



Pioneering Bisphosphocin[®] Compounds

Advancing a novel class of fast-acting antimicrobials to address the global threat of resistance

Forward-looking Statements

This presentation may contain forward-looking statements as defined by the Private Securities Litigation Reform Act of 1995. Generally, the words "believe," "expect," "intends," "estimate," "anticipate," "project," "will" and similar expressions identify forward-looking statements, which generally are not historical in nature. However, the absence of these words or similar expressions does not mean that a statement is not forward-looking. All statements that address operating performance, events or developments that we expect or anticipate will occur in the future are forward-looking statements. Management believes that these forward-looking statements are reasonable as and when made. However, caution should be taken not to place undue reliance on any such forward-looking statements because such statements speak only as of the date when made. Our Company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. In addition, forward-looking statements are subject to certain risks and uncertainties that could cause our Company's actual results to differ materially from historical experience and our present expectations or projections.

Relying on such statements involves risk, uncertainty and assumptions. These statements are based on the current estimates and assumptions of the management of Lakewood-Amedex Biotherapeutics Inc. as of the date of this press release and are subject to uncertainty and changes. All statements obtained in this press release are made only as of the date of this press release and Lakewood-Amedex Biotherapeutics Inc. does not undertake any obligation to publicly update any forward-looking statements.

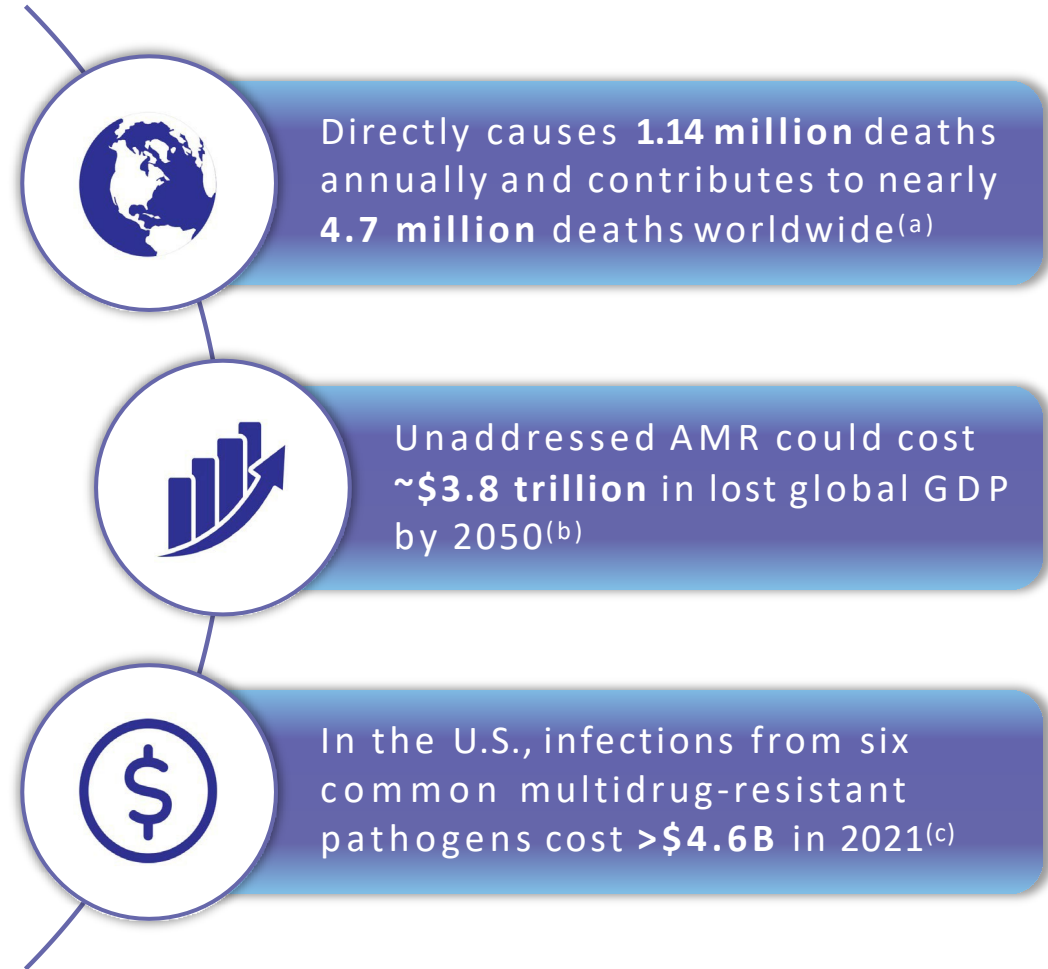
Antimicrobial Resistance (AMR): A Global Public Health Threat

Core Drivers of AMR

- Widespread use of systemic antibiotics
- Frequent systemic use of antibiotics for infections suitable for local treatment
- Antibiotic use in agriculture

Fundamental Barrier

- Newly developed systemic antibiotics are vulnerable to resistance
- Intended use only as reserve or third-line therapies



