

A Croatian Bioinformatics company that provides an Innovative Generative AI Drug Discovery Platform for Small Molecules and Peptides and is looking for partners from the Biotech or Pharma Sector

## Summary

Profile type	Company's country	POD reference
<b>Technology offer</b>	<b>Croatia</b>	<b>TOHR20230628022</b>
Profile status	Type of partnership	Targeted countries
<b>PUBLISHED</b>	<b>Research and development cooperation agreement</b> <b>Investment agreement</b> <b>Commercial agreement with technical assistance</b>	<b>• World</b>
Contact Person	Term of validity	Last update
<b><u><a href="#">Rita ELSTE - TOMSONE</a></u></b>	<b>28 Jun 2023</b> <b>27 Jun 2024</b>	<b>28 Jun 2023</b>

## General Information

### Short summary

With its generative AI platform, a Croatian company supports Pharma Research companies in accelerating their Drug Discovery Processes by applying a novel software solution for De Novo Drug Design. The company is looking for a partner from the Biotech or Pharma sector who is doing research on a dedicated target protein, has Biochemistry expertise, but wants to complement this newest AI technologies.

### Full description

A Croatian Bioinformatics company provides a generative AI platform to support Pharma Research Companies in accelerating their Drug Discovery Processes by applying a novel software solution for De Novo Drug Design. Its software generates Small Molecules and Peptides, and also features embedded ADMET prediction capabilities. Clients provide a target protein as a sequence or as a 3d shape and the company generates the hit compound and returns it in SMILES or FASTA format. In addition to Pharma Companies, this technology may also be interesting to the Cosmetics, Nutrition, and Chemicals sectors.

Besides its core generative AI platform capabilities, the company also supports its clients along the whole Drug

Discovery Process, starting from target identification and reaching to the clinical phase. While the generation of ligands is the core functionality, its software also features on target/off target combinations or multiple targets. It can also be applied to other techniques, e.g. scaffold hopping.

The company is looking for a partner from the Biotech or Pharma sector who is doing research on a dedicated target protein, and has Biochemistry expertise, but wants to complement it with the most modern Bioinformatics and AI capabilities. The company is open to act as a consortia partner, co-develop a new drug, or act as a supplier.

#### Advantages and innovations

Compared to traditional screening methods, generative AI can cut drug discovery process durations by 75% and lower costs significantly.

Its proprietary AI technology yields superior results compared of other generative approaches (e.g. GAN or reinforcement learning) that recently entered the market of generative AI. The Structure Based approach is superior to sequence-based AI.

The main USP is that it yields much better results in an environment with scarce data.

#### Technical specification or expertise sought

#### Stage of development

**Available for demonstration**

#### IPR Status

**Secret know-how**

#### Sustainable Development goals

- **Goal 9: Industry, Innovation and Infrastructure**
- **Goal 3: Good Health and Well-being**
- **Goal 2: Zero Hunger**
- **Goal 6: Clean Water and Sanitation**

## Partner Sought

#### Expected role of the partner

The company is looking for a partner from the Biotech or Pharma sector who is doing research on a dedicated target protein, and does have the Biochemistry expertise, but wants to complement this with the most modern Bioinformatics and AI capabilities. The company is open to act as a consortia partner, co-develop a new drug, or act as a supplier

## Type of partnership

**Research and development cooperation agreement**

**Investment agreement**

**Commercial agreement with technical assistance**

## Type and size of the partner

• **Other**

• **Big company**

• **SME <=10**

• **University**

• **SME 11-49**

• **SME 50 - 249**

• **R&D Institution**

## Dissemination

## Technology keywords

- **06002001 - Biochemistry / Biophysics**
- **01003003 - Artificial Intelligence (AI)**
- **06002009 - Molecular design**
- **05001002 - Computational Chemistry and Modelling**

## Targeted countries

- **World**

## Market keywords

- **04011 - Molecular design**
- **04006 - Cellular and Molecular Biology**
- **04012 - Toxicology**
- **04014 - Bioinformatics**

## Sector groups involved