

Ligand Pharmaceuticals (LGND)

\$109.79 (As of 07/07/20)

Price Target (6-12 Months): **\$116.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 07/06/20)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:B

Value: A

Growth: D

Momentum: B

Summary

Ligand's Captisol Formulation technology has resulted in partnerships with several leading drug companies, providing it with funds through milestone and royalty payments. The technology has been driving its revenues for the past few years. The company is looking to expand its technology platforms beyond Captisol through acquisitions. Its OmniAb platform, added with OMT acquisition, is encouraging with several partnered drugs in pivotal development stage. Ligand has acquired two more platforms in the past two years. However, shares of Ligand have underperformed the industry so far this year. The company is highly dependent on its partners for revenues. Moreover, revenues are concentrated around Kyprolis, which is facing increasing competition.

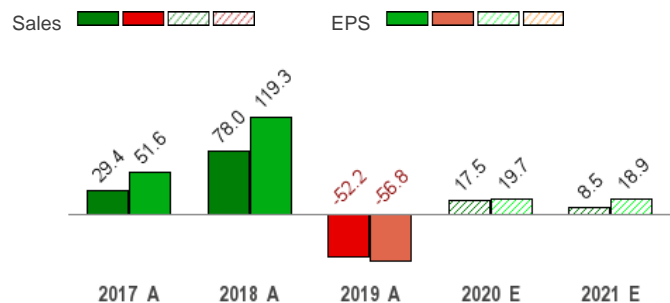
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$124.97 - \$57.24
20 Day Average Volume (sh)	332,690
Market Cap	\$1.8 B
YTD Price Change	5.3%
Beta	1.64
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Medical - Biomedical and Genetics
Zacks Industry Rank	Top 26% (66 out of 252)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	45.9%
Last Sales Surprise	27.3%
EPS F1 Est- 4 week change	0.0%
Expected Report Date	08/04/2020
Earnings ESP	0.0%
P/E TTM	39.6
P/E F1	29.7
PEG F1	2.0
P/S TTM	16.0

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021					153 E
2020	33 A	28 E	37 E	42 E	141 E
2019	43 A	25 A	25 A	27 A	120 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021					\$4.40 E
2020	\$0.89 A	\$0.65 E	\$0.99 E	\$1.17 E	\$3.70 E
2019	\$1.16 A	\$0.68 A	\$0.49 A	\$0.71 A	\$3.09 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 07/07/2020. The reports text is as of 07/08/2020.

Overview

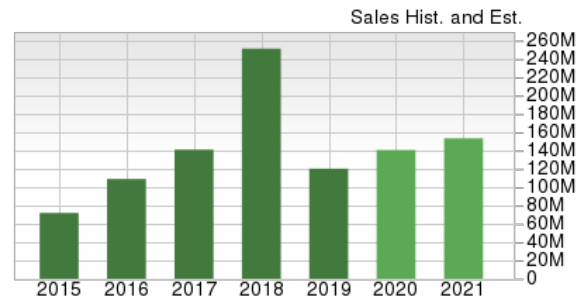
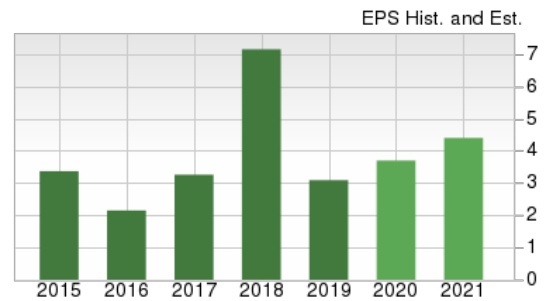
San Diego, CA-based Ligand is a biotechnology company whose business model is based on developing or acquiring royalty revenue generating assets and coupling them with a lean corporate cost structure. The company is focused on the development and licensing of biopharmaceutical assets.

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. The Captisol drug formulation platform technology was added to Ligand's technology portfolio following its 2011 merger with CyDex.

