

# Bactiguard<sup>®</sup>

## SEB Nordic Seminar 2024

**Tuesday January 9, 2024**

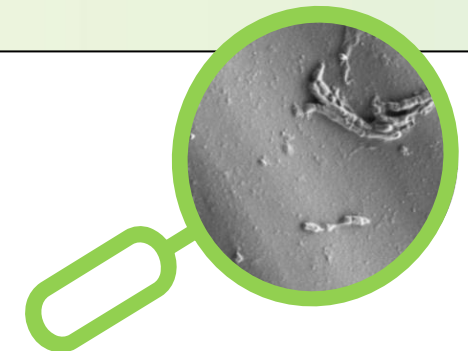
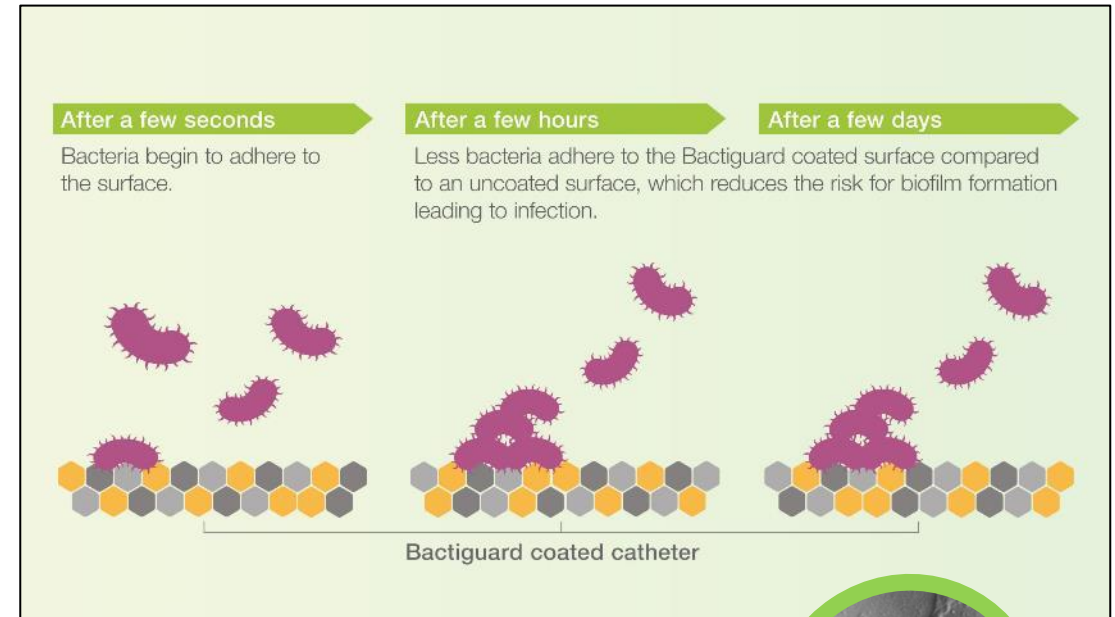
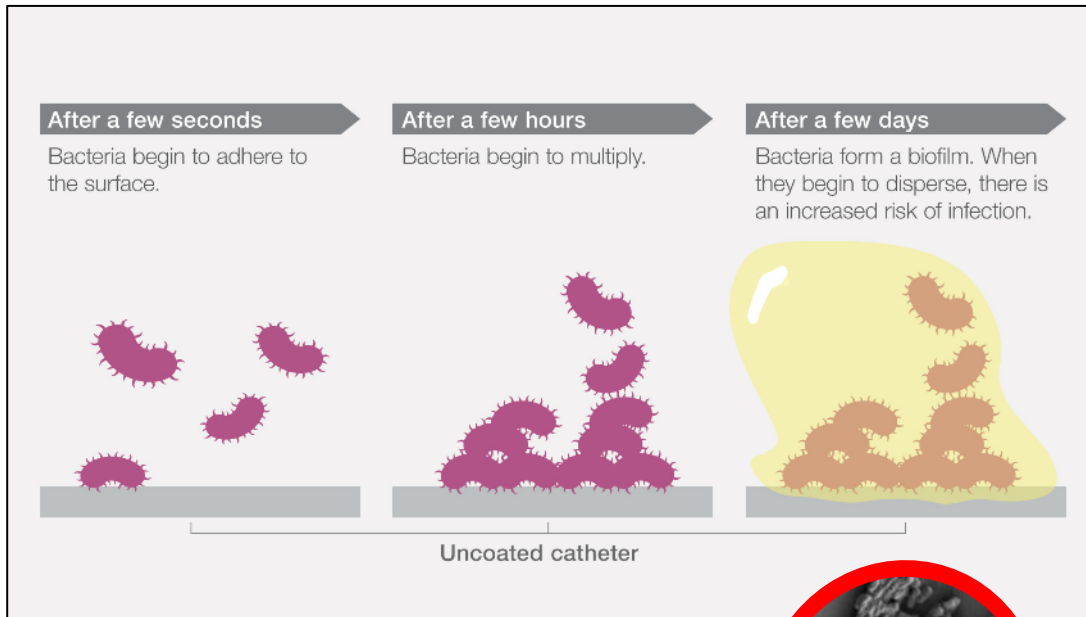
Patrick Fruergaard Bach, Chief Financial Officer





