

## Ligand Pharmaceuticals (LGND)

**\$89.51** (As of 02/03/20)

Price Target (6-12 Months): **\$76.00**

Long Term: 6-12 Months

**Zacks Recommendation:** Underperform

(Since: 01/31/20)

Prior Recommendation: Neutral

Short Term: 1-3 Months

**Zacks Rank:** (1-5)

**5-Strong Sell**

Zacks Style Scores:

VGM:F

Value: C

Growth: F

Momentum: F

### Summary

Ligand's Captisol Formulation technology resulted in partnerships with several leading drug companies like Amgen, providing it with funds in the form of milestone and royalty payments. Ligand is acquiring other technology platforms like OmniAb platform to reduce dependence on Captisol formulation. OmniAb is likely to drive future revenues. However, shares of Ligand have underperformed the industry so far this year. Ligand derives a substantial portion of its revenues from royalties associated with the sales of Kyprolis. Any setback to Kyprolis will have an unfavorable impact on the top line. Moreover, increase in inactive licensing deals related to Ligand's technology platform raises concerns.

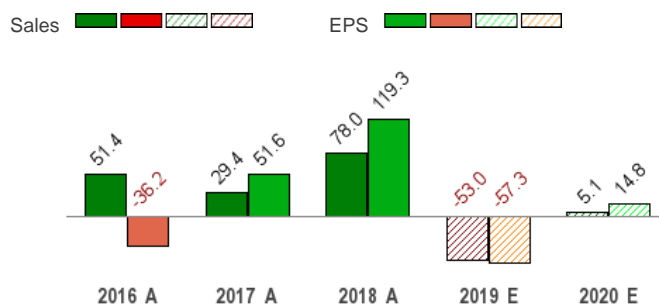
### Price, Consensus & Surprise



### Data Overview

52 Week High-Low	<b>\$130.50 - \$84.45</b>
20 Day Average Volume (sh)	<b>316,577</b>
Market Cap	<b>\$1.6 B</b>
YTD Price Change	<b>-14.2%</b>
Beta	<b>1.32</b>
Dividend / Div Yld	<b>\$0.00 / 0.0%</b>
Industry	<b>Medical - Biomedical and Genetics</b>
Zacks Industry Rank	<b>Top 29% (74 out of 254)</b>

### Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	<b>-24.6%</b>
Last Sales Surprise	<b>7.1%</b>
EPS F1 Est- 4 week change	<b>-19.4%</b>
Expected Report Date	<b>02/06/2020</b>
Earnings ESP	<b>0.0%</b>
P/E TTM	<b>22.2</b>
P/E F1	<b>25.6</b>
PEG F1	<b>1.3</b>
P/S TTM	<b>10.3</b>

### Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2020	27 E	28 E	31 E	32 E	124 E
2019	43 A	25 A	25 A	25 E	118 E
2018	56 A	90 A	46 A	60 A	251 A

### EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2020	\$0.72 E	\$0.79 E	\$0.99 E	\$1.01 E	\$3.50 E
2019	\$1.16 A	\$0.68 A	\$0.49 A	\$0.68 E	\$3.05 E
2018	\$1.55 A	\$2.59 A	\$1.32 A	\$1.70 A	\$7.15 A

\*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 02/03/2020. The reports text is as of 02/04/2020.

## Overview

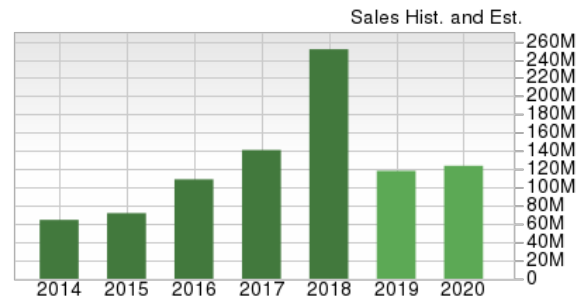
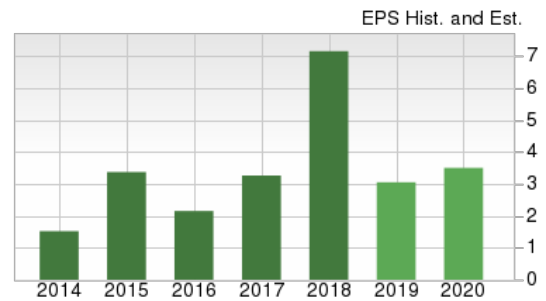
San Diego, CA-based Ligand is a biotechnology company whose business model is based on developing or acquiring royalty revenue generating assets and coupling them with a lean corporate cost structure. The company is focused on the development and licensing of biopharmaceutical assets.

