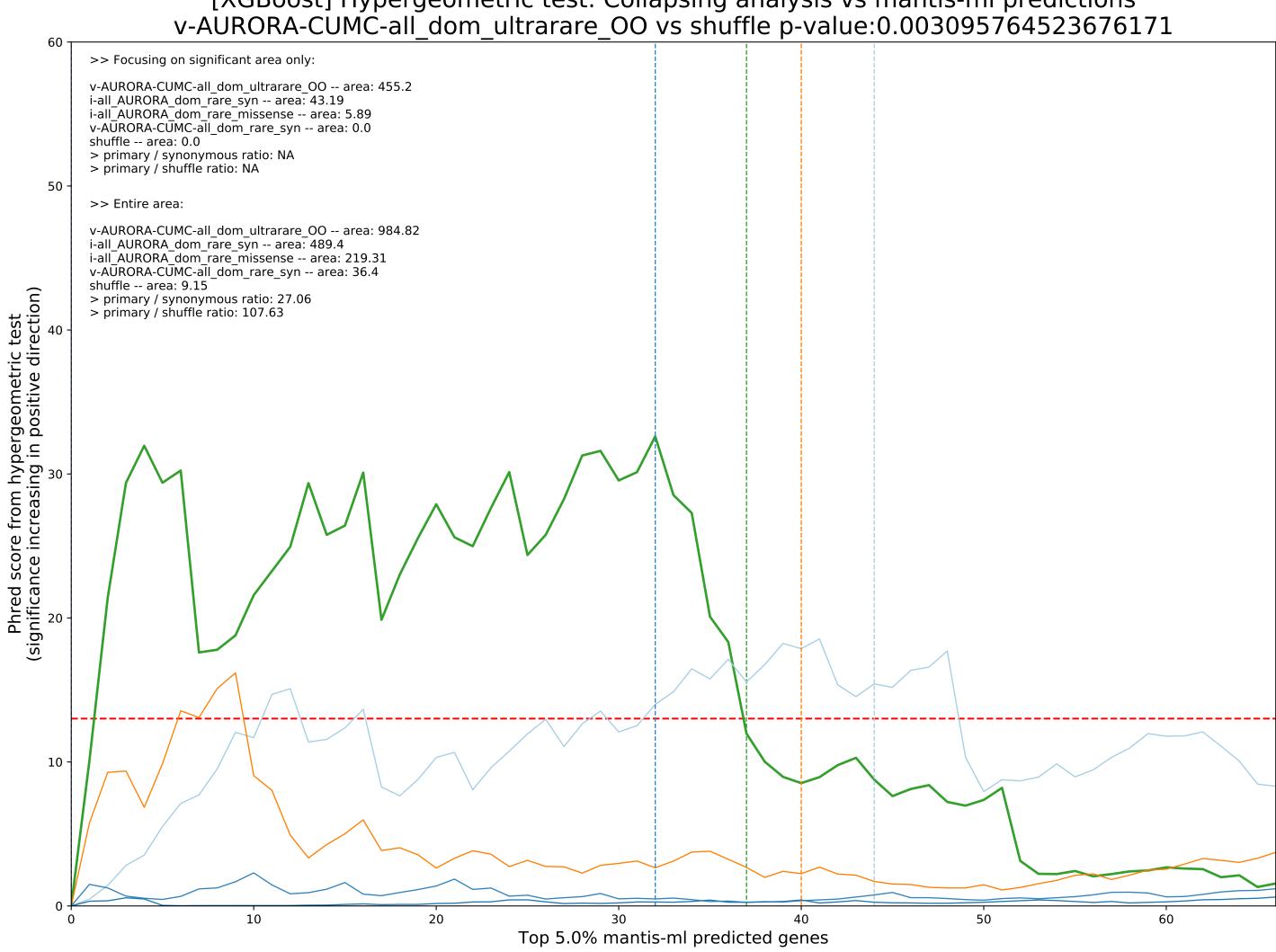[XGBoost] Hypergeometric test: Collapsing analysis vs mantis-ml predictions
v-AURORA-CUMC-all_dom_ultrarare_OO vs shuffle p-value:0.00309576452367171

>> Focusing on significant area only:

v-AURORA-CUMC-all_dom_ultrarare_OO -- area: 455.2
i-all_AURORA_dom_rare_syn -- area: 43.19
i-all_AURORA_dom_rare_missense -- area: 5.89
v-AURORA-CUMC-all_dom_rare_syn -- area: 0.0
shuffle -- area: 0.0
> primary / synonymous ratio: NA
> primary / shuffle ratio: NA

>> Entire area:

v-AURORA-CUMC-all_dom_ultrarare_OO -- area: 984.82
i-all_AURORA_dom_rare_syn -- area: 489.4
i-all_AURORA_dom_rare_missense -- area: 219.31
v-AURORA-CUMC-all_dom_rare_syn -- area: 36.4
shuffle -- area: 9.15
> primary / synonymous ratio: 27.06
> primary / shuffle ratio: 107.63

Legend:
- - - p-val: 0.05
—— v-AURORA-CUMC-all_dom_ultrarare_OO
—— i-all_AURORA_dom_rare_syn
—— i-all_AURORA_dom_rare_missense
—— v-AURORA-CUMC-all_dom_rare_syn
—— shuffle

Y-axis: Phred score from hypergeometric test (significance increasing in positive direction)
X-axis: Top 5.0% mantis-ml predicted genes