

KCNT1 Demographics and Genetics Survey 1.0

Participant Name: _____ Doctor Name: _____

Parent Name: _____

For Study Personnel Use, Only:

Coordinator Code: _____

Date: _____

1. Person filling out this form and your relation to the participant

Primary caregiver of someone with KCNT1 (living or deceased)

Self (adult) living with KCNT1

Clinical provider of someone with KCNT1

If you are answering for yourself, for the remainder of this survey, questions will be asked about "your child", but since you are an adult with a KCNT1 gene mutation, please answer the questions about YOURSELF. If you have questions, please contact us directly at info@kcnt1epilepsy.org.

2. Please select your child's sex at birth. Male Female Prefer not to answer

3. Was your child born prematurely? Male Female I'm not sure

4. If yes, how many weeks early was your child born? _____ Weeks

5. Describe any prenatal issues or birth complications, or write "none"

7. 7a. What is your child's age today? If under the age of 2 years, indicate how many weeks or months old. _____

8. In what country was your child born? _____

9. Does your child currently live in the United States?

Yes

No

9a. In which U.S. state or territory does your child currently live?

10. Does your child have a CRID number?

Yes

No

11. In addition to KCNT1, has your child ever experienced or been diagnosed with any of the following conditions?

- None
- Aicardi Syndrome
- Autism Spectrum Disorder
- Autonomic Disorder or Dysautonomia
- Brugada Syndrome
- Coppula-Dulac Syndrome
- EIEE (Early infantile epileptic encephalopathy)
- EIMFS / MMPSI / MPSI (Early-onset epileptic encephalopathy with migrating focal seizures)
- SHE / ADNPLE (Autosomal dominant Nocturnal frontal lobe epilepsy Sleep/Hypermotor Epilepsy)
- Hypsarrhythmia
- Lennox-Gastaut Syndrome
- Major Aortopulmonary Collateral Arteries (MAPCAs)
- Microcephaly (small head size)
- Ohtahara Syndrome
- West Syndrome
- 11a. Other Diagnosis (please specify)._____

12. Was the diagnosis of KCNT1 confirmed with Genetic Laboratory Analysis?

- Yes No I'm not sure

13. Do you have a copy of your child's genetic report?

- Yes No I'm not sure

14. What KCNT1 variant does your child have?

- c.841C>T (p.Leu281Phe)
- c.862G>A (p.Gly288Ser)
- c.1038C>C (p.Phe364Leu)
- c.1066C>T (p.Arg356Trp)
- c.1192C>T (p.Arg398Trp)
- c.1193G>A (p.Arg398Gln)
- c.1238G>A (p.Arg428Gln)
- c.1420 >T (p.Arg474Cys)
- c.1421G>A (p.Arg474His)
- c.1975C>T (p.Arg659Cys)
- c.2782C>T (p.Arg928Cys)
- c.2687T>G (p.Met896Lys)
- c.2800G>A (p.Ala934Thr)
- c.2849G>A (p.Arg950Gln)
- c.2849G>T (p.Arg950Leu)
- c.2882G>A (p.Arg961His)
- c.3689G>A (p.Arg1230His)
- 14a. Other _____

Report not available

15. Please select how the KCNT1 variant/mutation is described on the genetic report.

- Not sure/No report available
- Benign
- Pathogenic (PATH)
- Likely Pathogenic (LPATH)
- Conflicting Interpretations
- Variant of Uncertain Significance (VOUS or VUS)
- Other _____

16. What type of KCNT1 mutation, if any, was found in your child's genetic testing? (Select all that may apply)

- | | |
|---|---|
| <input type="checkbox"/> Not sure/No report available | <input type="checkbox"/> Duplication |
| <input type="checkbox"/> No mutations were found | <input type="checkbox"/> Frameshift |
| <input type="checkbox"/> Missense | <input type="checkbox"/> Repeat expansion |
| <input type="checkbox"/> Nonsense | <input type="checkbox"/> Other |
| <input type="checkbox"/> Insertion | |
| <input type="checkbox"/> Deletion | |

17. What does the report specify about KCNT1 inheritance? (Select all that may apply)

- Not sure/No report available
- Autosomal dominant
- Autosomal recessive
- De Novo (random)
- Multifactorial
- Mitochondrial inheritance
- Other (specify). _____ 17a.

18. What kind of genetic testing was done? (Select all that apply)?

- Single Gene Sequencing (sgs)
- Whole Exome Sequencing (wes)
- Whole Genome Sequencing (wgs)
- Commercially available gene panel
- Customized gene panel
- Not sure/None

19. Does the report include any additional gene mutations? (Check any/all that apply)?

- | | | |
|--|---------------------------------|--|
| <input type="checkbox"/> No report available | <input type="checkbox"/> CHRNA4 | <input type="checkbox"/> SCN2A |
| <input type="checkbox"/> None | <input type="checkbox"/> DEPDC5 | <input type="checkbox"/> Xp11.3 |
| <input type="checkbox"/> BRAT1 | <input type="checkbox"/> CRH | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> CDKL5 | <input type="checkbox"/> CABP4 | |
| <input type="checkbox"/> CHRNA4 | | |