# The dangers of biofilm...

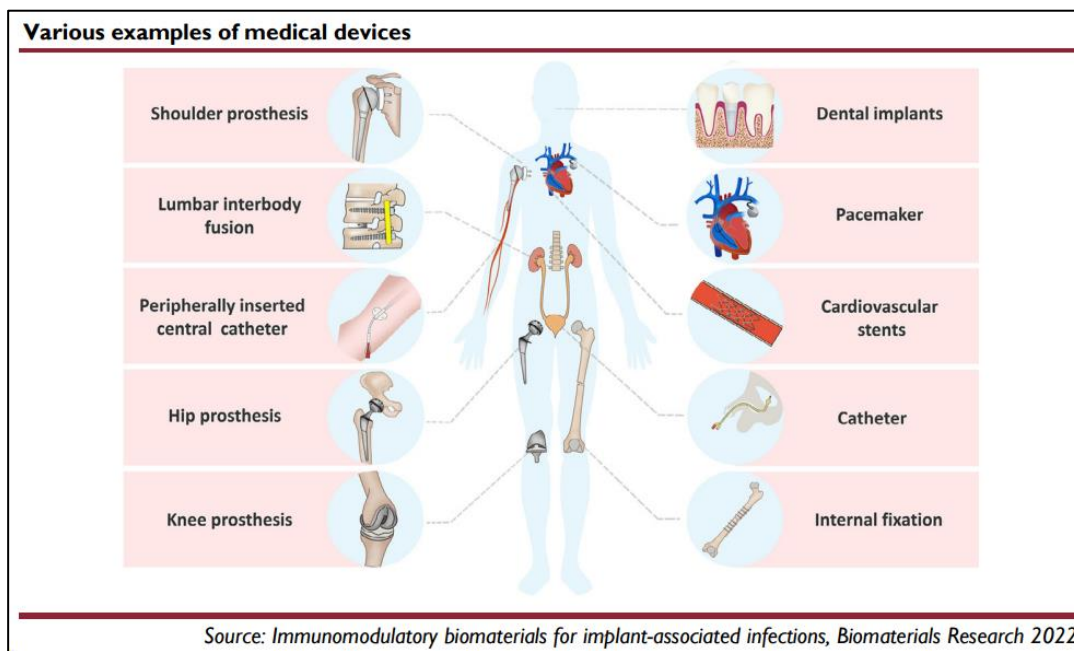
Medical devices that stay in the body more than two days – a possible danger for infection





# ... it's all over the body, and it's well documented

Implant-associated infection rates differ but are among the most frequent and severe complications



**Device-associated infection**

Device	Estimated no. inserted in the United States per year	Rate of infection, %	Attributable mortality <sup>a</sup>
Bladder catheters <sup>b</sup>	>30,000,000	10–30	Low
Central venous catheters <sup>b,c</sup>	5,000,000	3–8	Moderate
Fracture fixation devices <sup>b</sup>	2,000,000	5–10	Low
Dental implants <sup>d</sup>	1,000,000	5–10	Low
Joint prostheses <sup>b</sup>	600,000	1–3	Low
Vascular grafts <sup>b</sup>	450,000	1–5	Moderate
Cardiac pacemakers <sup>b,d</sup>	300,000	1–7	Moderate
Mammary implants, in pairs <sup>e</sup>	130,000	1–2	Low
Mechanical heart valves <sup>d</sup>	85,000	1–3	High
Penile implants <sup>b,d</sup>	15,000	1–3	Low
Heart assist devices <sup>d</sup>	700	25–50	High

<sup>a</sup> Semiquantitative scale for attributable mortality: low, <5%; moderate, 5%–25%; high, >25%.  
<sup>b</sup> Numbers estimated by analysis of market reports.  
<sup>c</sup> Numbers estimated by review of the medical literature.  
<sup>d</sup> Numbers estimated by personal communication with personnel from device manufacturing companies.  
<sup>e</sup> Numbers estimated by review of data provided by medical associations.

