**Table S1:** Summary of 10 reported *SCN1A* mutations.

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Patient number | cDNA  | Protein | Type of mutation | Inheritance | Previous report | ACMG-based classification | SIFT；Polyphen；Mutation taster |
| 1 | c.568T>C | p.Trp190Arg | Missense  | De novo | DS1-3 | PAT | Damaging;Probably damaging;disease causing |
| 6 | c.1193C>T  | p.Thr398Met | Missense  | Maternal  | IE4 | LP | Damaging;Probably damaging;disease causing |
| 7 | c.1277A>G | p.Tyr426Cys | Missense  | De novo | DS2Epilepsy5 | PAT | Damaging;Probably damaging;disease causing |
| 10 | c.2584C>T | p.Arg862Ter | Nonsense  | De novo | GEFS+7DS2, 8, 9 | PAT | -;-;- |
| 12 | c.2836C>T | p.Arg946Cys | Missense  | De novo | DS2, 3, 8-11Epilepsy5 | PAT | Deleterious;Probably damaging;disease causing |
| 14 | c.2959T>C  | p.Phe987Leu | Missense  | De novo | DS2 | PAT | Deleterious;Probably damaging;disease causing |
| 22 | c.4555C>A | p.Pro1519Thr | Missense | Paternal  | DS13Epilepsy5 | LP | Damaging;Probably damaging;disease causing |
| 24 | c.4762T>C | p.Cys1588Arg | Missense  | NA | DS10, 14EE15Epilepsy5 | PAT | Deleterious;Probablydamaging;disease causing |
| 25 | c.4853-1G>C | - | Splicing | Maternal  | DS16Epilepsy2 | PAT | ‘-;-;- |

ACMG: American College of Medical Genetics and Genomics; DS: Dravet syndrome; EE: epileptic encephalopathy; GEFS+: generalized epilepsy with febrile seizures plus; IE: intractable epilepsy; LP: likely pathogenic; NA: not available; PAT: pathogenic.

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