Value Proposition of Patented Bisphosphocin[®] Class

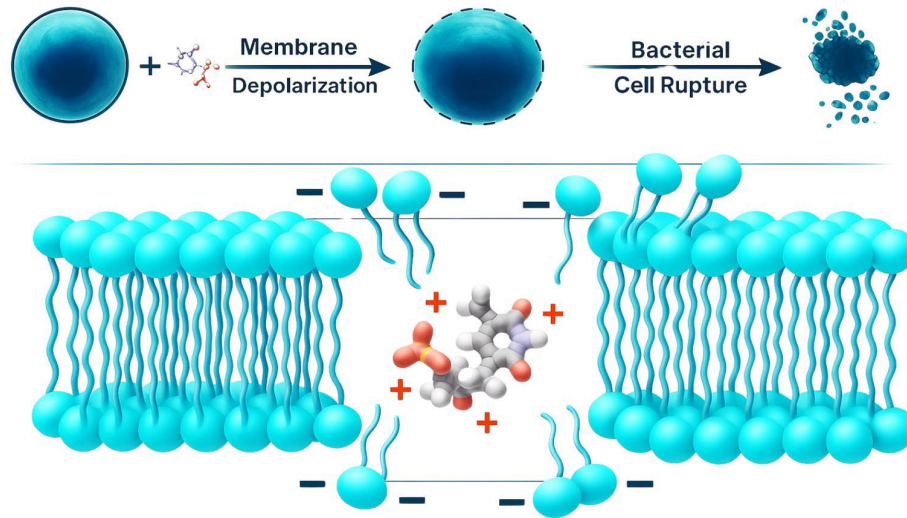
- ✓ First-in-class, antimicrobial compounds with potential to mitigate the impact of the global AMR crisis
- ✓ Broad-spectrum activity against both susceptible and clinically relevant resistant pathogens^(a)
- ✓ Demonstrated cidal activity against biofilm organisms ^(b)
- ✓ Favorable resistance profile with low risk of resistance development ^(a)
- ✓ Local delivery achieves high concentration at the site of infection
- ✓ Reduced likelihood of systemic side effects due to targeted delivery

(a) – Cooper K, et al, *Antimicrobial Agents and Chemotherapy*, **2025**, <https://doi.org/10.1128/aac.00948-25>;

(b) – Akiyosji D., et al., 53rd ICAAC, **2013**, Denver, CO, (abstract F1701a)

Bisphosphocin[®] — Proposed Mechanism of Action

Bisphosphocin[®] compounds are novel, small nucleotide derivatives that are proposed to exert antibacterial activity by targeting bacterial cell membranes, causing rapid bacterial cell death^(a)



- Targets bacteria through a pH- and concentration-dependent destabilization of the bacterial cell membrane, typically within minutes of exposure
- Broad-spectrum antibacterial activity, including resistant strains (MRSA, VRE), with demonstrated effectiveness against biodefense pathogens

Mechanism of Action – Rapid Destabilization of Bacterial Cell Walls

Lead Program: Infected Diabetic Foot Ulcer (iDFU)

Global Prevalence

- 830M people with diabetes;^(a) about one third will develop a DFU^(b)

Infection Rate

- ~50% of DFUs become infected; many patients face recurrent events ^(b)

Severe Outcomes

- Infections are a critical risk factor for amputation, alongside the presence of peripheral arterial disease ^(b)

Resistance Challenge

- 15–20% of iDFUs involve resistant pathogens (primarily MRSA) ^(c)

Treatment Shortcomings

- Standard-of-care: systemic antibiotics and wound care — yet outcomes remain poor with high recurrence and amputation rates



(a) WHO report on diabetes, 2024;

(b) Armstrong D., et al., Diabetes Care, 1998, 21 (5), pp 855-859;

(c) Zhou S., et al., Metabolic Syndrome and Obesity, 2024, 17, 563-574

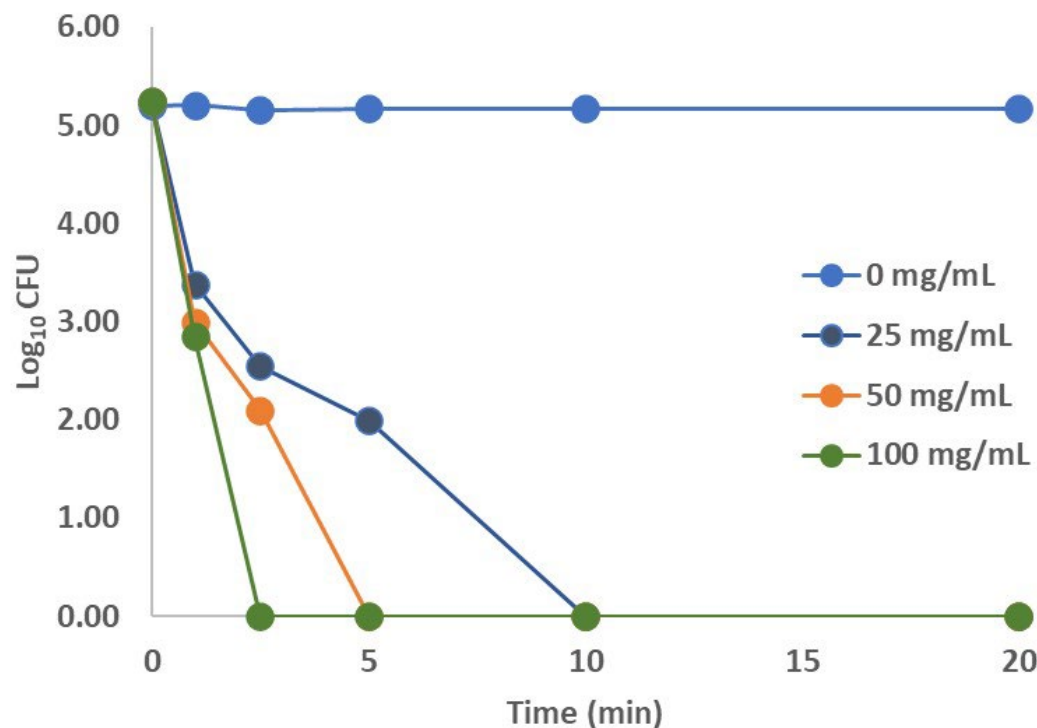
Nu-3 Selected for Clinical Development^(a)

