



Micar Innovation

Drug Discovery Factory
for novel drug molecules

Problem



There are so many **incurable diseases** around the world that **need adequate novel compounds** for the treatment, like:

- **Chronic pain** still a **pandemic** in the **21st century** and affecting **1.5bn** people worldwide
- There are, **7 000** know **Rare & Ultra Rare Diseases** affects as many as **350** million people in worldwide, **50-66%** of which affect **children**.
- **No time to waste:** Collaborative efforts in disease drug discovery

Direct economic healthcare costs for treating diseases worldwide are about **\$ 5 000 billion**



Solution



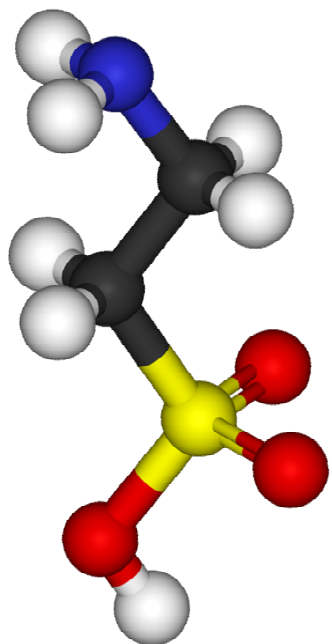
Novel drug molecule is the KEY

Drug Discovery Factory **created & provided:**

- **Drug molecules for treatments** of diversity pandemic, Rare & Ultra Rare, diseases with **unprecedented speed, accuracy and diversity Drug Discovery**
- **Indirect Reduce** direct economic healthcare costs
- **Positive** social and economic impact

Make people smile & healthy

small molecule is the key



Product proof in Pipeline



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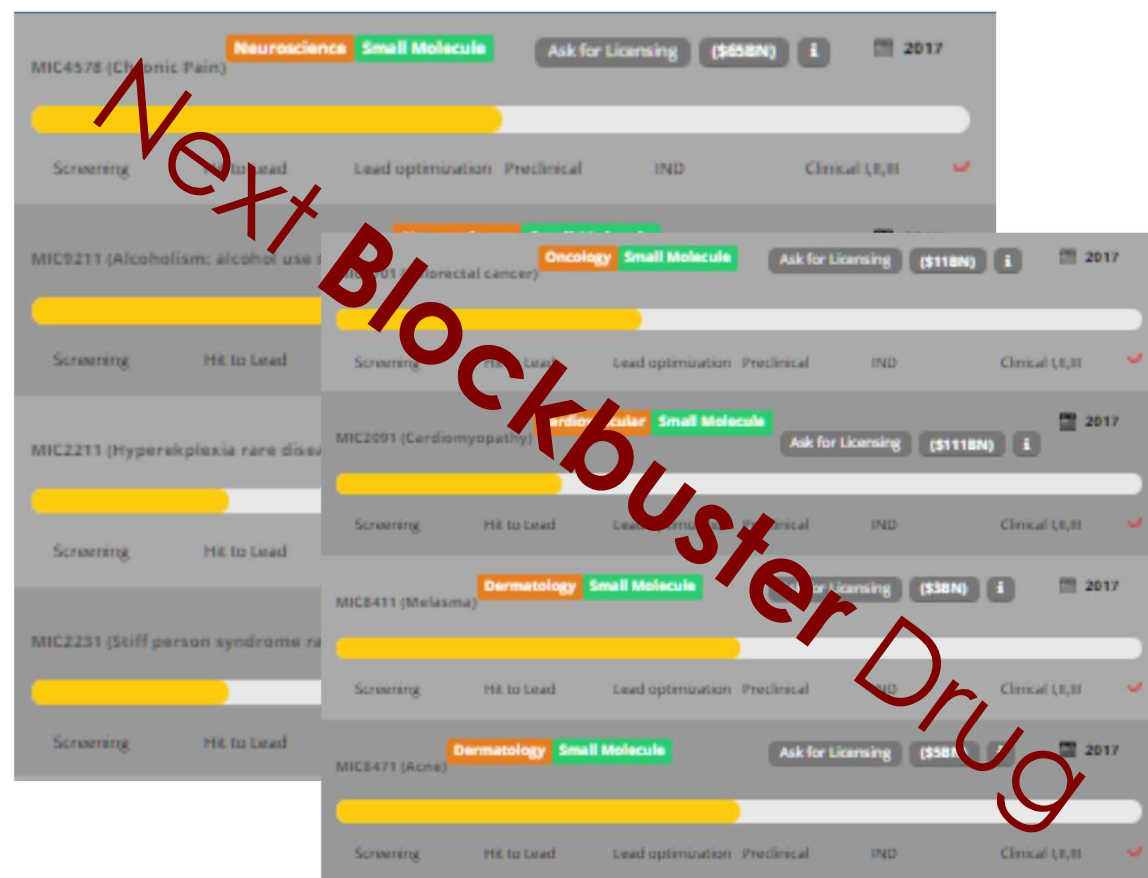
novel drug molecule is the KEY

