

PolyPid Provides Corporate Update and Reports First Quarter 2022 Financial Results

*Planned Unblinded Interim Analysis of Phase 3 SHIELD I Trial of D-PLEX₁₀₀ in Abdominal Soft
Tissue Surgery Expected to Occur Imminently*

*Recruitment Progressing as Planned with Approximately 900 Patients Enrolled into Phase 3
SHIELD I Trial of D-PLEX₁₀₀ in Abdominal Soft Tissue Surgery*

*Extended Cash Runway into the Second Quarter of 2023 with \$15 million Non-Dilutive
Secured Term Loan Facility*

Strengthened Executive Management Team

Conference Call Scheduled for Today at 8:30 AM ET

PETACH TIKVA, Israel, May 11, 2022 — PolyPid Ltd. (Nasdaq: PYPD) (“PolyPid” or the “Company”), a late-stage biopharma company aiming to improve surgical outcomes, today provided a corporate update and reported financial results for the three months ended March 31, 2022.

Recent Corporate Highlights:

- Unblinded interim analysis of SHIELD I (Surgical site Hospital acquired Infection prEvention with Local D-PLEX) study evaluating D-PLEX₁₀₀ for the prevention of abdominal soft tissue surgical site infections (SSIs) expected to occur imminently. Once 750 patients complete their 30-day follow-up and statistical analysis is finalized, the results will allow for early trial stoppage due to efficacy, futility, or for sample size reassessment.
- Recruitment progressing as planned with approximately 900 patients enrolled into the ongoing Phase 3 SHIELD I study.
- Obtained a non-dilutive secured term loan facility for up to \$15 million from Kreos Capital VI (Expert Fund) LP (“Kreos”) that broadens financing options and provides access to significant additional capital, which bolsters the Company’s ability to invest in commercial capabilities for D-PLEX₁₀₀, as well as its development activities utilizing its promising PLEX technology platform. The first \$10 million of the facility was drawn in April 2022.
- Strengthened the executive management team with the recent appointment of Evgeny Valdman as PolyPid’s new Executive Vice President of Operations and the promotion of Dalit Hazan to Executive Vice President, Research & Development, and Clinical & Regulatory Affairs. Evgeny brings to PolyPid more than 25 years of experience in senior management positions at Teva Pharmaceuticals and other pharmaceutical companies

with approved products, with success at all levels of operations. Since 2016, Ms. Hazan has served in various leadership roles at PolyPid, most recently as PolyPid's Senior Vice President, Research and Development and Regulatory Affairs.

"We are thrilled with the significant momentum throughout all aspects of our business," stated Amir Weisberg, PolyPid's Chief Executive Officer. "We now have approximately 900 patients enrolled into SHIELD I, and we expect that the planned unblinded interim analysis in the study will occur very shortly, providing an exceptional opportunity for PolyPid to determine the patient enrollment target".

"The appointment of Evgeny to oversee our technical operations and the promotion of Dalit to a senior role within our clinical development function further strengthens our commercial readiness and enhances our clinical development organization," added Mr. Weisberg.

Dikla Czaczkes Akselbrad, Executive Vice President and Chief Financial Officer of PolyPid, stated, "The secured loan agreement we recently entered into for up to \$15 million will be used to support commercialization preparations for the launch of D-PLEX₁₀₀ for the prevention of abdominal soft tissue SSIs, as well as further advancement of our unique PLEX technology platform. Importantly, our cash runway now extends into the second quarter of 2023."

Financial results for three months ended March 31, 2022

- Research and development, net (R&D) expenses for the three months ended March 31, 2022, were \$8.7 million, compared to \$6.0 million for the same three-month period of 2021, as spending increased primarily due to the expedited recruitment in SHIELD I Phase 3 clinical trial in abdominal surgery.
- General and administrative (G&A) expenses for the three months ended March 31, 2022, were \$2.5 million, compared to \$2.1 million for the same period of 2021.
- Marketing and business development expenses for the three months ended March 31, 2022, were \$0.8 million, compared to \$0.7 million for the same period of 2021.
- For the three months ended March 31, 2022, the Company had a loss of \$11.9 million, compared to a loss of \$8.7 million for the same three-month period ended March 31, 2021.

Balance Sheet Highlights

- As of March 31, 2022, the Company had cash and cash equivalents and deposits in the amount of \$23.6 million. PolyPid expects that its cash balance, together with the first tranche of \$10 million from the Kreos loan that was drawn in April 2022, will be sufficient to fund operations into the second quarter of 2023.

