



Lysando[®]

**YOUR LIFETIME
IS OUR PRIORITY.**



AMR CAN AFFECT

ANYONE.

Antimicrobial Resistance (AMR) is a rising problem worldwide - according to the WHO, AMR in general is one of the top 10 global public health threats facing humanity.

Bacteria acquire resistance mechanisms over time and no longer respond to medicines like antibiotics, making infections harder to treat and increasing the risk of disease spread, severe illness and death.

WE DO NOT HAVE THE TIME TO WAIT.

Resistant bacteria do not stop at anyone -
AMR can affect anyone, but now it is stoppable.

**AMR IS
STOPPABLE.**

THE SILENT PANDEMIC

BACTERIAL INFECTION IS THE SECOND MOST COMMON CAUSE OF DEATH

We have been fighting bacterial infections with antibiotics for almost a hundred years. Antibiotics were a medical revolution. They have changed our lives.

But bacteria are living microorganisms that are constantly evolving and learning to defend themselves against antibiotics - with increasing success.

Antibiotic resistance occurs naturally, but misuse of antibiotics in humans and animals has been accelerating the process. Already today, many antibiotics have lost their effectiveness against a large number of dangerous bacteria, resulting in an increased proportion of bacterial infections leading to death.

Antibiotics accumulate in our environment and can remain for years in our soils and waterways further accelerating the rate of resistance spread.

Most bacteria are commensals, even an integral part of our immune system. But antibiotics cannot distinguish between friend and foe. This harms our natural microbiome and increases the likelihood of further bacterial infections.

Today, over 7 million people worldwide die from bacterial infections annually, 1.3 million thereof are caused by resistant bacteria.

One of the leading risks for contracting an infection with an antibiotic-resistant strain is treatment in a healthcare facility.

According to the WHO, the most aggressive and thus highest priority bacterial pathogens include the so-called "ESKAPE" species - representing six highly virulent and antibiotic resistant bacterial pathogens associated with high morbidity and mortality.

Antibiotic resistance is reaching critical scale all over the world. A century after their discovery the benefits of antibiotics have increasingly worn off.

IT'S THE BEGINNING
OF THE POST-ANTIBIOTIC ERA.

IT'S THE BEGINNING
OF SOMETHING NEW.



FOR A WORLD WITHOUT FEAR.

Lysando[®]

Lysando®

Your lifetime is our priority.

FIGHTING EVERY DAY AGAINST THE MOST DANGEROUS TYPES OF BACTERIA

Bacteria are constantly present: they are part of us. No matter how old we are – this applies to children and the elderly. Most bacterial species are no harm. But some species go rogue. Infections can affect anyone because they don't stop at anyone.

Antibiotics have had immense value over the last century, but their benefits have largely worn off. Resistances are making it harder to treat bacterial infections which are becoming more and more life-threatening.

This situation demands a solution.

What was just an idea in 2009 is now a technology that can restore control over harmful bacteria, even the resistant ones. Bacterial resistance no longer has to pose a health threat to all of us. Bacteria will always exist, but now we have the means to defend ourselves against this enemy.

Artilysin® has a particular mechanism of action that helps people with bacterial infections whose way seems hopeless.

Artilysin® fights both resistant and persistent bacteria. Due to their unique mode of action, even recurring - chronic - infections are addressed.

Artilysin®, when applied topically, acts locally and rapidly reduces the targeted bacteria, allowing the microbiome to support the immune system and the natural healing process.

Over the years, we have been able to help many people. We helped them to walk, to dance, to laugh.

Every day we work diligently to advance towards a fearless world.

**Markus Matuschka
de Greiffenclau**
CEO, Lysando



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At Lysando, we are treading a new path in the treatment of bacterial infections to give the world a novel tool against harmful bacteria.

**THE SOLUTION
THAT PAVES
THE WAY OUT OF THE
BACTERIAL CRISIS.**

Artilysin[®]

Artilysin[®] is a new antimicrobial platform technology to combat bacterial pathogens in a wide range of applications.

The specifically designed proteins can target virtually all bacterial species, gram-positive or gram-negative ones.

ACTIVE ON RESISTANT BACTERIA

ACTIVE ON PERSISTENT BACTERIA

HELPS THE SKIN REBALANCING

NO NEGATIVE SIDE EFFECTS

ACTIVE IN BACTERIAL BIOFILM

ENVIRONMENTALLY-FRIENDLY

**ARTILYSIN[®] PUTS AN END TO
UNTREATABLE BACTERIAL
INFECTIONS.**

**The most customizable
antimicrobial solution.**

THE NEXT GENERATION ANTIMICROBIAL PLATFORM TECHNOLOGY

Each Artilysin[®] is unique. It is specifically designed according to set requirements ensuring the highest possible benefit.

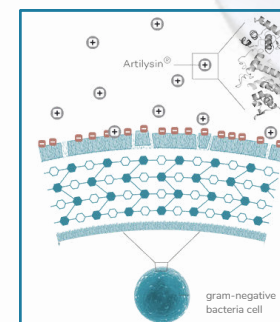
This makes the technology versatile in its use.

As a spray, adapted to certain bacterial strains, to help patients with chronically infected wounds which did not respond to classical treatment.

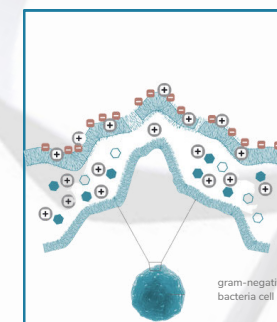
Depending on the indication at hand, also a broad spectrum of bacteria can be addressed simultaneously in order to be able to intervene quickly in an emergency, e.g., in sepsis, to save the patient's life.