Source: *Device-Associated Infection, Clinical Infectious Diseases 2001*



# BactiGuard



BactiGuard's effective prevention technology increases patient safety and reduces the risk of infection.





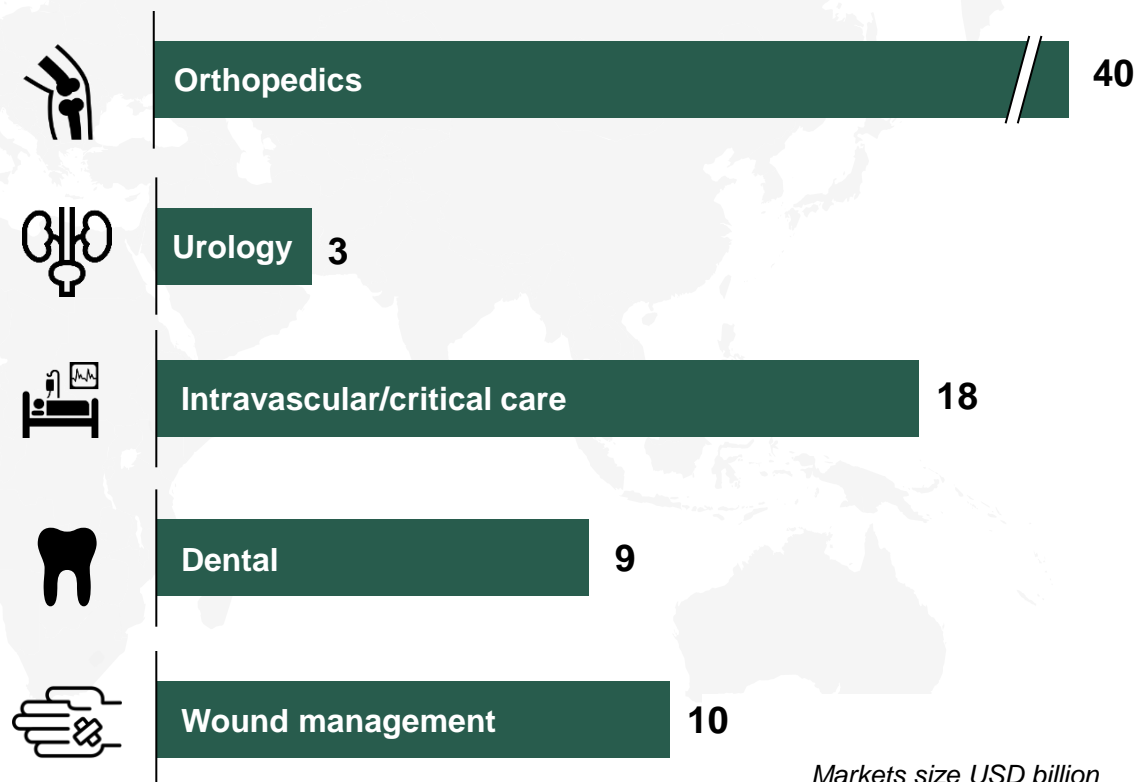
# Opportunities behind critical global healthcare trends

“not a question of if, it’s a question of when”

## The issues

- **Antimicrobial resistance** one of the top global public health threats facing humanity – associated with the **death of close to 5 million people globally in 2019**
- **1 in 10 patients** worldwide affected by **healthcare associated infections**
- **Demographic development, ageing population** and increasing **lifestyle diseases**
- Strained **healthcare resources**

## The USD 80bn market opportunity



Markets size USD billion



# The new, license focused Bactiguard

## Purpose (why we exist)

“to champion a **healthier world** by **preventing infections**”

## Vision (what we strive to be, visionary, long-term aspiration)

“to be the **global standard of care** for **preventing medical device related infections**”

## Mission (what we do to reach our vision)

“by being the **premier partner for leading medtech companies**, joining forces to **redefine healthcare** and **improve health** worldwide”





# Biggest strategic shift in Bactiguard's history

Key priorities ahead

## License

- strengthen organization
- double down on current partnerships
- new partnerships

