

WE ARE BREAKTHROUGH T1D!

Type1 discovery

Issue 98/ October - January 2024/25

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T1D film

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MEET KITTY

who put on Maidstone's
first Pride with the help
of her new CGM



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We are Breakthrough T1D



Welcome to the final issue of Discovery for 2024—and the first under our new identity as Breakthrough T1D.

This year has been a milestone for us, not just in terms of breakthroughs, but in how we represent ourselves. Our new name and look emerged from a commitment to being more inclusive and reflective of the community we serve. And what an incredible year it has been, where research, advocacy, and peer support have taken centre stage.

Our breakthroughs span many areas of type 1 diabetes care and research, but what connects them all is you. Your support makes it all possible. From your runs and rides to your volunteering and voice, you keep us moving forward. Together, we can continue our mission of finding cures for T1D and making everyday life better for people who live with T1D.

This issue celebrates both the innovative advances we are pushing forward and the remarkable achievements of people like you. It reflects the vibrant community that shapes everything we do.

You will hear from some of our extraordinary fundraisers, whose dedication fuels our progress. Plus, we are thrilled to feature Kitty, our cover star, who hosted her town's first Pride event while embracing new technology. Kitty's story is a powerful reminder of the importance of peer support and how we lift each other up.

We are also excited to share news of our upcoming awareness campaign, a true community effort that was created and filmed with the help of our supporters. This project embodies the spirit of collaboration and collective action that defines who we are as a community today.

Thank you for being part of this journey with us. Here's to the future and all we will achieve together.

Karen Addington

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To find out about the projects you help to fund, visit breakthrough1d.org.uk



JDRF has become Breakthrough T1D!

While our name may have changed, our commitment to advancing research, improving lives, and finding a cure remains fixed.

Thanks to your incredible support, we have invested in the world's most pioneering research aimed at preventing, treating, and ultimately curing type 1 diabetes (T1D). From developing the first engineered insulin over 40 years ago to creating hybrid closed loop systems, our achievements are a testament to the impact of your generosity.

We understand that living with T1D presents unique challenges, and we are dedicated to advocating for better access to treatments and resources. Through collaboration with the T1D community, we prioritise the needs that will make the most significant difference in daily lives.

Karen Addington, Breakthrough T1D UK CEO says:

“On a global scale, we are investing in groundbreaking research to prevent, treat, and cure T1D, while also transforming everyday life for everyone living with it. We are breaking through the barriers once imposed by a T1D diagnosis, empowering people to live fuller and healthier lives. Our mission won't stop until T1D becomes a thing of the past.”

As we embark on this exciting new chapter, we want to express our heartfelt gratitude for your ongoing support. Together, we are making strides toward a future where T1D is no longer a reality. Thank you for being a vital part of our mission. Together, we will continue to push boundaries and drive progress.

New Digibete digital learning platform for schools

The Type 1 Diabetes Schools and Training Community Platform is a cutting-edge digital tool that will equip teachers and school staff with essential knowledge to support students with T1D.

The course enhances understanding of the physical and mental impacts of type 1 diabetes on young learners while emphasising the importance of diabetes technologies and mobile phone access. It features interactive elements, real-world scenarios, and quizzes.

Dan Farrow, Head of Community Engagement at Breakthrough T1D says: “Educators play a critical role in the lives of students with type 1, and it's essential they understand the realities of living with this condition to create inclusive learning environments. From managing blood glucose fluctuations to navigating the emotional challenges, it's more than just a medical condition - it's a daily balancing act. That's why we're thrilled to have partnered in developing the Type 1 Diabetes Schools and Community Training platform for teachers and school staff, empowering them with the knowledge and tools they need to truly support students with type 1, ensuring they feel safe and thrive academically, socially and emotionally.”

Developed collaboratively with diabetes healthcare professionals, young people, educators, and parents, this platform is a joint initiative of DigiBete and Leeds Children's Hospital Diabetes Team, in partnership with the National Children and Young People's Diabetes Network, Breakthrough T1D, and the Together Type 1 team at Diabetes UK.

You can find out more about the tool at breakthrough1d.org.uk/schools-training

TOP 10 RESEARCH PRIORITIES FOR ADULTS LIVING WITH TYPE 1 DIABETES

A new study, 'The Top Ten Priorities in Adults Living with Type 1 Diabetes in Ireland and the United Kingdom,' published in Diabetic Medicine, reveals key concerns of adults with T1D. Conducted collaboratively through the James Lind Alliance Priority Setting Partnership, it involved patients, families, diabetes charities, and clinicians.

The study focused on person-centered care, ensuring research aligns with the needs of people living with T1D. The top priorities include advancements in technology, women's health, and assessing blood glucose metrics. This updated list builds on findings from a similar study in 2011, guiding future research and funding in diabetes care.

You can find out more at breakthrough1d.org.uk/priorities



Wear It ONEderful on World Diabetes Day

This World Diabetes Day, November 14, 2024, join the celebration by wearing your most joyful outfits to raise funds for T1D research.

Whether it's a wacky hat, a dazzling dress, or a superhero costume, choose your attire and light up the day to bring much-needed awareness to T1D.

You won't be alone – with the launch of our new brand 'Breakthrough T1D' we'll also be Wearing it ONEderful on World Diabetes Day. We'll be joining in the fun with our new brand logo and colours, showing our love for our incredible T1D community.

Find out more at breakthrough1d.org.uk/wear-it-onederful



One Walk 2024 Season raises over £207,000 for T1D

The One Walk 2024 season has come to a close and we want to say a massive thank you to all of our supporters and volunteers who made this year's events such a success! With six events held across the UK in Aberdeen, Birmingham, Cardiff, Glasgow, London, and Manchester, over 1,800 of you came together to raise awareness and funds for T1D.

Your incredible efforts helped us raise an impressive £207,015, which will help us reach the next breakthrough in T1D research. Thank you for your commitment and support in making this season such a success. We couldn't have done it without you.

