

Ligand Spins Out and Merges Pelican Subsidiary with Primordial Genetics to Form Primrose Bio

Ligand retains all Pelican commercial royalties and will own 49.9% of Primrose Bio, Inc. as a stand-alone private company with leading technologies in synthetic biology

Ligand contributes \$15 million in exchange for economic interest in select Primrose programs

Ligand improves cash expense outlook and raises EPS guidance

SAN DIEGO--(BUSINESS WIRE)-- Ligand Pharmaceuticals Incorporated (NASDAQ: LGND) ("Ligand," the "Company" or "we") announced that it has entered into a merger agreement, pursuant to which its subsidiary, Pelican Technology Holdings, Inc., ("Pelican") has become a wholly owned subsidiary of Primrose Bio, Inc. ("Primrose Bio", formerly known as Primordial Genetics, Inc.). Primrose Bio is a stand-alone private company focused on synthetic biology. As part of the transaction, Ligand retains the existing commercial royalties related to the Pelican Expression Technology[®] and will own 49.9% of Primrose Bio. Simultaneous with the merger, Ligand entered into a Purchase and Sale Agreement with Primrose Bio and contributed \$15 million in exchange for a portion of the economic rights from two contracts previously entered into by Primordial Genetics and an economic interest in potential future revenues generated from PeliCRM197[®].

Primrose Bio combines the Primordial Genetics' Function Generator™ and Ligand's Pelican Expression Technology[®] platform (formerly known as Pfenex Expression Technology[®]) to create a revolutionary way of enhancing biological productivity to enable the next generation of therapeutics. Function Generator is designed to systematically generate tens of millions of novel genes in an ultra-high-throughput fashion, to enable the discovery of enzymes and microbes with improved function. The Pelican Expression Technology is a robust and scalable production platform used in five approved medicines that is especially well-suited for large-scale protein production of complex proteins. These proprietary technologies have been leveraged to create Prima RNApols™ and PeliCRM197, two manufacturing and formulation solutions licensed to biopharma companies to develop mRNA therapeutics and conjugate vaccines, respectively.

"The acquisition of Pfenex in 2020 was a successful and accretive deal for Ligand that continues to pay dividends. After incubating Pfenex and its Pelican Expression Technology for three years, we now have five commercial royalties from the technology platform, and with today's announcement, we retain a significant equity stake in an exciting new company pushing the frontiers of synthetic biology," said Todd Davis, CEO of Ligand. "With the spinout of Pelican, retention of economic rights to commercial royalties, and subsequent

purchase of economic rights, we are delivering on our strategy to streamline the Company's operations and focus on accretive high-margin businesses and royalties. We believe this will accelerate profitability and growth for our investors and add multiple new royalty 'shots-ongoal' for Ligand while realizing lower infrastructure costs within our efficient high growth business model."

About the Pelican - Primordial Genetics Transaction

- Pelican, which holds the Pelican Expression Technology[®], related patents, employees and operating business, has merged into a subsidiary wholly owned by Primordial Genetics
- As part of the transaction, Primordial Genetics has changed its name to "Primrose Bio, Inc."
- Ligand owns 49.9% of the equity of Primrose Bio, Inc.
- Ligand retains the existing royalty rights from the Pelican Expression Technology, including economic rights to Jazz's RYLAZE[®], Merck's VAXNEUVANCE[®] and V116 vaccines, Alvogen's Teriparatide, Serum Institute of India's Pneumosil[®] and MenFive[®] vaccines, among others.
- Simultaneous with the merger, Ligand entered into a Purchase and Sale Agreement with Primrose Bio and contributed \$15 million in exchange for economic rights in future programs
- As part of the Purchase and Sale Agreement, Ligand receives a portion of the economic rights from two contracts previously entered into by Primordial Genetics related to proprietary RNA polymerase enzymes (Prima RNApols) and an economic interest in future revenue generated from PeliCRM197[®].

Financial Guidance

Ligand is increasing adjusted EPS guidance and modifying revenue guidance. As a result of the divestiture and given the profile of the Pelican business, Ligand will have lower contract revenue than previously expected but increased adjusted earnings. In addition, Ligand is updating royalty revenue guidance based upon the latest product sales estimates. Ligand's updated guidance is now revenue of \$124 million to \$126 million (previously \$124 to \$128 million) and adjusted diluted EPS of \$5.10 to \$5.25 (previously \$4.85 to \$5.00). Guidance for royalties is now \$82 million to \$84 million (previously \$78 to \$82 million). Sales of Captisol are expected to be \$25 million (previously \$24 million) and contract revenue is now expected to be \$17 million (previously \$22 million).

About Primrose Bio, Inc.

