AIR.CAV$_2$.4
Dravet

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Entrepreneur in residence - Ampleia

Developmental epilepsy due to a loss of sodium channel activity

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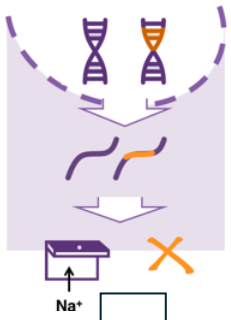
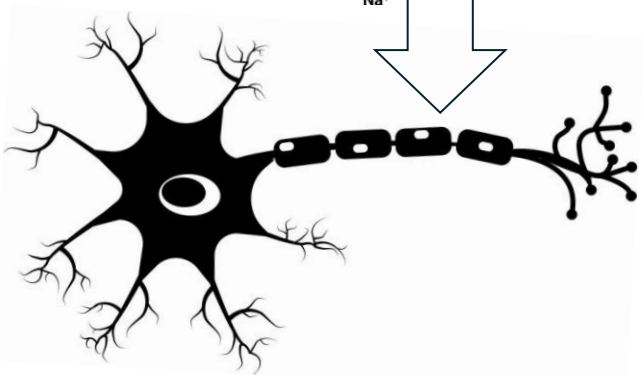
Cause

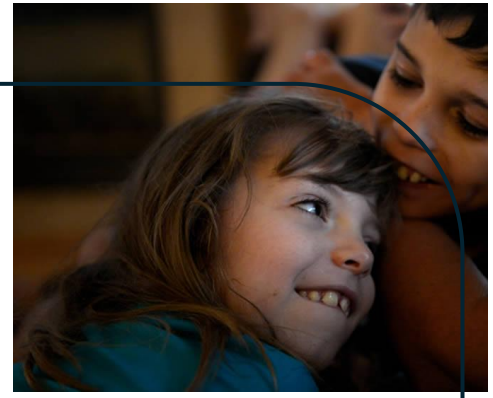


de novo
single gene mutation
(loss of function)



Dysfunctional neuronal networks

Effect



Dravet syndrome

- **Developmental Epileptic Encephalopathy**
- **Orphan disease**
- **From the first year of childhood**
  - **Resistant epilepsy**
  - **Sudden death**
  - **Developmental delay**
  - **Behavioral symptoms**

Therapeutic challenges

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Dravet

Huge unmet needs

- **With marketed Anti Seizure Medications, Dravet remains incurable**
  - **Do not fully control the seizures**
  - **Have no effect on developmental and behavioral disturbances**
- **The Battle = new disease modifying drugs**
  - **Simplest solution = supply the deficient gene**
  - **Gene too big to fit most common gene delivery systems**

R&D solutions for disease modifying effect

Workaround overexpression

1. Antisense oligonucleotide (intrathecal)

STOKE THERAPEUTICS Biogen

2. AAV vector (intra brain)

Encoded THERAPEUTICS

Full gene supply

1. CAV2 vector (intra brain)

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ACD-01 drug candidate
A differentiated program

