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Ligand Raises 2020 Financial Guidance Due to Higher Captisol Material Sales

SAN DIEGO--(BUSINESS WIRE)-- Ligand Pharmaceuticals Incorporated (NASDAQ: LGND) announces an update to its financial outlook and raises its 2020 financial guidance. Ligand now expects 2020 total revenues to be approximately \$133 million and diluted EPS to be \$3.62, up from previous guidance for total revenues of approximately \$128 million and diluted EPS of \$3.45. This increase is due to higher material sales of Ligand's Captisol technology as a result of multiple recent orders for Captisol to be used with the investigational compound remdesivir. Material sales for 2020 are now expected to be approximately \$40 million, up from previous guidance of approximately \$35 million.

This updated financial guidance continues to include the contribution from the core assets and business of Icagen, Inc. (Icagen). This acquisition was announced on February 11, 2020, is subject to certain closing conditions, including a vote of Icagen stockholders, and is expected to close in April 2020.

"Ligand's Captisol technology has enabled several ground-breaking medicines, and we are now seeing partners increase their orders in support of clinical studies of the antiviral drug remdesivir, which is being actively assessed for the treatment of the new strain of the coronavirus, COVID-19," said John Higgins, Chief Executive Officer of Ligand. "We have invested significantly in the Captisol technology and supply chain over the years to enable the development and manufacture of important medicines that address significant medical needs. We stand ready to fulfill additional future orders of Captisol for use in formulating remdesivir, as needed."

About Captisol®

Captisol is a patent-protected, chemically modified cyclodextrin with a structure designed to optimize the solubility and stability of drugs. Captisol was invented and initially developed by scientists in the laboratories of Dr. Valentino Stella, University Distinguished Professor at the University of Kansas' Higuchi Biosciences Center for specific use in drug development and formulation. This unique technology has enabled several FDA-approved products, including Amgen's KYPROLIS®, Baxter International's NEXTERONE®, Acrotech Biopharma L.L.C.'s and CASI Pharmaceuticals' EVOMELA® and Melinta Therapeutics' BAXDELA™ and Sage Therapeutics' ZULRESSO™. There are many Captisol-enabled products currently in various stages of development.

About Ligand Pharmaceuticals

Ligand is a biopharmaceutical company focused on developing or acquiring technologies that help pharmaceutical companies discover and develop medicines. Our business model creates value for stockholders by providing 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, diversified and lower-risk business than a typical biotech company. Our business model is based on doing what we do best: drug discovery, early-stage drug development, product reformulation and partnering. We partner with other pharmaceutical companies to leverage what they do best (late-stage development, regulatory management and commercialization) to ultimately generate our revenue. Ligand's OmniAb technology platform is a patent-protected transgenic animal platform used in the discovery of fully human mono- and bispecific therapeutic antibodies. The Captisol® platform technology is a patent-protected, chemically modified cyclodextrin with a structure designed to optimize the solubility and stability of drugs. The Vernalis Design Platform (VDP) integrates protein structure determination and engineering, fragment screening and molecular modeling, with medicinal chemistry, to help enable success in novel drug discovery programs against highly-challenging targets. Ab Initio™ technology and services for the design and preparation of customized antigens enable the successful discovery of therapeutic antibodies against difficult-to-access cellular targets. Ligand has established multiple alliances, licenses and other business relationships with the world's leading pharmaceutical companies including Amgen, Merck, Pfizer, Sanofi, Janssen, Takeda, Gilead Sciences, Baxter International and Eli Lilly. For more information, please visit www.ligand.com.

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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. These include statements regarding Ligand's expectations on revenue, including expected material sales of Ligand's Captisol technology for use with remdesivir, the expected closing of the Icagen acquisition and guidance regarding the full-year 2020 financial results. Actual events or results may differ from our expectations due to the risks and uncertainties inherent in Ligand's business, including, without limitation: Ligand's partners may not order as much Captisol as Ligand expects; remdesivir is not yet licensed or approved anywhere globally and has not been demonstrated to be safe or effective for any use, including treatment of COVID-19; Ligand may not complete the acquisition of Icagen, or the acquisition may be delayed, as a result of not satisfying certain closing conditions, including the approval of Icagen stockholders; Ligand may not receive expected revenue from royalties, Captisol material sales, including from increased orders related to remdesivir, 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; and Ligand may not achieve its guidance for 2020. The failure to meet expectations with respect to any of the foregoing matters may reduce Ligand's stock price. Additional information concerning these and other important risk factors affecting Ligand can be found in Ligand's prior press releases available at www.ligand.com as well as in Ligand's public periodic 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 press release, except as required by law. This caution is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.

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