Due to its unique mechanism, Artilysin[®] even helps patients infected with resistant germs. Persistent bacteria are also not spared, making recurrent infection unlikely. In light of our database with more than 450 prototype molecules, even the ESKAPE pathogens no longer pose an untreatable threat to humanity.

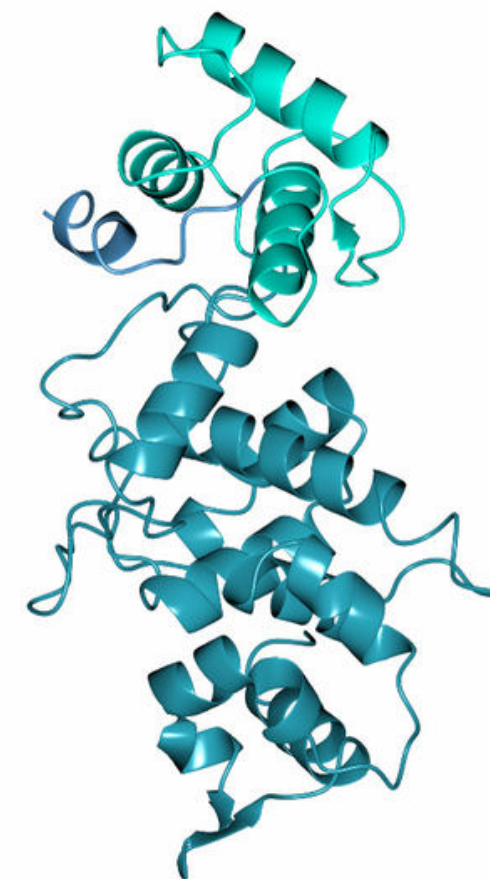
HOW ARTILYSIN[®] WORKS



Due to its physical properties, Artilysin[®] pass the outer membrane of gram-negative bacteria and subsequently destabilize the cell wall.



As a result of the high osmotic pressure, bacterial cells burst within fractions of a second.





"Staphylococcus aureus is a major therapeutical challenge in patients with atopic dermatitis. Targeting those pathogenic germs with Artilysin® and to thereby help rebalance the natural human skin microbiome is a true innovation for the good of the patient."

Priv.-Doz. Dr. med. Wolfgang G.
Philipp-Dormston

"Two weeks after the treatment my wife is physically & mentally better than she has been for 3 years!"

Christa Ostertag - A woman full of life.

One of Christa's greatest joys is dancing together with her husband.

But at some point, the symptoms of her atopic dermatitis became so severe that she could no longer dance. She could no longer participate in social life. A vital 78-year-old woman had her hands tied.

Using her own hands became more and more painful over the years. No conventional treatment was able to ease her symptoms like sensitivity to touch, pain, flaky skin, lichenification (development of thick, leathery skin) and eczema.

Then her husband found us and wrote us an e-mail describing all her symptoms and her suffering. He was full of hope and we knew that we could help her. So with the help of her physician, the Lysando-Team managed to get our Artilysin® prototype spray applied to her.

Over the course of a mere 13 days, her symptoms had eased dramatically - itchiness, redness and eczema had subsided - and upon completion of treatment her hands were finally back under her own control.

Most importantly: she had regained her former quality of life. After all these years of suffering she is now a woman full of life again, dancing with her husband.



Day 1



Day 5



Day 13



Day 60



**We are currently working on
life-changing projects
to see people's smile again.**

SEPSIS

DIABETIC FOOT

WOUND INFECTIONS

ATOPIC DERMATITIS



27

people are already
working on a world
without fear.



14

Years of in-depth
experience.



305

National patents
and patent
applications.



WE STRIVE TO MAKE A DIFFERENCE

We believe that every person has the right to live a fulfilled life. With our novel Artilysin® technology, even against multiresistant bacteria, we help everybody to live a better and fearless life. Giving people not only health and hope, but also the power to live freely and shape their own lives - for a better lifetime.

By prioritizing the quality of life of every individual, we want to help create a humane world. This is how we work everyday - at Lysando® we strive to make a difference for you.

HELPING AS MANY PEOPLE AS POSSIBLE

We are working intensively on various projects with our partners to bring life-enhancing solutions to market as quickly as possible.

Starting what was just an idea of an entirely new way to protect people from bacterial infections, we now have many effective prototypes on the way to become products.

On this journey, physicians have helped people with various compassionate use cases applying our molecules and our self-developed product Medolysin® wound spray for chronic wounds, giving people new hope for a healthy life in the future.

We have achieved this as a team because we bundle our strengths and focus on our core competencies. By thinking outside the box, we create new perspectives and different angles. We always go the extra mile to reach a world without fear of bad bacteria.

**We are Lysando -
striving to make a difference
to help as many people as possible.**

EMPOWERING PEOPLE

**WANT TO
LIVE IN A
FEARLESS
WORLD?**

**JOIN US -
SPREAD THE WORD.**

YOUR
LIFETIME IS
OUR PRIORITY.

Sources

- Fighting Antibiotic Resistance in Hospital-Acquired Infections: Current State and Emerging Technologies in Disease Prevention, Diagnostics and Therapy, Front. Microbiol., Volume 12 - 2021
- Antibiotic Resistance; World Health Organization, July 2020, who.int.
- Global mortality associated with 33 bacterial pathogens in 2019: a systematic analysis for the Global Burden of Disease Study 2019; GBD 2019 Antimicrobial Resistance Collaborators, DOI: [https://doi.org/10.1016/S0140-6736\(22\)02185-7](https://doi.org/10.1016/S0140-6736(22)02185-7)

Lysando[®]

A biopharmaceutical company with a leading antimicrobial technology, aiming for a world without fear of bad bacteria to empower everyone to live a better and longer life.

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