The Power of Community: Clinical Trial Experience in Tuberous Sclerosis Complex

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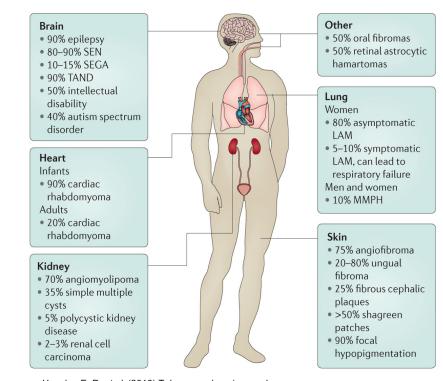


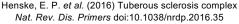


ABCs of Clinical Trials Part 2: What Rare Disease Families Should Know

Tuberous Sclerosis Complex (TSC)

- TSC is a genetic disorder that causes tumors to form in vital organs: primarily the brain, eyes, heart, kidney, liver, lungs and skin.
- Neurological manifestations are often the most devastating.
- TSC affects ~1 in 6,000 live births.
- An estimated 50,000 Americans have TSC.
- No two people are affected the same way, not even identical twins.





Nature Reviews | Disease Primers

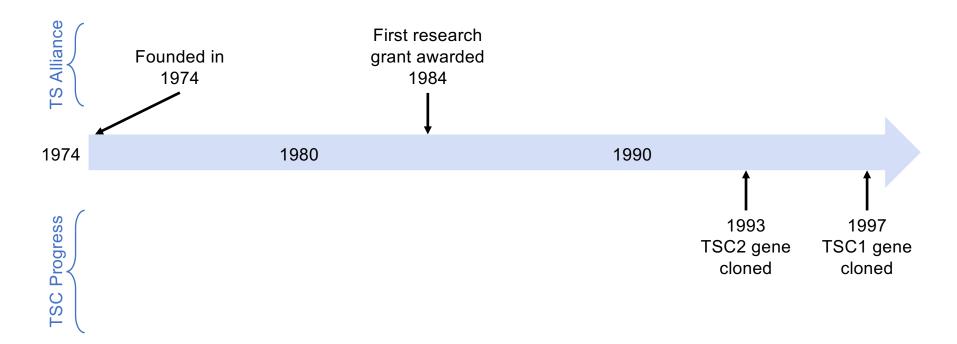






ABCs of Clinical Trials Part 2: What Rare Disease Families Should Know

Stimulating Research to Learn the Cause of TSC



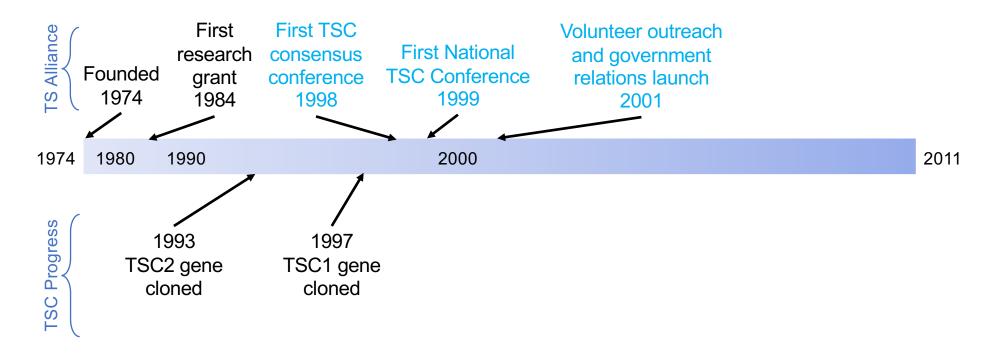






ABCs of Clinical Trials Part 2: What Rare Disease Families Should Know

Preparing and Empowering the Community



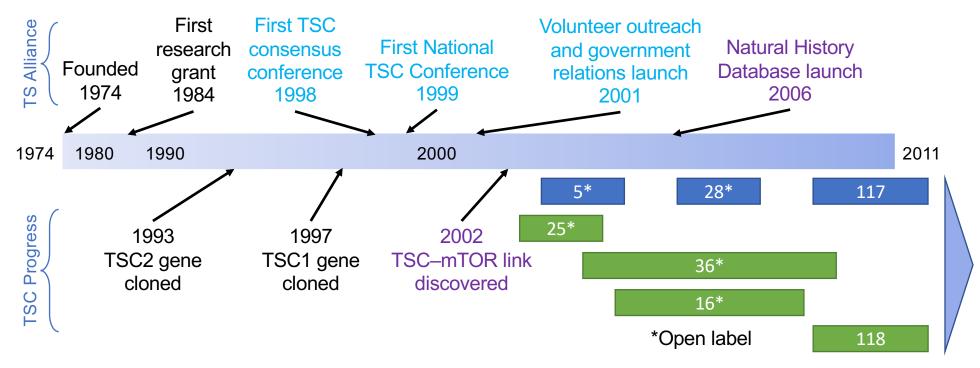






ABCs of Clinical Trials Part 2: What Rare Disease Families Should Know

A Breakthrough Leads to Many Clinical Trials









ABCs of Clinical Trials Part 2: What Rare Disease Families Should Know

Biomarkers or Validation Studies Often Come First

Regular EEGs in TSC infants 0-2 years

PREVeNT Trial (preventing epilepsy with vigabatrin)

STOP-2 Trial (preventing multiple manifestations with rapamycin)

Methods to predict risk of autism in TSC infants 0-3 years

JASPER intervention feasibility study

JETS Trial testing efficacy of JASPER







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Some Takeaway Messages

- A united, collaborative ecosystem of patients, researchers, and clinicians sets the stage for success
- Clinical trials are part of a process expect them to evolve:
 - Natural history or pilot study provides key data to design a good trial
 - Feasibility study (often open-label) tests the trial design
 - Pivotal study must be well controlled and rigorously conducted
- Well informed peer-to-peer advocacy coordinated through patient advocacy organizations can be the biggest contributor to successful clinical trial enrollment







Some Tools

- TS Alliance's Basic Introduction to Clinical Trials
 - https://www.tsalliance.org/individuals-families/tsc-clinical-trials/
- Clinical Trials Transformation Initiative
 - Home page https://www.ctti-clinicaltrials.org/
 - Effective engagement with patient groups around clinical trials https://www.ctti-clinicaltrials.org/files/pgctrecs.pdf