When we come together, we make change happen. Whether it's volunteering our time, taking on a fundraising challenge, or making a donation, together we are improving the lives of everyone living with T1D

Breakthrough T1D and Diabetes UK win big impact award for hybrid closed loop



We are thrilled to announce that together with Diabetes UK, we have won the Third Sector Big Impact Award for our part in the development and roll out of hybrid closed loop technology. There are 177,000 charities in the UK all of whom are driving impact – so this award really is phenomenal.

This achievement wouldn't have been possible without your incredible support. Your contributions directly fund our research and advocacy efforts, enabling us to push for innovations that improve the lives of everyone with T1D. Together, we are making significant strides in diabetes treatments and better health for everyone living with T1D.

Thank you for your commitment and passion. This award is a testament to our collective impact in advancing research and getting it into the hands of the people who need it.

For the latest type 1 news go to breakthrough1d.org.uk/news

From real life to screen:

The making of our Breakthrough T1D film

One of the key goals in transitioning to Breakthrough T1D was to better reflect who we are and where we're going. Our aim is to connect with more people affected by T1D, making sure everyone feels supported and welcome as part of our movement. We are the T1D charity dedicated to improving life – now and in the future – for all of us impacted by this condition.

Our recently launched campaign aims to bring our message of inclusion to the widest possible group of people affected by T1D. We wanted to make an emotive connection with the community by representing the relentlessness of the condition and what a cure would feel like.

At the heart of the campaign is a powerful film, co-produced with people affected by T1D. We asked supporters to share with us their day-to-day experiences of T1D and what a cure would feel like. We captured these personal reflections and created the film.

The result was beyond our expectations. The film demonstrates the relentlessness of T1D directly from people living with the condition. And it shows the deeply felt response to a cure.



We initially spoke with over 30 different people and family groups affected by T1D and interviewed a number of these in depth to gather their stories and co-create the script. Initially, the film was planned to be just 90 seconds long, which meant we had to make the difficult decision to shortlist to only four stories. We had such a positive response that it made the choices all the harder! However, as we developed the script, it became clear that more time was needed to do justice to each story. We extended the film to two minutes, ensuring every person's experience was told with the depth it deserved.

The production itself was carried out in a collaborative way, with the director ensuring the portrayal of T1D was always accurate from a technical and emotional perspective.

The process was long but incredibly rewarding. The supporter contributors took to their acting roles well. However, some of it wasn't always acting. Jon Peach, who acted in the film said: "I was filming the scene where I was having a hypo, and I was actually having one. I'd left my phone a couple of rooms away, so it didn't interfere with the sound recording. I didn't need make-up on to show the sweats. The film crew were brilliant when I said I needed five minutes to have some hypo treatment. Proof that they can occur at any time!"

We asked contributors to share with us why they had agreed to take part:

"I hope the film shows people how challenging hypos can be, whatever your age. And also, that with T1D, as shown in the cake sharing scene, we CAN eat what we like (if taught to adjust insulin doses)."

Lis Warren, Breakthrough T1D supporter and film contributor

"I want the film to reach far and wide and help people understand a little more about the condition, the research and support provided by Breakthrough T1D. Everywhere go, I bump into people living with or they know someone with type 1 so the awareness is really needed."

Tara Humphrey, mother of Tahlia, Breakthrough T1D supporters and film contributors

The campaign launched on 28 October and will run until mid-December. By telling this story and how we drive towards better treatments and cures, we aim to make a connection with even more people living with the condition to support even more breakthroughs.



Visit breakthrough1d.org.uk/film to watch the film

“Pushing my limits”

Peter Davies has just returned from a fundraising hike for Breakthrough T1D in the Atlas Mountains to mark his 70th birthday. Diagnosed with type 1 aged two, he talks about changes in type 1 technology, the importance of peer support and the positive mindset that's helping him manage a new diagnosis of Parkinsons.



For the first 30 years of managing my type 1 diabetes, not much changed at all. We were still relying on really unhelpful urine tests. The change that made the biggest difference to me was the continuous glucose monitor (CGM), which I didn't discover until I was 60, after living with type 1 diabetes for 58 years. The CGM gave me a sense of safety that I had never known before. It was like no longer living in the dark.

Using hybrid closed loop

CGM also paved the way for hybrid closed loop (HCL) systems, which I'm now using. I find I'm hardly ever out of range and typically have time in range above 75%. It's quite incredible. It was set up by my clinic in King's College

Hospital in London. While others in my group had some challenges getting the balance and settings right, I was so lucky. I seem to hit the jackpot. Everything worked well from the start, and it's been fantastic ever since.

Technology has made it possible to push the limits without letting diabetes stop us from living our dreams.

Connecting with others

For the first 58 years of living with type 1 diabetes, I didn't know anyone else with the condition. Everything changed when I met a group of 19 people living with type 1 diabetes for a training session to prepare for climbing Kilimanjaro for Breakthrough T1D. I felt very close to them almost immediately because they were people who really understood the challenges of living with type 1. This extraordinary bond and closeness is very special and is so often a positive of living with this complex condition.

“

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Going to meetups, having a drink, a natter, and sharing meals with others who 'get it' is incredibly rewarding. It's amazing how such support, which feels so valuable, often comes at little to no cost apart from a meal or a drink. I always come away from those sessions feeling as though I've had great therapy, and a lot of fun.

Managing other conditions

In 2016, I was diagnosed with Coeliac, which like type 1 is an autoimmune condition. It can be a frustrating thing to live with but thankfully, I find it less complex to manage than type 1. Recently I've developed Parkinson's disease. The impact has been significant - my left arm has lost dexterity, and my fine motor skills aren't nearly as precise as they used to be, and my balance has also been affected. It's been a tough adjustment. Having HCL makes it easier, I don't have to use pens and blood meters, which can be fiddly. The HCL system I'm using now is much simpler than what I used before and I don't have to be worrying about the tube connection. I'm finding that really helpful.

My wonderful Parkinson's nurse encouraged me to apply the positive mindset I use for dealing with type 1 to Parkinson's. I thought, well, type 1 has never stopped me doing anything and I'm blown if Parkinson's is going to, for as long as I can help it. I'm determined to keep pushing my limits and live as fully as I can.