- ✓ **Broad spectrum *in vitro***; Nu-3 shown to be rapidly cidal against a broad spectrum of microbes, including resistant strains, with low potential for resistance development and activity against biofilm
- ✓ **Robust efficacy in skin infection models**; Nu-3 active as solution or gel formulation in single dose and multiple dose *in vivo* studies
- ✓ **Formulation designed for local administration**; Gel formulation developed as most appropriate dosage form for topical application
- ✓ **Excellent safety profile toxicology program**; minimal effects given at high doses both iv and topical safety studies
- ✓ **Phase 2a trial**; Single-blinded, dose-finding study evaluating Nu-3 in adult patients with mildly infected diabetic foot ulcers

Nu-3 demonstrates rapid bacterial kill *in vitro*^(a)

In time kill experiments, where bacteria are exposed to the Bisphosphocin® class of compounds, the action is rapid, with total cell death occurring within minutes at higher concentrations and lower pH values

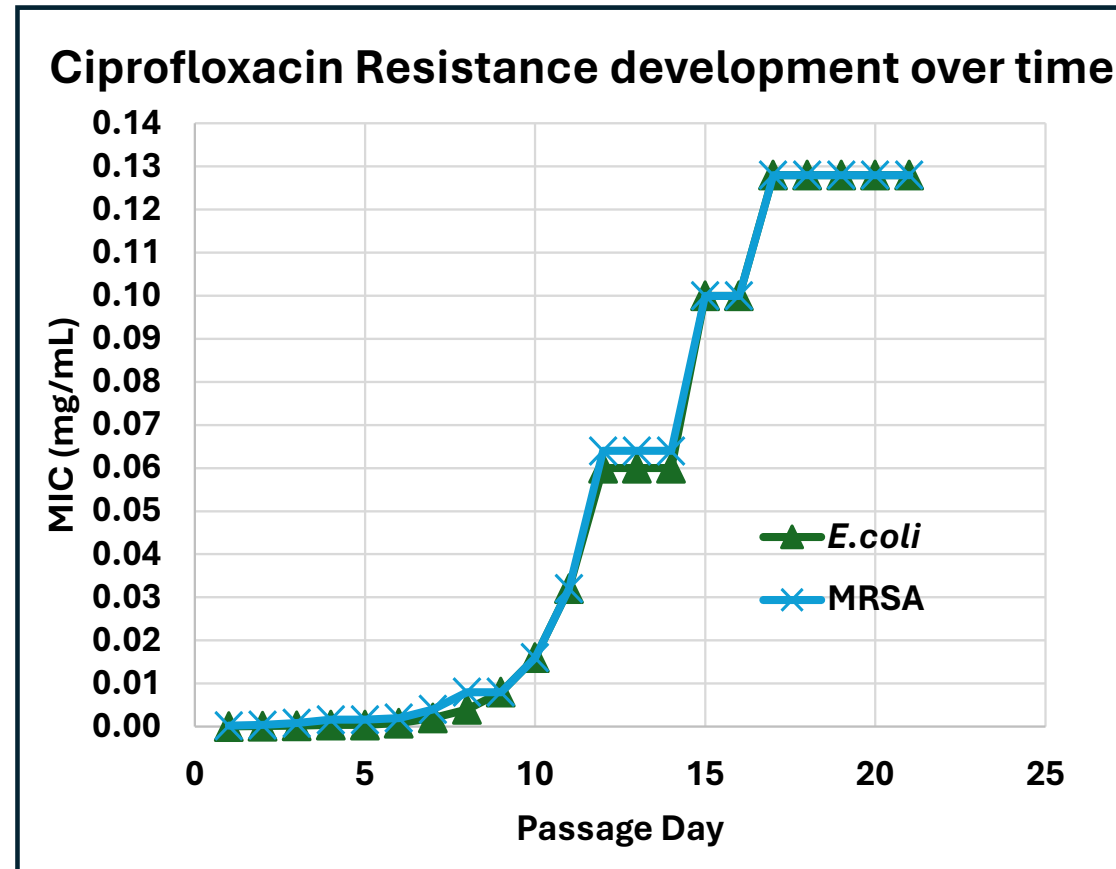
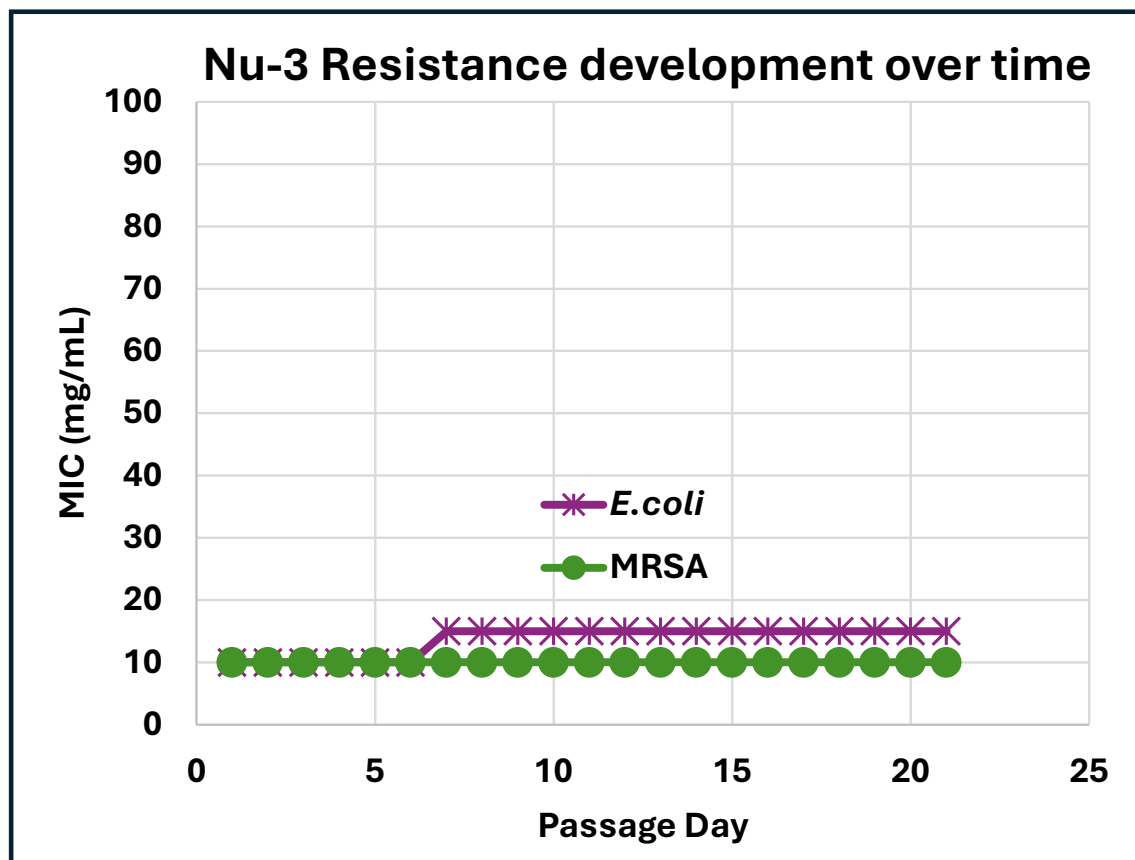
Time to Kill: Nu-3 vs. *E. coli*



