Comparison of all methods on retrieval task

In Fig 1, we provide the comparison of all methods on retrieval task on a database of $\sim 90k$ sequences; the results are averaged over $\sim 60k$ queries. As shown, the proposed supervised approaches provide a high gain in precision values over unsupervised methods and comparable performance as compared to BLAST.

**Fig 1. Improvement in precision**: The plot shows the percentage improvement in precision value achieved by SuperVec, HSuperVec(X) and H+BLAST over other methods. Precision is compared at 0.6 recall for the database of 90k sequences and 200 classes from dataset1.