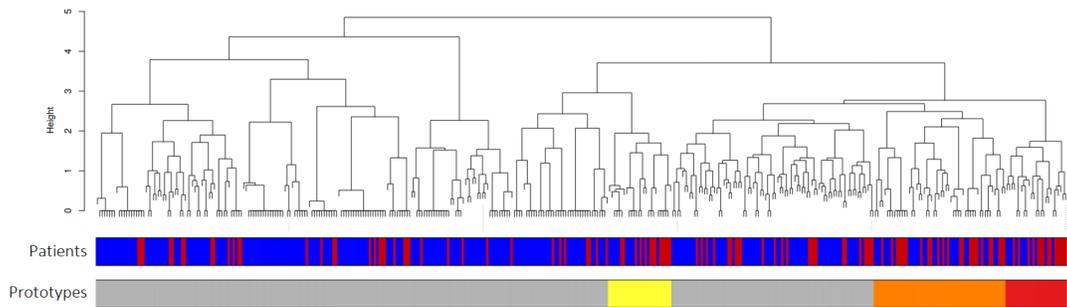
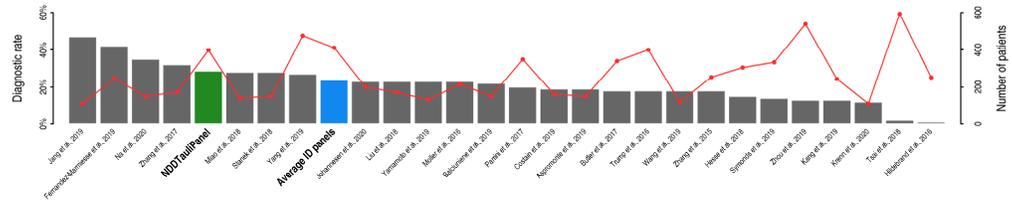


**Figure S1.** Inheritance pattern for variants in putative mosaic state. Orange arrows indicate the identified single point causal variant. (a) Inheritance pattern for *ASXL3* NM\_030632.3:c.4890\_4893del. (b) Inheritance pattern for *TLK2* NM\_006852.6:c.1637G>A. (c) Sanger sequencing for *PHIP* NM\_017934.7:c.894G>A in proband and a non-related control indicated by (\*).



**Figure S2.** Dendrogram applied to the dissimilarities derived from the Random Forest classifier. The “Patients” bar represents patients with identified pathogenic variant (red) and patients for which a pathogenic variant was not identified (blue). The yellow, orange and red blocks in the bar “Prototypes” highlight the manually identified groups of patients enriched of patients with identified pathogenic variants.



**Figure S3.** Diagnostic rate comparison between NDDTauliPanel and the gene panel studies having sample size >100 in Stefinsky et al., 2021. The bars represent the diagnostic rate represented in the y-axis; red dots and line represent the gene panel sample size represented in the z-axis. Green and blue bars represent the diagnostic rate of the NDDTauliPanel and the average diagnostic rate of the rest of gene panel studies considered, respectively.