

# Re-engineering of a tool for drug repositioning with NMTF

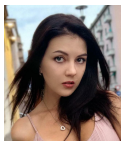
Application note on bioinformatics

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# Objective and applied modifications

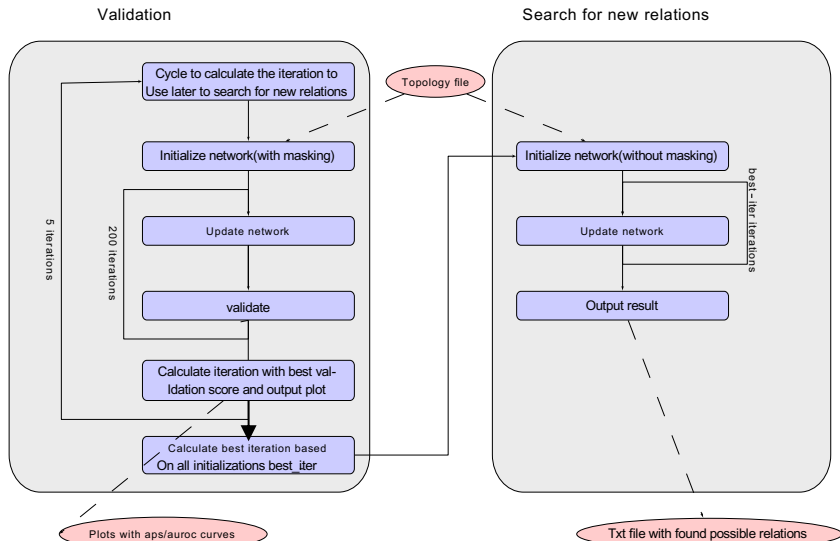
## Objective

The generalization of already existing functionality

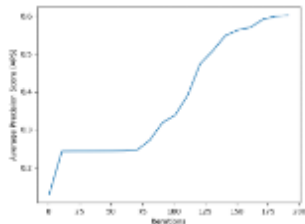
## Applied modifications

- Testing of existing functionality
- Adding validation
- Adding intra-data relations influence
- Adding output
- Implementing rank calculation
- Adjusting application flow

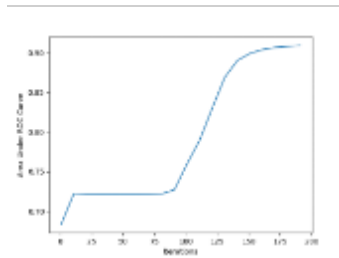
# Application flow



## • APS/AUROC validation results



APS plot example



AUROC plot example

## • Newly found connections file

```
1 DB00005 Blood Proteins 0.6127584520510099
2 DB00005 Globulins 0.5674650814479039
3 DB00005 Immunoglobulins 0.5510323395313135
4 DB00008 Carbohydrates 0.5160859039245146
5 DB00041 Enzyme Inhibitors 0.5144958639823646
6 DB00042 Nervous System 0.6860733637208515
7 DB00054 Antibodies, Monoclonal 0.6259975668233332
8 DB00056 Enzyme Inhibitors 0.5346958632240236
9 DB00056 Nucleic Acids, Nucleotides, and Nucleosides 0.5034638372435417
10 DB00074 Antibodies, Monoclonal 0.627168743063233
```