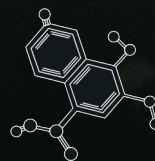
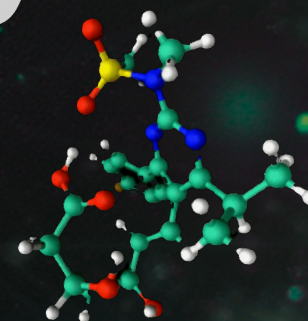


Terra Quantum Drug Discovery

Expanding the Druggable Target Space

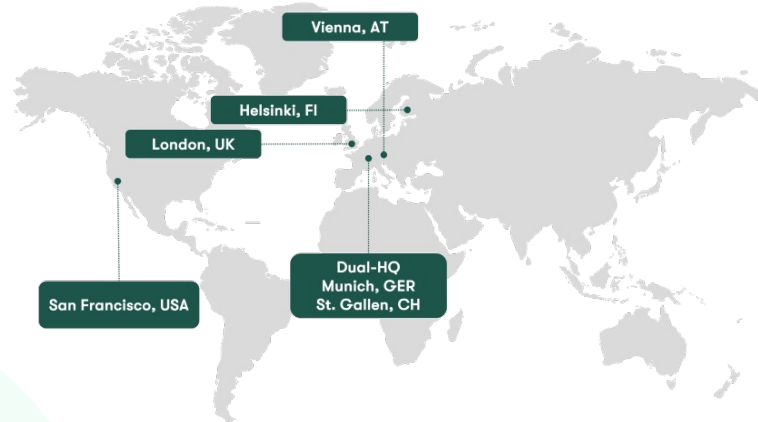


Non confidential presentation

We make deep tech accessible, reliable and impactful, accelerating therapeutic discovery



A global team of world-class industry experts, headquartered in Switzerland & Germany



Terra Quantum is the recognized **industry leader** in **Tensor Network and Quantum algorithms** research, innovation and industry applications.

As featured in:

WSJ



nature

New Scientist

- ✓ One of the world's largest Quantum and AI R&D teams
- ✓ Over 2,500 publications
- ✓ Experienced management board
- ✓ Successfully delivered quantum solutions across industries

THALES

SCHAEFFLER

BBVA

HSBC

NVIDIA



uniper

POSCO

Aflac

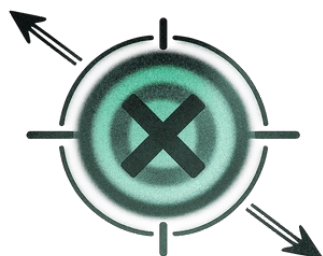


We partner with pharma and biotech to discover treatments for so far incurable diseases that have resisted decades of research, by fusing physics-based models with AI.

Turning the undruggable into treatable, going beyond what is so far possible with standard AI.

We can solve the key challenges in drug discovery

From Hit Identification to Lead Optimisation, we design novel lead candidates where standard AI stops.



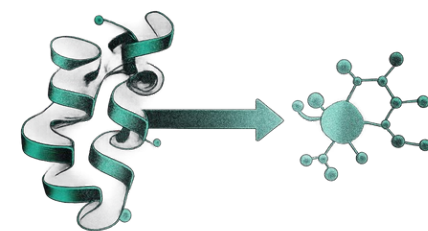
'Undruggable' Targets

Approximately **80-90%** of the human proteome is estimated to be **undruggable** a huge opportunity for novel treatments for patients.