I never had it said to me, but years ago, people were told, oh, you'll be lucky to

live to 40, and it's lovely that so many of us are now proving that wrong. But as life expectancy has gone up and up, provisions aren't there for older people yet. I'd love to see that focus change. I am delighted that the provision and support for young people with T1D is generally excellent, as it is for most adults. However, similar backing does not seem in place for elderly people with type 1. The prospect of handing over their complex T1D management is a major concern bearing in mind that typically care homes have no knowledge or very limited knowledge of T1D care. It's very frightening!

Trekking Mount Toubkal

I recently organised a fundraising trek to Mount Toubkal in Morocco with an amazing and lovely group of people who either live with type 1 or have a connection to it. In the end, I was sad not to summit the mountain because of the extremely challenging paths and the effect of my Parkinson's on my balance, but I definitely gave it my all. It was fantastic that 10 from the group reached the top and we raised so much money for Breakthrough T1D. Such a brilliant experience with this great team!

Giving something back

Fundraising is a lovely way to give back as a thank you for the work of a wonderful charity. Raising even a small amount for charity feels good and every bit most certainly helps.



Find out more about fundraising for Breakthrough T1D at breakthrough1d.org.uk/fundraise



First Pride helped Kitty overcome her fear of CGM

14-year-old Kitty was diagnosed with type 1 diabetes when she was four. Here, along with mum Jodi, she tells us how setting up Maidstone's first Pride event gave her the confidence to use a continuous glucose monitor (CGM) for the first time.

Kitty's inspiration to set up Pride in her town

Kitty: Being at London Pride was so exciting, we dressed up and I even coloured my pod in rainbow. I didn't want the day to end and asked my mum why our hometown of Maidstone didn't have a Pride celebration. Her reply was: "Why don't you start one?"

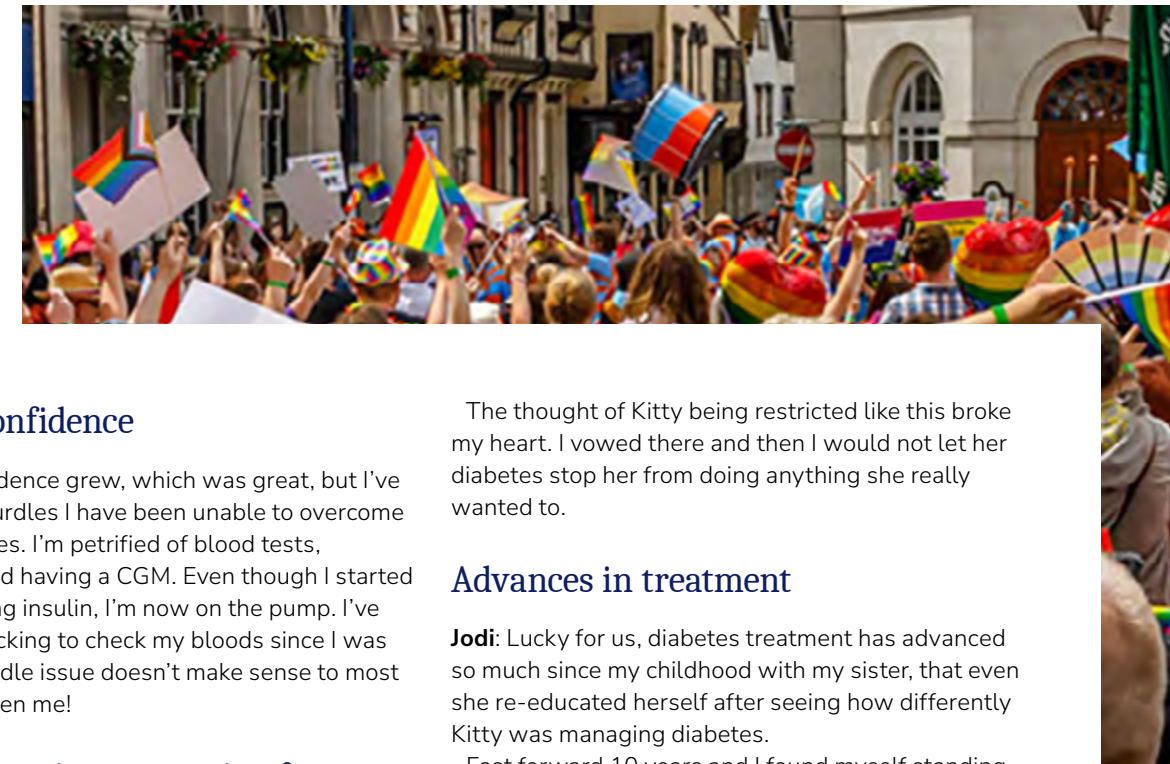
Mum has always said that there's only one thing I can't do and that is be a pilot due to my diabetes, so I've always tried to do everything else and manage my diabetes around it.

Galvanizing the community

Kitty: To help us start Maidstone's first Pride we got in contact with a local youth group and the council. We put out posters inviting young people in Maidstone who wanted a Pride to come along and share their views.

Within six months we had a lovely team of volunteers aged from 12 to 30 with adult mentors to help with the skills we needed to do a Pride.

I was invited to talk at my school assemblies during Pride month and even got invited by the head of Kent Police to attend their LGBTQ+ events awareness conference.



Building confidence

Kitty: My confidence grew, which was great, but I've had so many hurdles I have been unable to overcome with my diabetes. I'm petrified of blood tests, vaccinations and having a CGM. Even though I started off with injecting insulin, I'm now on the pump. I've been finger-pricking to check my bloods since I was four, so the needle issue doesn't make sense to most people – not even me!

Joining others in overcoming fears

Kitty: As Pride got closer, I was so excited about the day, the parade and the party that I didn't want to keep finger-pricking and losing out. At my clinic appointment I finally asked the nurse if I could take a Libre home to try and see if I could use it for Pride.

My mum couldn't believe it and I could see she was trying not to put any pressure on me so that I didn't get disappointed if I couldn't do it. She told me how brave some of the LGBTQ+ community had been, some coming to a meeting for the first time in their chosen gender and showing the world who they want to be, even though they were scared. And something in me clicked and I felt so much braver than I had months before. So, I went for it and I've hardly done a finger-prick since. I love the CGM!