20. Approximately how long ago was the most recent genetic test confirming KCNT1 completed?

- Less than 1 year ago
- 1-2 years ago
- More than 3 years ago
- Not sure/No report available

21. What is the name of the genetic testing company on your report?

Not sure/no report available	NeviCore	Impact
Ambrygen	Fulgent	Invitae
Athen	Gene DX	Knight
Baylor	Helix	Myriad
CleanPlex	Hospital system lab (e.g., private hospital lab at your hospital)	Labcorp
Concert Genetics		Sema4
Dante Labs	Illumina	Other (Not listed here)

22. What were the first KCNT1 symptoms that your child experienced (or symptoms that you or a doctor/nurse noticed)?

- | | |
|----------------------------|-----------------------------|
| Seizures | Reflux and/or vomiting |
| Infantile spasms | Delayed Development |
| Feeding difficulties | Lack of Neck Control |
| Learning disorder | Motor Delay |
| Inconsolable crying | Sleep-related issues |
| Muscle twitches or tremors | 22a. Other (Please specify) |
-

23. Select the approximate age of your child when signs or symptoms were first experienced and believed to be due to KCNT1.

- | | |
|----------------------------------|---------------------|
| Within the first 30 days of life | 4 years - 6 years |
| 1 month - 3 months | 7 years - 10 years |
| 4 months - 6 months | 11 years - 14 years |
| 7 months - 12 months | 15 years - 18 years |
| 1 year - 3 years | After age 18 |

24. Select the approximate age of your child at time of diagnosis of KCNT1

- | | |
|----------------------------------|---------------------|
| Within the first 30 days of life | 4 years - 6 years |
| 1 month - 3 months | 7 years - 10 years |
| 4 months - 6 months | 11 years - 14 years |
| 7 months - 12 months | 15 years - 18 years |
| 1 year - 3 years | After age 18 |

25. Please indicate which type of healthcare provider first diagnosed the participant with KCNT1.

Geneticist

Neurologist

Pediatrician

Other

26. Has your child ever experienced a seizure without a fever?

Yes

No

I don't know

27. What is the approximate age today of the biological FATHER (in years)? _____

28. Does this child's biological father have a KCNT1 mutation?

Father has no known KCNT1 mutation, after genetic testing

Father has KCNT1 mutation

Unknown if father has KCNT1 mutation

29. If the father has a KCNT1 variant/mutation, is it the same variant/mutation as the child?

___ Yes

___ No

___ Unsure

30. What is the approximate age today of the biological MOTHER (in years)? _____

31. Does this child's biological mother have a KCNT1 Mutation?

Mother has no known KCNT1 mutation, after genetic testing

Mother has KCNT1 mutation

Unknown if mother has KCNT1 Mutation

32. If the mother has a KCNT1 variant/mutation, Is it the same variant as the child?

___ Yes

___ No

___ Unsure

33. Does your child have any other relatives or family members diagnosed with a KCNT1-related epilepsy or a confirmed KCNT1 mutation?

___ Yes

___ No

___ Unsure

34. Does your child have any family members or relatives with a history of any of the following? (Check ALL that apply)

- Sibling ever had a seizure
- Relative ever had a seizure
- Sibling ever have a diagnosis of intellectual impairment
- Relative ever have a diagnosis of intellectual impairment
- Sibling had/has behavioral or psychiatric issues
- Relative had/has behavioral or psychiatric issues
- Sibling was born with a motor or muscle disorder
- Relative was born with a motor or muscle disorder
- Sibling with a diagnosis of epilepsy
- Relative with a diagnosis of epilepsy
- Sibling with a diagnosis or suspicion of Autism Spectrum Disorder
- Relative with a diagnosis or suspicion of Autism Spectrum Disorder
- Sibling died of heart-related issue
- Relative died of heart-related issue
- Sibling died of another sudden, unexplained cause
- Relative died of another sudden, unexplained cause
- Sibling died of sudden infant death syndrome
- Relative died of sudden infant death syndrome
- I don't know

35. Does your child have any siblings or half-siblings?

Yes No

36. Categories that Describe Your Affected Minor or Ward

- American Indian
- Alaska Native
- Asian
- Black, African American, or African
- Central or South American Indian
- Hispanic, Latino, or Spanish
- Middle Eastern or North African
- Native Hawaiian or other Pacific Islander
- White
- Other
- Prefer not to respond

37. Additional categories that Describe Your Affected Minor or Ward

Afghan	Jamaican
African American	Japanese
Algerian	Korean
Asian Indian	Lebanese
Barbadian	Liberian
Cambodian	Marshallese
Caribbean	Mexican
Chamorro	Mexican American
Chinese	Moroccan
Chuukese	Native Hawaiian
Colombian	Nigerian
Cuban	Norwegian
Dominican	Pacific Islander
Dutch	Pakistani
Ecuadorian	Palauan
Egyptian	Polish
English	Puerto Rican
Ethiopian	Russian
European	Salvadoran
Fijian	Samoan
Filipino	Scottish
French	Somali
German	South African
Ghanaian	Spanish
Haitian	Swedish
HmongIranian	Syrian
Honduran	Tahitian
Iranian	Tongan
Iraqi	Tunisian
Irish	Vietnamese
Israeli	Other
Italian	Prefer not to respond