Ligand's Captisol formulation technology has allowed it to enter into several licensing deals and generate royalties. Captisol is a well validated chemically modified cyclodextrin that is designed to improve safety and solubility, stability, and bioavailability or lessen the volatility, irritation, smell or taste of drugs.

In January 2016, Ligand acquired OMT, Inc., (Open Monoclonal Technology) for about \$178 million. The acquisition added an antibody-generating platform, OmniAb, to the company's technology portfolio. OmniAb is a patent-protected transgenic animal platform used in the discovery of fully human mono- and bispecific therapeutic antibodies.

Other technology platforms at Ligand include the LTP technology and Selexis technology. All these technologies including Captisol and OmniAb have created a strong platform for Ligand to seek new licenses and partnerships. Ligand has partnership agreements with leading healthcare companies like Novartis, Amgen, Merck, Pfizer, Celgene, Gilead and Lilly among others. The company is continues to buy smaller companies to increase its technology platforms.

In 2018, Ligand recognized \$251.5 million in total revenues, up 78.2% year over year. Royalties contributed about 51.1% to the total revenues in 2018.



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## Reasons To Sell:

- ▼ **Dependence on Partners:** Ligand is highly dependent on its Captisol-based partners including Novartis, Amgen, Pfizer and Lilly among others. If any of the company's partners fails to receive regulatory approval or terminates a deal, Ligand's future prospects would be severely hampered. For instance, a paragraph IV certification was filed by Cipla in September 2016 with respect to Amgen's Kyprolis. Cipla is looking to get its generic version of Kyprolis approved in the United States. In addition, most of the agreements covered by Ligand's Captisol out-licensing business state that with the expiration of the relevant patent, the amount of royalties will be either reduced or eliminated. For instance, Pfizer has discontinued selling Avinza (pain) due to the entry of generics. As a result, Ligand expects to receive a minimal amount of royalty from Avinza, if any. In July 2019, Ligand mentioned that all contracts previously signed with other companies related to the use of its technology platforms may not be active and that some have not been renewed. Non-renewal of contracts will result in lower future payments for the company.
- ▼ **Reliance on Captisol Supplier:** Ligand obtains Captisol from a single supplier, Hovione – a major global supplier of active pharmaceutical ingredients and drug product intermediates, located in Portugal. Any interruption in the supply of Captisol would have an adverse effect on the company's results.
- ▼ **Revenues Concentrated Around Kyprolis:** Ligand derives a substantial portion of its revenues from royalties associated with the sales of Kyprolis. With the sales its rights to a major revenue generating drug, Promacta in March 2019, the company's dependence on Kyprolis' royalties increases. Any setback related to Kyprolis could have a substantial impact on the company's results. Although revenues from Captisol-technology hit a record high in 2018, sales from this business generally fluctuates. A bad business year will severely impact Ligand's top line. Moreover, Ligand anticipates a decrease in sales of linaclotide API to Astellas pharma in 2020, which also increases the company's reliance on Kyprolis.

Ligand's dependence on the Captisol program and the Captisol-based partnerships are concerning.

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## Risks

- **Captisol Technology Supporting Revenues:** The Captisol drug formulation platform technology was added to Ligand's technology portfolio following its 2011 merger with CyDex. Captisol has a shelf life of five years once manufactured. Ligand derives revenues from the sale of Captisol material to its partners, who have either licensed its Captisol-enabled drugs or have licensed Captisol for their internal programs. Captisol is well protected by patents issued in the United States through 2029 and in the EU through 2025 with additional intellectual property either granted or pending an approval.