"I vowed I would not let her diabetes stop her from doing anything"

Jodi says: When Kitty was diagnosed aged four, I remember being at work on the phone to the consultant. I was slumped in the corridor, trying to take in the information and felt completely devastated. What the consultant didn't know was that my sister (10 years my senior) has type 1 and I'd witnessed her growing up with huge needles, blue-light hypos and a reluctance to take adventures due to her diabetes.

The thought of Kitty being restricted like this broke my heart. I vowed there and then I would not let her diabetes stop her from doing anything she really wanted to.

Advances in treatment

Jodi: Lucky for us, diabetes treatment has advanced so much since my childhood with my sister, that even she re-educated herself after seeing how differently Kitty was managing diabetes.

Fast forward 10 years and I found myself standing next to Kitty at London's annual Pride celebration, screaming at the Netflix Heartstopper Cast to give her a wave.

Choosing the right treatment at the right time

Jodi says: No matter how much we have told Kitty that this would make her life easier, the want and need for the CGM just hadn't clicked in her mind until Pride. Whether it was all the confidence she gained, the brave youngsters that she met overcoming their own fears - whatever it was - I'm glad she is moving forward in her treatment.

Other parents of children with type 1 have said the same - that the children will do it when they are ready, and it's true. It's so tough knowing that there's a better option out there for their management, but they are too scared to make the change. I never expected it to be an experience outside of her diabetes to make the penny drop.

LGBTQ+ and type 1 pride

Jodi: I'm so proud of my type 1, LGBTQ+ daughter. I hope that other young people with type 1, whatever is holding them back, remember this - you are already warriors every day and there is a whole community that is proud of that.



Read more stories about how people manage their T1D at breakthrough1d.org.uk/stories

Six new research projects to develop novel insulins

The Type 1 Diabetes Grand Challenge (our partnership with the Steve Morgan Foundation and Diabetes UK) is funding six new research projects to develop insulins that more closely mimic how a healthy pancreas works.

Global research effort

The six new international research projects are focused on developing next-generation insulins, also known as novel insulins. We fund the very best research wherever it takes place in the world. This crucial research is taking place at universities in the United States, Australia, and China. All six ambitious projects will last 12 months and will test their innovative insulin designs in animal models of type 1 diabetes, bringing them closer to clinical trials in people with type 1.

1 Ultrafast insulin

At Stanford University in the US, professor Danny Chou is developing an ultrafast-acting insulin. He is creating an insulin molecule that doesn't cluster together, so that the insulin can get into the bloodstream even more quickly than the fastest insulins currently available.

2 Small Nano Sugar system

At Monash University in Australia, professor Christoph Hagemeyer is developing an insulin that can respond directly to changing glucose levels, known as a smart insulin. He will develop his Small Nano Sugar system to carry insulin and a glucose-sensing molecule in tiny particles called nano sugars.

3 Smart insulin reservoir

At Notre Dame University in the US, professor Matthew Webber is also making a smart insulin. With the Grand Challenge funding, he will improve his insulin delivery system that releases insulin from a reservoir under the skin in response to rising glucose levels.

4 Even smarter smart insulin

At Wayne State University in the US, professor Zhiqiang Cao hopes to develop even 'smarter' smart insulin. His aim is to make smart insulin even more sensitive to changing glucose levels so that it better meets the needs of people living with type 1.

5 Glucose-responsive oral insulin

At the Jinhua Institute of Zhejiang University in China, professor Zhen Gu is designing another smart insulin. In his previous research project, funded by Breakthrough T1D, he designed a new glucose-responsive insulin by combining insulin with a glucose-sensing molecule.

The smart insulin is taken orally and passes through the stomach to the liver where it lies stable in a reservoir. Once the molecule detects rising blood glucose levels, it releases just enough insulin from the reservoir to lower blood glucose to a safe level.

6 Combining insulin and glucagon

At Indiana University in the US, Prof Michael Weiss is developing a novel protein molecule that combines insulin and glucagon. Unlike insulin, which helps remove glucose from the blood, glucagon is a hormone that stimulates the liver to release more glucose when levels in the blood run low. By including both hormones, the researchers hope the dual protein molecule can prevent both hypos and hypers.

Together, we're making this vital research possible

Improving life with type 1

Rachel Connor, Director of Research Partnerships at Breakthrough T1D, said:

"With this funding programme we have challenged scientists around the world to drive forward new ideas in insulin design to combat the relentless burden of managing type 1 diabetes.

While insulin has been saving lives for over a hundred years now, and previous research has driven important changes for people with type 1, it is still not good enough – managing glucose levels with insulin is really tough, and it's time for science to find ways to lift that burden.

By imagining a world where insulins can respond to changing glucose levels in real-time, we hope these six projects will help to create that new reality, relieving people with type 1 of the relentless demands that living with this condition places on them today."

What do we mean by novel insulin?

A novel insulin is a new type of insulin designed to manage diabetes more effectively. It works faster, lasts longer, or provides better blood sugar control, helping people live healthier lives with fewer complications.

This is only the beginning!



Find out more about the different ways you can get involved with type 1 research at breakthrough1d.org.uk/research

T1D and pregnancy

Earlier this year we relaunched our pregnancy toolkit to give you the information you need when you're planning a family. We worked incredibly closely with Cathy Campbell, a Diabetes Specialist Midwife, who made sure that our toolkit covers everything you need to know.



We caught up with Cathy to find out more about her experience of looking after pregnant women with T1D.

"I have lived with type 1 diabetes since 2001 and worked as a midwife since 2014. I started my career in Northern Ireland and this is where I completed my diabetes specialist practice qualification. In 2021, I moved to Leicester to pursue a career within diabetes specialist midwifery. Working in Leicester has provided the opportunity to care for women with all types of diabetes during pregnancy, and more recently preconception through to postnatal period. I work at Leicester Diabetes Centre and have been involved in some of

their research programmes. I have also been able to present at study days and conferences. It's been an exciting three years! I start working with women who have T1D as soon as they discuss planning pregnancy. This can be up to a year before conception or sometimes longer. It's important to optimise glucose management with support of the diabetes team. We also discuss the use of hybrid closed loop technology. I love the continuity of care I get with my role as a Diabetes Specialist Midwife (technology). It's really special as part of my role includes preconception care with both a consultant clinic as well as nurse and midwife-led clinics. I work with women with T1D until around three months after birth. This

provides support and care during the planning pregnancy stage through to early postnatal period when other factors like breastfeeding and lack of sleep contribute to new challenges with glucose management. When I began working as a midwife, women were testing blood glucose levels eight times a day and on multiple daily injections. They had to have scans every other week in their third trimester. The big transformation within care was the introduction of the use of continuous glucose monitoring, and now, the use of hybrid closed loop therapy. The difference is phenomenal and quality of life with diabetes technology has drastically improved as well as reducing complications such as stillbirth, and babies who are large for their gestational age, neonatal hypos and more."

