it's incredibly rewarding, because cardiologists can have such a major impact on how people with Fabry feel, function and live.

Read profile: bit.ly/MasseraNYU

Diagnosis came 15 years before she realized she had symptoms

Alicia with her grandfather

By Alicia Macke
Fabry Patient

My name is Alicia Macke, and I'm blessed with a beautiful, blended family consisting of two sons, two daughters and an amazing husband, Jerry.

My Fabry journey began in 2007, when my cousin reached out encouraging everyone to get tested, as Fabry was discovered in our family tree. Even though we had never heard of Fabry and weren't experiencing any of the symptoms she described, our extended family did the cheek swab as a precaution. Weeks later, my grandfather, mother, brother, and I received letters confirming that we all tested positive. We didn't believe—we felt fine. So we all filed the letters away and moved on with our lives, not realizing what we were ignoring.

Fast forward 14 years. I began having a recurring dream about my grandfather, who had passed away two years prior. It was like he was trying to tell me something. I recall waking up screaming, "What are you trying to tell me?" Then a commercial appeared on the TV about Fabry disease. It stopped me in my tracks—I hadn't heard the word Fabry for many years, and I remember telling my husband that it was in my family. That night, I had the dream again.

The next day, I reached out to my cousin, who connected me with Dr. Hopkins' office. On Aug. 18, 2021, I received a phone call stating that yes, my son and daughter had Fabry, in addition to myself. After the initial devastation, I drove to the cemetery and sat at the base of my grandfather's grave, crying. That's when I realized I hadn't dreamed about him since I made that phone call; I finally understood the message he was trying to send me. Even when his earthly body was no more, he was still protecting me.

Ridden with guilt and still some disbelief, I let another year and a half go by. Then came a pivotal moment that forced me to focus on my diagnosis. During a virtual meeting, my boss started having a stroke. My quick actions ultimately saved her life, but that moment shook me to my core. Knowing that several family members had suffered from strokes, I became determined to understand Fabry disease. I listened to podcasts, watched YouTube videos, read everything I could and reached back out to Dr. Hopkins' office to discuss receiving treatment on Galafold.

My research helped me finally put the puzzle pieces together and make sense of my mysterious issues. Since infancy, I had struggled with overheating—I would cry until my grandmother took off my shoes and socks. Fatigue and chronic pain were constant. In sports, I would quickly get tired, my heart would race, my vision would fade, my ears would ring, and I'd come close to blacking out if I didn't take off my shoes and socks. Migraines plagued me through high school; severe GI issues were frequent and debilitating. The extreme fatigue and heat intolerance were worsening. Jerry and I loved taking the kids to Kings Island Amusement Park every summer, but two years in a row, we had to cut the trip short because I overheated and passed out. My fatigue also involved extreme sleepiness; I had trained myself to just go at full speed with everything I did, so I wouldn't fall asleep. I contacted a neurologist and underwent a sleep study. The results confirmed that I was experiencing Excessive Daytime Sleepiness, a symptom of Fabry.

Then started Galafold. The first unexpected change was that I began sweating. It was messy and unfamiliar and downright gross! Before starting treatment, if I overheated, I would pass out, but now my body started adapting. Fans, powders and cooling tools became part of my daily routine. The next time we took the kids to Kings Island, we stayed all day—no overheating or passing out.


Alicia with her husband.

Today, I live with Fabry disease, and I embrace it. I share my story with family, advocate for myself and encourage others to do the same. Every day, I work to learn more and improve my health and well-being, still overcoming obstacles along the way.

I used to ignore my diagnosis. Now, I am an advocate. Fabry has taught me to listen to my body, honor my story and use my voice to help others do the same.

Compassion vital for both patients and caregivers

By Susanna VanVickle
FabryDiseaseNews.com

(Aug. 26, 2025) Sitting by the stone hearth at La Madeleine restaurant, two friends and I vulnerably shared our thoughts over soup and salad. We parent kids navigating chronic health issues. We fight for deep relationships within our families. We have experienced ups and downs in our mental health.

