Title: Supplementary Data 1.

**Description:** ONT sequencing runs with yield for all samples.

Title: Supplementary Data 2.

**Description:** All identified transcripts isoforms with exon coordinates in BED format.

Title: Supplementary Data 3.

**Description:** Quantification (read counts) of all transcript isoforms in all samples.

**Title:** Supplementary Data 4.

**Description:** Significantly co-associated exon pairs.

Title: Supplementary Data 5.

**Description:** List of differentially expressed transcript isoforms between wildtype and mutants.

Title: Supplementary Data 6.

Description: List of oligos for validating novel splice events with fragment analysis and

validation status.