CC When I began working as a midwife, women were testing blood glucose levels eight times a day and on multiple daily injections



Find more information visit breakthrough1d.org.uk/pregnancy-toolkit

We asked you...

At Breakthrough T1D, we put your lived experience at the heart of everything we do. In 2019, we commissioned market research for our Pathway to Choice initiative to explore your feelings about T1D technology. Do you embrace it? What barriers prevent you from using it? Recognising the immense potential of technology in managing T1D, we wanted to understand how we can support people to use technology.

Now, five years later, we've revisited our survey in a new report: Access for All - the impact of technology on the lives of people with type 1 diabetes. While we celebrate the progress made in access to technology, there are still some challenges out there.

This is what we found out:

Awareness and use

Awareness of insulin injections and pumps was nearly universal, while awareness of continuous glucose monitoring (CGM) and flash glucose monitoring has grown. However, only 25% of respondents were familiar with hybrid closed loop (HCL).



What makes people use T1D tech?

Many of you told us that you are motivated by recommendations from your healthcare professionals, especially when it comes to insulin pumps, CGM, and flash glucose monitors. Friends and family with firsthand experience also inspire you to give them a try.

What's stopping people from using T1D tech?

You told us that lack of availability on the NHS, complexity of new devices and concerns surrounding the physical appearance are the main barriers to using tech. For insulin pumps, 26% of you cited NHS unavailability as a barrier, and a similar percentage were not recommended the pump by their clinician.

Impact of technology

Those of you using tech told us that you're seeing better glucose management, increased happiness, and reduced anxiety. Those of you using HCL noted significant lifestyle improvements and high satisfaction rates. If access to your current technology was lost, many of you fear your diabetes management would deteriorate.

Future treatments

There is high interest in promising future treatments such as beta cell transplantation and responsive insulin. However, you also told us about the importance of making informed decisions and expressed hesitation about being early adopters.

What we're doing next

We won't rest until everyone living with type 1 diabetes has the access to technology they need and deserve. That's why we're committed to raising awareness of HCL systems and pushing for more equitable access across the UK. We know healthcare professionals are key to this, so we're calling for better training to support patients in making informed choices. We will continue to push for a national diabetes registry and early detection programme programme, which will help us track outcomes and tap into emerging treatments. We also plan to boost participation in clinical trials, which will pave the way for the next generation of life-changing breakthroughs.

Together, we can make sure no one is left behind.



For more information about the survey visit breakthrough1d.org.uk/market-research

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Medtronic to partner with Abbott's FreeStyle Libre tech

Abbott has announced that it is partnering with Medtronic Diabetes to connect a continuous glucose monitor (CGM), based on Abbott's FreeStyle Libre tech, with Medtronic's insulin delivery systems.

The integration of Abbott's CGM sensor with Medtronic's AID algorithms will enable automatic adjustments of insulin to keep glucose in range. The CGM sensor, designed to work exclusively with Medtronic devices, will be developed by Abbott and sold by Medtronic.



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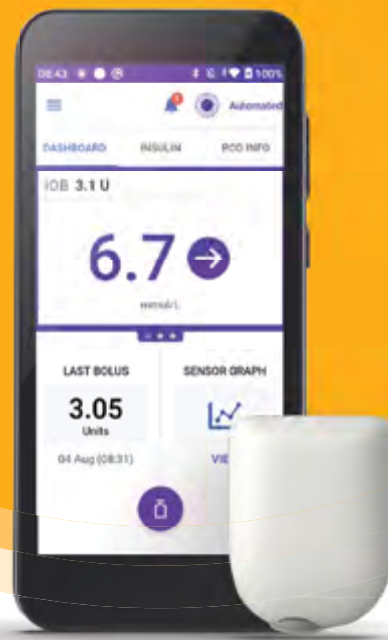
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Breakthrough T1D™
Formerly JDRF



Omnipod® 5

Automated Insulin Delivery System



Tubeless. Waterproof*. Wearable.
The Pod stays at work, while you live your life![§]

- ➔ SmartAdjust™ Technology automatically adjusts your insulin
 - ➔ May help protect against highs & lows
- ➔ No Multiple Daily Injections & No Fingerpricks**



ORDER A DEMO POD[‡], VISIT OMNIPOD.COM

Speak to your Healthcare Provider to assess if Omnipod® 5 is a good option for you.

Insulet_UK OmnipodUK omnipoduk

Pod is shown without necessary adhesive. Screen image is an example, for illustrative purposes only.
*The Pod has an IP28 rating for up to 7.6 metres for 60 minutes. The Omnipod® 5 Controller is not waterproof. **Fingerpricks required for diabetes treatment decisions if symptoms or expectations do not match readings.
†The sample Pod is a needle-free Pod that does not deliver insulin. Controller is not included. ‡Bolus for meals and corrections are still needed
§Brown et al Diabetes Care (2021) Study in 241 participants with type 1 diabetes aged 6 to 70 years involving 2 weeks standard therapy followed by 3 months Omnipod® 5 use with SmartAdjust™ technology
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PROMOTIONAL FEATURE

The Pod-sitive impact of tubeless pump therapy



Jade Byrne is a 37-year-old actress from the Northeast of England. “I started off acting professionally 13 years ago and in 2017 I decided to write my own show.”

Jade’s stage show ‘Pricks’ follows the emotive story of her and her journey with Diabetes. More recently, the script was adapted into a short film where Jade hopes it will reach a bigger audience and help raise more awareness of type 1 diabetes.

