

Supplementary Table S1: Clinical characteristics of pure small fiber neuropathy patients with a (potentially) pathogenic SCN9A variant

| c position | Gender | Age | Age debut | EMFD (5th percentile) | EMFD | TTT | Associated condition(s) | Erythromalgia | Ich | Cramps | Family history | Actual VAS | VASmin | VASmax | NPS Pain Severity | Sharpness | Hottness | Dullness | Coldness | Sensitivity | Itchiness | Unpleasantness | Intensity deep pain | Intensity surface pain | SPN-SDQ No. autonomic | SPN-SDQ No. somatic | Neuropathic pain medication at moment hospital visit | |
|---------------------------------|--------|-----|-----------|-----------------------|----------|----------|---------------------------|---------------|-----|--------|----------------|------------|--------|--------|-------------------|-----------|----------|----------|----------|-------------|-----------|----------------|---------------------|------------------------|-----------------------|---------------------|---|--|
| c118A>G | F | 46 | 44 | 7.4 (5.7) | Normal | Abnormal | ↓ vitamin B12 | No | No | No | Negative | 70 | 59 | 83 | 7 | 7 | 6 | 8 | 9 | 6 | 2 | 8 | 8 | 7 | 8 | 2 | None | |
| c545A>G | F | 40 | 38 | 6.6 (5.7) | Normal | Abnormal | | Yes | No | No | Negative | 20 | NA | NA | 3 | 5 | NA | 3 | 4 | 4 | 4 | 4 | 6 | 6 | 4 | 4 | None | |
| c514G>A | M | 52 | 22 | 1 (3.5) | Abnormal | Abnormal | | Yes | NA | NA | Positive | 50 | 50 | NA | 6 | 7 | 8 | 0 | 0 | 7 | 0 | 7 | 0 | 8 | 0 | 4 | Pregabalin 150mg BID | |
| c534G>A | F | 25 | 23 | 4.9 (8.4) | Abnormal | Abnormal | | No | Yes | NA | Negative | 84 | 62 | 94 | 7 | 8 | 7 | 8 | 8 | 8 | 9 | 7 | 9 | 7 | 4 | 4 | Phenytoin | |
| c684C>G* | M | 28 | 20 | 7.5 (6.1) | Normal | Abnormal | Autoimmune disease | Yes | No | No | Negative | 50 | 23 | 77 | 6 | 4 | 8 | 0 | 1 | 1 | 0 | 6 | 6 | 3 | 2 | 2 | Lamotrigine 25mg BID | |
| c684C>G* | F | 43 | 41 | 5.1 (5.7) | Abnormal | Normal | | No | No | No | Negative | 52 | 49 | 49 | 4 | 8 | 2 | NA | 0 | 0 | 2 | 5 | 5 | 5 | 5 | 2 | Gabapentin 300mg QID | |
| c684C>G* | F | 37 | 36 | 11.1 (7.1) | Normal | Abnormal | | Yes | No | No | Positive | 41 | 38 | 78 | 7 | 6 | 7 | 8 | 5 | 3 | 0 | 7 | 8 | 7 | 7 | 4 | None | |
| c684C>G* | F | 46 | 45 | 5.2 (5.7) | Abnormal | Abnormal | | Yes | No | No | Negative | 75 | 33 | 83 | 8 | 7 | 8 | 3 | 0 | 8 | 0 | 8 | 3 | 9 | 4 | 2 | None | |
| c684C>G* | F | 54 | 51 | 8.3 (4.3) | Normal | Abnormal | ↓ vitamin B12 | No | No | No | Positive | 49 | 46 | 94 | 8 | 9 | 9 | 9 | 6 | 10 | 5 | 9 | 9 | 6 | 9 | 4 | None | |
| c684C>G* | F | 41 | 33 | 11.1 (5.7) | Abnormal | Abnormal | ↓ vitamin B12 | Yes | No | No | Positive | NA | NA | NA | 8 | 8 | 4 | 7 | 9 | 4 | 7 | 8 | 8 | 7 | 8 | 3 | Gabapentin 900mg TID | |