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 2019, Ligand recognized \$120.3 million in total revenues, down 52.2% year over year. Royalties contributed about 39.1% to total revenues in 2019.



Reasons To Buy:

▲ **Captisol Technology Supporting Revenues:** 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.

Ligand's partnership portfolio and the possibility of new products hitting the market over the next few years are encouraging.

The Captisol technology has enabled development of several FDA-approved products, which generate royalties for Ligand. Currently, the company has 13 approved partnered drugs developed using this technology. The key drugs include Amgen's Kyprolis and Spectrum's Evomela. Several of its partners use Captisol technology to develop drugs. These partners have made significant progress with their pipeline candidates. Successful development of pipeline candidates under new and previous agreements is likely to bring in increased royalties for the company, once commercialized.

Meanwhile, higher demand for Gilead's remdesivir, which uses Captisol technology, as a COVID-19 treatment, is likely to boost revenues in 2020.

▲ **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. In 2019, Ligand entered into nine agreements related to its OmniAb technology platform. Currently, 12 OmniAb-based partnered drugs are in pivotal stage of development. Successful development can bring significant revenues in 2020. 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.

▲ **Positive on Deals:** Ligand presently has partnerships and license agreements with over 125 pharmaceutical and biotechnology companies. We are positive on Ligand's deals with companies like Amgen, Merck and others. Ligand earned \$827 million in March 2019 from the sale of its rights to Novartis' Promacta, which was developed using its Captisol technology. Moreover, Amgen's Kyprolis achieved blockbuster status in 2019. Moreover, Ligand is expected to receive potentially \$3.5 billion from its contracts with the partners, stretched over multiple years, related to several clinical and commercial milestones.

In October 2018, Ligand acquired UK-based Vernalis, boosting its pipeline with addition of eight fully-funded partnered programs including pipeline products for respiratory, oncology and CNS indications. The Vernalis Design Platform may boost Ligand's technology platforms going forward. In July 2019, Ligand acquired privately-held Ab Initio and added antigen discovery platform to its portfolio.

▲ **Favorable Debt Profile:** Ligand has a favorable debt profile. As of Mar 31, 2020, the company's debt to total capital was 40.7%, lower than 45.8% as of Dec 31, 2019. A lower ratio indicates lower financial risk. Also, the company's total debt (current and long-term debt) was approximately \$453.6 million as of March end. The company's cash, cash equivalents, and marketable securities totaling approximately \$738.8 million, as of the end of March 2020, should be sufficient to pay the debt in case of insolvency.

Reasons To Sell:

- ▼ **Dependence on Partners:** Ligand is highly dependent on its Captisol-based partners including 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. 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. Any non-renewal of contracts will result in lower future payments for the company.

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

Meanwhile, the company expects COVID-19 to delay study initiations or result in a slowdown in patient enrolment in some of partner-sponsored clinical studies. It also anticipates that a few smaller companies may face fund shortage leading to inability to make payments to Ligand. These factors are likely to lead to lower revenues in the near term.

- ▼ **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 increased. Any setback related to Kyprolis could have a substantial impact on the company's results. With fourth-quarter results, Amgen stated that Kyprolis is facing increased competition from several recently approved products. Moreover, several companies are looking to get its generic version approved in the United States. 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.
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Last Earnings Report

Ligand Beats on Q1 Earnings & Sales

Ligand reported first-quarter 2020 adjusted earnings of 89 cents per share, which beat the Zacks Consensus Estimate of 61 cents. The company had reported adjusted earnings of \$1.16 in the year-ago quarter.

Total revenues decreased 23.7% year over year to \$33.2 million mainly due to lower royalty revenues. However, the top line surpassed the Zacks Consensus Estimate of \$26.05 million.