Aged 4, Jade was diagnosed with type 1 diabetes. “I’d started drinking loads and going to the toilet a lot. Thankfully my mum had recently read an article about type 1 diabetes and picked up on the symptoms straight away.”

Like many, Jade started out managing her diabetes with insulin injections and even though she was offered a pump as a teenager, she was dead against it. It wasn’t until 15 years after first being offered a pump that she finally decided to go for it. This pump was different to what she’d been offered before, it was a tubeless pump called “Omnipod®”.

“I eat so much – I snack all the time – and I love carbs, so I was constantly injecting. Omnipod eliminated the need for multiple daily injections whilst giving me freedom as the Pod is tubeless!”



Jade started on the original Omnipod Insulin Management System in 2016, moved to Omnipod DASH® in 2020 and most recently started on to the new Omnipod® 5 Automated Insulin Delivery System (The first and only tubeless automated insulin delivery system that works with the leading sensor brands*.)

“Technology has made it so much easier to manage my diabetes. Now being tubeless AND having hybrid closed loop is an absolute game-changer”.

When asked about motivational quotes, Jade has a firm favourite:

**“Diabetes is not a barrier...
It’s just a hurdle that you
have to leap over (again
and again).”**

To find out more about
Pod Therapy – visit omnipod.com

INS-OHS-06-2023-00139 V2.0

*Compatible with the Dexcom G6 and FreeStyle Libre 2 Plus sensors. Sensors



Volunteer with us!

We have over 400 volunteers who generously give their time, skills and experience to help us support the 400,000 people in the UK living with type 1 diabetes (T1D), raise awareness of our work and fund research into better treatments and cures for T1D.

“

The panel share their views and experiences with us to help shape our policies and resources, take part in market research and give advice to T1D researchers.

We simply couldn't do as much as we do without our volunteers' support – and volunteers benefit too. Volunteering is a great way to gain new skills or develop existing ones, create lasting friendships with like-minded people, and have lots of fun!

Whatever your connection to T1D, your level of experience or age, we can find a role for you. Take a look at some of our current roles or get in touch so we can find the right opportunity for you at: volunteering@breakthroughT1D.org

Youth Ambassadors

If you have T1D and are aged up to 25, you can become one of our Youth Ambassadors. Our Youth Ambassadors bust myths and raise awareness about T1D.

We have Youth Ambassador groups for different ages: Rufus Club for age 10 and under, T1 Ambassadors for age 11-16 and T1 Mentors for age 17-25. It's a great opportunity to meet other people your age who know just what it's like to live with T1D.

When you join, we'll send you a Welcome Pack with all the information and resources you'll need to raise awareness of Breakthrough T1D and type 1. You'll get our regular Youth Ambassador newsletter and join us for online meetings throughout the year.

Insight and Experience Panel

Our Insight and Experience Panel volunteers have lived experience of T1D – through being diagnosed themselves, having a friend or family with T1D, or working as a healthcare professional.

The panel share their views and experiences with us to help shape our policies and resources, take part in market research and give advice to T1D researchers. Most recently, the panel has given us their views on wearable diabetes technology, Artificial Intelligence for diabetes eye care, and how to support people with T1D in the workplace.

Event Crew

Our Event Crew volunteers play a vital role in making sure our events run smoothly.



You can help us set up before an event gets started, register attendees as they arrive, make lots of noise in our cheer zones to motivate participants, or hand out information, refreshments, and finishers' medals.

We're putting together a programme of One Walks and Discovery Days throughout the UK for 2025, so if you fancy getting involved get in touch with the Volunteering Team. Your support is invaluable in helping us raise awareness and money for life-changing research.

Share a Skill

You might have skills and resources that can help us in other ways. Maybe you're a great proof-reader, an expert face-painter, or you have a van you can loan us to transport equipment to and from events. Let us know how you can help us and we'll find a unique role for you.

Our volunteers' talents and passion inspire us every day, and we truly appreciate everything you do to bring us closer to a world without T1D.



Find out more about volunteering at breakthrough1d.org/volunteer

Help create a world without T1D –
Leave a gift in your Will

Our promises to you

We are extremely grateful for any gift – large or small – that you leave to **Breakthrough T1D** to help us find ways to cure, treat and prevent type 1. In return, we make these promises to you:

- We always understand your family and friends come first, just as they should.
- We will use your gift carefully and cost-effectively, so it has the greatest research impact possible.
- We would love to know if you decide to leave a gift in your Will, so we can say thank you. But we respect your privacy and if you prefer to let us know anonymously, or not at all, then we do understand.
- You never need to tell us what or how much you want leave to Breakthrough T1D. Simply letting us know you have made such a special and important gift is very helpful.
- You can change your mind at any time. Even if you tell us you plan to leave a gift in your Will to Breakthrough T1D, it is not legally binding.



Five things we've learnt at EASD 2024

The European Association for the Study of Diabetes (EASD) annual conference is not just a gathering of researchers and healthcare professionals; it's a celebration of the diabetes community coming together to share knowledge, experiences, and hope. This year's event in Madrid highlighted the vital role that community plays in advancing diabetes care and research.



Here are the top five takeaways from this year's inspiring conference.

1 Lived experience is at the heart of EASD

The importance of lived experience took centre stage at this year's conference, thanks to the #dedoc° community. People with diabetes were actively involved in shaping the discussions, ensuring that their real-world experiences guide research and support services. Diabetologia, EASD's official journal, even featured lived experience on its cover, underscoring its significance. The #dedoc° symposium was a standout, reflecting the growing appreciation for patient perspectives.

2 Your body might still be making insulin

Recent research suggests that some people with type 1 diabetes may still produce insulin years after diagnosis. Dr Tiinamajja Tuomi from the University of Helsinki found that beta cells can continue producing c-peptide (a marker of insulin production) five years post-diagnosis. Even more striking, Dr Marc Gregory Yu from Boston's Joslin Diabetes Center showed that some people with type 1 for over 50 years still produce insulin. While the clinical implications are not fully understood, this discovery opens the door to new treatments like teplizumab, which aims to preserve insulin production.

