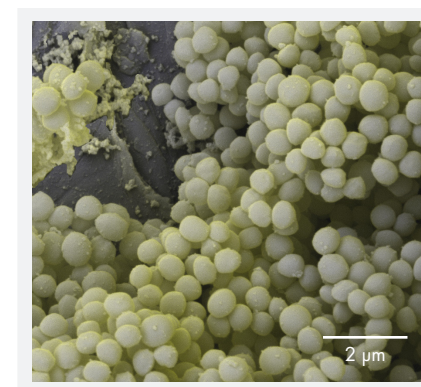
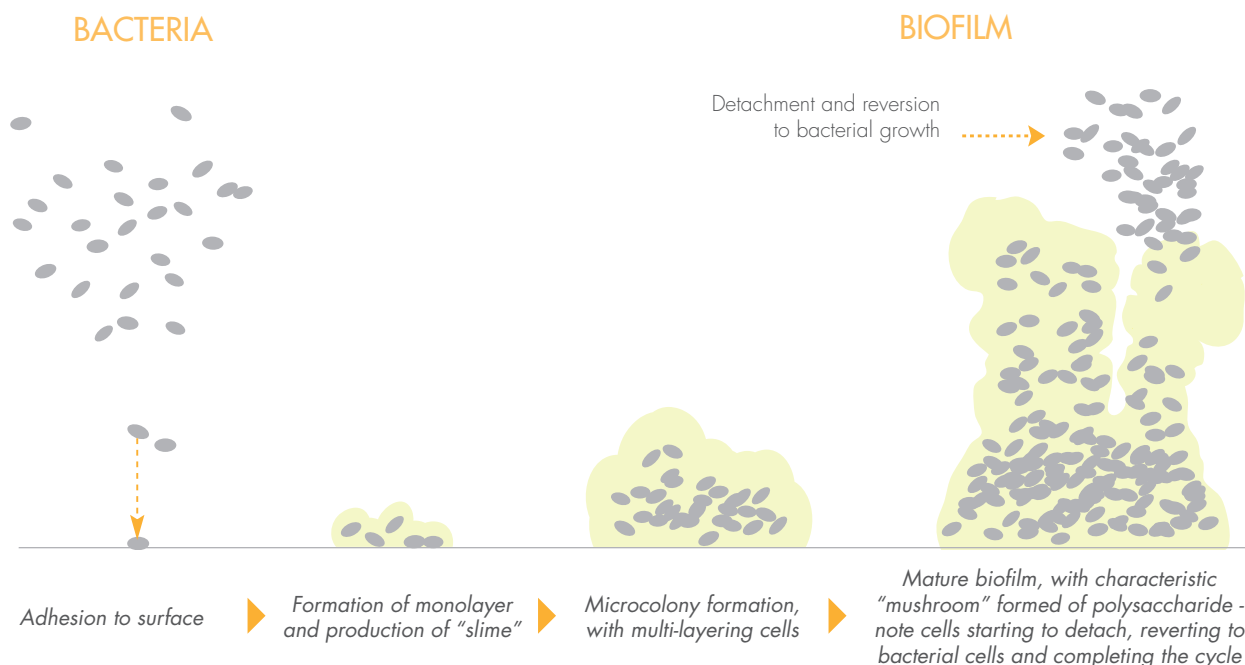


HOW STRONG IS YOUR DEFENSE AGAINST INFECTION?

Implant-related infections are one of the most significant problems faced by the orthopaedic industry. These infections often result in major corrective surgery, increased risk of attendant morbidity, and increased healthcare costs.¹ **The majority of implant-related infections are caused by biofilm forming bacteria.²**

WHAT IS BIOFILM

Biofilm is an adhesive protective coating produced by bacteria to protect themselves and their offspring from antibiotics.