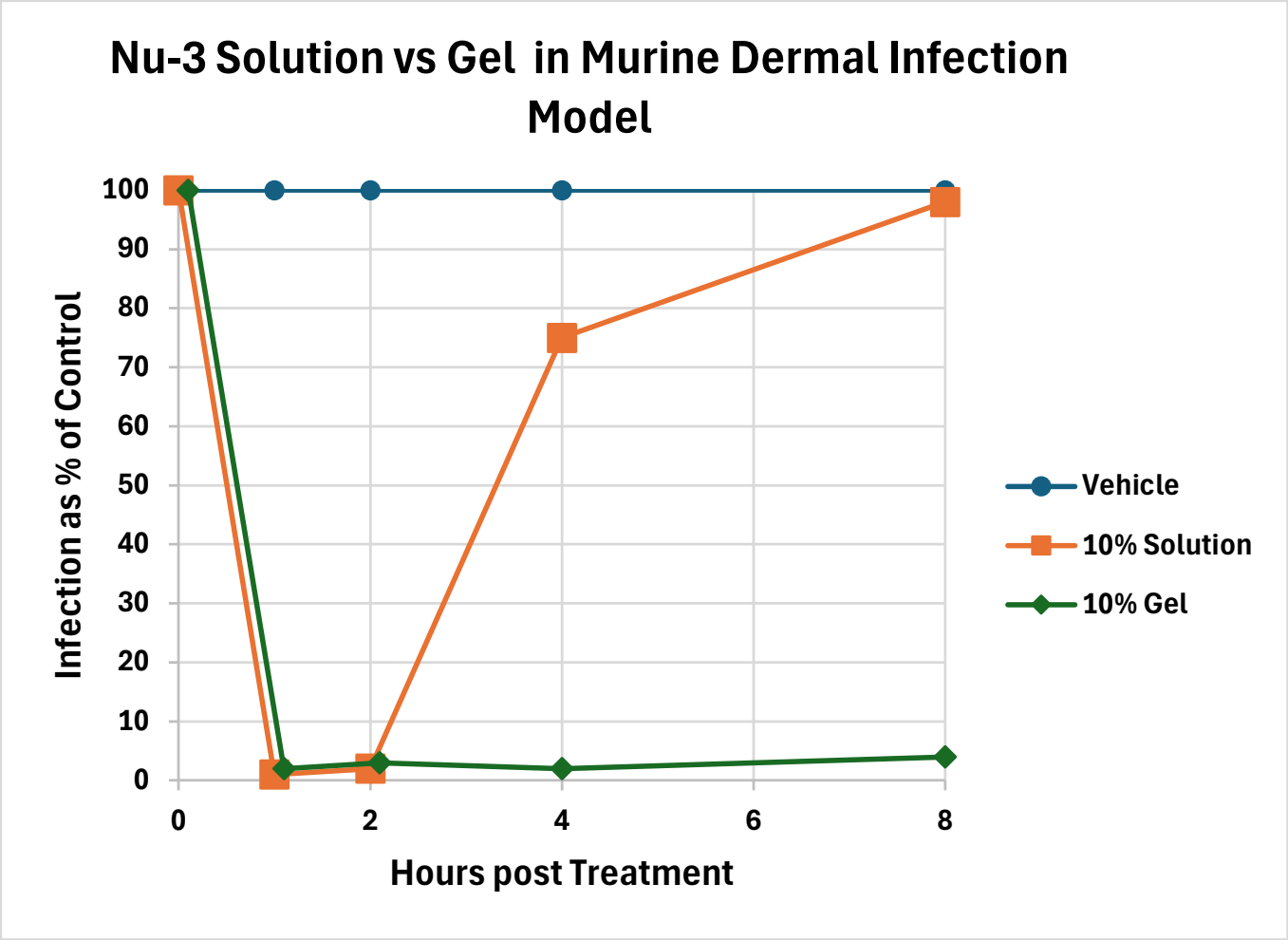
Vehicle Control	In the absence of Nu-3 the bacteria are unaffected over the 20-minute time course.
25 m g	At a low concentration (25 mg/ml - 2.5%), all the bacteria are killed within 10 minutes.
50 m g	At higher concentrations of Nu-3 (50 and 100 mg/ml, 5 and 10%) the bacteria are killed in 5 minutes or less.
100 m g	