Primrose Bio was formed in 2023 with the merger between Primordial Genetics, Inc. and Pelican Technology Holdings, Inc. Primrose Bio combines the Function Generator™ and Pelican Expression Technology[®] platforms to create a novel way of enhancing biological productivity to enable the next generation of therapeutics. These combined technologies are designed to create and express some of the largest sets of genetic diversity available in the industry, to enable customers to discover new biological molecules and cells that with levels of productivity that were previously unachievable, economically prohibitive, or otherwise inaccessible. Primrose has leveraged its technology to create Prima RNApols™ and PeliCRM197[®], two manufacturing and formulation solutions licensed to biopharma

companies to develop mRNA medicines and conjugate vaccines, respectively. Several of the world's leading pharmaceutical companies use Primrose Bio's technology, including Merck, Jazz Pharmaceuticals, Alvogen, Serum Institute of India, Arcellx, Arcturus and others. For more information, please visit www.primrosebio.com.

About Ligand Pharmaceuticals

Ligand is a biopharmaceutical company enabling scientific advancement through supporting the clinical development of high-value medicines. Ligand does this by providing financing, licensing our technologies or both. Our business model generates value for stockholders by creating a diversified portfolio of biotech and pharmaceutical product revenue streams that are supported by an efficient and low corporate cost structure. Our goal is to offer investors an opportunity to participate in the promise of the biotech industry in a profitable and diversified manner. Our business model is based on funding programs in mid- to late-stage drug development in return for economic rights and licensing our technology to help partners discover and develop medicines. We partner with other pharmaceutical companies to leverage what they do best (late-stage development, regulatory management and commercialization) in order to generate our revenue. Our Captisol® platform technology is a chemically modified cyclodextrin with a structure designed to optimize the solubility and stability of drugs. We have established multiple alliances, licenses and other business relationships with the world's leading pharmaceutical companies including Amgen, Merck, Pfizer, Jazz, Takeda, Gilead Sciences and Baxter International. For more information, please visit www.ligand.com.

Follow Ligand on X (f/k/a Twitter) @Ligand_LGND.

We use X and our investor relations website as a means of disclosing material non-public information and for complying with our disclosure obligations under Regulation FD. Investors should monitor our X account and our website, in addition to following our press releases, SEC filings, public conference calls and webcasts.

Adjusted Financial Measures

Ligand reports adjusted net income per diluted share in addition to, and not as a substitute for, or superior to, financial measures calculated in accordance with GAAP. The Company's financial measures under GAAP include share-based compensation expense, amortization of debt-related costs, amortization related to acquisitions and intangible assets, changes in contingent liabilities, mark-to-market adjustments for amounts relating to its equity investments in public companies, excess tax benefit from share-based compensation, income tax affect of adjusted reconciling items and others that are listed in the itemized reconciliations between GAAP and adjusted financial measures included in the Company's earnings press release for the second quarter of 2023 available on the Company's website. However, the Company does not provide reconciliations of such forward-looking adjusted measures to GAAP due to the inherent difficulty in forecasting and quantifying certain amounts that are necessary for such reconciliation, including adjustments that could be made for changes in contingent liabilities, changes in the market value of its investments in public companies, share-based compensation expense and the effects of any discrete income tax items. Management has excluded the effects of these items in its adjusted measures to assist investors in analyzing and assessing the Company's past and future core operating performance. Additionally, adjusted earnings per diluted share is a key component

of the financial metrics utilized by the Company's board of directors to measure, in part, management's performance and determine significant elements of management's compensation.

Forward-Looking Statements

This news release contains forward-looking statements by Ligand that involve risks and uncertainties and reflect Ligand's judgment as of the date of this release. Words such as "plans," "believes," "expects," "anticipates," and "will," and similar expressions, are intended to identify forward-looking statements. These forward-looking statements include: Ligand's expectations that the spin-off of Pelican will accelerate profitability and growth, the potential for new revenue from the economic rights purchased from Primordial Genetics and guidance regarding the full-year 2023 financial results. Actual events or results may differ from Ligand's or its partner's expectations due to risks and uncertainties inherent in Ligand's and its partner's business, including, without limitation: Ligand may not receive expected revenue from royalties, Captisol material sales and license fees and milestone revenue; Ligand and its partners may not be able to timely or successfully advance any product(s) in its internal or partnered pipeline; Ligand may not achieve its guidance for 2023; Ligand will be dependent on Primrose Bio to leverage the Pelican Expression Technology and Function Generator platforms and to generate revenue from its commercial contracts; Ligand may not be able to create future revenues and cash flows through its partnerships or otherwise; the spin-off of Pelican Holdings, Inc. may not achieve the intended strategic, operational and financial benefits; and other risks described in Ligand's prior press releases and filings with the Securities and Exchange Commission available at www.sec.gov. Ligand disclaims any intent or obligation to update these forward-looking statements beyond the date of this release. This caution is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.

View source version on businesswire.com: https://www.businesswire.com/news/home/20230918188983/en/

Ligand Pharmaceuticals Incorporated Simon Latimer investors@ligand.com (858) 550-7766

X Handle: @Ligand_LGND

LifeSci Advisors
Bob Yedid
bob@lifesciadvisors.com
(516) 428-8577

Source: Ligand Pharmaceuticals Incorporated