My friend told us to imagine carrying hundreds of pounds of rocks in a pack on our back. Then imagine feeling shame or guilt because our back hurts.

"Of course your back is in pain," she gently pointed out. "You are carrying a tremendously heavy weight everywhere you go."

I thought of some recent comments I've received from Fabry Disease News readers. A common thread among them — both patients and caregivers — is that you, too, are carrying a heavy weight. My heart broke as I read some of the comments. Fabry disease is a big load of rocks to carry, even with help. Please reach out, speak out, and cry out when you need to. There are people who will walk with you beneath the burden."

Another challenge often echoed by readers is that parents feel lost in the storm of Fabry. Considering the particular difficulties shared by those of us raising children, teens, and young adults with this lysosomal storage disorder, it helps to hear from other parents who understand. We all worry about making the right decisions, get frustrated with the lack of answers, struggle with what to say, and even worry about the financial impact of this rare disease on our families.

Still, despite the circumstances, every parent raising a child with Fabry must offer compassion. Compassion, which entails more than just pity or empathy, is vital. I remember learning that the Latin root "com" means "with" and "passio" means "suffering." A 2018 article published in the Journal of Pain and Symptom Management notes:

"Although the Latin root for the term compassion (compassio) was often used interchangeably when translating sympatheia from ancient Greek in the 16th century, the concept originally held a deeper meaning and religious connotation that was rooted in love and the spiritual connection of living beings through a Higher Power, God, the Universe, Nature or a Life Force."

With this in mind, we may not be able to mitigate our loved ones' pain, but we can suffer with them. Caregivers are co-sufferers, and our job is not only to feel sad for or encourage, offer guidance or let alone, manage symptoms or seek a cure, but to sincerely suffer with our children. It is invaluable to the person suffering to be connected with others who suffer alongside them every single day."

Read full story: bit.ly/FabryCare

Study shows burden of heart, other complications

By Lindsey Shapiro, PhD
FabryDiseaseNews.com

(June 5, 2025) Serious complications like cardiovascular disease and other heart issues, kidney problems, and stroke are common among adults with Fabry disease and may be associated with factors such as sex, age at diagnosis, genetic profiles, and cardiometabolic risk factors like obesity, according to the findings of a 20-year U.K. study.

Slightly less than half of all reported deaths among these Fabry patients were related to cardiovascular problems like heart failure or heart attack, the data showed.

"This study provides real-world observational insights into the clinical trajectories of patients with FD [Fabry disease] over two decades," the researchers wrote, noting that "a substantial proportion of patients experienced ... outcomes" marked by heart and kidney complications.

The analysis, involving data from more than 400 people with Fabry in the U.K., helps to illustrate the disease burden experienced by patients, the researchers noted.

Moreover, the team wrote, "these findings support a comprehensive, individualised approach to care, including early diagnosis, [cardiovascular] risk assessment, and targeted multidisciplinary management to optimise outcomes."

Read full story: bit.ly/FabryHeart

Fabry affects family planning among Japanese

By Steve Bryson, PhD
FabryDiseaseNews.com

(July 17, 2025) Family planning is the main event in a woman's life that's most affected by Fabry disease, while passing the disease onto her children was the biggest concern, according to a survey of patients and caregivers in Japan.

Most respondents also felt the condition affected their mental health. "This study provides important insights into the experiences of women living with Fabry disease in Japan, emphasizing the multifaceted challenges they face," the researchers wrote.

Researchers recruited 62 participants, primarily women (75.8%), to complete a 22-question survey to better understand the burden of disease and quality of life in women with Fabry disease in Japan. The work was sponsored by Amicus Therapeutics, which markets Galafold (migalastat).

