

PolyPid to Present D-PLEX Microbiology Data at IDWeek 2026

Analysis demonstrates a lower bacterial burden in breakthrough surgical-site infections, with similar proportions of multidrug-resistant organisms between treatment groups

PETACH TIKVA, Israel, Oct. 21, 2026 (GLOBE NEWSWIRE) — PolyPid Ltd. (Nasdaq: PYPD) (“PolyPid” or the “Company”), an innovative biopharmaceutical company dedicated to improving patient outcomes by elevating treatment effectiveness, right where care begins, today announced that it will present an oral presentation at IDWeek 2026 on Thursday, October 22, 2026, in Washington, D.C. The presentation will focus on an exploratory pooled analysis of microbiology from SHIELD I, SHIELD II, and D-PLEX phase 2 trial involving 2,185 patients, demonstrating a lower bacterial burden in breakthrough surgical-site infections (“SSIs”) and later occurrence of breakthrough SSIs in the D-PLEX treatment arm compared to standard of care (“SoC”), with similar proportions of multidrug-resistant organisms between treatment groups.

The presentation, titled “D-PLEX Lowers the Microbial Burden Without Selecting for Multidrug-Resistant Bacteria: Pooled Microbiology from Three Randomized Trials (N=2,185),” will be delivered by George M. Viola, M.D., M.P.H., Department of Infectious Diseases, Infection Control, and Employee Health, Division of Internal Medicine, the University of Texas MD Anderson Cancer Center, Houston, Texas. Co-authors are Nurit Tweezer-Zaks, M.D., M.B.A., and Meidan Dvir, Ph.D.

The analysis pooled a Phase 2 trial and two Phase 3 trials to examine the bacteria present in SSIs that occurred despite preventive treatment. Wound microbiology was evaluated in 134 patients (D-PLEX arm n=51, SoC arm n=83) with culture-positive SSIs. Heavy bacterial growth was less frequent with D-PLEX plus standard of care than with SoC alone (16% versus 27%, $p=0.034$) while breakthrough SSIs occurred later in the D-PLEX arm compared to the SoC (median 10.0 vs 6.5 days; $p<0.001$). The proportions of multidrug-resistant organisms were similar between groups, and the difference in doxycycline resistance was not statistically significant.

Across the pooled study population, no statistically significant differences were observed in non-wound infections, systemic antibiotic use, or inflammation.

“Preventing surgical-site infections remains our primary objective. Part of infection prevention is understanding the microbiology of infections that occur despite prophylaxis.

This matters even more as antimicrobial resistance is a first-order global health threat¹. This exploratory pooled analysis showed that compared with standard of care alone, treatment with D-PLEX was associated with lower burden of bacterial growth, without evidence of increased antimicrobial resistance. Together with the later recorded onset of breakthrough SSIs, these findings suggest that D-PLEX do not only demonstrate a relative risk reduction by 60% in the postoperative infection as seen in the SHIELD II trial, but also favourably impact

the microbiologic characteristics and severity of infections that emerge despite treatment” said Dikla Czaczkes Akselbrad, Chief Executive Officer of PolyPid.

Presentation Details

Presentation Title: D-PLEX Lowers the Microbial Burden Without Selecting for Multidrug-Resistant Bacteria: Pooled Microbiology from Three Randomized Trials (N=2,185)

Abstract Number: LB-2201.6

Presenter: George M. Viola, M.D., M.P.H., Department of Infectious Diseases, Infection Control, and Employee Health, Division of Internal Medicine, the University of Texas MD Anderson Cancer Center, Houston, Texas

Session: Late Breaking Abstracts: Antimicrobials

Session Type: Oral Presentation

Session Date/Time: Thursday, October 22, 2026 | 10:30 a.m. – 11:45 a.m. ET

Location: Room 206, Walter E. Washington Convention Center, Washington, D.C.

The abstract will be available on www.polypid.com once the conference concludes.