In vitro Serial Passage Resistance Assay

In 21-day Serial Passage experiments to induce antibacterial resistance vs E. coli and MRSA, Nu-3 demonstrated marginal MIC increases whereas Ciprofloxacin showed 600- to 2,000- fold resistance



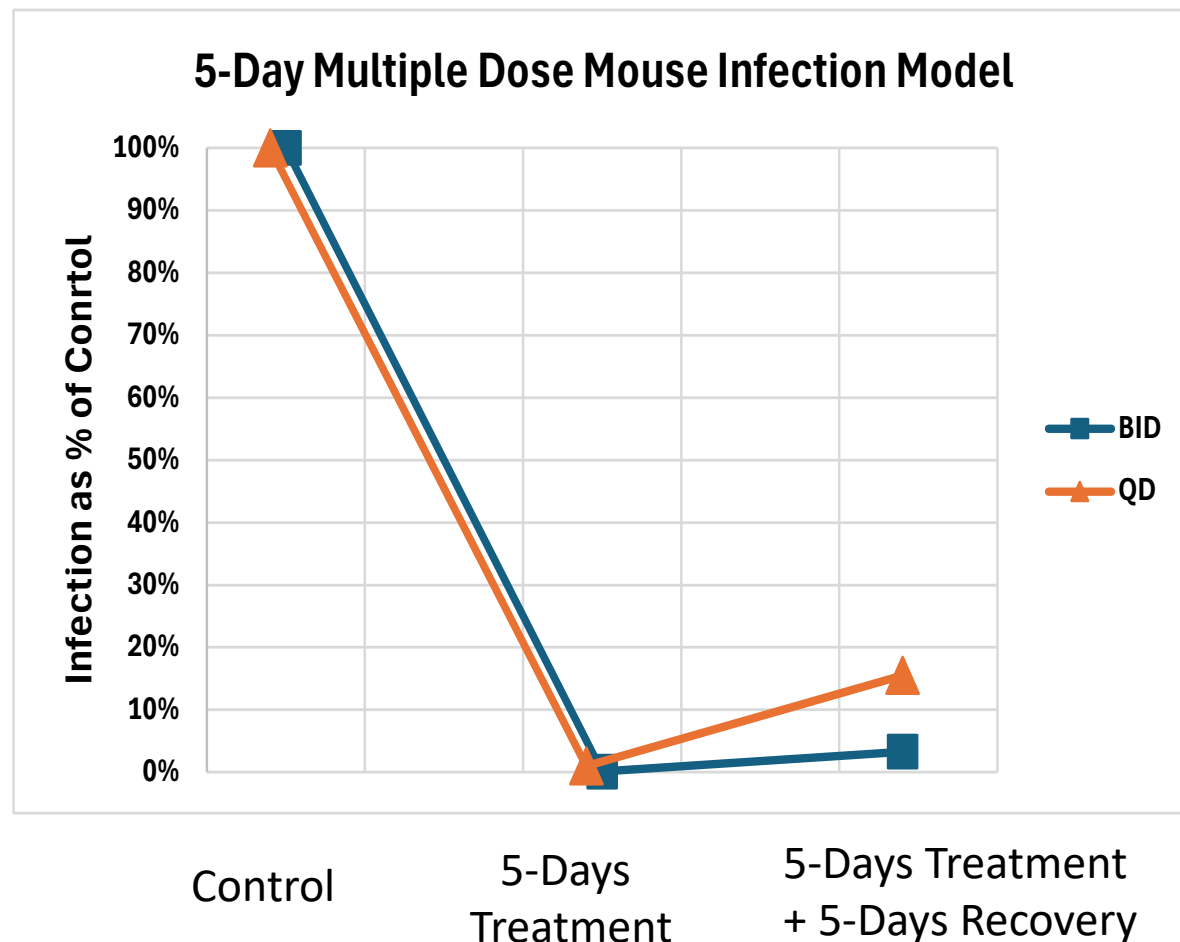
Nu-3 Gel Formulation Outperforms Solution Formulation^(a)



