




**Saving Lives By Developing Next Generation
Of Natural & Safe Antibacterial Solutions**

WE KILL PATHOGENS.



PHARMA FORUM Wiesbaden, 13.03.2024



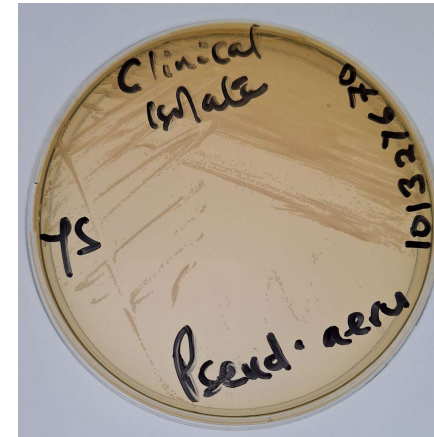
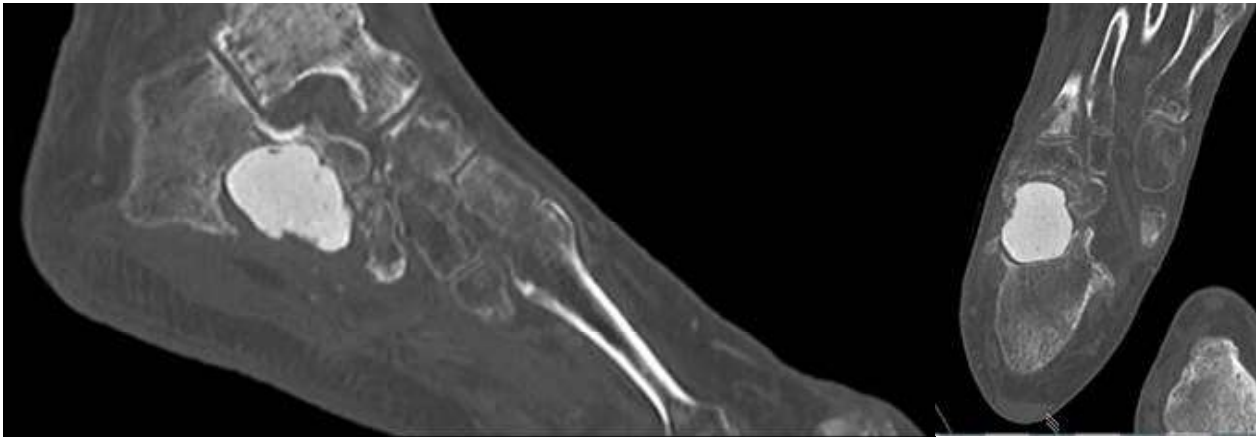
**OVERUSAGE OF CHEMICAL
ANTIBACTERIAL SOLUTIONS CAUSED
ANTIMICROBIAL RESISTANCE OF BACTERIA**



1.4 MILLION People die every year

10 MILLION In 2050

THE NEED: UKRAINIAN SOLDIER WITH PAN-RESISTANT PATHOGEN UNTREATABLE ?