| c684C>G* | M | 51 | 17 | 1.6 (3.5) | Abnormal | Abnormal | | Idiopathic | No | No | Negative | 68 | 18 | 88 | 7 | 8 | 3 | 3 | 4 | 4 | 1 | 7 | 7 | 4 | 9 | 4 | None | |
| c1007A>C | M | 40 | 37 | 8.5 (4.4) | Normal | Abnormal | | No | No | No | Positive | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | None | |
| c1520G>T | M | 38 | 37 | 6.1 (5.2) | Normal | Abnormal | Autoimmune disease | Yes | No | No | Negative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | None | |
| c1520G>T | M | 38 | 37 | 6.1 (5.2) | Normal | Abnormal | Autoimmune disease and DM | Yes | No | No | Negative | 79 | 24 | 92 | 8 | 8 | 6 | 4 | 1 | 3 | 7 | 7 | 6 | 7 | 9 | 4 | Tramadol and oxycodone on occasion | |
| c1555G>A | F | 44 | 35 | 7.5 (5.7) | Normal | Abnormal | | Idiopathic | Yes | No | Positive | 67 | NA | 86 | 7 | 8 | 6 | 7 | 10 | 9 | 0 | 7 | 8 | NA | 5 | 4 | None | |
| c1555G>A** | F | 63 | 60 | 1.0 (3.2) | Abnormal | Abnormal | IGT | Yes | No | No | NA | 36 | 21 | 65 | 5 | 6 | 7 | 5 | 6 | 5 | 3 | 5 | 3 | 3 | 6 | 4 | Gabapentin 300mg daily | |
| c1592A>C | F | 26 | 25 | 8 (8.4) | Abnormal | Normal | | Idiopathic | Yes | No | Negative | 75 | 7 | 74 | 8 | 7 | 10 | 0 | 0 | 0 | 0 | NA | NA | NA | 2 | 1 | None | |
| c1867G>A* | F | 64 | 59 | 2.8 (3.2) | Abnormal | Abnormal | | Idiopathic | Yes | Yes | Positive | 87 | 87 | 96 | 9 | 8 | 7 | 7 | 9 | 9 | 7 | 8 | 9 | 7 | 6 | 4 | None | |
| c2033A>C | M | 54 | 50 | 7.7 (3.5) | Normal | Abnormal | | Idiopathic | Yes | No | Negative | 70 | 53 | 88 | 8 | 8 | 8 | 0 | 0 | 8 | 0 | NA | NA | NA | NA | 8 | 4 | Duloxetine 120mg daily, oxycodone extended release 10mg TID, oxycodone 5mg QID |
| c2128G>G | F | 21 | 16 | 4.7 (8.5) | Abnormal | Normal | | Idiopathic | Yes | No | Positive | 64 | 0 | 85 | 7 | 5 | 8 | 7 | 0 | 5 | 0 | 6 | 7 | 5 | 5 | 3 | None | |
| c2157G>C | F | 46 | 39 | 6.9 (5.7) | Normal | Abnormal | | Idiopathic | Yes | No | Positive | NA | NA | NA | 9 | 9 | 3 | 9 | 9 | 9 | 1 | 9 | 9 | 9 | 1 | 1 | Tramadol hydrochloride/paracetamol | |
| c2159T>A* | F | 65 | 63 | 3.7 (3.2) | Normal | Abnormal | | Idiopathic | No | No | Positive | NA | NA | NA | 4 | 5 | 5 | 6 | 5 | 2 | 2 | NA | 2 | 2 | 4 | 3 | None | |
| c2159T>A* | M | 39 | 38 | 4.5 (3.2) | Abnormal | Abnormal | | Idiopathic | No | No | Negative | 56 | 34 | 74 | 7 | 6 | 7 | 7 | 8 | 3 | 0 | 7 | 8 | 7 | 6 | 4 | NA | |
| c2215A>G | F | 28 | 26 | 7.7 (8.4) | Abnormal | Abnormal | | Idiopathic | No | No | Negative | 77 | 56 | 89 | 8 | 8 | NA | 9 | 1 | 8 | 7 | NA | NA | NA | 8 | 4 | Oxycodone 5mg 4 to 8 times a day, pregabalin 75mg 6 times a day | |