Entering New Modalities

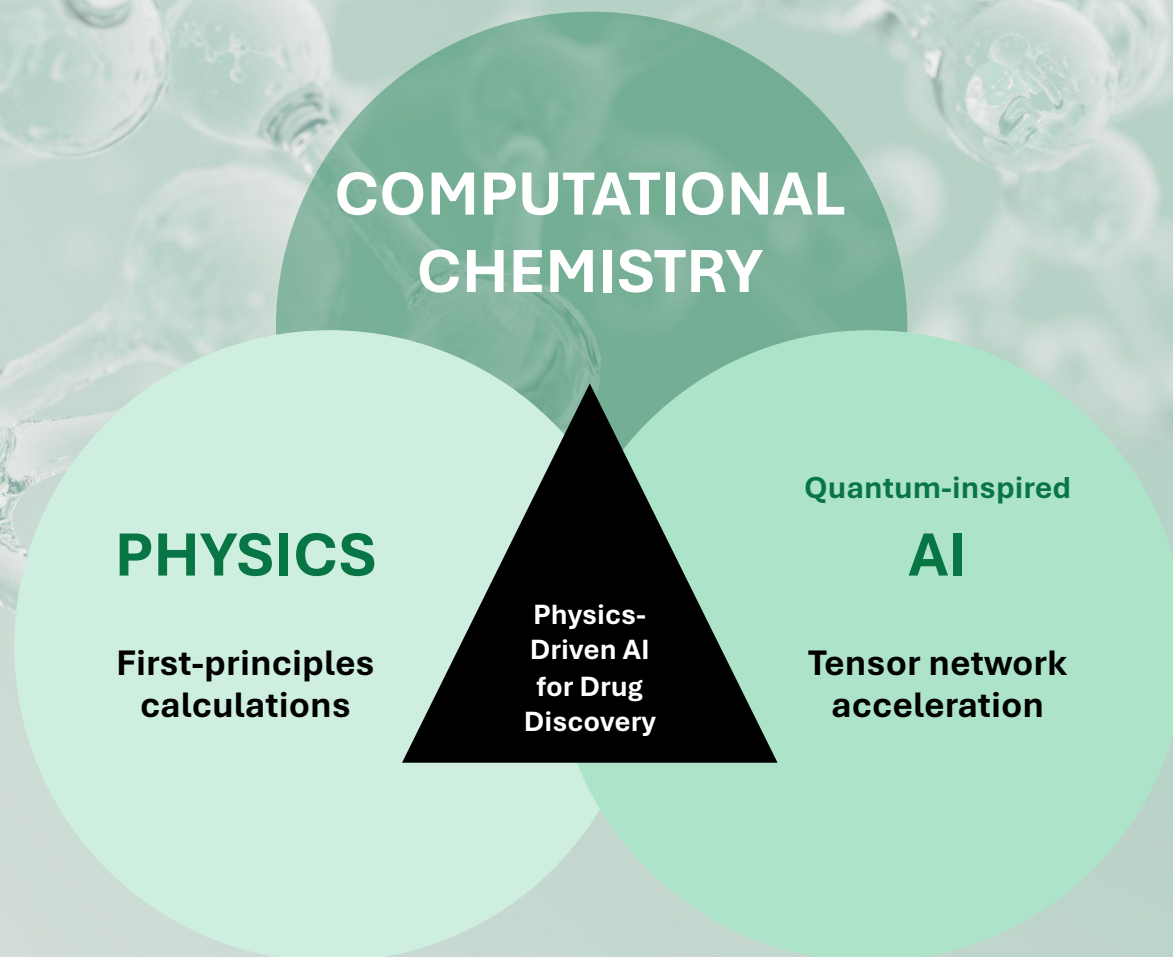
Novel modalities, such as **non-canonical cyclic peptides**, lack the typical extensive data sets required to train ML/AI models effectively.



High-Complexity Protein-Ligand Interactions

Bonds with **high flexibility** in **both** the target protein and the ligand, challenging conventional CADD modelling methods.

Novel modalities don't stem from existing data. They start with **physics**.



Our USP: Leapfrogging current classical AI models

Our next generation class of algorithms overcomes key challenges of the classical AI approaches:

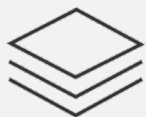
Most advanced classical AI in drug discovery



Introducing **bias** through training data



Losing accuracy due to approximations



Stuck in **today's** technology stack



Mostly limited to **traditional modalities**

Our approach: Next-generation Tensor Networks



No reliance on training data



Speed of AI + **accuracy** of physics-based calculations



GPUs today, **quantum hardware** automatically **tomorrow**



Designed for **novel molecules** (cyclic peptides, etc.)

Entering a new era of drug discovery with TQChem

Key TQchem Benefits

- 
No data bottlenecks
Compete in areas where you don't have proprietary data sets
- 
Significant time savings – 24x speed up above benchmarks
Short compute times despite high modelled complexity
- 
High accuracy calculations – Achieving chemical accuracy
Increase likelihood of success for costly experiments, preclinical & clinical
- 
Automated technology upgrade: we make you Quantum-ready
Platform automatically maps over to quantum hardware in future



Our enabling technology shows leading performance

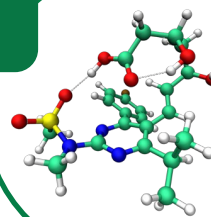
High-performance, proprietary tech stack of algorithms to design novel drug candidates.

Developed by our **industry leading research group** to tackle **challenges not solved by other platforms**:

- ✓ **Undruggable targets**
- ✓ **Data-scarce, novel modalities**
- ✓ **High flexibility in both the protein and the ligand**