Discover our Drug Discovery Research
results for last 1 year:

MIC4578 **Chronic Pain** (Preclinical)
MIC9211 **Alcoholism: AUD** (Lead optimization)
MIC2211 **Hyperekplexia rare disease** (Hit to Lead)
MIC2231 **Stiff PS rare disease** (Hit to Lead)
MIC2634 **Iminoglycinuria rare disease** (Hit to Lead)
MIC6479 **Pancreatic Cancer** (Preclinical)
MIC6701 **Colorectal cancer** (Lead optimization)
MIC2091 **Cardiomyopathy** (Hit to Lead)
MIC8411 **Melasma(Hyperpigmentation)** (Preclinical)
MIC8471 **Acne** (Preclinical)

Therapeutic areas

Neuroscience // Oncology // Cardiovascular //
Dermatology // Rare & Ultra Rare diseases



The platform Micar21



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The platform Micar21 – Micar Innovation drug discovery platform which enables efficient discovery of novel small molecule drug candidates.

The platform Micar21 provides access to screening of billions of molecules and efficient optimization of drug properties in the process of identifying the drug candidate.

The platform Micar21 - *structure based in silico drug design & AI*

Generation of highly quality structures

We find the target protein (gene) which is involved in certain disease (usually membrane proteins) and then design highly quality structure

New hit compounds discovery by state of art approaches (more than 70% success rate) + Lead

*Screening **800 million** molecules*

(we look the protein key and refine searching)

Lead optimization of the discovered hits by FEP+ method & computer guided ADMET

***7-10** small highly potent and selective molecules with all predicted ADMET*

Novel drug candidate (small molecule) is ready to go next Preclinical phase with ADMET - refined structure, absorptions, membranes, toxicology, etc and validated Non Clinical Proof Of Concept.

*usually **1-2** small molecules*

Our main expertise



Discovering novel small molecule and the demonstration of **true non-clinical proof-of-concept** is a key value-creation step in the clinical development of a medicine.



Micar Innovation seeks to develop product candidates that:

- Address currently unmet medical needs
- Suggest a clear-cut development profile
- Provide an opportunity to be first-in-class or best-in-class

Drug Discovery

Pre-Clinical

IND Enabling

Phase 1

Phase 2

Phase 3

Approval

Marketing

← 0.5 – 1 years →

- Generation of highly quality structures
- Target Validation
- Hit to Lead
- Lead Optimization
- Computed aided ADMET - refined structure, absorptions, membranes, toxicology, etc

