Bactiguard®

SEB Nordic Seminar

8 January 2026

Christine Lind, CEO

This is Bactiguard

Championing a healthier world by preventing infections

advanced technology to prevent **medical device related infections**

R&D

Medical

Regulatory

Wound Management portfolio

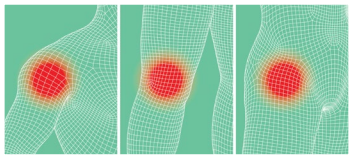
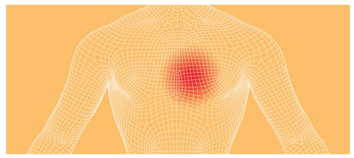
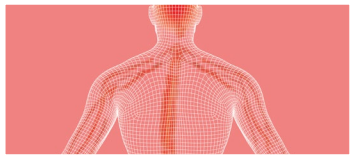
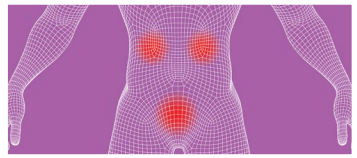
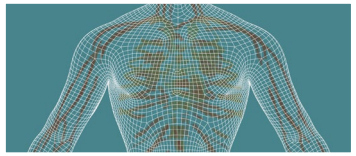
Advance current and develop new partnerships with global MedTech companies

Continue to invest in key knowledge areas

Grow profitably across product portfolio and new markets

High unmet medical need for infection solutions

Focus Therapeutic Areas

	Orthopedics[1-3]	Cardiology[4,5]	Neurology[6,7]	Urology[8]	Vascular access[9]
					
Application areas (examples)	*Hip & Knee Implants* *Spinal discs / Fusion cages* *Trauma Implants & hardware*	*Ventricular Assisted Device* *Pacemaker*	*Deep Brain Stimulator* *Vagus Nerve Stimulator* *Peripheral Nerve Stimulator*	*Foley Catheter*	*Central Venous Catheter* *Peripherally Inserted Central Catheter* *Midline Catheter*
Indicative infection rates	Primary **1-5%** Revisions **8-22%** Fracture related **5-40%**	CIED **1-7%** Structural heart **19-39%**	Modulators: **1-15%** Shunts: **5-13%**	CAUTI **9-21%** (>2 days)	CLABSI **2-10%** (>2 days)
Indicative mortality rates	**3-11%**	CIED **3-5%** Structural heart **5-10%**	**10-12%***	**1-4%**	**12-31%**
Addressable market	USD **39bn**	USD **10bn**	USD **9bn**	USD **5bn**	USD **11bn**

1. Masters et al. (2013); Acuña et al. (2021) 2. Gold et al. (2019); Patel et al. (2023) 3. Norris et al. (2019); Li et al. (2024) 4. Greenspon et al. (2011); Wilkoff et al. (2020); Solail Henrikson et al. (2011) 5. Mehra, Goldstein et al. (2022); Tong et al. (2015); Topkara et al. (2010)
6. Bendel et al. (2017); Ishizuka et al. (2007); Oh et al. (2002); Hasegawa et al. (2021) 7. Sagun Tuli et al. (2004) 8. CDC and Lo et al. 2014 9. Rosenthal et al. (2023); Alshahrani et al. (2023)

Advanced technology to prevent medical device related infections

Reduces microbial adhesion and biofilm formation

- **Ultra-thin noble metal coating**
- In contact with fluids, the noble metals create a **galvanic effect** due to their varying electro potentials