In addition to other questions, participants ranked the impact of Fabry on the key events in a woman's life—the onset of puberty, menstrual cycle, marriage, family planning, childbirth, peri- to post-menopause, and relationship building. About half (48.4%) the respondents said Fabry disease impacted family planning. Also mentioned was the onset of puberty (17.7%) and the menstrual cycle (12.9 %). Among women, family planning remained the most frequent problem (60.5%) associated with Fabry.

Inheriting the disease and its impact on children were more frequently noted by the female respondents (89.1% vs. 60.0%), while both women and men said women hold these concerns due to prejudice, stigma and guilt associated with the disease's hereditary nature.

Read full story: bit.ly/FabryFamPlan

5 tips to help Fabry teens thrive

By Susanna VanVickle
FabryDiseaseNews.com

(May 27, 2025) In March, I was blessed to go on a mission with my 81-year-old mother, my 14-year-old daughter, Marisa, and two other moms and their girls. We arrived in the stunningly beautiful Costa Rica and spent a week in a small village nestled in the mountains, where we visited the homebound, the needy, and the elderly every day.

Marisa was struck by witnessing the sick and disabled who, despite great poverty and suffering, welcomed us with cheerful dispositions and bore their difficulties with grace and even gratitude.

Since that week, Marisa has demonstrated greater gratitude and positivity. Therefore, as I begin to offer suggestions that might help a Fabry patient in the throes of their teens, serving others is at the top of the list.

1. Seek service opportunities.

The teen years are often typified by self-centered behavior, which makes teens vulnerable to depression. Hence, when Marisa was focusing on her own ailments and troubles, she wasn't happy, but when she was intentional about lifting someone else's heavy burdens, she found her own cross less weighty.

Just as Marisa found joy on our mission, teens who seek out opportunities to serve and uplift others tend to be happier. In fact, the good feelings (and endorphins) that come from being a gift to another are a powerful antidote to depression and anxiety.

2. Do something you love.

Marisa deals with frequent flare-ups of foot pain and gastrointestinal discomfort on top of the normal challenges of puberty, both physical and mental. At times she's complained daily about life, school, her body, her extracurriculars, and her social connections. It's heartbreaking to see my girl unhappy.

Recently, she's been complaining less after joining a city volleyball league. The chance to be active and do something she loves has made a marked difference in her outlook. The fun she's having on the court doesn't eliminate her neuropathy or abdominal pain— n fact, sometimes the symptoms are exacerbated—but volleyball gives her something to look forward to and a reason to push through the pain. We all need something enjoyable to draw our attention away from our problems.

3. Take your medication.

After bad experiences with treatment, Marisa became reluctant to get on any regimen. As her mom, I finally had to come up with creative incentives so that she'd take the two prescriptions that could relieve some of her neuropathy and gastrointestinal pain. To make sure she adheres to her treatment, I hung a calendar on the wall where she must put a check mark after taking her meds, and she set a daily alarm on her phone.

For the first time ever, she's been faithful to her regimen, and we're seeing slightly fewer flare-ups and less discomfort.

4. Enjoy a pick-me-up.

Besides seeking activities that bring joy to others and themselves, I've found that a special splurge can go a long way in boosting a teen's morale.

For Marisa's Confirmation day, I was inspired to get her hair cut somewhere other than Supercuts. Normally, the luxurious Ritz-Carlton Spa is out of our budget, but for this occasion she was pampered beautifully, and the smile on her face was worth it.

5. Write it out.

Everyone needs a safe place to vent or lament, but not everyone wants to talk about their troubles. For my introverted daughter, I've discovered that journaling is a healthy outlet for her to process and organize her thoughts.

A cute, cheap, leather-bound journal from Amazon has opened up hours of fun for Marisa, who enjoys working through things in writing while still keeping her thoughts private.