## R&D and coating development

- institutionalize
- Billy Södervall Academy

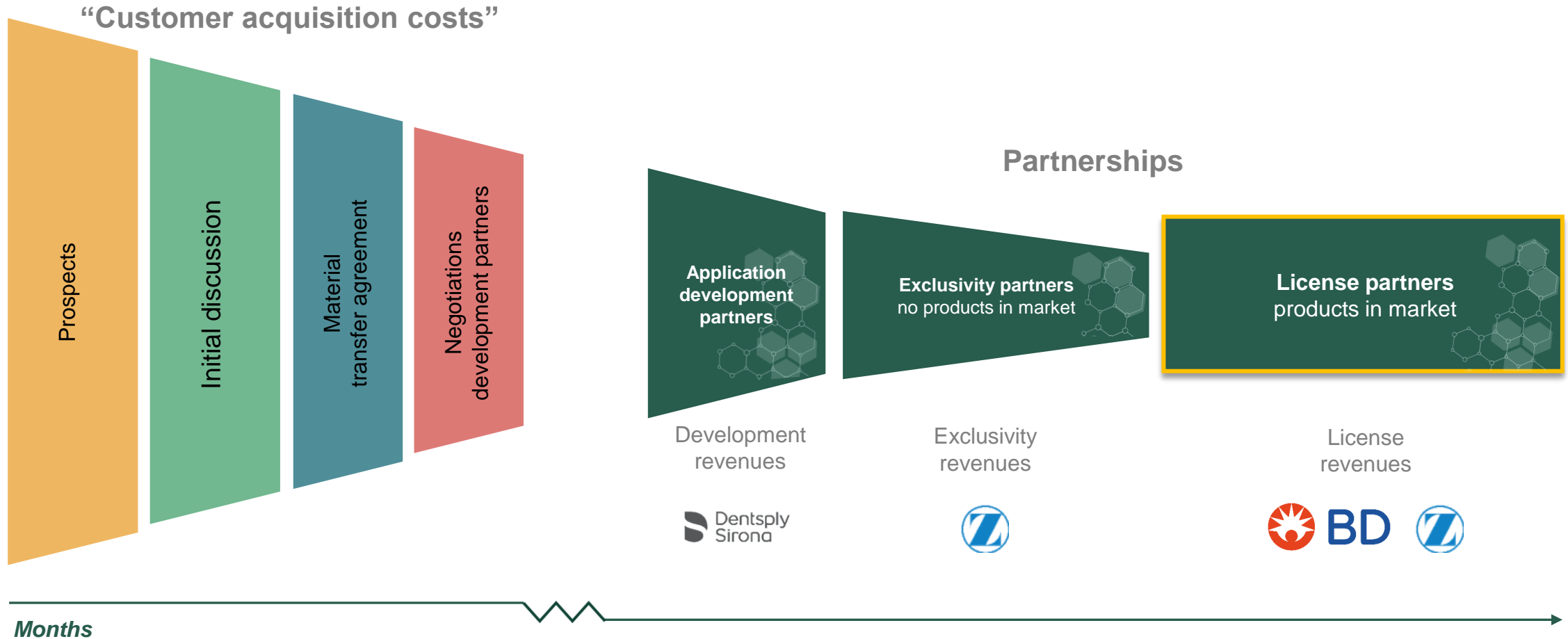
## BIP portfolio

- outsourcing discussions
- orderly transition and gradual phase out

“from a medical device production company to a **knowledge and specialist organization** – and a **profitable high-margin business**”