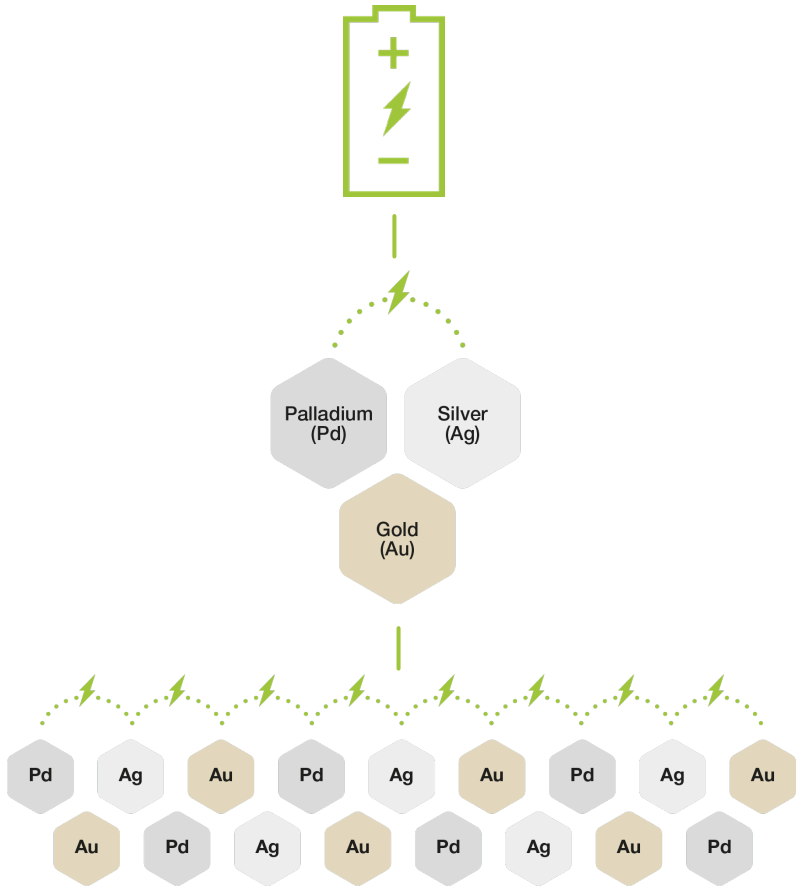
20+
materials coated

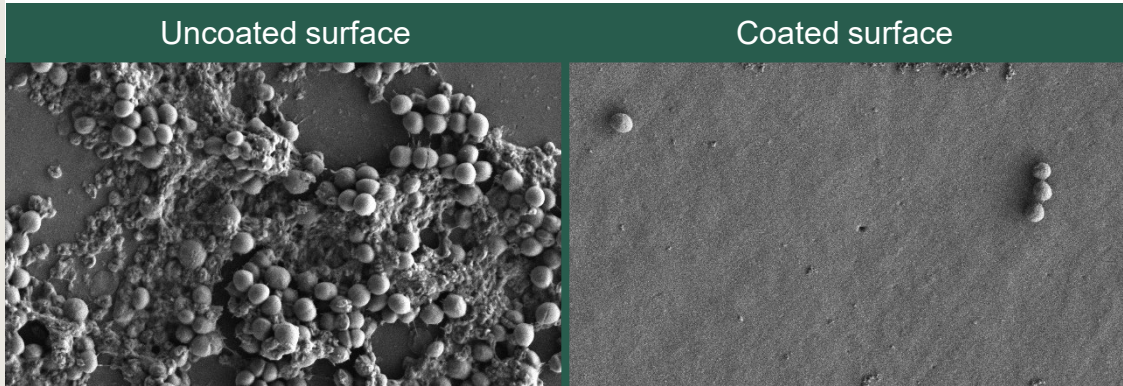
250M+
devices coated

100,000+
trial participants

70%
infection reduction

ZERO
adverse events related to the coating





Adding to clinical evidence on Bactiguard-coated implants

Orthopedic trauma nail

Two independent clinical studies published in medical journals strengthen the evidence base for Bactiguard's coated implants

UK-based pilot study *(Leeds Major Trauma Centre, Leeds, UK)*

Compares Bactiguard-coated vs. antibiotic coated and uncoated tibial nails in high-risk trauma patients. Showing potential to reduce infections and unplanned reinterventions.

Kanakaris, N.K. *et al.* (2025). Tibial Fractures at High Risk of Infection Treated with Intramedullary Nailing: Do Nails with Antibacterial Coatings Make a Difference?. *JBJS Open Access* 10(3). DOI: 10.2106

Spanish retrospective study *(Vall d'Hebron, Barcelona)*

Evaluates Bactiguard-coated nails in bone transport techniques, demonstrating infection reduction compared to external fixation methods.