1&2 Hours	At 1and 2 hours post established infection both 10% gel and 10% solution of Nu-3 show >95% inhibition of MRSA growth
4 Hours	At 4 hours post established infection the 10% gel outperforms the 10% solution of Nu-3 in blocking MRSA growth
8 Hours	At 8 hours post established infection the 10% gel is far superior to the 10% solution of Nu-3 in blocking MRSA growth

(a) - Cooper K, et al, *Antimicrobial Agents and Chemotherapy*, 2025, <https://doi.org/10.1128/aac.00948-25>

Nu-3 Gel active either once or twice per day in multidose study^(a)



5% Gel

After 5 days of treatment with 5% Nu-3 gel both once-a-day (QD) and twice-a-day (BID) MRSA growth is >95% inhibited

5% Gel + 5 days recovery

After 5 days of treatment plus 5 days recovery with 5% Nu-3 gel the twice-a-day (BID) regimen outperforms the once-a-day regimen in controlling MRSA growth

Advantages of Bisphosphocin[®] Class in Combating AMR: based on available non-clinical evidence



Right Drug



Right Application



Right MOA

Clinical Evidence Supporting Development of Nu-3

Phase 1 Patch Study

- A 21-Day Repeat Patch Test to Evaluate the Irritation Potential of Test Product (2% Nu-3 in 0.85% Saline, W/V) on Abraded and Intact Skin Sites with Controls in 35 healthy subjects
- No findings in intact skin, minimal reaction in abraded skin at 2%

Exploratory Phase 2a Study in Patients with iDFU

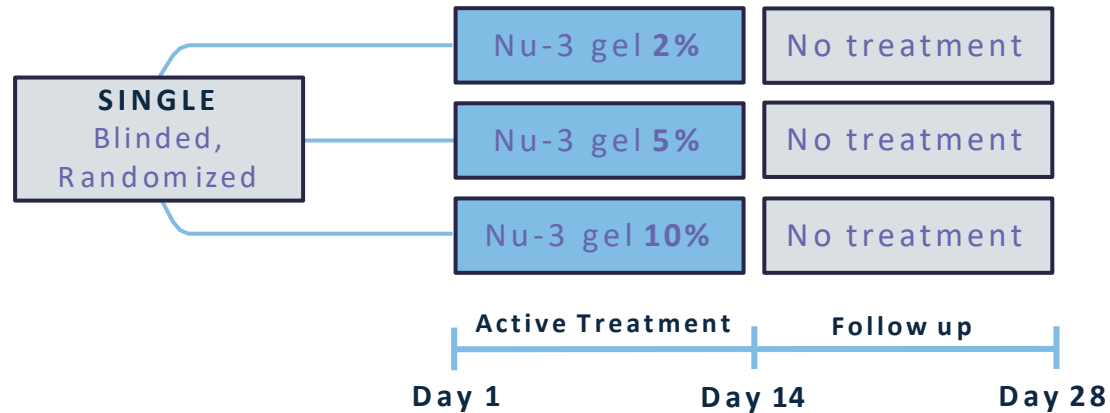
- Double blinded, randomized, dose-escalating
- Doses of Nu-3 solution: 0.1%, 1% and 2 % or placebo in 30 patients analyzed
- No relevant safety findings
- Trend for Pathogen reduction and ulcer surface area reduction only at 2%

Conclusions for further development

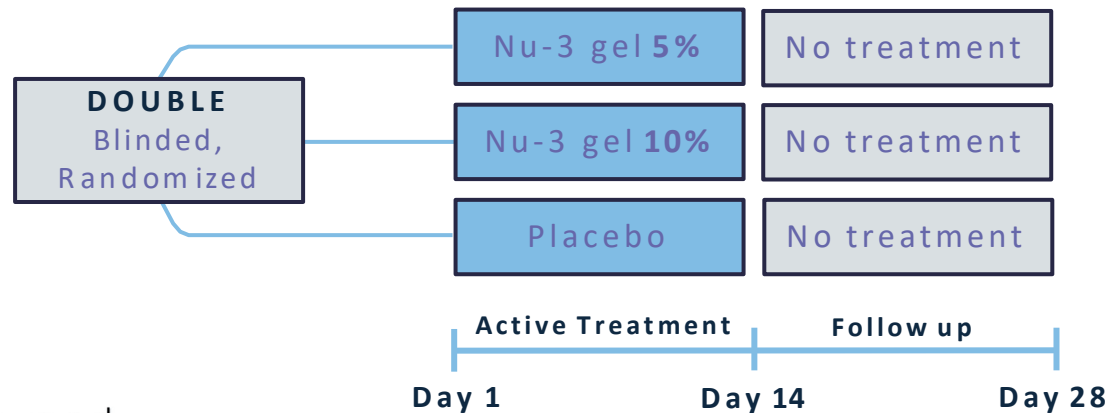
- Nu-3 is well tolerated and safe
- Doses not sufficiently high ➡ additional toxicology studies for higher concentrations initiated
- Decision to change formulation from solution to gel