Read full story: bit.ly/FabryTeens

People with Fabry spend average 6 hours on ERT

By Steve Bryson, PhD
FabryDiseaseNews.com

(Sept. 4, 2025) People with Fabry disease spend an average of six hours on activities related to a single treatment with an enzyme replacement therapy, including on travel, waiting, infusions, and other tasks, an observational study suggests.

About 1 in 5 patients and half of caregivers said they took time off work for an ERT infusion, resulting in unpaid hours and out-of-pocket travel expenses.

"Real-world data on the time, cost, and burden associated with the administration of ERTs are limited," wrote a team led by scientists at Amicus, who conducted an observational study (NCT04281537) to measure the burden of ERT infusions on 76 patients with Fabry disease.

Healthcare providers spent about 2.5 hours on an ERT session, including pre-infusion, infusion, and post-infusion tasks. The total mean time was almost two hours for agalsidase alfa and nearly three hours for Fabrazyme. More than six hours were spent on all the activities related to an ERT infusion.

Read full story: bit.ly/ERT6Hours

WORLD BRIEFS

Rare disease advocate forced to emigrate for ERT

(Sept. 19, 2025) Fabry patient James McGoram was so desperate for life-saving treatment, he was forced to move to Australia. The outgoing Rare Disorders New Zealand chairman told 1News that while he loves Aotearoa, New Zealand, "living here is quite literally killing me."

New Zealand's Pharmaceutical Management Agency (Pharmac) has been reviewing four treatment options for Fabry, including one that's been under consideration since 2006.

Read full story: bit.ly/RDadvocate

Fabry Korea head urges reform of reimbursement

(June 13, 2025) Fabry Korea President Jang Dong-ki recently met with Korea Biomedical Review to discuss the difficulties of treating the rare diseases due to outdated reimbursement criteria. While many countries have a system that allows patients to start treatment as soon as a problem is detected, this is not the case in Korea.

Read full story: bit.ly/FabryReimburse

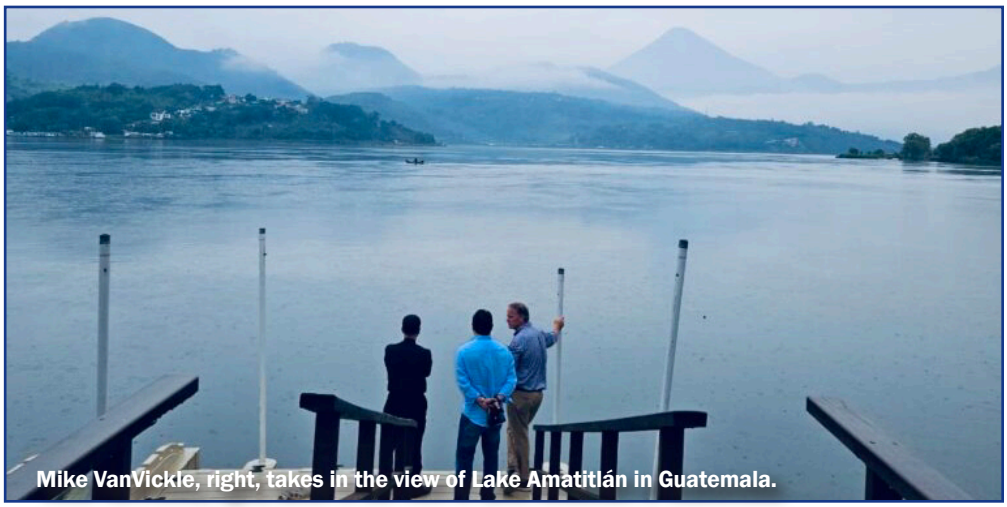
Argentina OKs 1st Fabry biosimilar in South America

(Sept. 17, 2025) Argentina has approved Agalzyme, a biosimilar of agalsidase beta, as the first enzyme replacement therapy for Fabry disease in Latin America, representing a major advance in treatment accessibility for Fabry.

Laboratorio Biosidus announced the launch of Agalzyme, a biosimilar to Sanofi's Fabrazyme (agalsidase beta).

