Impact Report

2025

A year of advancing CTNNB1 research and community together

CTNNB1
CONNECT AND CURE

About Us

CTNNB1 Connect and Cure is a registered 501(c)(3) nonprofit organization led by families and fueled by volunteers (EIN 83-4541448)

Mission

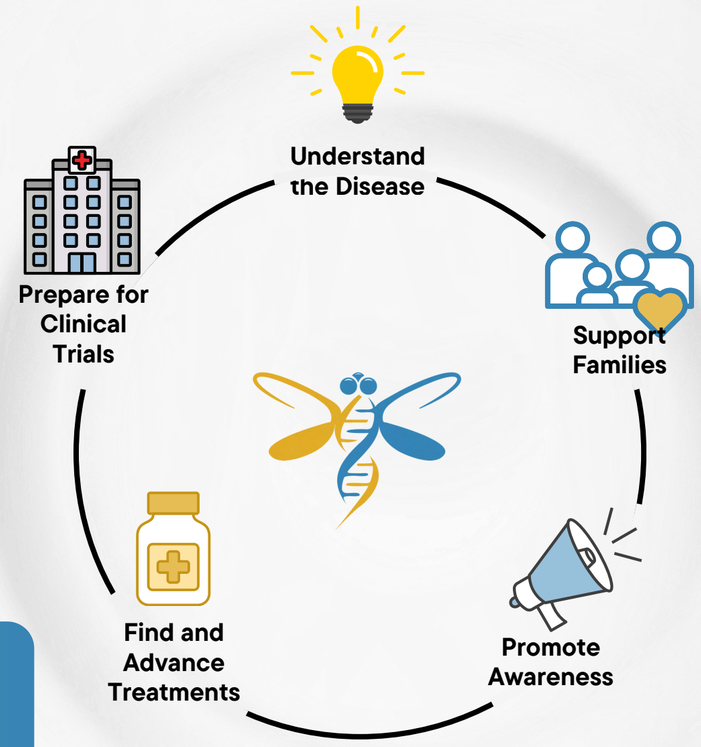
To find treatment options and a cure for CTNNB1 Syndrome while improving the lives of our patients and community.

Vision

To create a world where every family affected by CTNNB1 Syndrome has access to safe and effective treatments and a supportive community.

Core Values

Transparency
Teamwork
Integrity



What is CTNNB1 Syndrome?

A rare disease caused by variants of the CTNNB1 gene that result in decreased levels and/or function of the beta-catenin protein. This can cause a variety of multi-system symptoms, including:

- Cognitive impairment
- Microcephaly
- Behavioral challenges
- Sleep disturbances
- Limited speech / nonspeaking
- Epilepsy

- Truncal hypotonia
- Peripheral spasticity
- Dystonia

- Exudative vitreoretinopathy
- Strabismus
- Refractive errors

- Tethered spinal cord
- Congenital heart defects
- Osteopenia
- Scoliosis
- Feeding difficulties
- Gastrointestinal problems

Estimated Prevalence:

3 in 100,000

ICD-10 Code:

Q87.88

Dear Friends, Families, and Supporters,

Each year, I am deeply moved when I reflect on the progress our community has made together. CTNNB1 Connect & Cure exists because families believe that even the rarest diagnosis deserves attention, answers, and hope. In 2025, that belief continued to drive meaningful momentum across research, community connection, and global awareness.

What started as a small group of determined families has grown into a powerful network of advocates, researchers, clinicians, and supporters working toward the same goal: improving the lives of individuals with CTNNB1 Syndrome and advancing the path toward treatments and a cure.

The progress highlighted in this report is only possible because of the strength of our community. Behind every milestone are families who share their stories, researchers committed to discovery, and supporters who believe in our mission.

It is an honor to serve this community and to stand beside so many people working tirelessly for a brighter future for our children.

Thank you for being part of this journey.
Let's keep making a difference together!