Corona, P.S. *et al.* (2025). Preliminary outcomes of a novel metal-coated antibacterial nail in Bone Transport Over Nail (BTON) and Nail After Bone Transport (NABT) procedures in cases of segmental infected tibial bone defects. *Injury,* 56(8). DOI:112520

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journal homepage: www.elsevier.com/locate/injury

Preliminary outcomes of a novel metal-coated antibacterial nail in Bone Transport Over Nail (BTON) and Nail After Bone Transport (NABT) procedures in cases of segmental infected tibial bone defects

Pablo S. Corona, Oriol Pujol, Jorge Valeárcel, Matias Vicente, Kushal Lakhani, Carles Amat

JB&JS OPEN ACCESS

Tibial Fractures at High Risk of Infection Treated with Intramedullary Nailing: Do Nails with Antibacterial Coatings Make a Difference?

Nikolaos K. Kanakaris, MD, PhD, Vasileios P. Giannoudis, MRes, MBChB, MRCS, Ritchie G. Strain, MReS, MBChB, MRCS, FRCS, and Peter V. Giannoudis, MD, PhD, FACS, FRCS, MBE

Background: Tibial fractures represent the most common model for studying complications of long-bone fracture treatment, particularly fracture-related infections (FRIs). One of the recently emerging FRI prevention strategies has been the use of coated intramedullary nails. The aim of this study was to evaluate the clinical effectiveness of 2 commercially available coated tibial nails (the ETN PROtect and the ZNN Bactiguard) in comparison with standard noncoated nails in clinical scenarios of high FRI risk.

Methods: In-hospital and follow-up data for a minimum of 12 months were collected. High risk was defined as open injuries, fasciotomies, and fractures treated initially with a bridging external fixator or Oestern-Tscherne grade 2/3 soft tissue trauma. Statistical analysis was performed using Stata, with a significance level of $p < 0.05$.

Results: Two hundred thirty-four high-risk tibial fractures were operated in different periods by the same team of senior surgeons. The PROtect nail was used in 102 fractures, the Bactiguard in 41, and the noncoated standard nail in 92. There were no statistically significant differences in epidemiological and comorbidity characteristics, severity of associated injuries, fracture types, severity of soft tissue trauma, time-to-definitive fixation, or soft tissue management between the coated nail groups. Overall, the incidence of FRIs was 9.4%: for the PROtect nails, 7.8%; for the Bactiguard nails, 4.9%; and 13.2% for the noncoated nails ($p = 0.167$). Staphylococcus was the most common species, whereas 11 (50%) samples were polymicrobial, and 18.8% were multidrug-resistant species. Uncomplicated union within 6 months was recorded in 64.7% vs. 65.9% vs. 53.8% and unplanned secondary interventions in 26.5% vs. 22% vs. 41.8%, respectively, ($p = 0.009$).

Conclusions: The incidence of FRIs in these high-risk tibial fractures was 9.4%. Compared with noncoated intramedullary implants, both types of coated nails achieved a lower incidence of FRI. Larger-scale studies would provide more robust evidence to inform patient care and validate the role of coated implants in preventing FRI.

Level of Evidence: Level III, cohort study (nonrandomized comparative study). See Instructions for Authors for a complete description of levels of evidence.

Introduction

Tibial fractures are common injuries and represent the most commonly used clinical model when studying complications of long-bone fracture treatment[1]. Contemporary principles suggest using intramedullary nails (IMN) as the primary fixation device in this anatomical region due to its clear biomechanical, biological, and cost-efficiency advantages[2–4].

The vulnerability of the tibia to the development of complications has been attributed to its problematic blood supply[5], the compromised/disrupted soft tissue envelope (44% of all open long-bone fractures), and the development of compartment syndrome[6,7]. These features predispose the tibia to complications as nonunions and fracture-related-infections (FRIs) occurring in 12% and 18%, respectively[8].

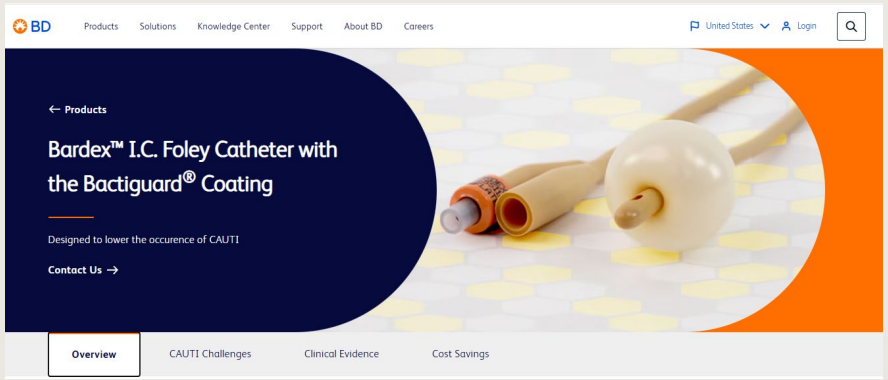
Disclosure: The **Disclosure of Potential Conflicts of Interest** forms are provided with the online version of the article (http://links.lww.com/JBJSOA/A922).