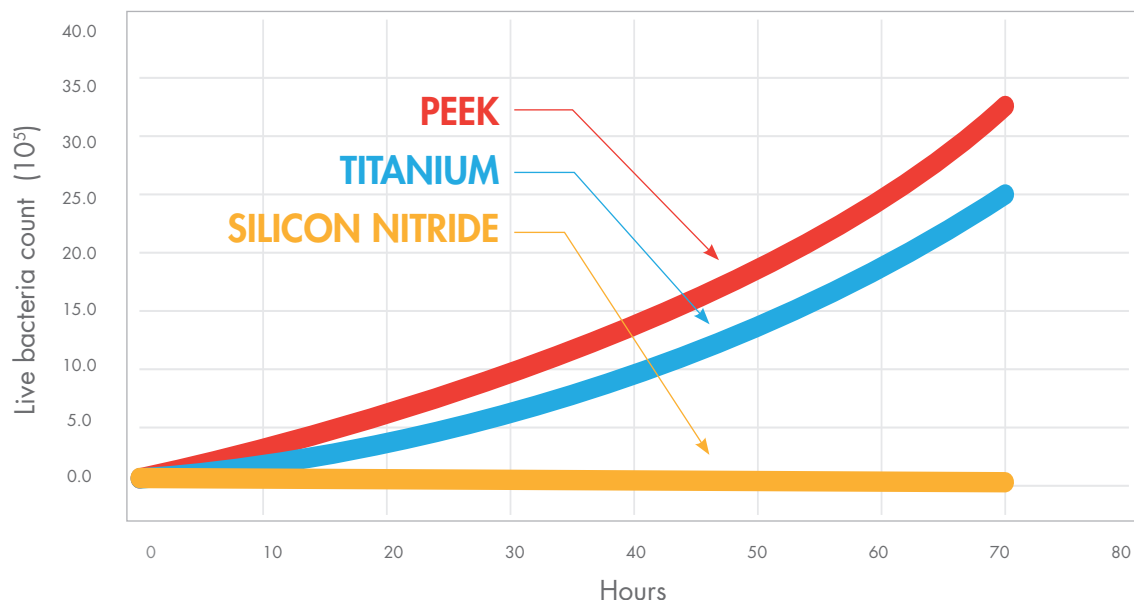


S. aureus biofilm growth on PEEK

1. M. Ribeiro, et al., *Biomatter*, 2:4, 176-194, (2012). 2. L Harris, R Ricahrds, *Injury, Int. J. Care Injured*, 37, S3-14, (2006).

DECREASED BIOFILM = DECREASED BACTERIA

In several scientific studies, Amedica's proprietary silicon nitride ceramic material has demonstrated **significant biofilm prevention** when compared to PEEK and titanium.



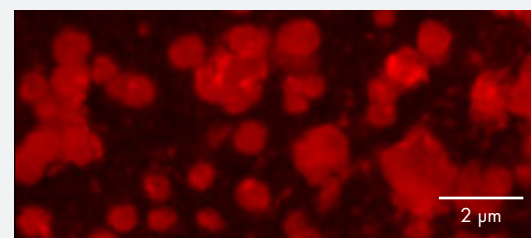
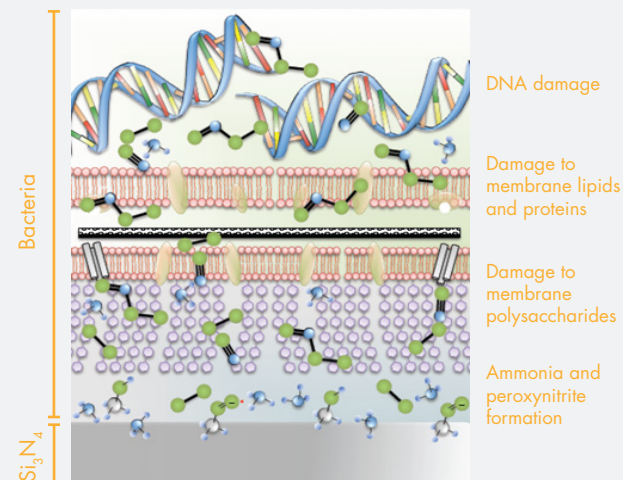
AMEDICA'S SILICON NITRIDE MATERIAL OUTPERFORMED PEEK AND TITANIUM IN THE PRESENCE OF FIVE SEPARATE BACTERIAL STRAINS.³

CALL **855.839.3500** OR VISIT US AT **AMEDICA.COM**
TO DISCOVER WHY MATERIAL MATTERS.

3. Gort *et al.*, J Int Nanomedicine, 7, 4829-4840, (2012). 4. Langmuir 32, 3024-3035 (2016).

SILICON NITRIDE CAN HAVE A LETHAL EFFECT ON BACTERIA.⁴

In a recently published study, silicon nitride exhibited the powerful and unique ability to destroy already existing bacterial cells.⁴



Dead bacteria on the surface of silicon nitride⁴