Conference Call Dial-In & Webcast Information:

Date: Wednesday, May 11, 2022
Time: 8:30 AM Eastern Time
United States: +1 877-870-9135
Israel: +972 1809 213-985
International: +44 (0) 2071 928338
Conference ID: 3450787
Webcast: <https://edge.media-server.com/mmc/p/djs2mjt6>

About PolyPid

PolyPid Ltd. (Nasdaq: PYPD) is a late-stage biopharma company aiming to improve surgical outcomes. Through locally administered, controlled, prolonged-release therapeutics, PolyPid's proprietary PLEX (Polymer-Lipid Encapsulation matrix) technology pairs with Active Pharmaceutical Ingredients (APIs), enabling precise delivery of drugs at optimal release rates over durations ranging from several days to months. PolyPid's lead product candidate D-PLEX₁₀₀ is in Phase 3 clinical trials for the prevention of soft tissue abdominal and sternal bone surgical site infections. In addition, the Company is currently in preclinical stages to test the efficacy of OncoPLEX for treatment of solid tumors. For additional Company information, please visit <http://www.polypid.com> and follow us on Twitter 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 its ongoing clinical trials, its expectations regarding the unblinded interim analysis in SHIELD I and its timing, that interim analysis could allow for an early trial stopping, its expectation that the planned interim analysis will provide an exceptional opportunity to determine the patient enrollment target, the pace of enrollment in SHIELD I trial, its use of proceeds from the Kreos loan, commercialization preparations for the launch of D-PLEX₁₀₀ for the prevention of abdominal soft tissue SSIs, extension of the Company's cash runway into the second quarter of 2023 and its expectation that its cash balance, together with the proceeds from the Kreos loan, will be sufficient to fund operations into the second quarter of 2023. 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. 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 (“SEC”), including, but not limited to, the risks detailed in the Company’s Annual Report on Form 20-F filed on February 28, 2022. 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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CONSOLIDATED BALANCE SHEETS

U.S. dollars in thousands

| | March 31, 2022 Unaudited | December 31, 2021 Audited |
|---------------------------|---|--|
| ASSETS | | |
| CURRENT ASSETS: | | |
| Cash and cash equivalents | \$ 11,434 | \$ 9,819 |

| | | |
|---|--------|-----------|
| Restricted cash | 393 | 397 |
| Short-term deposits | 12,187 | 22,384 |
| Prepaid expenses and other current assets | 1,478 | 2,211 |
| Total current assets | 25,492 | 34,811 |
| LONG-TERM ASSETS: | | |
| Property and equipment, net | 9,338 | 8,761 |
| Other long-term assets | 651 | 663 |
| Total long-term assets | 9,989 | 9,424 |
| | \$ | |
| Total assets | 35,481 | \$ 44,235 |

CONSOLIDATED BALANCE SHEETS

U.S. dollars in thousands

| | March 31, 2022 Unaudited | December 31, 2021 Audited |
|--|--------------------------------|------------------------------------|
| LIABILITIES AND SHAREHOLDERS' EQUITY | | |
| CURRENT LIABILITIES: | | |
| Trade payables | \$ 3,214 | \$ 4,136 |
| Accrued expenses and other current liabilities | 3,227 | 3,940 |
| Total current liabilities | 6,441 | 8,076 |
| LONG-TERM LIABILITIES: | | |
| Other liabilities | 195 | 199 |
| Total long-term liabilities | 195 | 199 |
| COMMITMENTS AND CONTINGENT LIABILITIES | | |
| SHAREHOLDERS' EQUITY: | | |
| Ordinary shares with no par value - Authorized: 47,800,000 shares at March 31, 2022 (unaudited) and December 31, 2021; Issued and outstanding: 19,470,757 and 18,756,570 shares at March 31, 2022 (unaudited) and December 31, 2021, respectively | - | - |
| Additional paid-in capital | 215,606 | 210,847 |
| Accumulated deficit | (186,761) | (174,887) |
| Total shareholders' equity | 28,845 | 35,960 |
| Total liabilities and shareholders' equity | \$ 35,481 | \$ 44,235 |

CONSOLIDATED STATEMENTS OF OPERATIONS

U.S. dollars in thousands (except share and per share data)

Three Months Ended
March 31,
2022 2021
Unaudited

| | | |
|---|----------------------|---------------------|
| Operating expenses: | | |
| Research and development, net | \$ 8,697 | \$ 6,018 |
| Marketing and business development | 775 | 652 |
| General and administrative | 2,480 | 2,127 |
| Operating loss | 11,952 | 8,797 |
| Financial income, net | 78 | 110 |
| Loss | \$ 11,874 | \$ 8,687 |
| Basic and diluted loss per Ordinary share | \$ 0.63 | \$ 0.47 |
| Weighted average number of Ordinary shares used in computing basic and diluted loss per share | 18,936,457 | 18,623,154 |

