

EXCLUSIVE LICENSE / TECH TRANSFER OPPORTUNITY

e.valuation scientific software

biomarker/target/drug positioning & repositioning

domain: biotech/pharma; digital drug R&D; big data

Technology Readiness Level: 9

Software architecture: 3-TIER, client-server; web client



A 50+ person years R&D initiative started in 2006; TRL9 reached in 2015; 2016/17: fixes, documentation, Proof-of-Concept applications; 2018: Due Diligence package ready for review – now offered for exclusive licensing & technology transfer. Present version: 2.3.6 (data status 07/2018)

Application areas: **data-driven bio/pharmaceutical asset R&D**

- Fit-for-purpose evaluation, given biomarker/target/drug candidate assets for a disease in focus
- Search for/evaluation of alternative assets for a disease in focus
- Search for/evaluation of alternative diseases for given assets (repositioning)
- comparative pathology, comparative drug MoA, drug combination MoA, comparative animal model pathology, omics profile-in-context interpretation, etc.

Technology core/uniqueness: **molecular models**

Disease pathologies resemble a molecular process of processes – the same being true for drug mechanism of action (MoA). Assembling data annotation of molecular objects (human protein coding gene level) in interaction allows deriving molecular models of pathologies and drug MoA, in computational interference informing on drug effect.

Molecular models embedded in e.valuation allow integrated analysis of pathology processes, disease progression-associated biomarker, embedded drug target candidates, and superposition of drug mechanism of action - all assembled for ultimately enabling precision medicine R&D.

Loaded platform: aside interfaces allowing processing/integration of proprietary data the platform holds a preconfigured data space of >4,300 pathology/drug MoA molecular models and > 18 mio marker-, target- and drug-to-disease links.

Selected technology reference:



Predictive biomarkers for linking disease pathology and drug effect.

Mayer B, Heinzel A, Lukas A, Perco P, Current Pharmaceutical Design 23, 29-54 (2017)

about emergentec:

Founded in 2002 by a team of biologists and computer scientists; core: scientific computing/software technologies; focus: multi-agent (system of) systems; track record of proprietary software development/licensing/tech transfer projects.



emergentec biodevelopment GmbH
Gersthofenstrasse 29-31
1180 Vienna, Austria
www.emergentec.com

Contact:
Arno Lukas, PhD
office@emergentec.com
phone: +43 1 4034966