Read full story: bit.ly/ArgentinaFabry

Life must go on, even when Fabry flares up



Mike VanVickle, right, takes in the view of Lake Amatitlán in Guatemala.

By Susanna VanVickle
FabryDiseaseNews.com

(July 1, 2025) Picture this: I was soaking in the panorama of emerald mountain peaks framing the blue waters of Lake Amatitlán in Guatemala, where my friend and her groom were kicking off their wedding festivities with friends, food, and music. The event was exceptional, but I was feeling off. An unease had a hold on my body, and the low churning discomfort in my gut made it hard to enjoy the party.

I am a 46-year-old with Fabry disease. Miraculously, however, I have never experienced Fabry symptoms, so I wonder if food poisoning caused the queasy feeling that upset my Guatemalan getaway.

I hid my discomfort from the celebrated couple and their family. Hardly keeping my mind off my stomach, I did my best to smile and engage, while constantly visiting the bathroom."

That experience gave me a deep sense of empathy for my children with Fabry. My oldest sons, twins Michael and Anthony, as well as my youngest daughter, Marisa, face ongoing stomach pain due to Fabry disease. They have mentioned feeling "awful" or "unsettled" without going into much more detail. I couldn't relate—not until my last two days in Guatemala.

I wanted to show up fully for the wedding festivities, but I was hanging on by a thread. I couldn't eat more than a bite of the exquisite food, and the only beverage I consumed was chamomile tea. I binged on the chewable antacids provided in the ladies' room and managed a few dances on the dance floor, but my insides were out of sync.

I share these vulnerable moments because they gave me a taste of the symptoms that are common in Fabry disease. But from what my kids tell me, the awful, sick feeling usually isn't enough to stop what they're doing. Instead, they go through the day with an underlying storm in their guts. Often the storm is an obstacle to concentration or enjoyment, but they are used to it. I recall a specific instance when my boys, then in middle school and not yet diagnosed with Fabry, were excited to travel to Louisiana to spend the "best week of their life" at a summer camp.

That week Anthony was plagued with his usual gastrointestinal issues and found himself frequently isolated in the restroom or discreetly chugging his contraband Pepto Bismol. Yet, he still managed to make the most of his camp opportunity.

I have a newfound admiration for my kids and others with Fabry disease who persevere through continuous and disruptive sickness. I applaud Michael, Anthony, and Marisa for counting their blessings and letting the beauty around them speak louder than the discomfort within.

Read full story: bit.ly/FabryFlare

FSIG

FSIG is a support group dedicated to dispensing information and encouraging mutual self-help as a means of emotional support.

FSIG was formed in 1996 by two Fabry patients and supportive family members with the hope that their particular understanding of this disease, combined with experience gathering information and working with doctors could benefit others.

FSIG is a nonprofit, tax-exempt organization and relies on charitable contributions to provide services to those with Fabry disease, their families and supportive others. Donations may be sent to the address below.

Please feel free to make copies of the FSIG Newsletter to share with your family, friends and others. We encourage anyone interested in FSIG or the newsletter to contact us so we can make sure you receive the next issue.

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Long-term agalsidase alfa shows benefits in treating Fabry disease

Use over 20 years extends life, aids kidneys & heart

By Steve Bryson, PhD
FabryDiseaseNews.com

(May 15, 2025) Up to 20 years of treatment with agalsidase alfa slowed declines in kidney and heart function, and extended survival, among people with Fabry disease, according to the findings of a global real-world study.

The therapy's long-term use was found to delay mortality in these patients relative to untreated people with Fabry disease.

The researchers also noted that kidney outcomes improved and heart muscle disease stabilized "regardless of sex or [a patient's] baseline" status — a participant's functional levels or condition at the study's start.

Still, among male Fabry patients, kidney function declined faster, and the probability of survival over time was lower, compared with female patients, the data showed.

