

# CREATING HIGHER STANDARDS IN INFECTION CONTROL



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

ZNN with Bactiguard Technology\* offers the combination of a unique non-antibiotic-eluting, anti-infective coating with a clinically successful intramedullary nailing system.<sup>1-3</sup>

This pairing is designed to provide a promising solution for addressing implant associated infections<sup>4</sup> and improving patient outcomes.<sup>5</sup>

### The Value of Bactiguard Technology

#### Responsible Care

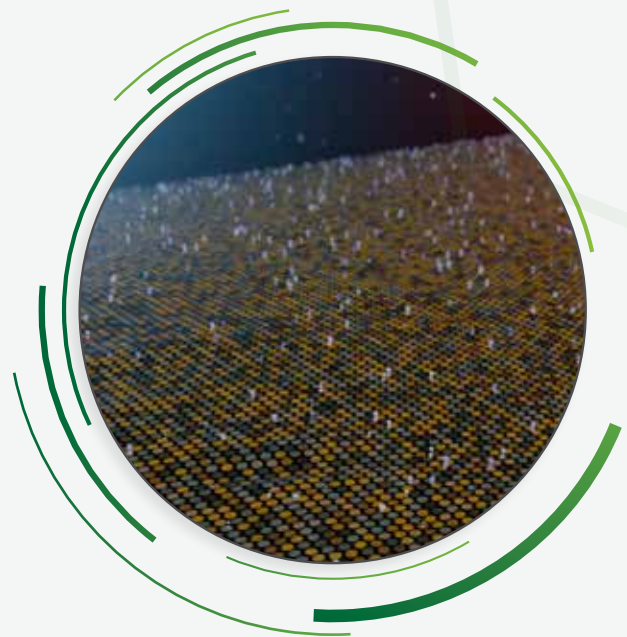
Designed to address the risk of implant associated infection and increase patient safety, without eluting antibiotics.

#### Cost and Resource Reduction

Provides a promising solution to current infection management approaches that often result in higher costs and resource allocations for society and healthcare at large.<sup>6,7</sup>

#### Clinical Outcomes

Offers value to the practice through the use of a safe and proven anti-infective technology.

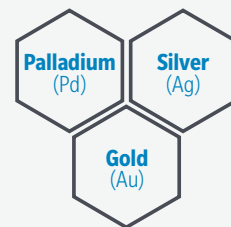


### How does Bactiguard Technology work?

Bactiguard Technology is a thin, durable and non-eluting noble metal (gold, silver and palladium) alloy coating that is firmly attached to the implant surface. When the coating comes into contact with moisture, the noble metals create a unique galvanic (or battery) effect that generates tiny pico currents on the implant surface, reducing bacterial adhesion and subsequent risk of biofilm formation.<sup>8</sup>



Like in batteries, the different electro potentials of the metals create a current.



Bactiguard Technology is clinically-proven for various non-orthopedic medical devices in 40 clinical trials and more than 100,000 patients.<sup>9</sup>

## PREVALENCE

**3.2↑  
MILLION**

In Europe, 3.2 million patients are estimated to receive a healthcare-associated infection (HAI) diagnosis each year, of which an estimated 37,000 have proven to be fatal.<sup>10</sup>

## SOCIOECONOMIC IMPACT

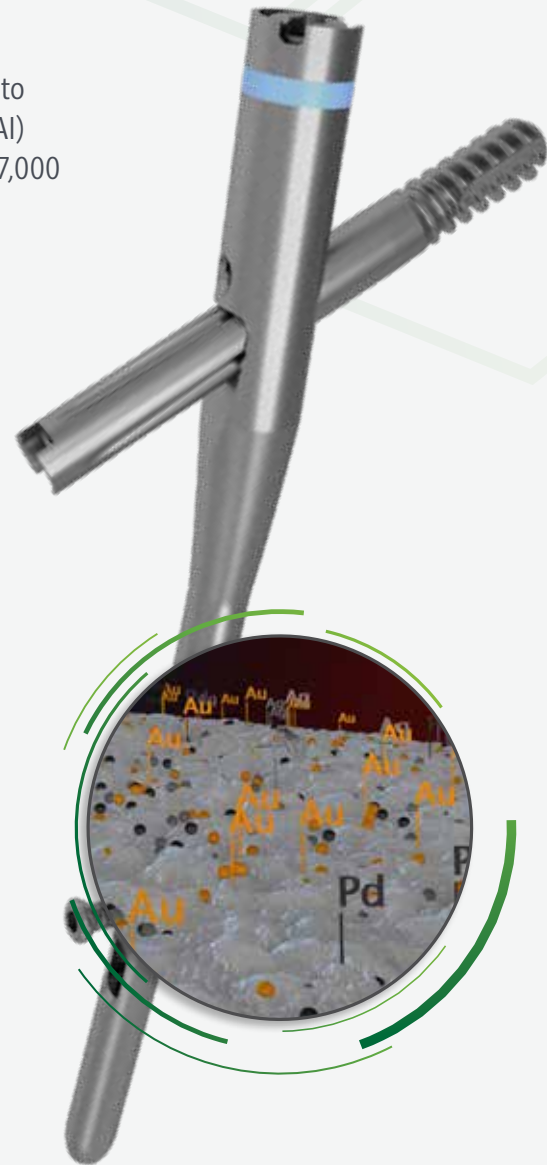
**€7↑  
BILLION**

This leads to 16 million extra-days of hospital stay and costs approximately €7 billion annually across Europe.<sup>11</sup>

## BIOFILM INFECTION

**65%↑**

More than 65% of the infections are related to biofilm.<sup>12,13</sup> In orthopaedic trauma, an estimated 30% of cases may result in infection<sup>14</sup>, with almost 80% of all open fractures presenting some bacterial contamination.<sup>15</sup>



\*Bactiguard-coated ZNN nails are intended to prevent infections, but are not indicated for the treatment of established infections. Use of this product does not replace existing standard practice for infection prevention such as the use of prophylactic antibiotics.

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### REFERENCES

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