- Non-Clinical Proof of Concept
- PK/PD
- Pilot Tox

GPL Tox
Pharmacology
CMC

Phase 1
SAD/MAD

Phase 2
Clinical PoC



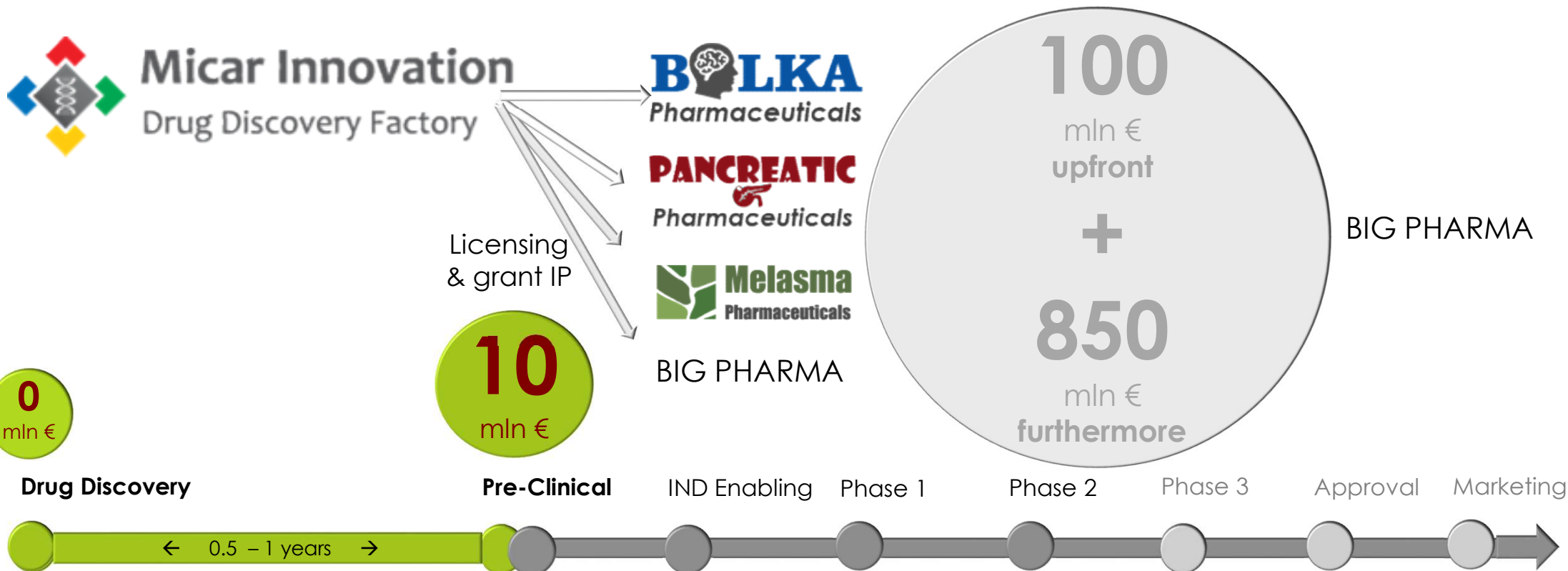
Micar Innovation is actively developing promising first-in-class or best-in-class therapies to treat rare genetic diseases, which mostly affect children. The company has a growing product pipeline, with multiple preclinical candidates in development.

IND (Investigation New Drug application)

Business Model



Business model based on discovering and developing novel drug candidate until **Preclinical phase** – with strong science data of Non-Clinical “Proof of concept” (PoC) and **licensing** them to the best possible commercial partner or new spin out companies.