Overall, however, the researchers concluded that "long-term treatment with agalsidase alfa may provide renal [kidney], cardiac, and overall survival protection in [Fabry disease]."

The annual rate of kidney function decline in treated patients was numerically lower than that of untreated individuals, regardless of sex, as assessed by the estimated glomerular filtration rate (eGFR). Still, kidney function declined significantly faster in treated male patients than in female patients.

Male patients lost kidney function faster each year than female patients, independently of how long they had been treated. When looking at treatment length, women who had been treated for less than 10 years had a faster decline in kidney function compared with those treated for 10 years or more, the data showed.

Cardiomyopathy, a disease of the heart muscle, worsened more slowly in treated versus untreated patients, regardless of sex or treatment duration, as indicated by the annual left ventricular mass index (LVMI). Even so, the annualized LVMI changes of treated patients with or without left ventricular hypertrophy, or the enlargement of the heart's left lower chamber, were similar, regardless of sex.

The team then analyzed morbidity, or the general state of illness, by assessing the occurrence of a composite event, which included adverse heart events/procedures, kidney events, stroke, or death.

In treated patients, men were generally younger than women at their first composite event (mean 40.23 vs. 49.14), but the time to an event from the start of treatment was similar between the two sexes.

Overall, treated patients were older than untreated patients at the time of their first composite event. After two years of treatment, the likelihood of a composite morbidity event was lower in treated than untreated patients (34% vs. 45%), particularly among boys/men (46.6% vs. 87%).

In a survival analysis, patients who were treated lived longer than those who were untreated, by an average (mean 61.7 vs. 50.3 years). Although the age at which half of the treated male patients were still alive was older than that of untreated patients (75.5 vs. 60 years), treated boys/men had a lower probability of survival over time than treated girls/women.

Read full story: bit.ly/LT-AA

Myeloid bodies in urine may help find, monitor Fabry

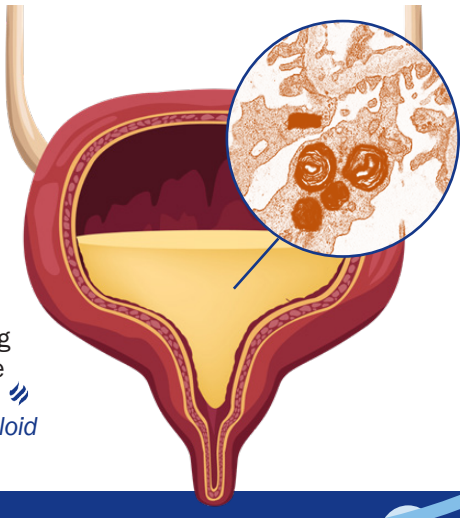
By Marisa Wexler, MS
FabryDiseaseNews.com

(July 3, 2025) Fatty deposits called myeloid bodies in urine may help diagnose Fabry disease and monitor how people with Fabry are responding to treatment, a study showed.

Myeloid bodies are abnormal clumps of fat-like molecules that build up inside cells in people with Fabry disease. Some of these clumps can be found in urine. These deposits, known as urinary myeloid bodies, were first described in the 1970s, but their exact role and importance in Fabry disease have not been well understood.

"After 1 year of ERT, both the number and area ratio of urinary myeloid bodies decreased, highlighting their potential as biomarkers for monitoring ERT effectiveness," wrote the Chinese researchers.

Read full story: bit.ly/Myeloid



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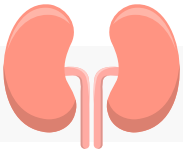


KIDNEY

Fabry disease may raise risk of renal cell carcinoma

(July 10, 2025) Renal cell carcinoma, a common type of kidney cancer, is diagnosed more frequently in people with Fabry disease than in the general population, suggesting a need to consider routine cancer screening as part of their care plan, according to a study from the U.K. and the Netherlands.