 **BG Klinik**
Berufsgenossenschaftliche
Unfallklinik Ludwigshafen



NEXT GENERATION OF NATURAL & EFFECTIVE ANTIBACTERIAL SOLUTIONS: BACTERIOPHAGES

BACTERIOPHAGES

NATURAL MICROORGANISMS THAT KILL BACTERIA & TREAT INFECTIONS



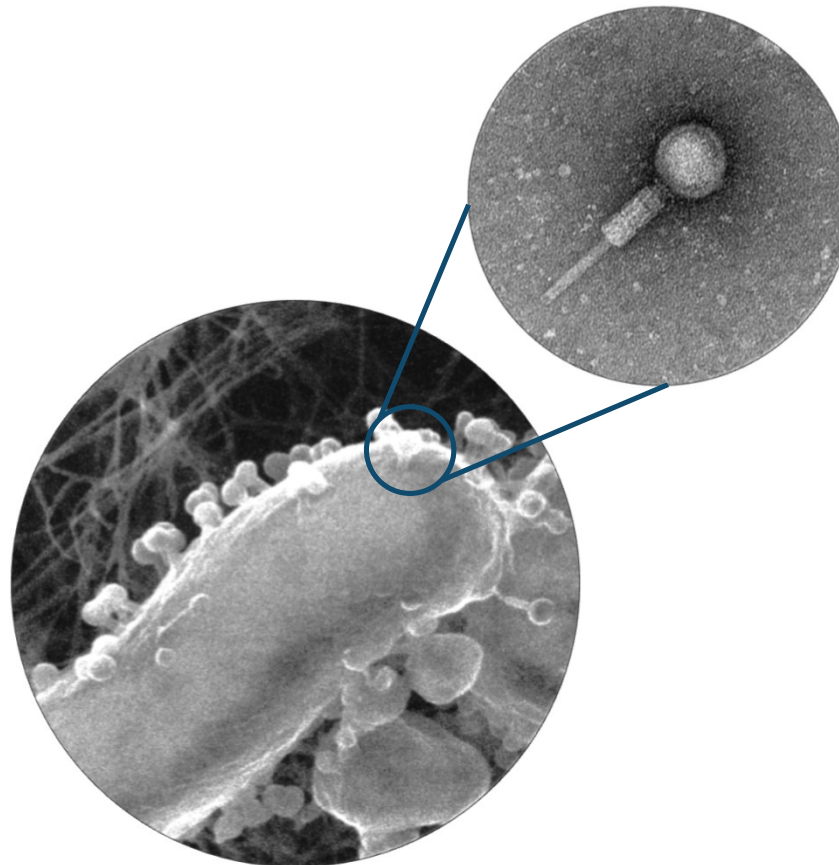
Fully Biodegradable



No side-effects



Adaptability to Resistance



Target specific



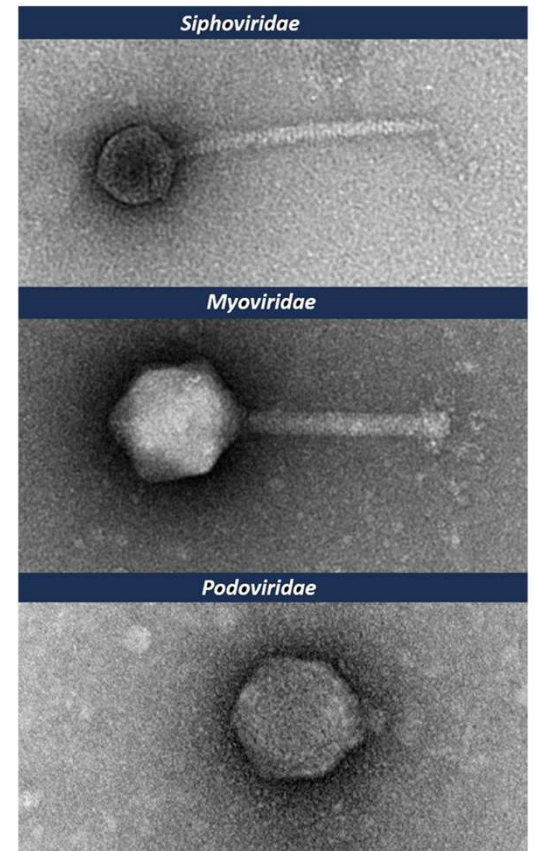
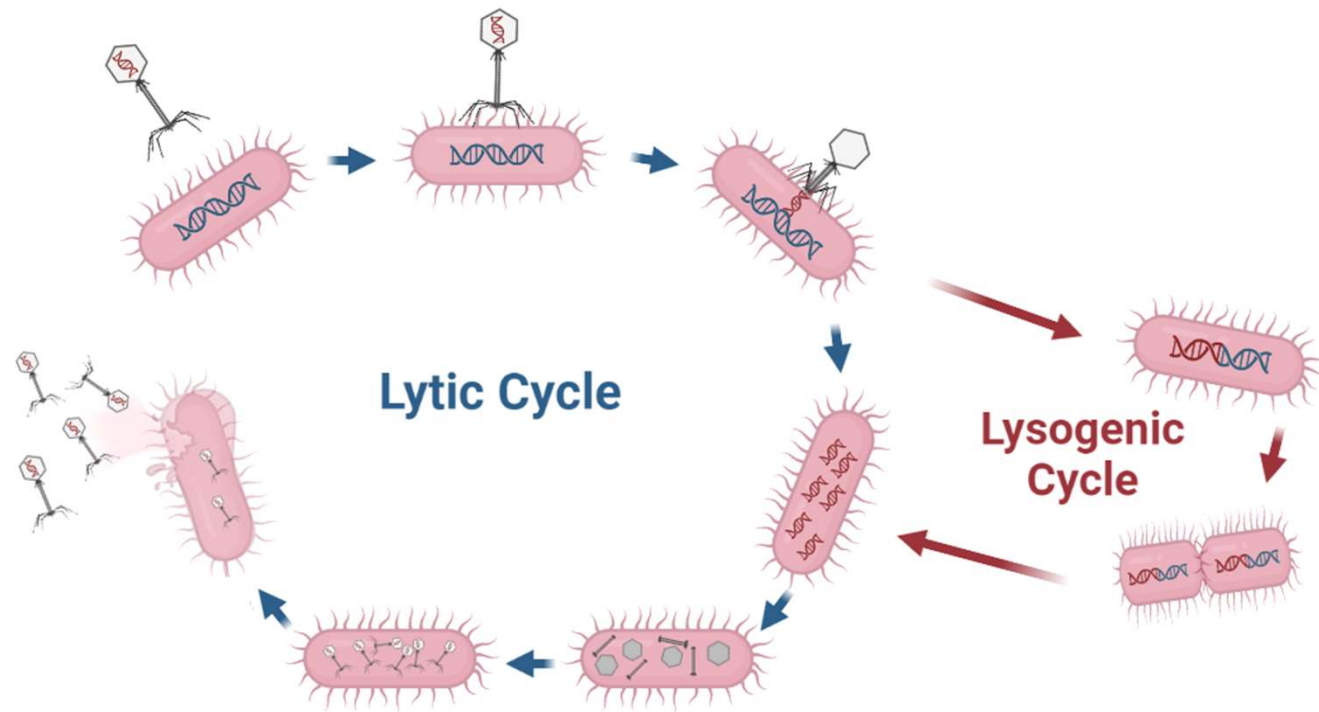
Stable & scalable