| c2215A>G | M | 65 | 61 | 3.2 (3.8) | Normal | Abnormal | | Idiopathic | Yes | Yes | Negative | 45 | 7 | 46 | 6 | 0 | 9 | 0 | 6 | 10 | 0 | 10 | 2 | 10 | 2 | 1 | None | |
| c2215A>G | F | 56 | 53 | 1.8 (3.3) | Abnormal | Normal | Autoimmune disease | No | No | No | Negative | 76 | 49 | 94 | 8 | 8 | 8 | 7 | 6 | 6 | 0 | 8 | 8 | 7 | 8 | 4 | None | |
| c2215A>G | M | 70 | 68 | 1 (2.2) | Abnormal | Abnormal | | Idiopathic | No | No | Negative | 22 | 21 | NA | 7 | 8 | 7 | 6 | 3 | 2 | 2 | 5 | 3 | 7 | 2 | 2 | Pregabalin 75mg BID | |
| c2215A>G | F | 48 | 41 | NA | Normal | Abnormal | | Idiopathic | Yes | No | Positive | 46 | 22 | 86 | 7 | 8 | 7 | 7 | 4 | 8 | 4 | 9 | 7 | 8 | 0 | 4 | None | |
| c2215A>G | M | 59 | 39 | 2.2 (3.5) | Abnormal | Abnormal | | Idiopathic | No | Yes | Negative | NA | NA | NA | 9 | 9 | 7 | 3 | 1 | 1 | 1 | 8 | 8 | 8 | 7 | 4 | Pregabalin, duloxetine | |
| c2215A>G | F | 51 | 14 | 3.4 (8.3) | Abnormal | Abnormal | | Idiopathic | Yes | Yes | Positive | 53 | 46 | NA | 6 | 8 | 6 | 4 | 2 | 8 | 6 | 7 | 8 | 5 | 0 | 4 | Duloxetine | |
| c2215A>G | M | 67 | 61 | 0 | Abnormal | Abnormal | | Idiopathic | No | No | Negative | 78 | 27 | 85 | NA | NA | 8 | 2 | 0 | 8 | 1 | 6 | 6 | 8 | 7 | 3 | None | |
| c2215A>G | F | 69 | 63 | 2.2 (3.2) | Abnormal | Abnormal | | Idiopathic | Yes | No | Negative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | Pregabalin 75mg TID | |
| c2215A>G | F | 50 | 46 | 4.5 (3.3) | Normal | Abnormal | | Idiopathic | Yes | No | Negative | NA | NA | NA | 5 | 5 | 9 | 0 | 0 | 0 | 0 | 7 | 6 | 6 | 8 | 3 | Pregabalin | |
| c2215A>G | F | 75 | 70 | 6.7 (2.2) | Normal | Abnormal | DM | No | No | No | Negative | 64 | 29 | 83 | 7 | 6 | 8 | 8 | 0 | 0 | 5 | 1 | 5 | 6 | 4 | 8 | 3 | None |
| c2215A>G | M | 35 | 27 | 5.1 (5.2) | Abnormal | Abnormal | Alcohol abuse | No | Yes | No | Positive | 56 | 28 | 87 | 6 | 7 | 8 | 0 | 5 | 6 | 0 | 9 | 9 | 6 | 5 | 4 | Amitriptyline 10mg BID | |
| c2215A>G | F | 66 | 64 | 2.8 (3.2) | Abnormal | Abnormal | | Idiopathic | No | No | Negative | 83 | 25 | 94 | 9 | 9 | 7 | 7 | 6 | 8 | 0 | 8 | 7 | 9 | 8 | 3 | Gabapentin 800mg TID, tramadol 50mg TID | |
| c2215A>G | F | 65 | 62 | 9.7 (3.2) | Abnormal | Abnormal | | Idiopathic | No | No | Negative | 91 | 71 | 95 | 9 | 9 | 7 | 8 | 8 | 9 | 8 | 9 | 9 | 8 | 7 | 4 | Duloxetine 30mg QID, buprenorphine transdermal | |
| c2266A>A | F | 71 | 63 | 6.4 (2.2) | Normal | Abnormal | | Idiopathic | No | No | Negative | NA | NA | NA | 7 | 10 | 10 | 2 | 0 | 8 | 3 | 10 | 10 | 7 | 3 | 1 | Pregabalin 75mg daily | |
| c2271G>A | F | 68 | 48 | 1 (3.2) | Normal | Abnormal | Autoimmune disease | Yes | No | Yes | Negative | NA | NA | NA | 7 | 9 | 6 | 7 | 5 | 8 | 9 | 9 | 10 | 5 | 3 | 3 | Duloxetine 60mg daily | |