The data suggest that adults with Fabry disease may be at increased risk for renal cell carcinoma, and that this cancer may occur at a younger age than in the general population. This raises the possibility that Fabry disease itself may be an independent risk factor for kidney cancer, potentially due to chronic stress or inflammation caused by the accumulation of fatty molecules.

"This suggests that routine screening for [renal cell carcinoma] may be beneficial in patients with Fabry disease," the researchers wrote. They suggested further research into how mutations in the GLA gene may increase the risk of kidney cancer.

Read full story: bit.ly/FabryRCC

Blood biomarkers may reflect kidney function

(June 12, 2025) Levels of certain molecules in the blood may help track disease activity and kidney damage in Fabry disease, a study found.

"These biomarkers may play a crucial role in improving clinical management by facilitating early diagnosis and personalized treatment strategies for" Fabry disease, researchers wrote in the study, "The relationship between multiple plasma biomarker levels and renal disease activity in Fabry disease," published in BMC Nephrology

A team led by scientists in Turkey set out to examine how levels of various molecules in blood are related to kidney involvement in people with Fabry disease. The team analyzed blood samples from 87 people with Fabry disease, 46 people with non-Fabry chronic kidney disease (CKD), and 41 people with no known health issues.

Among the Fabry patients, about half had kidney involvement, and most were being treated with enzyme replacement therapy.

Read full story: bit.ly/biomarkFab

HEART

Blood tests rule out Fabry heart disease

(Sept 18, 2025) High-sensitivity blood tests to measure troponin — a biomarker of heart cell damage — can be used to rule out significant cardiomyopathy, a heart condition, in people with Fabry disease, according to a recent report. In clinical settings, this could help physicians promptly identify patients in need of more substantial monitoring and treatment, while avoiding resource-intensive MRI imaging for people at low risk. *Read full story: bit.ly/FabryTroponin*

Fabry serious heart risk for both sexes

(Aug. 7, 2025) Fabry disease takes a significant toll on the hearts of both male and female patients in Finland, often leading to cardiomyopathy, a serious heart condition, according to a recent study. This condition, which weakens the heart muscle, increases the risk of heart failure and stroke.

Researchers also found a difference between the sexes: cardiomyopathy tends to develop earlier in men, and it is also linked to a younger age at death.

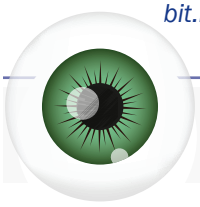
Read full story: bit.ly/FabryRisk

BONE

Bone tissue death rare, painful in Fabry

(Aug. 7, 2025) A type of bone tissue death called avascular necrosis is a rare, painful complication of Fabry disease that clinicians should be aware of, according to a recent case report. The report described a 41-year-old man with Fabry who experienced severe pain and mobility problems from avascular necrosis, and ended up needing his hips replaced.

Read full story: bit.ly/BTdeath



EYE

Fabry eye changes may affect vision

(May 29, 2025) Changes in the cornea are found in the eyes of people with Fabry disease who have a common disease symptom called corneal verticillata, and these alterations could affect vision quality, a study has found.

Specifically, patients tend to have more abnormalities or aberrations in the cornea that affect the way it focuses light onto the retina. The thickness of the center of the cornea was significantly smaller in people with Fabry.

Read full story: bit.ly/FabryEye

Eye blood vessels predict stroke risk

(July 24, 2025) Looking at blood vessels in the eye in people with Fabry disease may give clinicians new insights into problems with blood vessel regulation in the body — and help explain the increased risk of stroke and other complications in Fabry patients.

The team noted, "retinal vessel behavior represents a window to the brain and its specific vasculature" that could help explain complications seen in Fabry patients.

Read full story: bit.ly/Eye-Stroke

Results strong in Phase 2 trial for oral treatment

By Lindsey Shapiro, PhD
FabryDiseaseNews.com

(Aug. 21 2025) The main part of a Phase 2 trial testing Acelink Therapeutics' AL01211 in men with Fabry disease is now complete, and its developer is reporting that the oral treatment candidate showed a favorable safety profile and led to "robust" reductions in disease biomarkers.