About D-PLEX

D-PLEX, PolyPid’s lead product candidate, is designed to provide local prolonged and controlled anti-bacterial activity directly at the surgical site to prevent surgical site infections (“SSIs”). Following the administration of D-PLEX into the surgical site, PolyPid’s delivery technology, Kynatrix™, pairs with Active Pharmaceutical Ingredients, enabling a prolonged and continuous release of the broad-spectrum antibiotic doxycycline, resulting in a high local concentration of the drug for a period of 30 days for the prevention of SSIs, with additional potential to prevent SSIs caused by antibiotic-resistant bacteria at the surgical site. D-PLEX recently demonstrated positive results in the Phase 3 SHIELD II trial, achieving a statistically significant 60% ($p=0.0013$) relative risk reduction in SSI incidence following abdominal colorectal surgery with large incisions. D-PLEX received Breakthrough Therapy designation from the U.S. Food and Drug Administration for the prevention of SSIs in patients undergoing elective colorectal surgery.

About PolyPid

PolyPid Ltd. (Nasdaq: PYPD) is an innovative biopharmaceutical company dedicated to elevating treatment effectiveness, right where care begins. The Company develops long-acting, controlled-release drugs designed to deliver therapy precisely at the site of care, addressing critical unmet medical needs across a wide and diverse pipeline spanning surgical care, metabolic diseases, and beyond. PolyPid’s lead product, D-PLEX, successfully met its primary and all key secondary endpoints in the landmark Phase 3 SHIELD II trial for the prevention of surgical site infections. Guided by a commitment to precision and innovation, PolyPid is redefining how therapies perform and raises the standard of patient care. For additional Company information, please visit <http://www.polypid.com> and follow us on Twitter (X) and LinkedIn.

Forward-looking Statements

This press release contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act and other securities laws. Words such as “expects,” “anticipates,” “intends,” “plans,” “believes,” “seeks,” “estimates” and similar expressions or variations of such words are intended to identify forward-looking statements. For example, the Company is using forward-looking statements when it discusses the potential implications of the exploratory pooled microbiology findings, the potential role of D-PLEX in improving the prevention of surgical site infections, and its potential implications for antimicrobial resistance, as well as the Company’s ongoing regulatory review process for D-PLEX . Forward-looking statements are not historical facts, and are based upon management’s current expectations, beliefs and projections, many of which, by their nature, are inherently uncertain. Such expectations, beliefs and projections are expressed in good faith. However, there can be no assurance that management’s expectations, beliefs and projections will be achieved, and actual results may differ materially from what is expressed in or indicated by the forward-looking statements. Forward-looking statements are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the forward-looking statements. These risks and uncertainties include, among others, that the pooled microbiology findings are exploratory; that they come from the culture-positive SSI subset; that wound-culture comparisons were not significant after multiplicity adjustment; that the presentation does not constitute a new primary efficacy result; and that the Company’s NDA remains under FDA review. For a more detailed description of the risks and uncertainties affecting the Company, reference is made to the Company’s reports filed from time to time with the Securities and Exchange Commission, including, but not limited to, the risks detailed in the Company’s Annual Report on Form 20-F filed on February 25, 2026. Forward-looking statements speak only as of the date the statements are made. The Company assumes no obligation to update forward-looking statements to reflect actual results, subsequent events or circumstances, changes in assumptions or changes in other factors affecting forward-looking information except to the extent required by applicable securities laws. If the Company does update one or more forward-looking statements, no inference should be drawn that the Company will make additional updates with respect thereto or with respect to other forward-looking statements. References and links to websites have been provided as a convenience, and the information contained on such websites is not incorporated by reference into this press release. PolyPid is not responsible for the contents of third-party websites.

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¹ World Health Organization. Antimicrobial resistance. Fact sheet. Bacterial AMR was estimated to be associated with more than 4.7 million deaths globally in 2021. <https://www.who.int/news-room/fact-sheets/detail/antimicrobial-resistance>. Citing GBD 2021 Antimicrobial Resistance Collaborators. Lancet. 2024;404(10459):1199-1226.



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