With hope and gratitude,

Emily Amerson

President

Impact by the Numbers: 2019-2025

4
CTNNB1 Conferences Hosted

2
Animal Models Created

8
Patient Cell Lines Created +1 Family Member Control

$740,000
Invested in CTNNB1 Research

121
Patients Enrolled in Citizen Health

43
Patients enrolled in our Natural History Study at Boston Children's Hospital

302
Patients Enrolled in Simons Searchlight

524
CTNNB1 Families in the Global Contact Registry

Top CTNNB1 Milestones

CTNNB1 CONNECT AND CURE

Q87.88

ICD-10 Code Secured for CTNNB1 Syndrome

CTNNB1 Connect and Cure **successfully supported the establishment of a dedicated ICD-10 diagnostic code (Q87.88) for CTNNB1 Syndrome, allowing physicians and health systems to consistently identify and document the condition in medical records. This important feat strengthens clinical trial readiness by:**

- **Improving patient identification within hospital and electronic health record systems**
- **Enabling researchers to locate potential trial participants more efficiently**
- **Supporting epidemiological tracking to better understand prevalence and natural history**
- **Helping pharmaceutical and biotech partners assess trial feasibility**

First Clinical Trial for CTNNB1 Syndrome

The *CTNNB1 Foundation* launched the first clinical trial studying gene therapy for CTNNB1 Syndrome, with the first child receiving treatment in December, 2025.

CTNNB1 FOUNDATION
Bringing hope to children

Community & Support

A CTNNB1 diagnosis affects the entire family. In 2025, CTNNB1 Connect and Cure continued expanding programs designed to ensure families feel supported, informed, and connected throughout their journey.

- **Caregiver Support Group:** Launched in 2025, offering a dedicated space for parents and caregivers to share experiences, ask questions, and find encouragement.
- **Virtual SibShops Program:** Based on amazing feedback, we continued this important initiative, offering regular sessions to give siblings the opportunity to connect with peers and share their experiences in a supportive environment.
- **Family Conference Activities:** Children and siblings participated in art therapy, music therapy, and a children's book review session focused on sibling experiences.
- **Educational Resources & App Support:** Families gained access to expanded educational materials and premium subscriptions to a caregiver support app with tools tailored to families like ours.
- **CTNNB1 Connect & Cure Podcast:** Thoughtful episodes produced to share research updates, expert perspectives, and family stories—helping make complex science more accessible to our community.
- **Partnership with the Cerebral Palsy Research Network:** Through this collaboration with the Cerebral Palsy Research Network (CPRN), we are working to both A) raise awareness of genetic causes of Cerebral Palsy and B) educating CTNNB1 families about resources related to co-diagnoses such as CP.

Through connection, education, and family-centered programming, CTNNB1 Connect and Cure continues building a strong community where no family feels alone.

Awareness & Growth

In 2025, CTNNB1 Connect and Cure amplified the visibility of CTNNB1 Syndrome, reaching new families, researchers, and supporters while building a strong foundation for community growth.

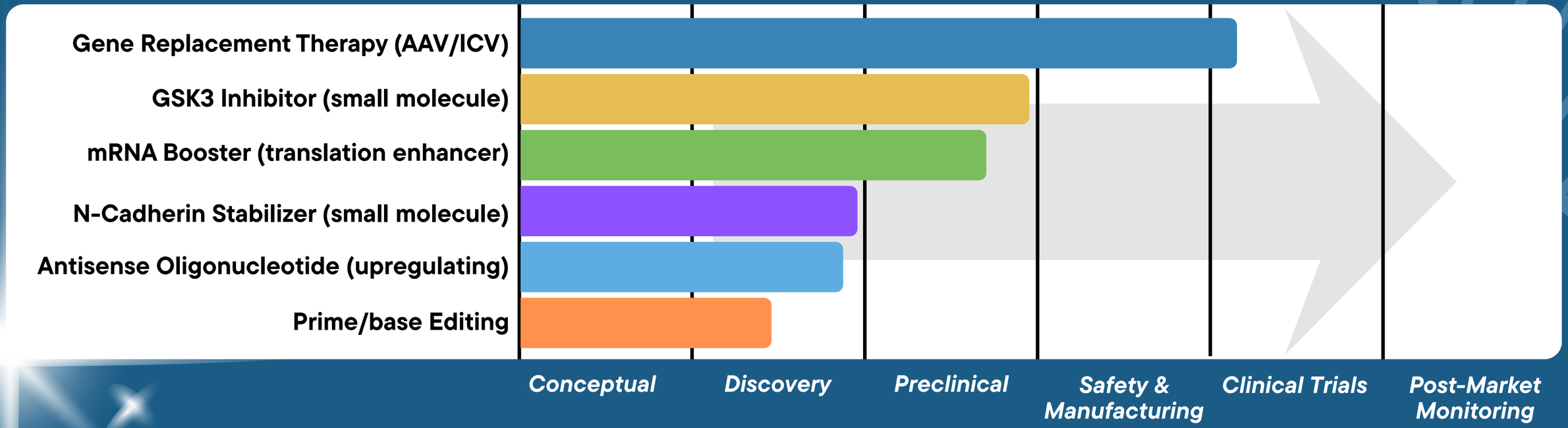
- **Events & Workshops:** Our team participated in key rare disease conferences, workshops, and webinars to connect with families, clinicians, and researchers, share resources, and raise awareness of CTNNB1 Syndrome.
- **Awareness Campaigns:** Social media campaigns, educational posts, and caregiver stories brought CTNNB1 into public view, helping families and clinicians understand the syndrome and its impact.
- **Million Dollar Bike Ride:** Our community came together for the Million Dollar Bike Ride, a signature fundraising and awareness event, raising critical funds for research while engaging supporters nationwide.
- **Collaborations & Media:** Partnerships with other rare disease organizations, local news coverage, and educational features helped expand CTNNB1 Connect and Cure's reach and credibility.

