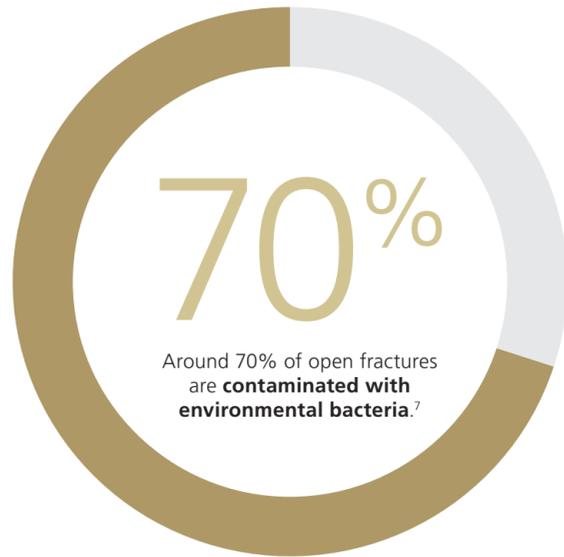


Bony infections of the tibia pose a serious threat to all patients treated for tibial injuries.

These infections may lead to **prolonged hospitalization, revision procedures, amputation or even death.**

Due to the low level of vascular perfusion in the tibia, **infections are difficult to treat with systemic antibiotics.**⁴ Further, the impact of trauma and other comorbidities may compromise **the immune system where it is most needed**, therefore making those patients more vulnerable to the risk of infection.⁵⁻⁶

Also, when you factor compromised soft tissue conditions (due to trauma and other comorbidities) in the tibia into the equation, **the supply of systemically administered antibiotics in the medullary canal is reduced.**



Intended use*

The Expert Tibial Nail PROtect is intended to be used for the surgical treatment and stabilization of fractures of the tibia.

*Please see instruction for use for complete indications, contraindications, precautions and warnings.

Product Catalog

ETN PROTECT Gentamicin-coated	Expert™ TN Ø 8 mm	Expert™ TN Ø 9 mm	Expert™ TN Ø 10 mm	Expert™ TN Ø 11 mm	Expert™ TN Ø 12 mm	Expert™ TN Ø 13 mm
255 mm	-	-	04.004.431SAB	-	04.004.631SAB	-
270 mm	-	-	04.004.434SAB	-	04.004.634SAB	-
285 mm	-	04.004.337SAB	04.004.437SAB	04.004.537SAB	04.004.637SAB	-
300 mm	-	04.004.340SAB	04.004.440SAB	04.004.540SAB	04.004.640SAB	-
315 mm	-	04.004.343SAB	04.004.443SAB	04.004.543SAB	04.004.643SAB	-
330 mm	-	04.004.346SAB	04.004.446SAB	04.004.546SAB	04.004.646SAB	-
345 mm	-	04.004.349SAB	04.004.449SAB	04.004.549SAB	04.004.649SAB	-
360 mm	-	04.004.352SAB	04.004.452SAB	04.004.552SAB	04.004.652SAB	-
375 mm	-	04.004.355SAB	04.004.455SAB	04.004.555SAB	04.004.655SAB	-
390 mm	-	04.004.358SAB	04.004.458SAB	04.004.558SAB	04.004.658SAB	-
405 mm	-	-	04.004.461SAB	-	04.004.661SAB	-
420 mm	-	-	04.004.464SAB	-	04.004.664SAB	-
435 mm	-	-	04.004.467SAB	-	04.004.667SAB	-
450 mm	-	-	04.004.470SAB	-	04.004.670SAB	-
465 mm	-	-	04.004.473SAB	-	04.004.673SAB	-

PROtect Coating can therefore be an important support tool in infection prevention.

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Synthes GmbH
Eimattstrasse 3
4436 Oberdorf
Switzerland
Tel: +41 61 965 61 11
Fax: +41 61 965 66 00

www.depuy-synthes.com

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Expert Tibial Nail PROtect Enhance your first line of defense



PART OF THE Johnson & Johnson FAMILY OF COMPANIES

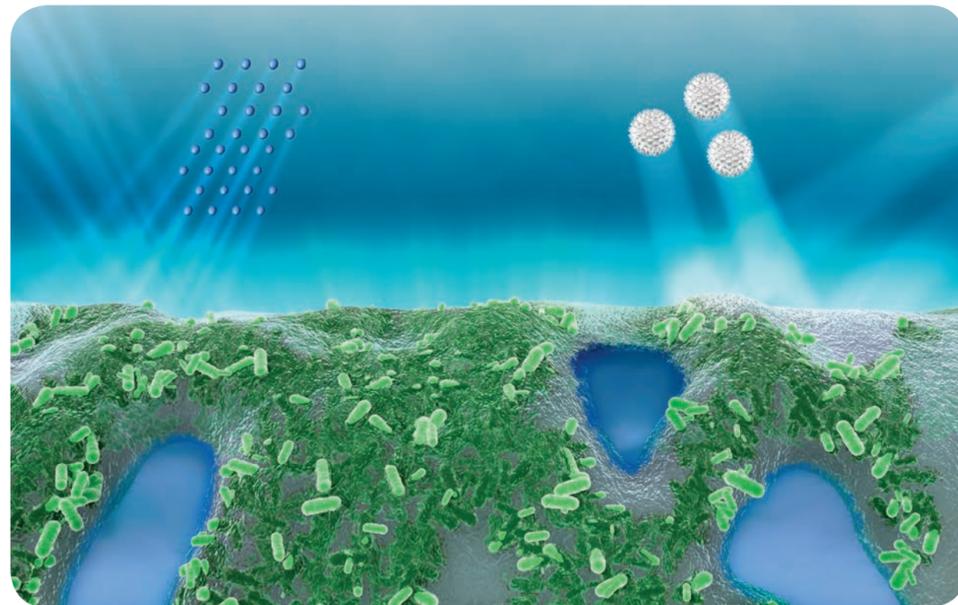
Infections remain a feared complication in fracture care.