Self-replication

PHAGE FACTS

PHAGE REPLICATION CYCLES



MEDEA PROCESS

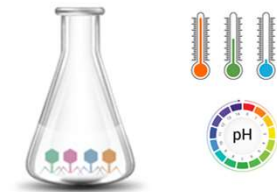
PHAGE ISOLATION, EVOLUTION, CHARACTERIZATION AND FORMULATION



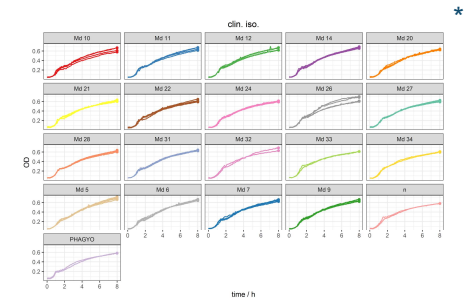
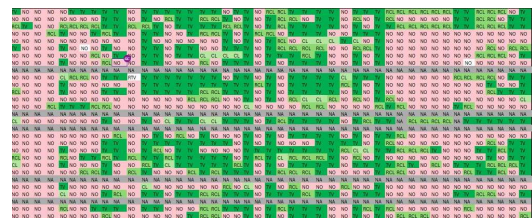
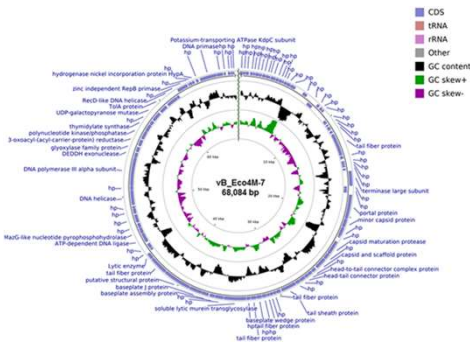
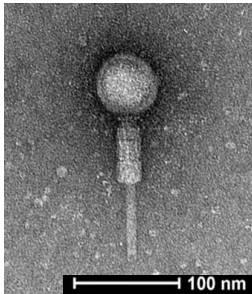
1 **Discovering natural phages and creating selective and adaptive biobanks**