# A license focused business model







# Strengthened global ties with Becton Dickinson



Press release

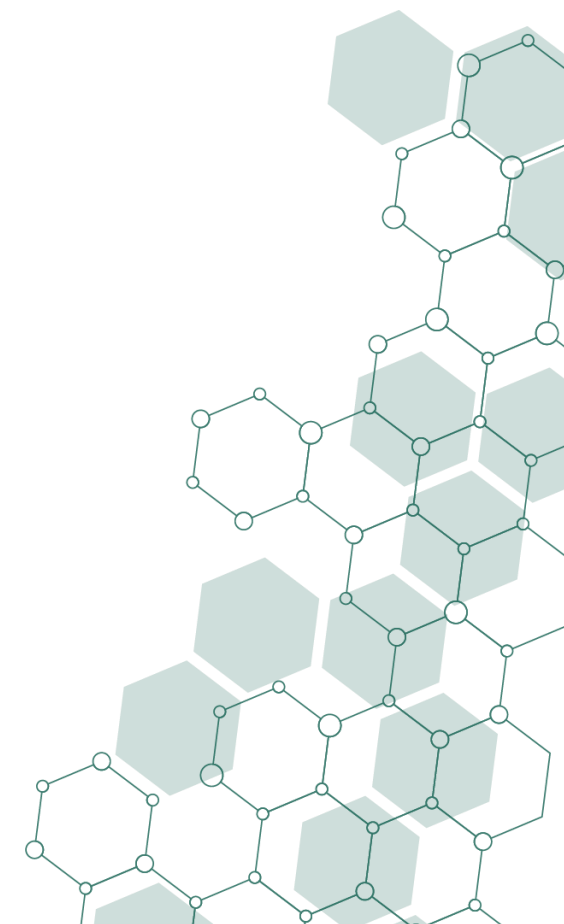
Stockholm December 14, 2023

## BD to become exclusive global license partner (excluding China) for Bactiguard coated Foley catheters

**Bactiguard Holding AB (publ.) today announces strengthened ties with leading global medical technology company Becton Dickinson & Company (BD), Bactiguard's longest and strongest license collaboration. An interim agreement has been signed granting BD an exclusive global license, effective immediately, for Bactiguard coated Foley catheters, which is a first step on the strategy of phasing-out Bactiguard's medical device portfolio.**

As communicated earlier this year, Bactiguard has sharpened its strategy to focus fully on the licensing business and transform from a medical device production company to a knowledge and specialist organization. An important part of the transformation is the phase-out of Bactiguard's medical device portfolio and today's announcement is a first step on that strategy. The interim agreement to extend the partnership with BD includes sales exclusivity of Foleys not only in the US, Japan, UK, Canada, Ireland, and Australia, but now also the rest of the world (excluding China) and aims at limiting supply disruptions for current distributors and customers. The majority will be offered Bactiguard coated BD Foley catheters which have similar features and functionality to the Bactiguard Foley. It is both parties' expectations to enter into an expanded long-term license agreement during the first half of 2024.

"We are thrilled to have agreed to extend our partnership with BD and can't think of a better organization to partner with in this area. Having been partners since 1994, we know each other well and share common values with a commitment to help patients in need and not least, make the world a healthier place. Today's announcement also supports our strategy of focusing on our licensing business, so it is an important first step on our transformation while we also ensure a smooth transition





# Zimmer Biomet ZNN Bactiguard EMEA launch

**YOU WOULDN'T DRIVE A CAR WITHOUT A SEATBELT**

**SO WHY TAKE RISKS WITH INFECTION CONTROL?**

**Zimmer® Natural Nail® (ZNN) System**  
with **Bactiguard® Technology**

ZIMMER BIOMET



# Our financial targets

Mid-term expectations given new strategy and license focused business model

## Profitability

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deliver an **EBITDA of SEK 500 million by year-end 2028**

## Growth

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deliver **net sales in excess of SEK 1 billion by year-end 2028**

## Application areas generating license revenues

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have at least **10 application areas in license partnerships with products in the market by year-end 2028**

“from a medical device production company to  
a **knowledge and specialist organization** – and a **profitable high-margin business**”



# “A novel noble metal stent coating reduces in vitro platelet activation and acute in vivo thrombosis formation”

Published in Scientific Reports in October 2023 – available on [www.bactiguard.com](http://www.bactiguard.com)

Joint study by Bactiguard, KI and KTH

- **Efficacy of the coating to reduce thrombo-inflammatory reactions and acute stent thrombosis** – gather more data and to provide proof of concept
- **Two versions of the coating** – “standard” (gold, silver, palladium), and modified version (with neodymium)
- **In vivo** and **in vitro** (pigs and through blood marker analysis, including human samples)
- **Coated stent group significant decrease in blood clot volume** vs control group – **effect observed one hour** after the stent was implanted, more accentuated after two hours
- **Conclusion:** promising results, Bactiguard’s coating has the **potential to reduce the thrombo-inflammatory reaction of an intravascular device**

**Bactiguard**<sup>®</sup>



**Karolinska  
Institutet**





# Why invest in Bactigard?

## A recap of today's presentation

- AMR caused the death of close to **5 million people** globally in 2019 – **a silent tsunami**
- **Biofilm on a medical device** is the start of a potential infection – this problem **MUST** be solved
- **Medical devices in the body more than two days should be coated** – value of uncoated medical devices sold today around USD 100bn
- **Antibacterial, biocompatible, sustainable and safe**
- **Prevents infection** – by repelling not killing bacteria
- **New license partnership focused strategy** – major market potential behind critical global healthcare trends







# Q&A

“to champion a healthier world  
by preventing infections