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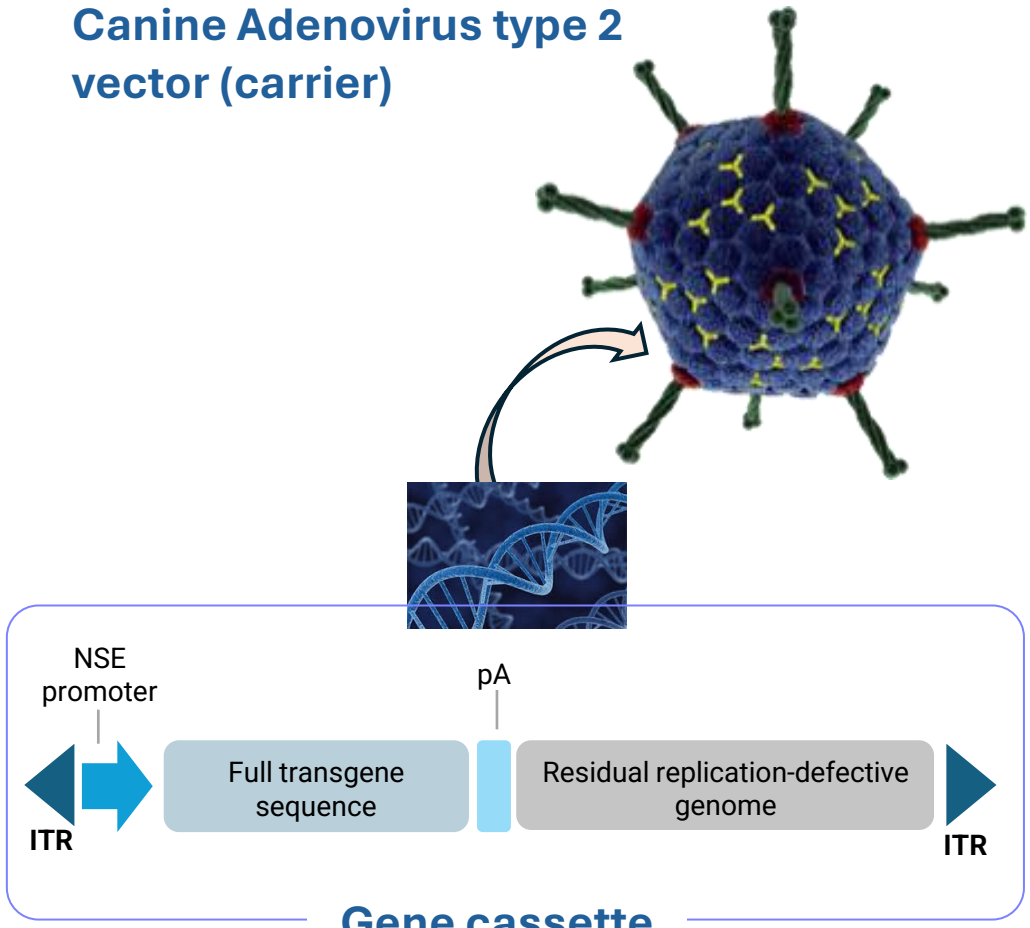
Canine Adenovirus type 2 vector (carrier)