2 **Designing most effective Cocktails with selected synergetic phages**



3 **Phage adaptation for different application areas and modalities**



- 5x faster than existing methods*
- 10-100x cost efficiency*



MEDEA Software

Patent Pending

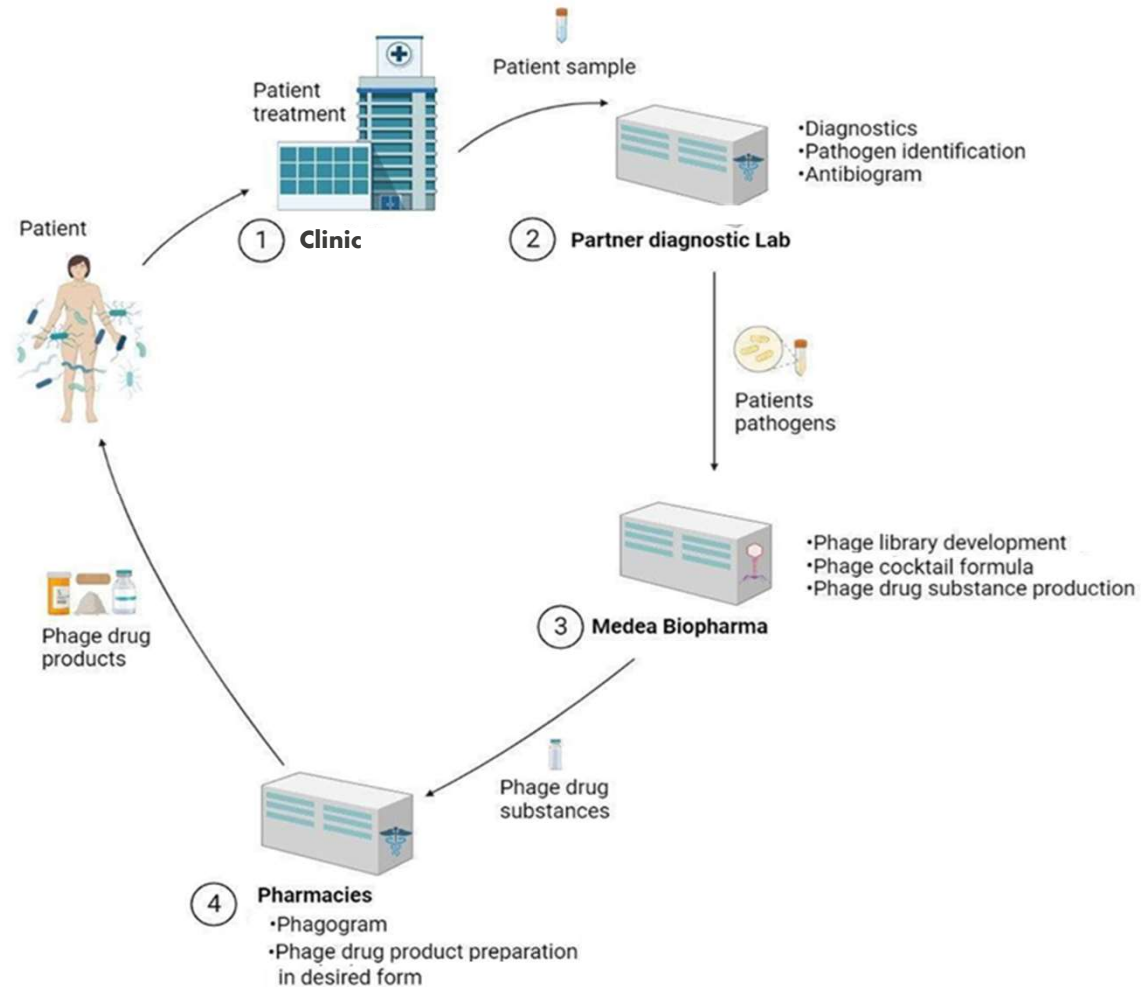
COMPETITIVE ADVANTAGE:

We use our inhouse automation platform technology to create large & up-to-date biobanks and develop optimal products!