3 Breakthrough T1D takes the spotlight

This year, there was excitement around the rebranding of JDRF to Breakthrough T1D. Our Chief Scientific Officer, Dr Sanjoy Dutta, spoke on EASD TV about our ongoing focus on preventing, treating, and curing type 1 diabetes. CEO Dr Aaron Kowalski co-hosted a session on diabetes devices, where Professor Thomas Danne highlighted the benefits of hybrid closed loop technology in improving blood glucose control and reducing complications.

4 Fear of hypos hinders exercise

A University of Dundee study found that fear of hypoglycaemia remains a significant barrier to exercise for people with type 1 diabetes, despite advancements in insulin and glucose monitoring. Better education on managing insulin and carbohydrate intake around exercise could help alleviate this fear and boost confidence.

5 Promising results from Vertex's VX-880 trial

Vertex Pharmaceuticals shared promising results from its VX-880 trial, where lab-grown islet cells combined with immune-suppressing drugs helped 11 participants reduce or eliminate insulin use. All four participants who received the cells over a year ago have remained insulin-independent, offering hope for a future cure for type 1 diabetes.



Find out more about research at Breakthrough T1D at breakthrough1d.org.uk/research



Gifts in Wills are powering research around the world to build a brighter future for everyone living with type 1. To find out more about leaving a gift in your Will, you can download your free legacy pack by visiting breakthrough1d.org.uk/legacy or by scanning the QR code

Inspirational, committed and amazing

ALLAN GOLDIE –

A huge thank you to everyone who supported our West Highland Way fundraiser in May, raising vital funds and awareness for Breakthrough T1D. Despite living with type 1 diabetes for over 31 years, Allan Goldie, alongside his wife Alison, brother David, and sister-in-law Angela, completed the 96-mile challenge, including a 19-mile hike in one day. They not only finished the trek but also exceeded their fundraising goal, raising an incredible £3,100 with Gift Aid completely smashing our targets!



SCOTLAND GROUP –

A massive congratulations and heartfelt thanks to Karen, Suzanne, Emma, the two Carolines, Michael, Dave, Andy, and Tony! This amazing team took on not one, but TWO epic challenges this July. First, they conquered the gruelling 97-mile West Highland Way, trekking through Scotland's stunning but tough terrain. Then, as if that wasn't enough, they went on to summit Ben Nevis the very next day. They raised a total of £1,449!



PAUL ALDERSON –

Huge congratulations to Paul and his son Sam for completing all three Climb 1 for type 1 events. They reached the summits of Scarfell Pike (2022), Snowden (2023) and Ben Nevis (2024), and raised over £30,000! Sam was diagnosed with type 1 five years ago and received a Rufus from Breakthrough T1D which helped him and the family understand his diagnosis. Paul wanted to give something back to one day make Sam and others with type 1 lives a bit easier. Thank you, Paul and Sam, for your incredible efforts fundraising and raising awareness of type 1 diabetes!



KATHLEEN AND SUSIE –

We'd like to say a huge thank you to friends Kathleen and Susie, who took on the Manchester to Blackpool bike ride on July 14th in support of Breakthrough T1D. The pair bravely took on the 62-mile cycle route, and crossed the finish line in only 5 hours, 53 minutes. Together, they have raised £765 for our charity. Thank you so much Kathleen and Susie, you are cycling superstars!



JAMES AND MARGARET CRIPPS –

A huge thank you to James, Margaret, and their two Labrador dogs, Maia and Theia, for walking 100 miles on the Ridgeway this summer and raising more than £1,000 for Breakthrough T1D and the Fuellers Charitable Trust Fund.

Your passion and support make our vital work possible - thank you!

Fabulous fundraisers

We want to take a moment to celebrate two of our incredible supporters. First up is Francesca, who organised a fantastic cake sale in her local community. Then there's Guillermo, who is on a mission to break the Guinness World Record for the fastest time to complete all six World Marathon Majors. That's no small feat!

Over £200 raised for Breakthrough T1D

"Over the summer holiday, our eight-year-old daughter, Francesca, who lives with T1D, organised a cake sale outside our house to raise money for Breakthrough T1D and the Born Free Foundation. Since Francesca was also diagnosed with coeliac disease three months after her type 1 diagnosis, all of the cakes were gluten-free, baked at home with the help of family and friends.

The cake stall had been her

dream for over a year, and with the support of her sister and some close friends, we finally made it happen. The sun shone, and we had lots of visitors enjoying the homemade cakes.

Francesca recently transitioned to CGM after over a year on MDI. We are so grateful for all the research being carried out by Breakthrough T1D and their support for these amazing, brave children."



Motivated to take on a huge challenge!

"My journey with T1D began at age 12, and it was a shock that turned my world upside down. The constant need to monitor my blood sugar, manage insulin, and live with the fear of complications became a daily challenge. But over time, I realised that these challenges could either hold me back or push me forward.

Two years ago, when I took up long-distance running, I discovered a powerful way to take control of my health and inspire others. Fundraising for Breakthrough T1D became a natural extension of this journey because their mission aligns perfectly with my goal: to show that type 1 diabetes doesn't have to limit anyone's potential.

Whether you're a runner, a cyclist, or someone who loves to cook, there's always a way to turn your passion into a force for good. Supporting Breakthrough T1D is an opportunity to make a real difference in the lives of people's lives. It's not just about raising money; it's about raising awareness and being part of a movement that's working towards a world without T1D."



Join us and find out how you can support us at breakthrough1d.org.uk/how-to-help



What's on

Connect with the T1D community, share stories and tips, raise funds and have fun when you join a Breakthrough T1D event. For full details and to view the latest list, visit breakthrough1d.org.uk/events

Keep on running breakthrough1d.org.uk/runningevents

Brighton Marathon	6 April 2025	Manchester Marathon	27 April 2025
London Landmarks Half Marathon	6 April 2025	Great Manchester Run (10k & half marathon)	18 May 2025
Paris Marathon	13 April 2025	Hackney Half Marathon	18 May 2025
TCS London Marathon	27 April 2025		

Walk breakthrough1d.org.uk/events

London Winter Walk (26 miles, 13 mile & 10k)	25 January 2025	Jurassic Coast Ultra Challenge	17–18 May 2025
Easter 50km Ultra Challenge	12 April 2025	One Walk 2025 – Various locations	May and June 2025
Breakthrough T1D: Yorkshire 3 Peaks	3 May 2025	Kilimanjaro Trek	3 October 2025

On your bikes breakthrough1d.org.uk/cyclingevents

Breakthrough T1D: Virtual Triathlon	February – March 2025
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Type 1 Discovery Days breakthrough1d.org.uk/discover

Virtual Discovery Event	12 November
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To sign up to any of our events, go to breakthrough1d.org.uk/events

Learn and connect at our free Discovery Days

Our free Discovery Day events are a great way to learn about T1D, connect with others and be inspired.

