Attachment no 1 Technical Specification

Name:	Software for drug designing process
Term of license:	12 months
Number of licences:	2
Technical Specification	

Integrated software package with the remote access possibility and following instruments:

- **1**. The system should have the ability to calculate and visualize ΔG using at least two forces: desolvation and H-Bond interactions
- **2**. The system for **s**caffold hopping should have at least the following functions, replacing the central part of the ligand and generating suitable 3D replacement.
- **3**. The system should provide pharmacophore constraints (3D) and be able to use the fragments from PDB or ZINC database.
- **4.** System for the hit optimization should be able to provide growing the fragments inside the binding pocket and linking fragments in 3D.
- **5**. Visual torsions system provides a statistical assessment of the likelihood of dihedrals.
- **6**. System for pocket detection should be able to detect the binding pocket, assess the quality of binding pocket and visualize it.
- **7**. A Molecular docking system should be able to perform a docking (places a ligand into a binding site), including a template-based docking, by determining the Maximum Common Substructure (MCS) or similar scoring.