Phase 2a/2b Study Design with New Gel Formulation

Step One: Phase 2a Study



Step Two: Phase 2b Study



Indication

- Infected diabetic foot ulcers

Safety Measures

- Number of related AEs and SAEs

Efficacy Measures

- Reduction in CFU at days 7 and 14 compared to baseline
- Clinical infection scores and wound size changes

Protocol

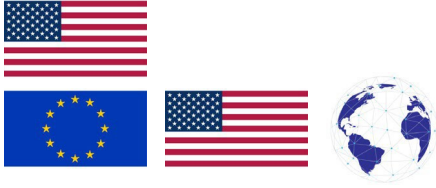
- Phase 2a: Aligned with FDA comments
 - NCT07565506 (ClinicalTrials.gov)
- Phase 2b: FDA reviewed and in alignment
 - NCT0602035 (ClinicalTrials.gov)

Target Outcome

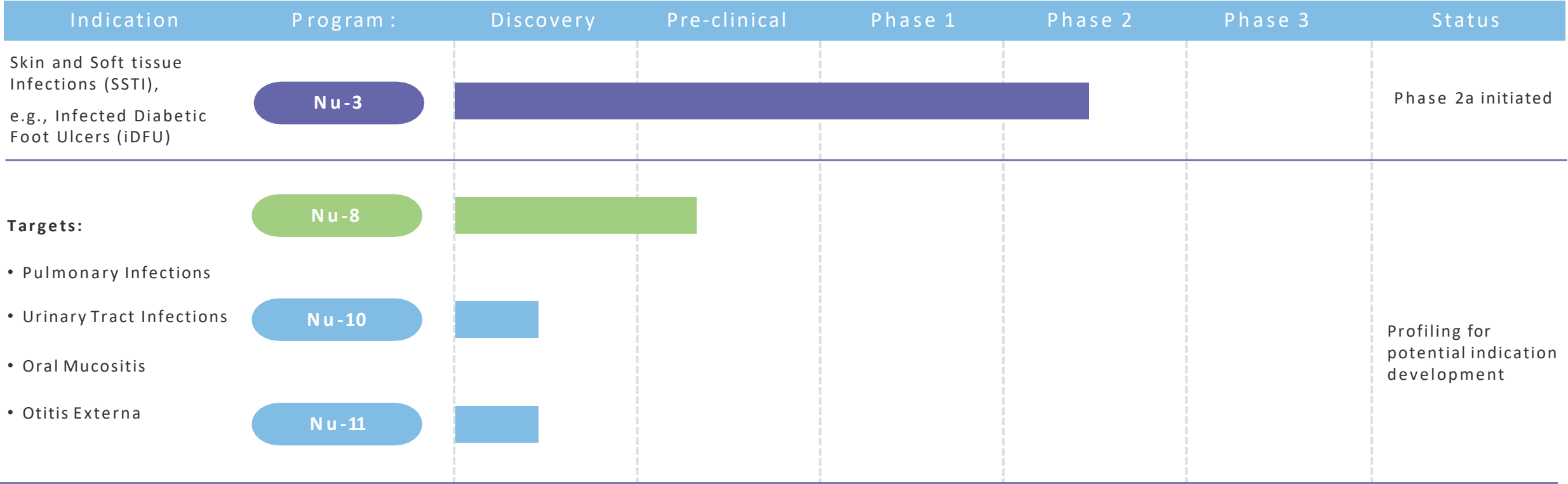
- Achieve clinical proof-of-concept of safety and antimicrobial efficacy in Phase 2

*Treatment groups in Phase 2b will be confirmed after Phase 2a readout

iDFU Development and Regulatory Strategy

Geographic Scope	• Phase 2 U.S.development • Phase 3 International development 
Clinical Development	• 2 small accessory studies full pharmacokinetic and skin sensitization • End of Phase 2 Meeting • Phase 3: In partnership to attain global reach and capabilities ○ Active comparator trial(s) ○ Longer follow-up in Phase 3 to establish clinical utility on wound healing (Performance + Utility)
Manufacturing	• Final Formulation ○ Define the commercial dosage form by end of Phase 2 for Phase 3 start

Development Pipeline



Upcoming Milestones



2Q26

- Drug product manufacturing initiated
- Site enrollment initiated



3Q26

- Drug product manufacturing completed
- Site enrollment completed
- Clinical Trial Commences
- First Patient First Visit



