

## Ligand Completes Neurogen Acquisition

SAN DIEGO-- Ligand Pharmaceuticals Incorporated (NASDAQ: LGND) announced today that it has completed the acquisition of Neurogen Corporation (NASDAQ: NRGN), following approval of the transaction by Neurogen stockholders earlier today. As a result, Ligand gains a fully funded partnership with Merck & Co., additional pipeline assets, drug discovery resources and additional cash balances.

"This acquisition, our second in the last 12 months, demonstrates our ability to consolidate companies in a way that provides significant potential upside value for shareholders of both firms," said John L. Higgins, President and Chief Executive Officer of Ligand. "Ligand is executing a unique strategy that utilizes acquisitions and internal research capabilities to build an extensive portfolio of royalty-bearing assets and early stage pipeline programs, backed by a strong balance sheet and spending discipline. The acquisition of Neurogen meets all of these criteria by adding to our long roster of partnerships, expanding our drug candidate pipeline and strengthening our cash reserves."

In connection with the acquisition, Ligand issued 4.2 million shares of Ligand common stock and approximately \$600,000 in cash to Neurogen stockholders. In addition, Neurogen stockholders will receive four Contingent Value Rights, as previously disclosed.

### Primary Acquired Assets

- Fully Funded Partnership with Merck for Vanilloid Receptor Subtype 1 (VR1) Antagonists: Merck will fund 100% of program costs and make milestone and royalty payments upon the achievement of certain development events and commercialization of any applicable VR1 compounds.
- H3 Antagonist Program: Neurogen has developed a significant intellectual property estate and identified multiple clinical candidates for blockade of the histamine H3 receptor. The H3 receptor is a target for the potential treatment of sleep disorders, attention deficit hyperactivity disorder (ADHD), and cognitive deficits (e.g., schizophrenia and Alzheimer's disease).
- Oral Erythropoietin (EPO) Research Program: Neurogen has conducted its own drug discovery efforts in the area and provides novel chemical scaffolds and additional know-how that could further enhance Ligand's oral EPO program.
- Cash and net operating loss carryforwards (NOLs): Ligand will gain approximately \$7.4 million net in cash from this transaction, after taking into account the \$600,000 paid to Neurogen shareholders at closing. Neurogen also has more than \$180 million of NOLs. While there will be significant limitation to the utilization of the NOLs over time given the tax laws governing use of acquired NOLs, the NOLs may be usable to some extent by Ligand, should the combined company become profitable.

### Financial Outlook

Reflecting the acquisition of Neurogen, Ligand projects having more than \$50 million in cash at the close of 2009.

### About Ligand Pharmaceuticals

Ligand discovers and develops new drugs that address critical unmet medical needs of patients with muscle wasting, frailty, hormone-related diseases, osteoporosis, inflammatory diseases, anemia, asthma, rheumatoid arthritis and psoriasis. Ligand's proprietary drug discovery and development programs are based on advanced cell-based assays, gene-expression tools, ultra-high throughput screening and one of the world's largest combinatorial chemical libraries. Ligand has strategic alliances with major pharmaceutical and biotechnology companies, including Bristol-Myers Squibb, Celgene, Cephalon, GlaxoSmithKline, Merck and Pfizer. With more than 20 molecules in various stages of development, Ligand utilizes proprietary technologies for identifying drugs with novel receptor and enzyme drug targets.

### Forward-Looking Statements

This release contains forward-looking statements that involve risks and uncertainties. Ligand and Neurogen caution readers that any forward-looking information is not a guarantee of future performance and actual results could differ materially from those contained in the forward-looking information. Words such as "expect," "estimate," "project," "potential," and similar expressions are intended to identify such forward-looking statements. Such forward-looking statements include, but are not limited to, the expected timing of closing the merger and other statements that are not historical facts. Among the important factors that could cause actual results to differ materially from those in any forward-looking statements are the risks that Merck may not advance the VR1 program successfully; the risk that Neurogen's real estate or the Aplindore program may not be sold and that the conditions of the H3 and Merck CVR's may not be met in order to produce proceeds for the CVR holders; the anticipated synergies and benefits from the transaction may not be fully realized or may take longer to realize than expected; Neurogen product candidates may have unexpected adverse side effects or inadequate therapeutic efficacy; and positive results in clinical trials may not be sufficient to obtain FDA approval. There can be no assurance that any product in Ligand's, Neurogen's or the projected combined company's product pipeline will be successfully developed or manufactured, that final results of clinical studies will be supportive of regulatory approvals required to market licensed products, or that any of the forward-looking information provided herein will be proven accurate. Additional important factors that may affect future results are detailed in Ligand's and Neurogen's filings with the Securities and Exchange Commission (the "SEC"), including each company's recent filings on Forms 10-K and 10-Q, or in information disclosed in public conference calls, the date and time of which are released beforehand. Each of Ligand and Neurogen disclaims any intent or obligation to update these forward-looking statements beyond the date of this release.

Source: Ligand Pharmaceuticals Incorporated