The Captisol technology has enabled development of several FDA-approved products, which generate royalties for Ligand. The key drugs include Amgen's Kyprolis, Spectrum's Evomela and Merck's Noxafil IV. Several of its partners use Captisol technology to develop drugs. These partners have made significant progress with their pipeline candidates. During the third quarter of 2019, Ligand inked new license and supply agreements with SQ Innovation, Millennium/Takeda, BendaRx Corporation, Hikma, the University of Edinburgh and Quadria Bio. Successful development of pipeline candidates under new and previous agreements is likely to bring in increased royalties for the company, once commercialized.

- **OmniAb Platform Encouraging:** OmniAb platform, which Ligand added to its portfolio with the acquisition of OMT, has provided the company a new growth avenue beyond Captisol technology. The OMT technology is well protected with patents that run through 2033. The company's partnerships related to OmniAb technology has increased threefold since its acquisition. The company has several different platforms within the OmniAb platform — OmniRat OmniMouse and OmniChicken — which can be used for drug discovery and development. Ligand has collaborated with Johnson & Johnson for further development of the OmniChicken platform. The company believes that the platform can generate \$500 million to \$1 billion in annual royalties beginning 2030. These royalties may offset the likely decline in revenues from Captisol technology, which will lose patent exclusivity in that period.
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## Last Earnings Report

### Ligand Misses on Q3 Earnings & Sales

Ligand reported third-quarter 2019 adjusted earnings of 49 cents per share, which missed the Zacks Consensus Estimate of 65 cents. The company had reported adjusted earnings of \$1.32 in the year-ago quarter. Third-quarter adjusted earnings exclude the impact of non-cash charge of \$10.5 million related to Ligand's investment in Viking Therapeutics, stock-based compensation and non-cash charges.

Total revenues in the quarter decreased to \$24.8 million from \$45.7 million in the year-ago period. However, the top line surpassed the Zacks Consensus Estimate of \$23.16 million.

Quarter Ending **09/2019**

Report Date	Nov 05, 2019
Sales Surprise	7.12%
EPS Surprise	-24.62%
Quarterly EPS	0.49
Annual EPS (TTM)	4.03

### Quarterly Highlights

Royalty revenues were \$9.8 million in the reported quarter compared with \$36.1 million in the year-ago quarter. Ligand primarily earns royalties on sales of Kyprolis and Evomela, which were developed using its Captisol technology. The significant decline in royalty revenues was due to loss of royalties from sales of Novartis' Promacta.

Please note that excluding Promacta royalties recorded in the year-ago quarter, royalty revenues increased almost 39% year over year in the third quarter. The growth was driven by higher royalty rate on Kyprolis sales as the drug's sales reached higher royalty rate tier and higher sales of Evomela following its launch in China.

CASI Pharmaceuticals launched Evomela in China in August 2019.

License fees, milestones and other revenues were \$8.2 million in the third quarter compared with \$2.5 million in the year-ago period. Material sales were \$6.8 million, down 2.9% year over year.

General and administrative expense was \$9.5 million in the third quarter, down 1.1% from the year-ago quarter. Research and development expense more than 150% year over year to \$13.7 million.

### Business Developments

Ligand inked new OmniAb license agreements with six companies including Takeda Pharmaceutical. It also entered into agreements related to its Captisol technology with several companies during the quarter.

In September, Amgen announced successful completion of a phase III study evaluating Kyprolis in combination with dexamethasone and J&J's cancer drug, Darzalex. The company also signed an agreement to commercialize Kyprolis in China. In July, Sage Therapeutics announced the launch of its postpartum depression drug, Zulresso.

Meanwhile, Ligand is actively repurchasing its shares since November 2018. The company has \$500 million share repurchase program, and it has utilized about \$91 million so far.