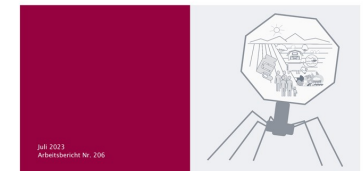
MEDEA Bioreactor**

MAGISTRAL PHAGE THERAPY

PERSONALISED DRUG SUBSTANCE R&D & MANUFACTURING



Gutachten Trojok et al. 2022



A photograph of a vast green agricultural field, likely a vineyard, with rolling hills in the background under a clear sky.

AGRICULTURE

A close-up photograph of a white dog, possibly a Golden Retriever, with its tongue hanging out, looking towards the camera.

VETERINARY

A collection of personal care items including a glass perfume bottle, a small jar, and a brush with yellow bristles, set against a light background.

PERSONAL-CARE

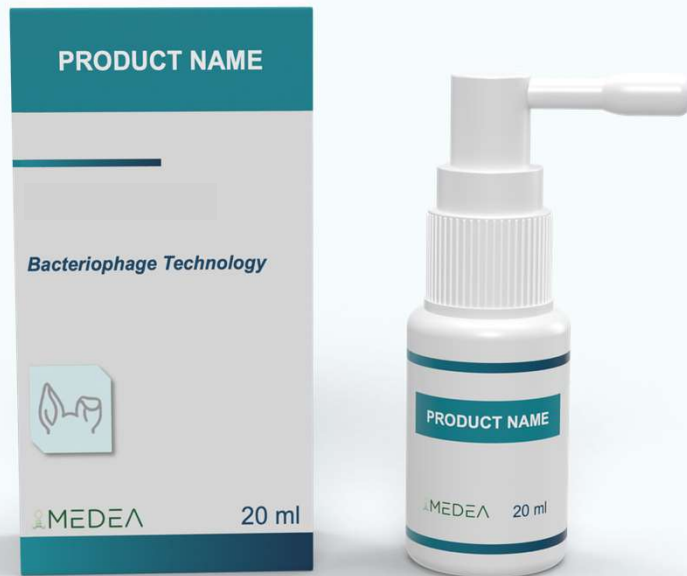
A photograph of several glass vials with blue caps, arranged on a surface, representing pharmaceutical products.

(PHARMA)

CURRENT PRODUCT DEVELOPMENT

DEVELOPING ANTIBACTERIAL THERAPEUTIC DRUG FOR DOGS

Antibiotic
Alternative



Description: Bacterial Infection Treatment in Otitis Externa

Status: Preclinical R&D. Market Entry: 2028

Why Otitis Externa?

High Resistance to Antibiotics

Recurrent & Chronic Cases

Topical Delivery Ideal for Phages

Low Price-Sensitivity of dog owners

Positive Efficacy Results in previous clinical trials

Compared to alternatives

- ✓ Natural & targeted
- ✓ Effective against MDR Bacteria
- ✓ No side-effects

OUR CURRENT PIPELINE

VETERINARY THERAPEUTIC DRUGS



FUTURE POSSIBILITIES



Animal Care & Hygiene



Feed Supplements

OUR ACHIEVEMENTS & NEXT STEPS

2 Million EUR Pre-Seed Funding & Grants in **2023**



Team of **10** employees

Fully equipped
250m² BSL2 Lab



Achievements & Prizes



Award
Top 16 Most Promising German Startup!

WE ARE LOOKING FOR
5 Million EUR Seed Investment

FOUNDING TEAM



Rüdiger Trojok

Managing Director
Dipl. Biologist



- 11 years in biotech R&D
- Advisor of German Parliament



Giorgi Khubua

Managing Director
M.Sc. Management



- Forbes 30 under 30
- Entrepreneur with Exit



Dr. Elene Kakabadze

Chief Scientific Officer
PhD, Microbiology



- >12 years in phage R&D
- Several scientific papers



Staatskanzlei Rheinland-Pfalz

3.983 Follower:innen

1 Woche • 🌐

+ Folgen ...

🚀 Rheinland-Pfalz ist Zukunftsstandort der Biotechnologie!

💡 Ich war zu Besuch bei der **Medea Biopharma GmbH**. Ein beeindruckendes Beispiel für unser Innovationspotenzial. Mit ihrer Forschung an umweltfreundlichen antibakteriellen Lösungen auf Basis von Bakteriophagen trägt sie aktiv zur Bekämpfung antimikrobieller Resistenzen bei – einer der größten globalen Herausforderungen unserer Zeit.