| c2367G>A* | M | 68 | NA | 3.7 (2.8) | Normal | Abnormal | NA | No | No | No | Positive | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | None | |
| c2794A>C/c.2971G>T* | F | 62 | 59 | 5.4 (3.2) | Normal | Abnormal | | Idiopathic | No | No | Negative | 60 | 28 | 81 | 6 | 6 | 7 | 5 | 1 | 8 | 2 | NA | NA | NA | 9 | 4 | None | |
| c2794A>C/c.2971G>T* | M | 21 | 16 | 4 (6.1) | Abnormal | Abnormal | | Idiopathic | No | No | Positive | 7 | 7 | 11 | 4 | 6 | 7 | 4 | 0 | 1 | 1 | 6 | 7 | 5 | 7 | 2 | None | |
| c2794A>C/c.2971G>T* | F | 36 | 34 | 6.4 (7.1) | Abnormal | Abnormal | Autoimmune disease | Yes | No | Yes | NA | 87 | 80 | 100 | 9 | 9 | 8 | 9 | 10 | 7 | 6 | 10 | 10 | 8 | 9 | 4 | Amitriptyline | |
| c2794A>C/c.2971G>T* | M | 27 | 19 | 7.4 (6.1) | Normal | Abnormal | Autoimmune disease | No | No | Yes | Negative | 88 | 39 | 100 | 9 | 9 | 8 | 9 | 7 | 10 | 0 | 9 | 9 | 9 | 7 | 4 | None | |
| c2794A>C/c.2971G>T* | M | 21 | 13 | 10.2 (6.1) | Normal | Abnormal | | Idiopathic | No | No | NA | 77 | 47 | 95 | 9 | 9 | 8 | 8 | 3 | 8 | 0 | 8 | 8 | 7 | 4 | 3 | None | |
| c2794A>C/c.2971G>T* | M | 50 | 49 | 0.6 (3.5) | Abnormal | Abnormal | Autoimmune disease | No | No | No | NA | 29 | 13 | 59 | 4 | 5 | 3 | 1 | 1 | 0 | 1 | 5 | 4 | 3 | 5 | 2 | None | |
| c2794A>C/c.2971G>T* + c.4612T>C | F | 44 | 42 | 8.1 (5.7) | Normal | Abnormal | | Idiopathic | No | No | Negative | 68 | 27 | 78 | 6 | 7 | 6 | 7 | 6 | 9 | 5 | 5 | 8 | 7 | 9 | 4 | Gabapentin 300mg QID, duloxetine 60mg daily | |
| c2794A>C/c.2971G>T* + c.4612T>C | M | 58 | 56 | 9.6 (3.5) | Normal | Abnormal | Autoimmune disease | No | No | No | Negative | 80 | 21 | 73 | 8 | 8 | 9 | 7 | 8 | 8 | 6 | 8 | 5 | 9 | 6 | 4 | None | |
| c2869A>G | M | 67 | 63 | 7.8 (2.8) | Normal | Abnormal | Autoimmune disease | No | No | No | Negative | 71 | 19 | 87 | 8 | 8 | 9 | 3 | 8 | 9 | 0 | 8 | 8 | 4 | 3 | 1 | Amitriptyline, lidoacaine gel, oxycodone 5mg TID | |
| c3889T>C | F | 27 | 26 | 4.5 (8.4) | Abnormal | Normal | | Idiopathic | Yes | No | Positive | NA | NA | NA | 4 | 0 | 6 | 7 | 8 | 1 | 6 | 5 | 1 | 7 | 5 | 3 | None | |
| c3836G>A | M | 64 | 59 | 7 (2.8) | Normal | Abnormal | | Idiopathic | Yes | No | Negative | NA | NA | NA | NA | NA | NA | 8 | NA | NA | NA | NA | NA | NA | 8 | 4 | None | |
| c4585_4590A>G>G>C>A>A | F | 42 | 40 | 9.1 (5.7) | Normal | Abnormal | | Idiopathic | Yes | No | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | None | |
| c4596G>A | F | 70 | 68 | 2.3 (2.2) | Abnormal | Abnormal | | Idiopathic | Yes | No | Negative | 35 | 35 | 75 | 8 | 8 | | | | | | | | | | | | |