### 2019 Guidance

Ligand continues to expect sales for 2019 to be \$118 million. However, it lowered adjusted earnings estimate from \$3.20 per share to \$3.00 for 2019, which reflects certain changes in tax expense, especially related to sale of Promacta royalty right.

## Recent News

### Enters License Agreement with Pandion – Jan 13

Ligand announced that it has entered into a worldwide OmniAb license agreement with privately-held Pandion Therapeutics. The agreement will grant Pandion access to Ligand's full OmniAb antibody discovery platform. Per the agreement, Ligand will receive up-front platform access fee, development and regulatory milestone payments and potential royalties on sales of marketed products from Pandion.

### Enters License Agreement with Sanofi – Dec 2

Ligand announced that it has entered into a worldwide OmniAb license agreement with France-based pharma giant, Sanofi. The agreement will grant Sanofi access to Ligand's full OmniAb antibody discovery platform. Per the agreement, Ligand will receive up-front platform access fee, development and regulatory milestone payments and potential royalties on sales of marketed products from Sanofi.

## Valuation

Ligand's shares are down 14.2% in the year-to-date period and 23.4% over the trailing 12-month period. Stocks in the Zacks sub-industry and the sector are down 3.9% and 0.5%, respectively, in the year-to-date period. Over the past year, stocks in the sub-industry are down 7.3% while stocks in the Zacks sector are up 1.1%.

The S&P 500 Index is up 0.9% in the year-to-date period and 17.7% in the past year.

The stock is currently trading at 25.24X forward 12-month earnings per share which compares to 128.49X for the Zacks sub-industry, 20.82X for the Zacks sector and 18.61X for the S&P 500 Index.

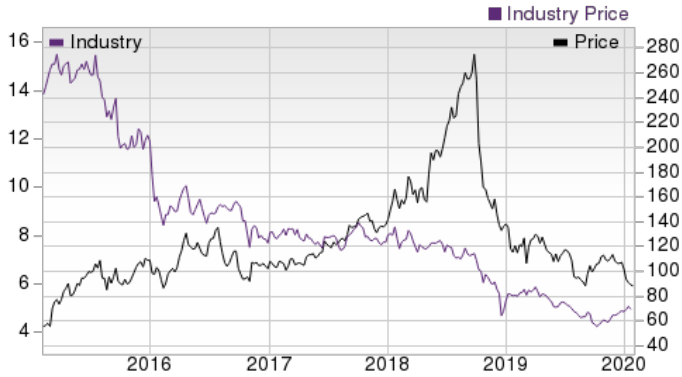
Over the past five years, the stock has traded as high as 57.21X and as low as 4.53X, with a 5-year median of 39.39X. Our Underperform recommendation indicates that the stock will perform worse than the market. Our \$76 price target reflects 21.43X forward 12-month earnings per share.

The table below shows summary valuation data for LGND.

Valuation Multiples - LGND					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	25.24	128.49	20.82	18.61
	5-Year High	57.21	132.83	21.25	19.34
	5-Year Low	4.53	20.37	15.84	15.18
	5-Year Median	39.39	38.49	18.9	17.46
P/S TTM	Current	10.99	2.7	3.1	3.53
	5-Year High	33.36	5.03	4.15	3.63
	5-Year Low	8.88	2.15	2.75	2.53
	5-Year Median	24.62	2.65	3.27	3.14
P/B TTM	Current	1.85	3.71	4.49	4.44
	5-Year High	72.26	5.79	5.02	4.54
	5-Year Low	1.66	2.46	3.48	2.9
	5-Year Median	6.69	3.27	4.29	3.62

As of 02/03/2020

## Industry Analysis Zacks Industry Rank: Top 29% (74 out of 254)



## Top Peers

Bristol-Myers Squibb Company (BMY)	Outperform
Aclaris Therapeutics, Inc. (ACRS)	Neutral
Alkermes plc (ALKS)	Neutral
Amgen Inc. (AMGN)	Neutral
Ascendis Pharma A/S (ASND)	Neutral
Johnson & Johnson (JNJ)	Neutral
Nektar Therapeutics (NKTR)	Neutral
OPKO Health, Inc. (OPK)	Neutral