2025 was a year of meaningful growth across every area of our work. From increased awareness and deeper community engagement to new research partnerships and record fundraising, the momentum is real.

Research Strategy

CTNNB1 Connect and Cure is dedicated to advancing diverse, complementary research programs in parallel, increasing the chances of discovering effective therapies for *all* patients.

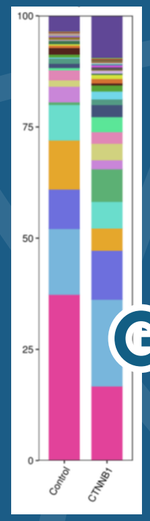
CTNNB1 Therapeutic Pipeline



Clinical Trial Readiness

Clinical Data

Teams from Boston Children's University, Columbia University, the University of South Carolina, and Geisinger collected critical in-person clinical data from individuals with CTNNB1 syndrome, advancing our Natural History Study and generating new insights into brain function and communication. This work is essential for defining meaningful clinical endpoints for clinical trials and accelerating the development of future therapies.

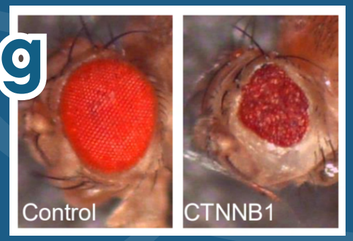


Drug Development Breakthroughs

Researchers at the Jacob Lab at Tufts University showed that the drug that successfully restores beta-catenin levels in the CTNNB1 mouse model also normalizes beta-catenin in patient-derived neurons. Additionally, groundbreaking advances in medicinal chemistry this year have further accelerated the optimization process, bringing this promising therapeutic closer to clinical testing.

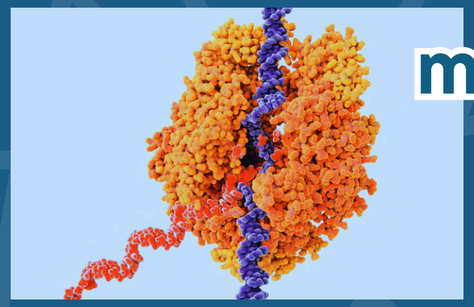
Drug Repurposing

A high-throughput drug screen identified 28 FDA-approved compounds that improved symptoms in a Drosophila model of CTNNB1, elucidating key information about the disease and opening the door to faster solutions.



Gut Microbiome

Dr. Mohammad Moshahid Khan identified distinct gut microbiome signatures in CTNNB1 patients compared to controls, revealing critical insights into gastrointestinal function in our patient population. These preliminary findings also highlight the potential for gut biomarkers for this disease.



mRNA Booster

With support from the 2024 Million Dollar Bike Ride grant, Dr. Jeffrey Coller and his team at Johns Hopkins Universitymade significant progress this year advancing their mRNA therapeutic toward clinical readiness.

Disease Concept Model

Daily, lived experiences of patients and caregivers are the most important guide to therapeutic research. This year, we partnered with COMBINEDBrain and Rutgers University to initiate a Disease Concept Study, which combined literature reviews with qualitative interviews with caregivers to create comprehensive maps of symptoms and daily impacts. The analyzed results will help define what matters most to CTNNB1 patients and families, which regulatory agencies need to evaluate trial endpoints.

CTNNB1 CONNECT AND CURE

CTNNB1 Conference

Uniting families, caregivers, clinicians, researchers, and industry leaders from around the world to share knowledge, strengthen community, and spark collaboration.