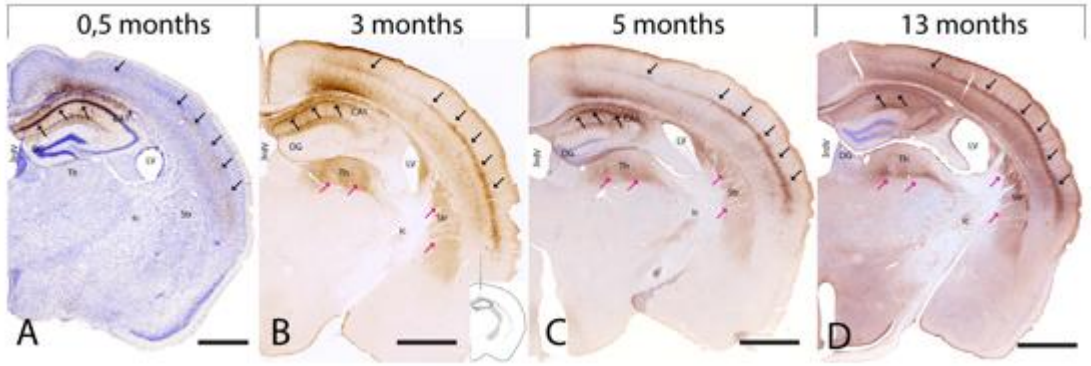
Features

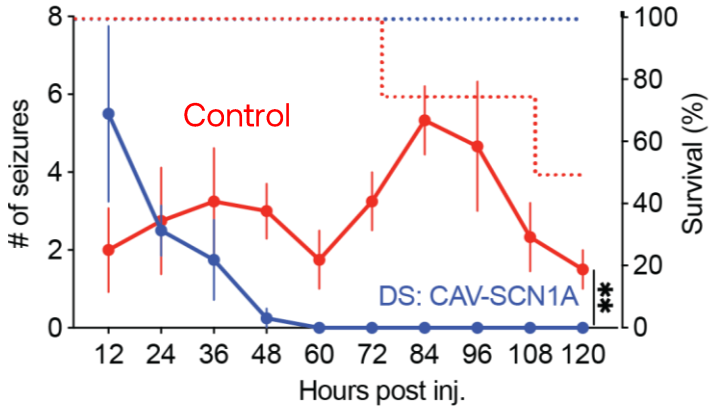
- Natural neuronal tropism
- Large payload capacity (full gene)
- Not immunogenic in human
- Made replication-defective

- Neuron-specific promoter
- Full codon-modified SCN1A transgene
- Not integrative

Preclinical Proof-of-concept data

- **Widespread brain distribution via retrograde axonal transport following a single intra-parenchymal administration**
- **Long-term expression in both inhibitory and exitatory neurons**
- **Reverts Dravet phenotype in both juvenile and young adult Dravet mice models**
  - **Improved survival**
  - **Protection from spontaneous and heat-induced seizures**
  - **Corrected behavioral deficits**
- **No de novo immune response in rodent and NHP**





Source: Fadila et al. J Clin Invest. 2023;133(12):e159316 https://doi.org/10.1172/JCI159316

Newco in creation

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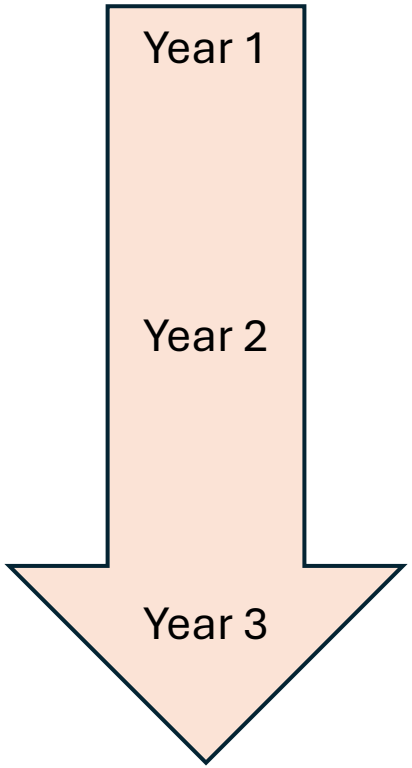
Dravet

- **Inception: Q3 2025**
- **Academic sciences incubated by Ampleia (start-up studio)**
- **Business model: mature program up to POC phase 2 stage and sell or partner to Pharmas**
- **Stage of financing: Seed/Series A round (Q4 2025)**

Seasoned Team with academic, pharma and biotech background

Roche
Johnson & Johnson
Pierre Fabre
Crucell
Sensorion
GenSight BIOLOGICS
accure therapeutics
OSE IMMUNO THERAPEUTICS
igmm INSTITUT DE GÉNÉTIQUE MOLÉCULAIRE DE MONTPELLIER
TEL AVIV UNIVERSITY אוניברסיטת תל אביב
GENETHON CURE THROUGH INNOVATION
AMPLEIA



Build an IND-Package

1. **CMC: Bioprocesses transfer from Lab to a CDMO and scale-up (GMP)**

2. **PK/PD:**
   - **Dose selection in rodents based on seizure and cognitive endpoints**
   - **Biodistribution in nonhuman primates**

3. **Safety & Toxicity: immunogenicity, regulatory package**

4. **Regulatory: Preclinical data package clearance from FDA & EMA with Pre-IND meetings**

Trial readiness for Phase 1b/2a study in Dravet patients

Next steps

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On-going (Q3 2025)

- **Inception of the newco**
- **First Seed ticket from Ampleia (start-up studio)**

Next steps (Q4 2025 onward)

- **Deployment of R&D plan**
- **Seed/Series A financing round**

Next steps

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Should you be interested in the project, please contact AMPLEIA

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