4Q26

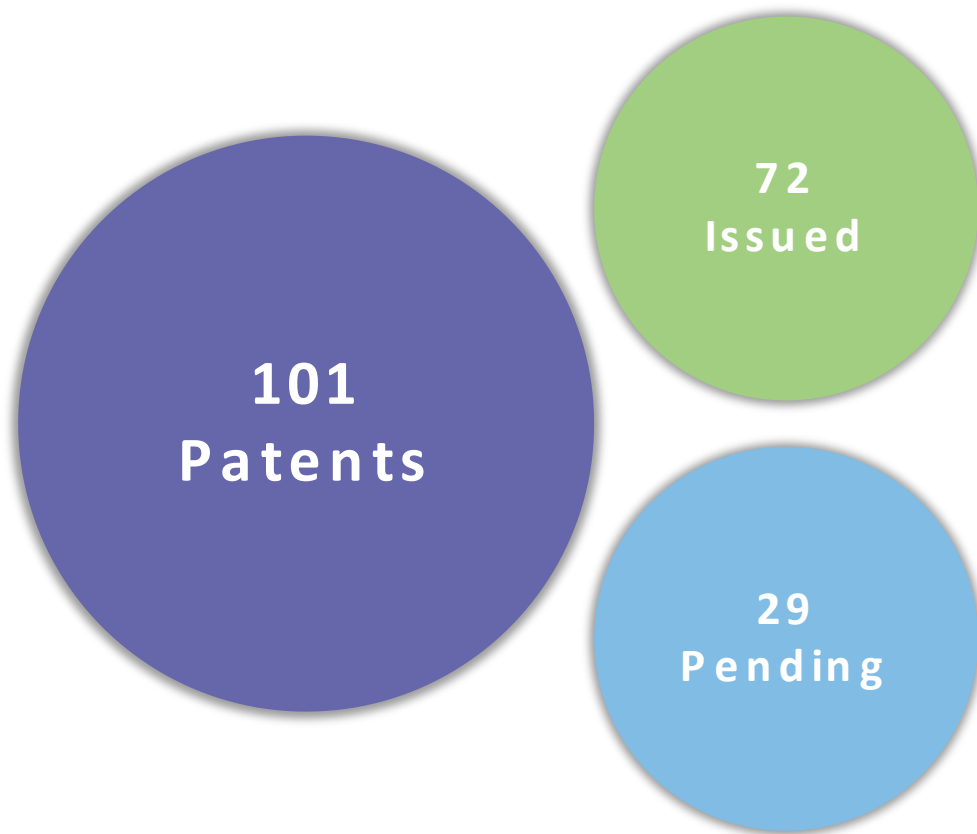
- Clinical Trial Ongoing
- All sites activated



1Q27

- Target Top Line Results

Robust Intellectual Property Portfolio



Patent Exclusivity

- Key filings provide protection through **2038**
- Recent applications extend through **2044**

Patent Coverage

- Patents cover **composition-of-matter** of the Bisphosphocin[®] class and other related classes of compounds; **formulations** of Nu-3; **use** patents for the Bisphosphocin[®] class; and **process** patents for the class

Nu-3 Well Positioned in Competitive Landscape

Proprietary Topical

Only One Direct and Comparable Competitor – Recce's R327

- Topical agent for Skin & Soft Tissue Infections – focus on iDFU
- Late-stage development in Australia & Indonesia

Standard of Care

- Effect of oral antibiotics in mild iDFU not demonstrated
- Guidelines based on general infection stewardship

OTC

- No approved topical for treatment of iDFU
- No efficacy against resistant pathogens

Experienced Management with Industry Depth

Leadership



Kelvin Cooper, Ph.D.

Chief Executive Officer

- 45 Years in the Pharmaceutical Industry
- 30 years at Pfizer
- Executive Leadership roles in Drug Discovery, Drug Development, Manufacturing, and Commercial



Peter Ceccacci

Chief Financial Officer

- More than 25 years of experience as a Senior Executive with comprehensive experience in accounting, finance, strategy, compliance, and management



Thomas Balzer, M.D., Ph.D.

Chief Medical Officer

- 30 Years in the Pharmaceutical Industry at Schering AG, Bayer US, Exact Sciences
- Executive Leadership roles in Global Clinical Development and Global Medical Affairs at Bayer US

Board



Doug Manion, M.D., FRCP(C)

Chairman



Leonard J. DeRoma

Director



Joseph Tucker, Ph.D.

Director



Kelvin Cooper, Ph.D.

Chief Executive Officer

Pioneering Innovations to Combat Drug-Resistant Infections

*Clinical-stage biotechnology company developing a **novel class of fast-acting, broad-spectrum antimicrobials** — Bisphosphocin® compounds — to treat infectious diseases and reduce the threat posed by antibiotic-resistant microbes*

Phase 2 lead product, Nu-3, is a topically delivered antimicrobial gel for the treatment of infected diabetic foot ulcers (iDFU)

Pre-clinical or early clinical data demonstrate broad, fast-acting activity (incl. resistant strains) with low resistance risk, a favorable safety profile, and effective local action

Potential first-in-class infection therapy for the treatment of iDFU

Near-term milestones include the initiation of a planned Phase 2a clinical trial evaluating the safety and efficacy of Nu-3 in iDFU

Robust intellectual property estate with key filings providing protection through 2038 and recent applications extending through 2044