56
Researchers in Attendance

65
CTNNB1 Families in Attendance

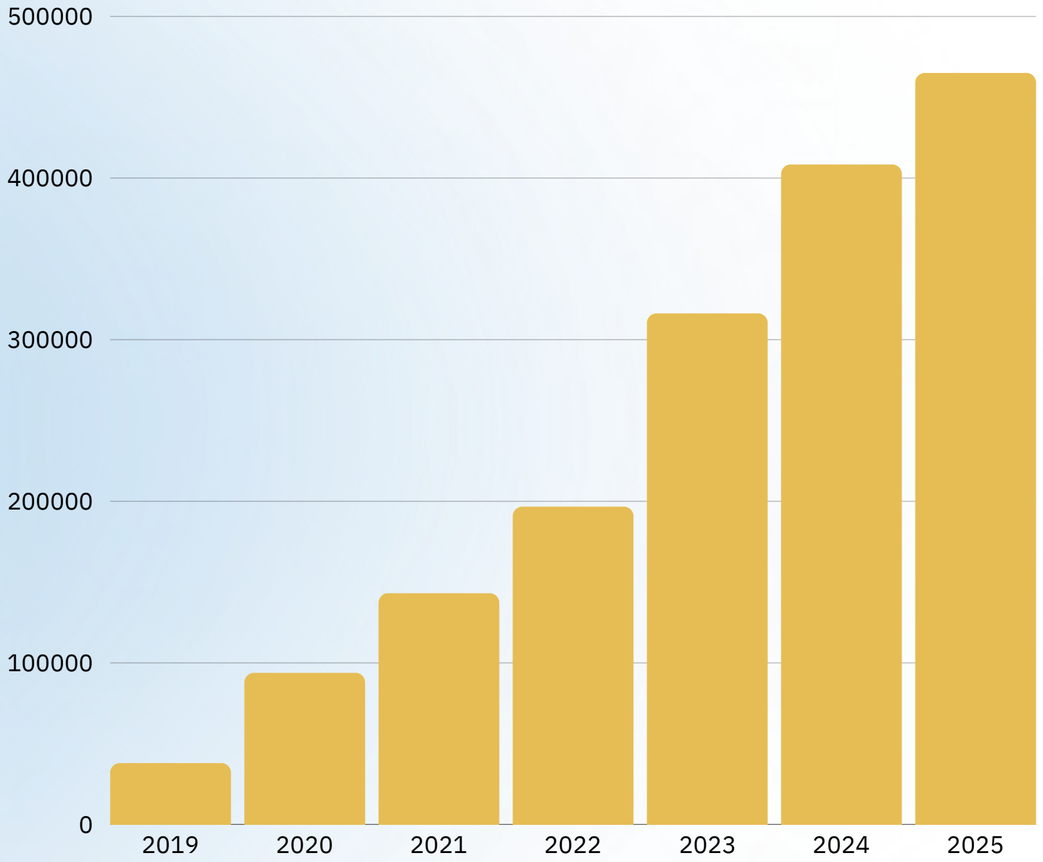
843
Biosamples Collected

2025 SPONSORS

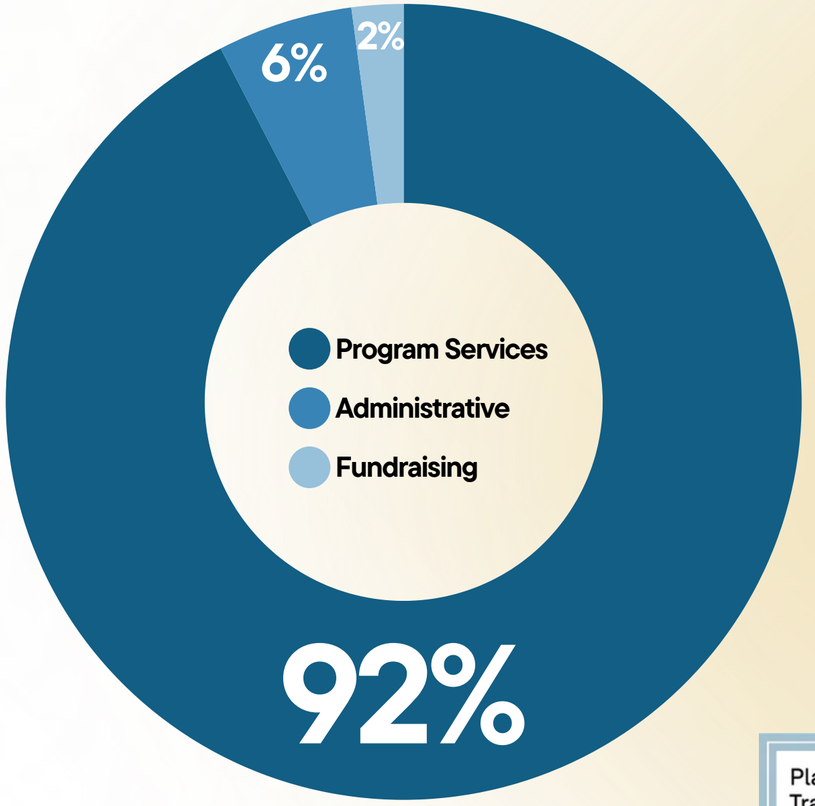
Builders FirstSource
Edward Jones
VIRALGEN
SIMONS FOUNDATION
EVERYLIFE FOUNDATION FOR RARE DISEASES
SPECIAL NEEDS COMPANIES
Assist 2 Sell & Buy
ultragenyx
SHELTER GROWTH CAPITAL PARTNERS
GoFeet Orthotics The Orthopedic Brace Company
Jersey Mike's SUBS
LANDERS FAMILY PRE-OWNED
SOPHIE'S HOPE FOUNDATION

