BIOMED 2026 COMPANY PRESENTATIONS – ABSTRACT TEMPLATE

Company name*: PolyPid

Website*: https://polypid.com/

Name: Dr. Shmuel Sharoni

Category*: Biotech
Session*: **The Next Pandemic: Are We Ready? Innovation in Infectious Diseases**

• **Executive Summary / Investment Rationale :** Surgical site infections are a major clinical and economic burden. PolyPid's D-PLEX100 is a single-dose, prolonged-release local doxycycline therapy applied at incision closure to prevent surgical site infection. SHIELD II (ITT n=798) showed reduced 30-day treatment failure (10.9% vs 18.1%; p=0.0039) and fewer incisional SSIs (3.8% vs 9.5%; p=0.0013). • **Core**

Technology : The Kynatrix™ platform eliminates burst and fluctuating drug release, enabling delivery of a broad range of active pharmaceutical ingredients (APIs), including small molecules, cytotoxic agents, biologics, nucleic acids, and peptides.
Release durations can be customized, spanning several days to several weeks, thereby enhancing and extending therapeutic effectiveness

• **Product Profile :** Lead product: D-PLEX100 (doxycycline–polymer–lipid encapsulation matrix) delivers prolonged local doxycycline release from a single intraoperative application at the surgical site before incision closure. The platform is designed to achieve high antibiotic exposure where contamination occurs while minimizing systemic exposure and fitting standard surgical workflow. It is intended to complement systemic prophylactic antibiotics.

• **Business Strategy :** Position D-PLEX100 as an adjunct to systemic prophylaxis for high-risk surgeries where SSI drives re-interventions and cost. Focus initial commercialization on colorectal/clean-contaminated procedures, supported by clinical and health-economic evidence. Seek strategic partners for distribution and market access and engage key surgical centres to drive adoption and guideline inclusion.

• **What's Next? :** Advance regulatory and market access activities supported by SHIELD II; broaden evidence generation across additional procedures and geographies and quantify health-economic impact. Pursue partnerships to scale manufacturing and commercialization and explore follow-on locally administered anti-infective products leveraging the same delivery platform.