Validated by global MedTech partners

BD (Becton, Dickinson and Company)

One of the **largest global MedTech companies** in the world

Bactiguard works with BD across the entire value chain, from technology through go-to-market strategies



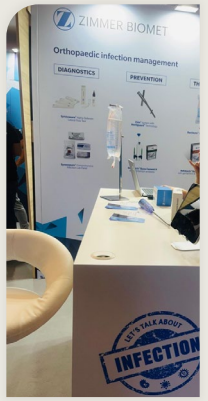
At a glance

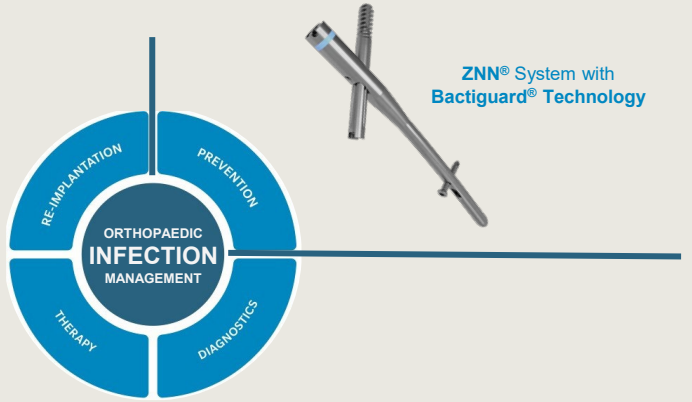
- **Q1-Q3 2025 revenues: 79.7 MSEK (2024: 88.9 MSEK)**
- Bactiguard-coated Foley catheters (Since 1990, updated 2023)
- Exclusive global license (ex China)

ZIMMER BIOMET

A **global leader** in orthopedics – comprehensive portfolio designed to maximize mobility and improve health

ZNN Bactiguard trauma implant on market under Zimmer Biomet's Infection prevention banner