In general, **bony infections are promoted by incorporated implants.**

While the bacterial colonization of an implant surface does not necessarily lead to an infection, **it is the first step in a series of events that can ultimately lead to an implant-related infection.**

The presence of a foreign surface such as an implant gives bacteria the possibility

The Role of the Implant Surface



In 75% of all infections the causative bacteria grow in biofilms³

to form a protective biofilm and become immune to systemic antibiotic delivery.

Bacteria adhering to the implant surface require up to 1000 times higher antibiotic concentrations, which is difficult to reach by systemic application.¹⁻²

The Expert Tibial Nail PROtect is designed to enhance safety in high-risk patients.^{8,9}

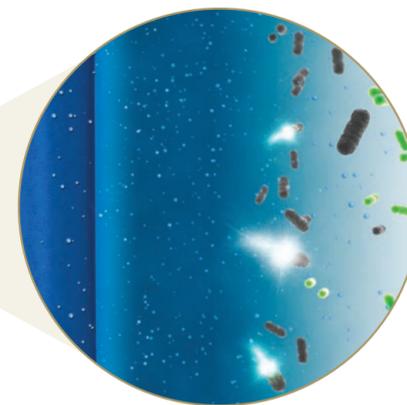
The Expert Tibial Nail PROtect nail features:

High antibiotic concentrations without high systemic doses and associated side effects^{8,9}
Very low levels of antibiotic in the blood serum.^{8,9}

Helps to prevent bacterial colonization on the implant surface⁹
Antibiotic coating releases antibiotic into the area surrounding the implant.⁸

Gentamicin is potentially effective in cases with more resistant organisms^{*,10}
Antibiotic agent shows a concentration-dependent bactericidal activity.¹¹

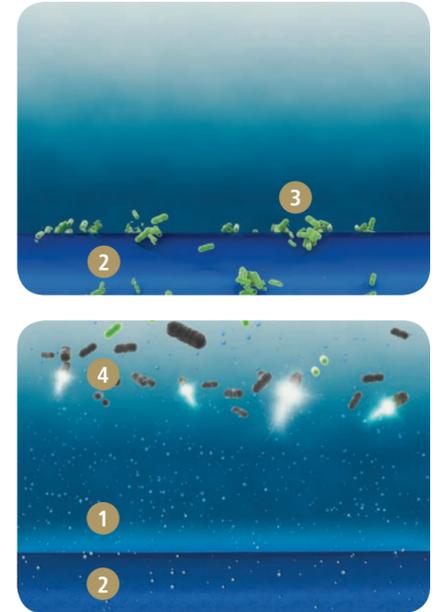
The Expert Tibial Nail PROtect, including its cannulation, is coated with a thin layer (approximately 10 µm) of Gentamicin-loaded polymer.⁹ The coating is abrasion resistant and will withstand most of the forces occurring during nail insertion.^{*,12}



* Bench test results may not necessarily be indicative of clinical performance.

The PROtect Coating impedes bacteria from adhering to the implant surface and producing biofilms.⁹

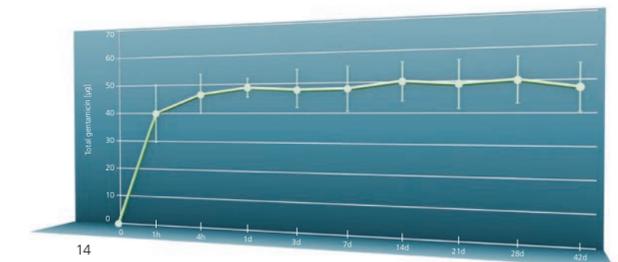
It releases **high concentrations of antibiotics** where systemically administered antibiotic finds difficult to reach. It is highly local thereby may mitigate the risk of systemic side effects associated with antibiotics.⁸



- 1 PROtect Coating
- 2 Coated medical device
- 3 Bacteria
- 4 Dead bacteria

The PROtect Coating:

- Releases the antibiotic immediately after implantation for the duration of approximately 2 weeks.⁹ It is completely resorbed after approximately 6 months.^{*,13}
- It is released at the right time, in sufficient amounts and in a way that reduces the risk of antibiotic resistance.^{**9}
- The initial release creates high concentrations of the antibiotic agent.⁹
- It is released with no observed systemic toxicity.⁹



* Resorption time may vary depending on patient-specific conditions.

** Compared to other methods.