Given these positive data, Acelink said it's now preparing for discussions with the U.S. Food and Drug Administration about a potential pathway to accelerated approval for AL01211 in the U.S.

In China, AL01211 has received breakthrough therapy designation, a status intended to expedite a treatment's clinical development and review. Acelink is leveraging that designation to engage with Chinese regulators on potential approval pathways, the company said in a press release.

"The successful completion of the [six]-month main treatment period of this Phase 2 clinical trial is an important milestone," said Wen Chen, Acelink's acting CEO. "We are looking forward to obtaining more clinical data and eventually being able to bring a safe and effective therapy to patients in urgent need.".

AL01211 belongs to a class of experimental Fabry treatments called substrate reduction therapies that aim to bypass the need for alpha-Gal A. These therapies seek to reduce the production of Gb3 in the first place. They do this by inhibiting an enzyme called glucosylceramide synthase (GCS) that's key for the production of Gb3 and other glycosphingolipids.

Substrate reduction therapies are named as such because they lower levels of an enzyme's substrate, or the substance on which the enzyme exerts its effects. In this case, that's Gb3.

Relative to other experimental treatments in this class, AL01211 is designed to potently and specifically target GCS in the tissues that are most affected in Fabry, such as the heart and kidneys, while avoiding other tissues where it could cause side effects, such as in the brain.

Acelink is also developing the therapy to treat Gaucher disease type 1, a condition in which a different type of glycosphingolipid accumulates.

In a Phase 1 study in healthy adults, AL01211 was found to be safe and well tolerated. Following those results, Acelink launched this Phase 2 trial (NCT06114329), which started dosing at clinical sites in China in 2023.

The study enrolled 18 men with classic Fabry — a more severe form of the disease in which little to no functional alpha-Gal A is made — who had not received any Fabry-specific treatment. The participants were assigned to receive daily oral capsules of AL01211 at a dose of 30 or 60 mg for 26 weeks, or about six months.

The main goal was to evaluate safety, with the therapy's pharmacological properties and disease biomarkers measured as secondary trial goals.

Interim results announced earlier this year showed that the therapy was safe and well tolerated. The 30 mg dose cut Gb3 levels in half, while the higher 60 mg dose led to even faster and stronger Gb3 reductions.

Data also suggested the therapy may protect kidney function, ease pain, and improve life quality, according to Acelink. While the company didn't present any new results in its announcement that the main part of the trial was finished, it did indicate that AL01211 was safe and led to biomarker reductions it deemed "robust."

Read full story: bit.ly/FabryCuts

RELATED STORY

Korean firms launch trial of patient-friendly Fabry therapy

Two leading Korean pharmaceutical companies have begun testing a new treatment that could transform the lives of patients with Fabry disease.

Current standard treatment involves enzyme replacement therapy delivered by intravenous infusion every two weeks, a process that is both time-consuming and burdensome for patients and their families. LA-GLA aims to change that paradigm with a once-monthly, subcutaneous injection patients can administer at home. Early animal studies suggest that this new approach improves convenience and provides better kidney function and nerve health protection.

Read full story: bit.ly/KoreanFabry

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New Fabry mutation leads researchers to connect 2 strangers

(July 31, 2025) A new mutation in the GLA gene was identified as the cause of Fabry disease in two people who turned out to be members of the same family in Spain, a discovery that allowed researchers to analyze the family tree and track how the disease was inherited.

They found that some members who carried the new mutation developed Fabry symptoms to varying degrees of severity, while others did not. The study, "Fabry disease: Importance of genetic counseling in the reclassification of variants of uncertain clinical significance," was published in *Medicina Clínica.*

Read full story: bit.ly/FabryStrangers

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