Industry Comparison Industry: Medical - Biomedical And Genetics				Industry Peers		
	LGND Underperform	X Industry	S&P 500	ALKS Neutral	ASND Neutral	NKTR Neutral
<b>VGM Score</b>	<b>F</b>	-	-	<b>C</b>	<b>F</b>	<b>C</b>
Market Cap	1.57 B	194.54 M	23.55 B	2.73 B	5.90 B	3.79 B
# of Analysts	1	3	13	8	6	7
Dividend Yield	0.00%	0.00%	1.81%	0.00%	0.00%	0.00%
<b>Value Score</b>	<b>C</b>	-	-	<b>C</b>	<b>F</b>	<b>B</b>
Cash/Price	0.75	0.23	0.04	0.21	0.13	0.43
EV/EBITDA	3.87	-3.38	13.97	-307.18	-34.03	3.65
PEG Ratio	1.28	1.70	1.97	1.54	NA	NA
Price/Book (P/B)	2.00	3.77	3.21	2.56	8.03	2.54
Price/Cash Flow (P/CF)	9.55	12.99	13.36	28.01	NA	5.39
P/E (F1)	25.57	29.25	18.42	32.03	NA	NA
Price/Sales (P/S)	10.28	13.68	2.60	2.54	243.33	31.43
Earnings Yield	3.91%	-16.04%	5.43%	3.12%	-3.56%	-11.37%
Debt/Equity	0.75	0.02	0.72	0.26	0.05	0.26
Cash Flow (\$/share)	9.37	-1.08	6.92	0.62	-3.63	4.00
<b>Growth Score</b>	<b>F</b>	-	-	<b>B</b>	<b>F</b>	<b>D</b>
Hist. EPS Growth (3-5 yrs)	31.83%	16.51%	10.68%	NA	NA	NA
Proj. EPS Growth (F1/F0)	14.75%	7.31%	7.59%	2.34%	-9.16%	4.24%
Curr. Cash Flow Growth	150.36%	19.71%	10.81%	126.78%	5.18%	-1,067.24%
Hist. Cash Flow Growth (3-5 yrs)	66.50%	7.72%	8.78%	-9.18%	NA	46.22%
Current Ratio	33.15	5.12	1.22	2.69	15.74	12.60
Debt/Capital	42.99%	3.95%	42.99%	20.46%	4.55%	20.90%
Net Margin	388.69%	-197.98%	11.69%	-18.71%	-789.80%	-352.83%
Return on Equity	7.47%	-64.16%	17.33%	-6.08%	-29.04%	-26.60%
Sales/Assets	0.09	0.20	0.55	0.61	0.03	0.06
Proj. Sales Growth (F1/F0)	4.71%	17.19%	4.12%	-8.38%	-50.47%	37.39%
<b>Momentum Score</b>	<b>F</b>	-	-	<b>D</b>	<b>B</b>	<b>C</b>
Daily Price Chg	1.94%	0.37%	-1.98%	-0.46%	3.66%	8.30%
1 Week Price Chg	-0.82%	-3.24%	-1.09%	-1.19%	-0.52%	-5.87%
4 Week Price Chg	-11.67%	-0.12%	-2.11%	-10.90%	4.29%	2.57%
12 Week Price Chg	-17.81%	11.77%	2.15%	-12.78%	23.64%	2.67%
52 Week Price Chg	-26.14%	-10.96%	14.15%	-47.77%	104.42%	-49.32%
20 Day Average Volume	316,577	211,909	1,808,632	1,388,975	167,112	3,185,016
(F1) EPS Est 1 week change	-19.39%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	-19.39%	0.00%	0.00%	-19.05%	1.53%	2.39%
(F1) EPS Est 12 week change	-19.39%	0.00%	-0.09%	-19.05%	-1.37%	-3.16%
(Q1) EPS Est Mthly Chg	NA%	0.00%	0.00%	0.00%	0.00%	16.78%

## Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

Value Score	C
Growth Score	F
Momentum Score	F
VGM Score	F

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

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