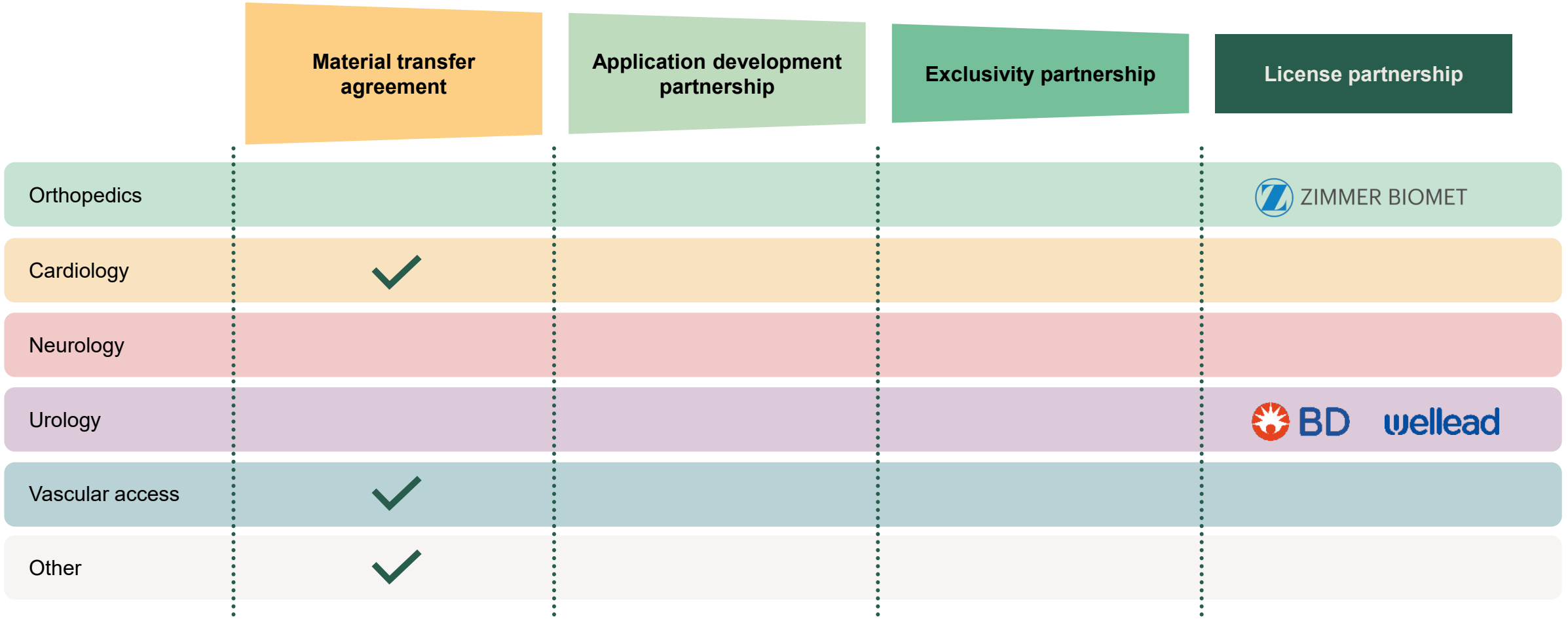


At a glance

- **Q1-Q3 2025 revenues: 16.5 MSEK (2024: 24.1 MSEK)**
- Bactiguard-coated trauma nail system (Since 2019, updated 2025)
- Focus on ZNN Bactiguard in selected markets, non-exclusive

Advancing the partnership pipeline

Exclusivity partnerships and **License partnerships** announced with partner name



Wound Management portfolio

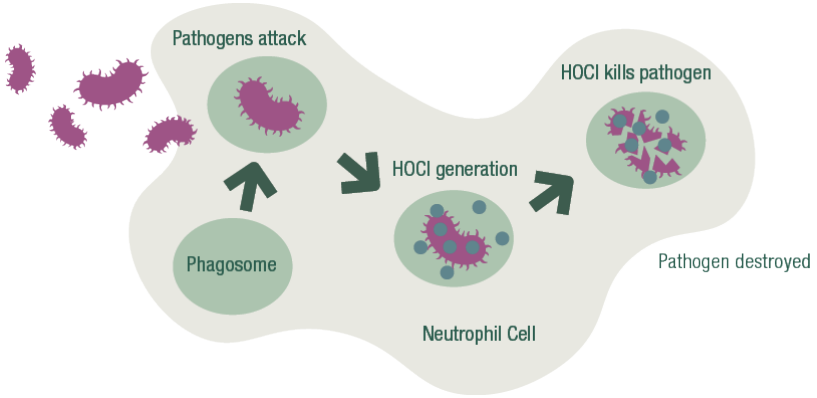
Preventing infections through effective, biocompatible solutions to improve wound healing

- **Hydrocyn aqua**, an innovative wound care product line enabling wound healing and preventing infection
- Effective against bacteria, fungi and spores. Non-toxic, non-stinging, no adverse events in clinical studies
- Offering also includes speciality **surgical sutures**

At a glance

HYDROCYN® aqua

- **Q1-Q3 2025 revenues: SEK 48.7 MSEK (45.3 MSEK)**
- Acquired in 2020



Milestones since strategic transformation

Six consecutive quarters with positive EBITDA (as of 3Q 2025)

License partnership

- Defined strategic therapeutic areas with the greatest realizable potential
- Expanded BD collaboration to new markets (BIP foley phase out)
- BD existing markets growth and new market launches initiated (e.g. India)
- Focused Zimmer Biomet collaboration on in-market ZNN Bactiguard trauma implant
- New clinical data publications supporting efficacy and safety of Bactiguard coating (implants)
- Initiated early feasibility studies with potential partners in 2 different therapeutic areas