Held across the UK and online throughout the year, they're for anyone and everyone connected to type 1 including adults, teens, children, and healthcare professionals. It also gives us the chance to meet you – which we love!

At our in-person Discovery Days you can find out about type 1 diabetes technology, managing diabetes in everyday life and the latest in type 1 research. We have expert speakers talking on a range of topics and people living with type 1 sharing their personal experience of the condition. Children under 12 can join supervised entertainment sessions and we have workshops for teenagers on how to manage T1D in places like school and sports clubs.

Discovery Days are a great way to connect with others living with type 1 in your local area and get support and advice from others experiencing the same things you are. We also have a technology exhibition so you can explore the latest devices for managing type 1 and ask questions.

Our virtual Discovery events focus on a single theme and feature discussions with healthcare professionals, people with type 1 and representatives from type 1 technology companies. These online sessions are live streamed across our social networks, making them easy to join.

In 2025, we're excited to be hosting nine Discovery Events, including two virtual sessions. The in-person events will take place in cities including London, Belfast, Edinburgh, Birmingham, and Cardiff. Keep an eye on the information events page on our website and we hope to see you at an event soon!



Discovery Days are a great way to connect with others living with type 1 in your local area and get support and advice from others experiencing the same things you are

For more information about our Discovery days visit breakthrough1d.org.uk/discover

dexcom one⁺



discover an easier way to manage diabetes^{†,‡,¶}

introducing the new Dexcom ONE⁺

A continuous glucose monitoring system (CGM) that lets you see your glucose readings at a glance on your smartphone,[§] receiver,^{||} or smartwatch.[¶]

- ✓ Accurate²⁻⁴ readings 24/7
- ✓ No finger pricks^{*} or scanning
- ✓ Customisable high and low alerts
- ✓ For type 1 and type 2 diabetes

ask your diabetes team about Dexcom
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Smart devices sold separately.[§]



*If glucose alerts and readings from Dexcom ONE+ do not match symptoms or expectations, use a blood glucose meter to make diabetes treatment decisions. †Results obtained with Dexcom G7 study, which shares similar features and usability. ‡Compared to self-monitoring of blood glucose (SMBG). §For a list of compatible devices, visit www.dexcom.com/compatibility. ||Optional receiver sold separately. ¶Compatible smartphone required to send readings to a compatible smartwatch. 1 Dexcom. Data on file, 2022. 2 Dexcom ONE+ User Guide, 2023. 3 Garg SK, et al. Diabetes Technol Ther. 2022;24(6):373-380. 4 Laffel LM, et al. J Diabetes Sci Technol. 2023;17(4):962-967. Dexcom, Dexcom Clarity, Dexcom Follow, Dexcom ONE+, Dexcom Share, and any related logos and design marks are either registered trademarks or trademarks of Dexcom, Inc. in the United States and/or other countries. ©2024 Dexcom International Ltd. All rights reserved. Dexcom International Ltd and its affiliated European entities. This product is covered by U.S. patent. dexcom.com | +1.858.200.0200 Dexcom, Inc. 6340 Sequence Drive San Diego, CA 92121 USA | MDSS GmbH Schiffgraben 41 30175 Hannover, Germany. MAT-2600.

I want to give a gift towards life-changing research

1 Here is my gift of....

☐ £20 ☐ £50 ☐ £100

☐ Other

2 Please make any cheque payable to Breakthrough T1D. To give by Mastercard/Visa (delete as appropriate) please fill in below:

Card no.

CVV

Expiry Date

Card Holder's Name

3 Your details

Name:

Address:

..... Postcode:

4 Keep in touch

To sign up to our emails and hear about the latest type 1 research, news, events and how you can help advance our work please complete your email address below:

You can change the way we contact you at any time by calling us on 020 7713 2030

5 Gift Aid

giftaid it

Yes I want to increase the value of my donation to BreakthroughT1D by 25% at no extra cost.

☐ Yes, I want to increase the value of my donation to Breakthrough T1D by 25% at no extra cost. I am a UK taxpayer and want to Gift Aid this donation and any donations I make in the future or have made in the past 4 years to Breakthrough T1D. I understand that if I pay less Income Tax and/or Capital Gains Tax than the amount of Gift Aid claimed on all my donations in that tax year it is my responsibility to pay any difference.

Date:

☐ I am not a UK tax payer.

Thank you. Please return your form in the **freepost envelope provided** or to **Freepost RTYC-XAJB-ZGUG, BreakthroughT1D, 17/18 Angel Gate, City Road, London EC1V 2PT.**

You can also donate online at breakthrough1d.org.uk/donate or call us on **020 7713 2030.**

Leaving a gift in your Will

We understand that deciding to leave a gift in your Will is a very personal decision. But if you are happy to let us know your plans it would be a great help. Anything you tell us is strictly confidential.

- ☐ **I am considering** leaving a gift in my Will
- ☐ **I intend to** leave a gift in my Will
- ☐ **I have already** left a gift in my Will

To find out more about leaving a gift in your Will, you can download your free legacy pack by visiting breakthrough1d.org.uk/legacy or by scanning the QR code.



“Children should never have to struggle with type 1 – it’s so important to come up with a cure and better treatments. I want to leave a gift in my Will to help”.

Margaret

grandmother to Fleur who was diagnosed with type 1 aged 9

Thank you.

Please return your form in the freepost envelope provided or to **Freepost RTYC-XAJB-ZGUG, Breakthrough T1D, 17/18 Angel Gate, City Road, London EC1V 2PT.**

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