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Ligand Announces Positive Preclinical Data on Selective Androgen Receptor Modulator LGD-3303

SAN DIEGO--

Ligand Pharmaceuticals Incorporated (NASDAQ:LGND) announced data from a preclinical study on its Selective Androgen Receptor Modulator (SARM) LGD-3303 at the American Society for Bone and Mineral Research Annual Meeting in Honolulu, Hawaii on September 16, 2007. Ligand tested the effect of LGD-3303 on bone density and strength in a three-month study using daily oral doses in ovariectomized, osteopenic rats, a well established model of post-menopausal osteoporosis.

LGD-3303 is a potent and highly selective androgen receptor full agonist in skeletal muscle, a classic target tissue for androgen action. By comparison, in the prostate and sebaceous glands, the compound is a weak partial agonist. The sparing of these non-target tissues by effective, pharmacologic doses of LGD-3303 provides a novel and potentially safer treatment for osteoporosis.

Martin D. Meglasson, Ph.D., Ligand's Vice President of Discovery Research, described the following key findings in this study:

- Repeated oral doses of LGD-3303 were more effective than alendronate (Fosamax(R), the current standard drug treatment) for increasing bone mineral density in the femur

- The mechanism for the increased bone mineral density was shown to be the deposition of new bone

- In the lumbar spine, LGD-3303 was as effective as aldendronate in increasing bone mineral density

- The combination of LGD-3303 and alendronate was more effective than either treatment alone at increasing lumbar bone mineral density

- LGD-3303 increased the bone strength of both the femur and spine

Ligand's findings suggest the potential for LGD-3303 to be useful either as a single agent or in combination with conventional bisphosphonate therapy. The data suggest that LGD-3303 may provide a safe and effective new drug for the treatment of osteoporosis, including in patients that have had an inadequate response to bisphosphonate treatment.

SARM Program

Ligand has conducted extensive drug research with SARMs. In its research collaboration with TAP Pharmaceutical Products, Ligand discovered the SARM LGD-2941, which TAP is developing in a Phase I clinical trial. Ligand has rights to several SARM molecules. In addition to LGD-3303, Ligand is formulating and optimizing a library of SARM compounds to potentially advance to clinical development.

About Ligand Pharmaceuticals

Ligand discovers and develops new drugs that address critical unmet medical needs of patients in the areas of thrombocytopenia, hepatitis C, cancer, hormone-related diseases, osteoporosis and inflammatory diseases. Ligand's proprietary drug discovery and development programs are based on its leadership position in gene transcription technology, primarily related to intracellular receptors.

Caution Regarding Forward-Looking Statements

This news release contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended that involve risks and uncertainties and reflect Ligand's judgment as of the date of this release. These include statements regarding data analysis and evaluation of LGD-3303 and other SARMs, utility or potential benefits to patients, plans for continued development and further studies of LGD-3303 or other SARMs, e.g., for the treatment of osteoporosis. Actual events or results may differ from our expectations. For example, there can be no assurance that other trials or evaluations of LGD-3303 or other SARMs will be favorable or that they will confirm results of previous studies, that data evaluation will be completed or demonstrate any hypothesis or endpoint, that LGD-3303 or other SARMs will provide utility or benefits to certain patients, that any presentations will be favorably received, that LGD-3303 or other SARMs will be useful as a single agent or in combination with other drugs, that marketing applications will be filed or, if filed, approved, or that clinical or commercial development of these drugs will be initiated, completed or successful or that our rights to LGD-3303 and other SARMs will not be successfully challenged. Our stock price may suffer as a result of the failure of any trials to be completed or meet their endpoints or if any actual events differ from our expectations. Additional information concerning these and other risk factors affecting Ligand can be found in prior press releases as well as in public periodic filings with the Securities and Exchange Commission, available via www.ligand.com. Ligand disclaims any intent or obligation to update these forward-looking statements beyond the date of this release.

Source: Ligand Pharmaceuticals Incorporated