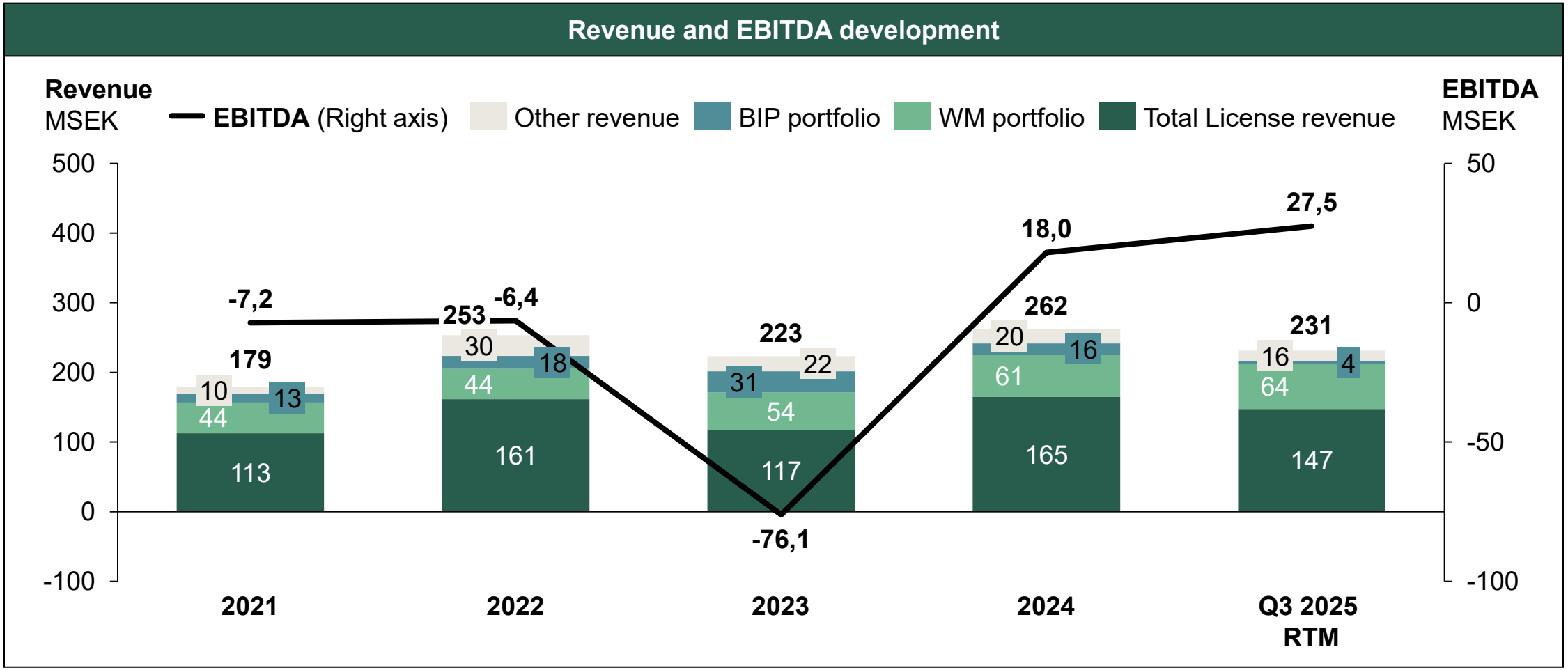
Wound management

- Returned to profitable growth driven by Hydrocyn aqua
- New clinical data publications in additional wound management settings
- ISO 14001 environmental certification achieved

Enabling

- Phase-out or transition of legacy BIP product portfolio
- Strengthened organization around new strategy and business model

Over the last years we have transformed the company to an EBITDA profitable license focused business



Strategic and financial targets by year-end 2030

Scalability and **operational leverage of business model** increases over time

>10

At least **ten application areas** in either **exclusivity** or **license partnership** stages

>200

EBITDA of at least **SEK 200 million**

>600

Revenues of at least **SEK 600 million**

Setting the standard in infection prevention

Unmet need

Healthcare-associated infections and chronic wounds create a multi-billion cost burden

Validated technology

Products on market with global MedTech partners, supported by clinical evidence

Scalable platform

Leverageable across multiple therapeutic areas, using a licensing model

Growth drivers

EBITDA-positive with opportunities for growth in both licensing and Wound Management

Innovation and implementation of new technology takes time, but the advantage with Bactiguard is that we have taken all those steps.

Professor Anna Martling

BACTIGUARD BOARD MEMBER