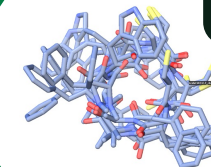
TTConf Conformer Search

**24x speed up
over best-in-class
benchmark**



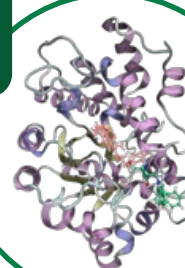
TTConf for Macrocycles Conformer Search

**23x speed up
over best-in-class
benchmark**



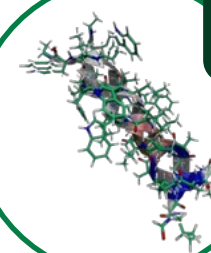
TTBind Protein-Ligand Binding

**High-accuracy
flexible binding**



GPU-Accelerated Electronic Structure

**60x speed up &
scaling to very
large systems**



TQchem

TQ Chem: Use cases across therapeutic areas

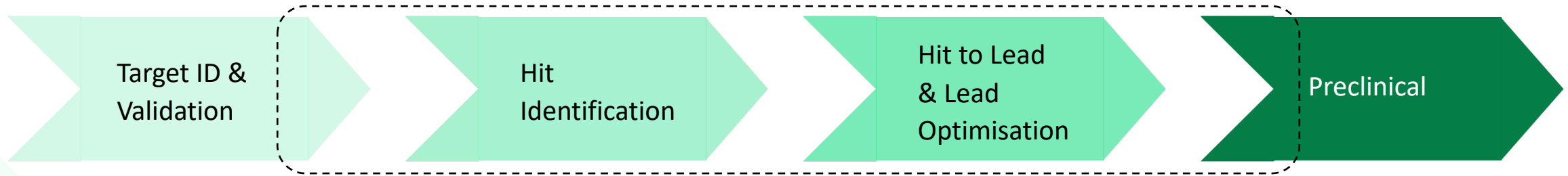
Current pipeline in areas of high medical need (results of internal as well as external collaboration):

Area	Indication	Target	Partner	Target ID	Hit ID	Hit to Lead	Lead opt
Rare diseases	ALS	SOD1	With partner	✓	✓	In progress	■ ■ ■
Neurology	Parkinson	Confidential	With partner	✓	In progress	■ ■ ■	■ ■ ■
Oncology	Cancer	KRAS G12D	TQ pipeline	✓	In progress	■ ■ ■	■ ■ ■

Our partnering model

Terra Quantum value creation

Building a deep understanding of the target, generation of novel hits, followed by in vitro testing loops for lead optimisation, **delivering a set of novel lead candidates ready for preclinical testing**



Partnership model:

- Collaborative working structure
- Leveraging cross-company expertise
- Fast timelines & iteration cycles

Proposed deal structure:

- Upfront payment for exclusivity to certain fields
- R&D /Project cost reimbursement
- Success driven milestone payments & royalties

Generation of novel cyclic peptides

Cyclic peptides are uniquely suited to address the "undruggable" targets that have eluded traditional drugs.

They combine the **precision targeting** of biologics with the **drug-like properties** of small molecules.



Market heating up: \$4.95B in cyclic peptide M&A in 2025 alone;



Growing momentum: 105 macrocyclic clinical candidates, 76 FDA-approved macrocyclic drugs, and 150+ peptide therapeutics in trials;



R&D derisked: With Terra Quantum's new approach and infrastructure, time and cost associated with programs are now reduced.

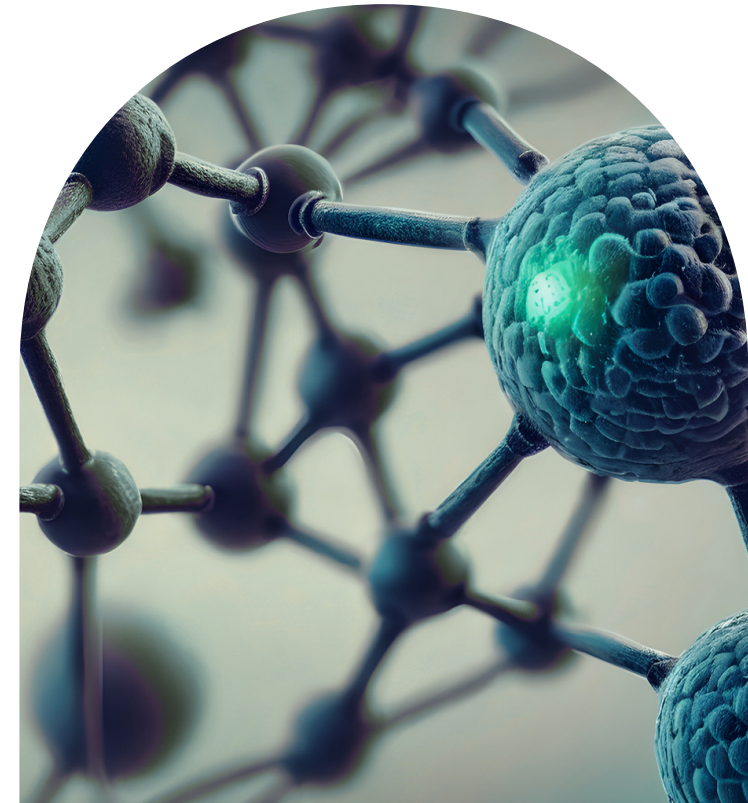
Our drug discovery program focuses on:

- **Undruggable targets**
- **Non-canonical cyclic peptides**
- **Next-generation technology at the forefront of science**

TQChem is building the bridge between AI and Quantum for drug discovery.

Terra Quantum: Physics-driven AI for Drug Discovery

- 1 We design novel lead molecules for the most challenging drug targets & modalities, *giving you a competitive edge*
- 2 We leapfrog current AI approaches and developed algorithms that *significantly outperform benchmarks*
- 3 We keep you at the *forefront of tech infrastructure*, executing on GPUs today and Quantum tomorrow
- 4 We save you cost, time, and improve the accuracy of calculations to *derisk preclinical & clinical trials later*



Please feel free to get in touch

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+49 151 16592429