Spin out companies



novel drug
molecule for the
treatment of

Chronic Pain



novel drug
molecule for the
treatment of

**Pancreatic
Cancer**



novel drug
molecule for the
treatment of

Melasma

Intellectual property



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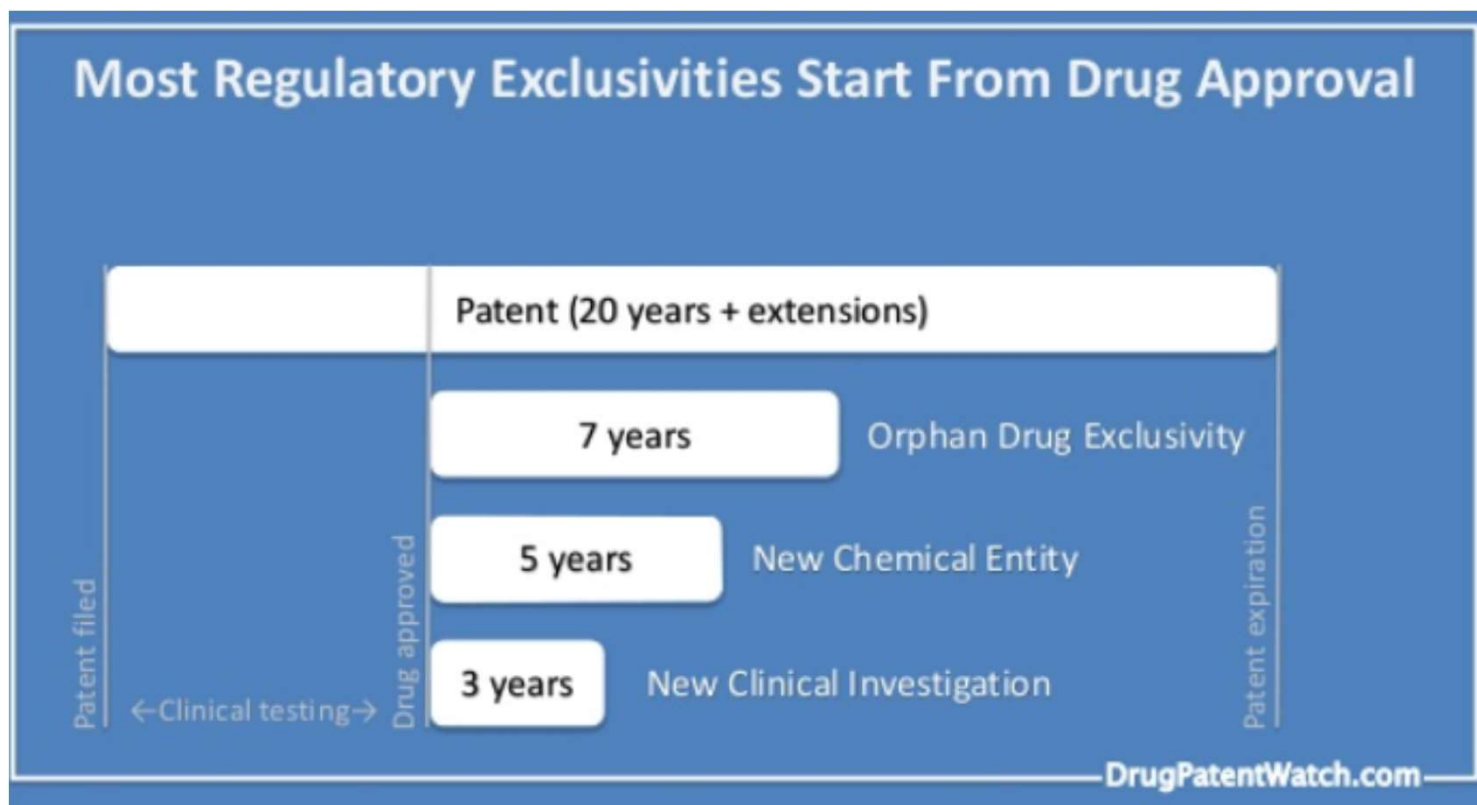


Patent family

Small Molecule for the treatment of

Priority date

Publication number



small molecule is the key

Publications



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Publications are only in highly visible
prominent international scientific journals



Micar Innovation, is one of the world's 250
companies in the report alongside corporations
such as Sanofi, Merck in Roots Analysis Study on
“Computer-Aided Drug Discovery Services Market
2018-2030”

Source: https://www.rootsanalysis.com/reports/view_document/computer-aided-drug-discovery-services-market-2018-2030/207.html

1. Aaranya Biosciences ... 146. **Merck** ... 147. **Micar Innovation**

Awards and nominations



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One year – 3 awards

The National Competition “Innovative Enterprise of the Year”
Micar Innovation (Micar21) **Innovative Enterprise of the Year – 2018**



CIDIC - European Centre of Economic Diplomacy
Micar Innovation (Micar21) **“European CIDIC Award”**.



Central European Startup Awards
Micar Innovation (Micar21) **Best Biotech Startup 2017 in CEE**



**CENTRAL
EUROPEAN
STARTUP
AWARDS**



Startup World Cup & Summit

- Regional Finals
- **TOP 8 Biotech Award** // TOP 50 of the 2018 Startup // World Cup & Summit // Regional Finals!



the
PITCHER

 **webit**

seedstarsworld*

Financial



We looking investment **5 mln EUR**



Bolka Pharmaceuticals - Chronic Pain novel molecule for next 15 *months* financing to reach *Clinical Phase I*

2 mln EUR

*Initial investment opportunity



Pancreatic Pharmaceuticals – Pancreatic Cancer novel molecule for next 15 *months* financing to reach *Clinical Phase I*

1 mln EUR

*Initial investment opportunity



Melasma Pharmaceuticals - Melasma (Hyperpigmentation) for next 15 *months* financing to reach *Clinical Phase I*

0.5 mln EUR

*Initial investment opportunity



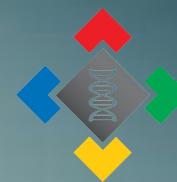
Precision Medicine (Pharmacogenomics) system for next 15 *months* financing to reach *Clinical Phase I*

1.5 mln EUR

*Initial investment opportunity

* ask for Business Plans

Thank you for your attention!



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Progress is impossible without
change, and those who cannot
change their minds cannot
change anything.

George Bernard Shaw



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