Financials & Transparency

Donations by Year



2025 Expenses



Platinum Transparency 2025

Candid.

CTNNB1 Connect & Cure is a 501(c)(3) nonprofit committed to responsible stewardship and unwavering transparency.

CTNNB1

CONNECT AND CURE

Partners

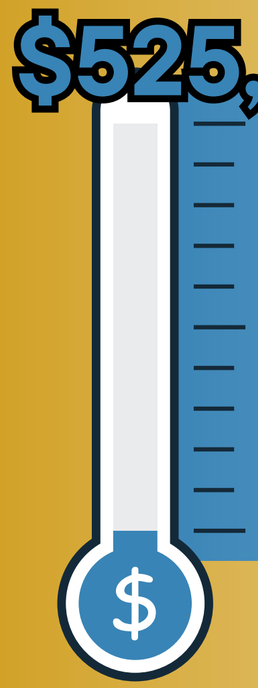
Columbia
Boston Children's
Simons Searchlight
Global Genes — Allies in Rare Disease
Once Upon a Gene
Courageous Parents Network
CTNNB1 Italia
Tufts University
University of Utah Health
NORD — National Organization for Rare Disorders
Kennedy Krieger
REN — Rare Epilepsy Network
citizen health
Broad Institute
Johns Hopkins University
Geisinger
GeneDx
MUSC — Medical University of South Carolina
probably genetic
NIH — National Institutes of Health
Asociación CTNNB1
CTNNB1 France
CTNNB1 Foundation — Bringing hope to children
Associação CTNNB1
Rutgers
COMBINED
Children's Hospital of Philadelphia
The University of Tennessee Health Science Center
the orphan disease center
UW Medicine — Department of Psychiatry and Behavioral Sciences
Van Andel Institute
University of South Carolina
Epilepsies Action Network
Project FIND-OUT
Cerebral Palsy Research Network
Haystack Project — The Voices of Rare & Ultra Rare

Supporting Our Future

2026 will be a pivotal year for CTNNB1. We are setting an ambitious fundraising goal of $525,000 to accelerate research, improve care, and stengthen support for families living with CTNNB1 Syndrome.

The funds raised in 2026 will support:

- Advancing multiple therapeutic research pathways
- Preparing the field for clinical trials through natural history and real-world data
- Supporting families with resources, education, and connection
- Ensuring patient voices remain central to every step forward



Every dollar makes a difference.

Donate today!

Fundraise for CTNNB1

We've made getting started with fundraising easy! There are fundraising ideas and premade resources for you to use in your fundraising efforts. Scan the code to go to our fundraising page.

Together, we are turning hope into action.

Help Light the Way

CTNNB1 Connect and Cure is powered by volunteers: families, friends, and supporters who believe our children deserve a brighter future. By relying on the skills and dedication of our community, we're able to keep administrative costs low and allocate as much as possible directly to the mission.

If you've been wondering how you can help, this is your invitation! Volunteer, attend an event, share our mission, and engage with us on social media! When our community shows up, progress becomes possible.

Volunteer

Do you have skills or interests you can dedicate to the cause? We have several ongoing initiatives that could use your help! Scan the code to fill out our volunteer form. We can't wait to get you plugged in!

Attend

Mark your calendars for regional meetups, awareness campaigns, and fundraising events. Connect and learn at our annual CTNNB1 Conference, which will be held in Boston, MA, October 8-10 this year.

Engage

Follow for information, upcoming events, and dragonfly spotlights. Like and share our posts to amplify the impact. Tag us so that we can help share your story!

WWW.CURECTNNB1.ORG