

Ultimate Medicine AG

c/o CHFL AG, Zürichstrasse 131

8600 Dübendorf, Switzerland



Development engine with novel
therapeutics for CNS

Industry: Pharma / Neuroscience

- **Lead Program:**
1st in class drug portfolio on cognitive impairment, dementia -> NEW pathway
- **Development Engine:**
gut-brain axis in-vivo models with advanced multiomics analytics
- **Indications:**
neurological & neuropsychiatric disorders

Management

- Antal Szalay, MD, MBA
CEO, Founder & Technology Inventor
- Thomas Blank, PhD
CSO & Technology Inventor

Advisory Board

- Ted Torphy, PhD
Pharmacologist, Drug Development
- Guido Koch, PhD
Chemist, Early Drug Development
- Michael Stucky
Business Expert, Biotech & Life Science

Intellectual Property

- Exclusive IP ownership
- First right of refusal for new IP of laboratory Dr. Blank University Freiburg, Germany
- Issued and pending patents covering methods of treatment (Tx & Dx)

Funding to Date

- \$600k through insiders and grants

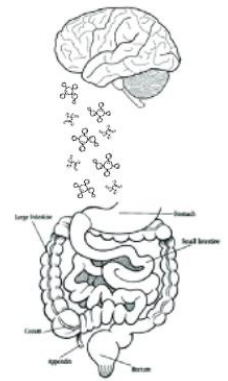
Seed Round of CHF3M to 5M open

Milestones:

- Prepare drug candidates for preclinical package UM001 (4Q2022)
- Clinical validation of biomarker UM001 (1Q2023)
- Process development for Tx, Dx and pipeline (2Q2022)
- Build strategic partnerships (4Q2022)

Executive Summary:

- Ultimate Medicine believes that new biological information are required for breakthroughs in the neuroscience space
- Ultimate Medicine is a pre-clinical drug development company with a proprietary development engine for novel CNS therapeutics
- Through its gut-brain in-vivo omics platform, Ultimate Medicine takes a specific piloting approach to generate organic leads
- Out of those novel high-value insights, Ultimate Medicine generates drug candidates and associated biomarkers
- Because of targeted in-vivo POC experiments validated novel targets, Ultimate Medicine expects a higher success rate in clinical studies
- Ultimate Medicine uncovered already a new biological pathway that provides ample new intervention options and a biomarker for age related cognitive impairment and dementia (UM001)



Market Opportunity & Unmet Medical Need:

- The neurology market has the potential to grow at 15.5% CAGR similar the Oncology market the last 2 decades.
- Out of an aging global population with currently 1Bn older people (+1.2% p.a.), about 70% will develop a certain degree of cognitive impairment or dementia
- About 50M (+3% p.a.) dementia cases exist worldwide, with 10M new cases annually
- Dementia affects whole families, reduces productivity and costs about \$1Tn per year (1.6% of global GDP)
- Today, patients are treated symptomatically without curing or slowing down disease progression and their families are left with a high burden, collateral disease and economic uncertainty
- Current drug development is hampered by nonspecific biomarkers, clinical endpoints, lack of patient stratification, underpowered clinical trials, lack of new approaches and hypotheses
- Drug development for dementia focuses on existing scientific hypotheses and high throughput discovery processes, and didn't result in breakthroughs yet
- Statistical big data approaches provide correlation not causation, significance is questionable

Development pipeline, Lead Programs UM001 & UM002:

- UM001 is based on a novel specific gut-brain axis pathway with a specific target
- UM001 provides a small and stable molecule detectable in blood samples (X7432), concentrations in serum and CNS are correlated
- Direct MoA of X7432 is supported by dose dependent cognitive impairment, reduced neuroplasticity and learning (in-vivo POC)
- UM001 has resulted in new clinical targets and X7432 can serve as diagnostic biomarker and surrogate endpoint
- X7432 indicates dementia in first external human CSF omics dataset with strong evidence
- A first target is to antagonize the effect of X7432 and to develop a set of drug candidates to build a drug portfolio based on the X7432 platform
- UM002 generated lead addresses other confidential indications on the X7432 platform
- Development pipeline develops assets e.g., targeting neurodegeneration and an immunotherapy for the aging brain

Technical & Business Milestones Achieved:

- Partnership established with the University Freiburg to market and commercialy develop IP from one of the top research groups worldwide in neuroscience with first right of refusal to novel IP
- In-vivo omics platform uncovered and validated through early in-vivo POC novel biological pathway that is directly related to cognitive impairment (UM001)
- Target validation and biomarker in-vivo POC finalized, clinical biomarker validation underway
- IP strategy defined and first patents for methods of treatment filed at EPO and USPTO
- 2 upcoming publications in top the scientific journals e.g., Nature Neuroscience and Nature Aging, covering the results of the first use cases of the in-vivo omics platform led by Dr. Blank
- Acceptance into the Innosuisse program Level 1 after application in Switzerland with its experienced industry network and experts, advancement to Level 2 initiated
- Acceptance into the BaselArea program in Switzerland and finalist in expert pitch competition of Neighborhood program in Paris France November 2021

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