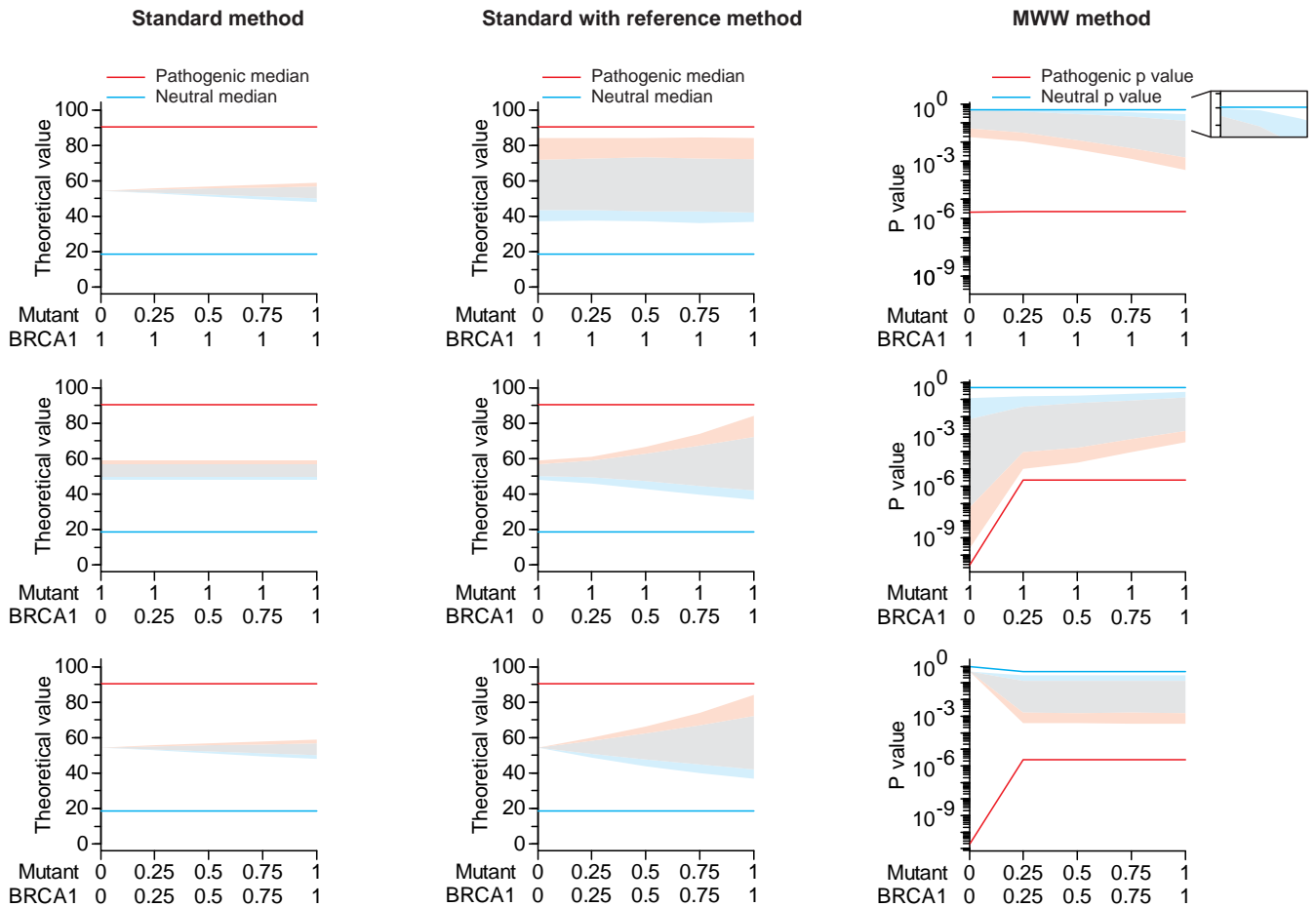**G** Distribution range

S27 Fig. Quantile system of classification (theoretical situation)
Evolution of the best cut-off fluctuation, depending on the range of the mutant and BRCA1 distributions, as in S25 Fig. The corresponding panels, depicted for the probability system of classification, are shown in S19E-G Fig.
As summarized in S17 Table, these results reveal a major flaw in the quantile system of classification. A null range means that all of the values, present in a distribution, are identical (ties). Because ties are related to a low measurement accuracy, an efficient variant classifier should penalize a high number of ties in a dataset, which is not observed here, whatever method is used.