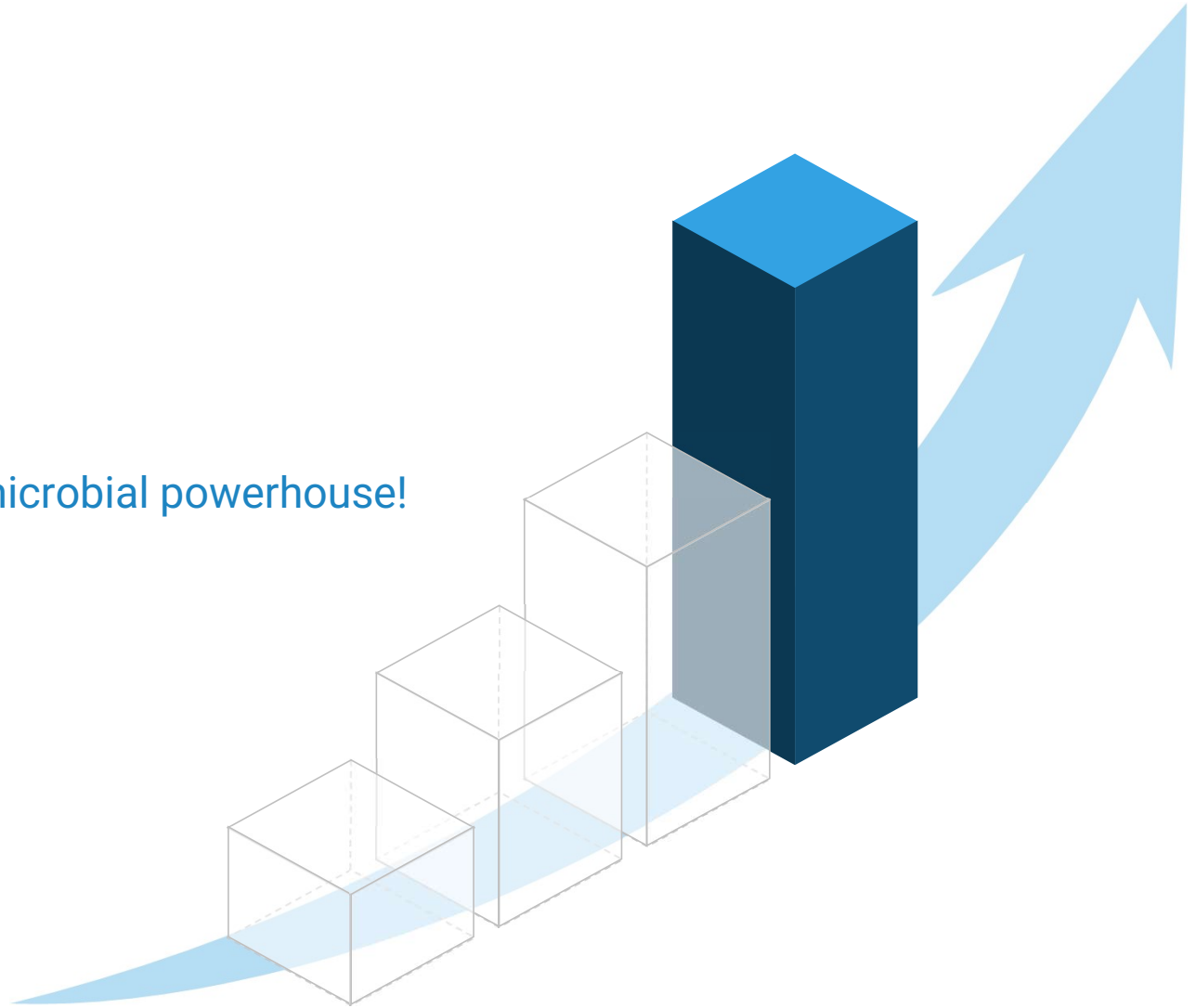
„Wir werden mit großer Offenheit schauen, wie wir bei Themen der Regulatorik und Arzneimittelzulassung ganz konkret unterstützen können.“

Ministerpräsident Alexander Schweitzer.



OUR VISION

Become world's leading antimicrobial powerhouse!





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