Quarter Ending **03/2020**

Report Date	May 06, 2020
Sales Surprise	27.30%
EPS Surprise	45.90%
Quarterly EPS	0.89
Annual EPS (TTM)	2.77

Quarterly Highlights

Ligand started presenting Service revenues as a separate line item, effective from the first quarter of 2020. It includes revenues generated from Vernalis, Icagen and OmniChicken businesses. The company previously included the item within License fees, milestones and other revenues. Beginning first-quarter 2020, the company started to report revenues under four categories — Royalties, Captisol, Service revenues and Contract revenues.

Royalty revenues were \$6.6 million in the first quarter compared with \$19.5 million in the year-ago quarter. The significant decline in royalty revenues was due to loss of royalties from sales of Promacta.

Please note that excluding Promacta royalties recorded in the year-ago quarter, royalty revenues increased year over year in the first quarter.

Captisol sales were \$21.1 million compared with \$9 million in the year-ago quarter. The significant increase was due to higher sales of Captisol to support evaluation of Gilead's remdesivir as treatment for patients with severe COVID-19. Remdesivir received FDA's Emergency Use Authorization on May 1 in the United States.

Contract revenues were \$2.1 million in the first quarter compared with \$11.1 million a year ago. Service revenues were \$3.4 million in the first quarter compared with \$3.9 million a year ago.

2020 Guidance Raised

Ligand raised its earlier guidance for sales and earnings for 2020 provided in February. The company expects total revenues and earnings for 2020 to be approximately \$140 million and \$3.65 per share, compared with the previous guidance of \$133 million and \$3.62 per share, respectively.

The company lowered its guidance for royalties and contract revenues while increasing the same for Captisol revenues. Service revenue guidance remained unchanged. Guidance for total revenues includes approximately \$32 million in royalties (previously \$38 million) and approximately \$18 million from contract revenues (previously \$30 million). Captisol sales are expected to be \$60 million (previously \$35 million) and Service revenues are expected to be about \$25 million.

Recent News

Vernalis Expands Collaboration with Servier – Jun 15

Ligand announced that Vernalis, a unit of the company, has expanded its oncology collaboration with Servier to jointly identify and enable new therapeutic targets. The new three-year research collaboration will enable drug discovery related to several undisclosed proteins identified as potential therapeutic targets. A number of compounds are in clinical studies under the earlier the collaboration.

Per the new collaboration, Vernalis is eligible to receive research and success fees, along with potential for milestone payments, and royalties on sales of any target advanced by Servier.

Ligand's Icagen Expands Collaboration with Roche – May 29

Ligand announced that Icagen, a unit of the company, has expanded its collaboration with Roche to develop and commercialize small molecule ion channel modulators using Icagen's ion channel technology. With this expansion, the companies will develop a specific novel ion channel target relevant to neurodegenerative disease in addition to the ongoing work on novel CNS target.

Milestone Payment from Palvella Therapeutics – May 28

Ligand announced that earned a \$3 million milestone payment from Palvella Therapeutics related to Palvella's Series C financing.

Completes Acquisition of Icagen's Assets – Apr 02

Ligand announced that it has completed the acquisition of core assets of privately held Icagen's North Carolina operation for \$15 million in cash. Icagen is also eligible to receive up to \$25 million in cash from Ligand related revenue-based milestones. Moreover, Ligand expects the deal to be immediately accretive to its top and bottom line.

The acquired assets include partnered programs, Icagen's proprietary ion channel screening and assay platforms, x-ray fluorescence capabilities, custom screening technologies and novel internalpreclinical-stage molecules. Ligand expects Icagen's technologies to create synergies across multiple technology platforms at Ligand, particularly with Vernalis and in novel OmniAb antibody discovery.

Valuation

Ligand's shares are up 5.3% in the year-to-date period but down 6.1% over the trailing 12-month period. Stocks in the Zacks sub-industry are up 11.1% while stocks in the Zacks sector are up 1.1% in the year-to-date period. Over the past year, stocks in the sub-industry and the sector are up 17.3% and 4.3%, respectively.

The S&P 500 Index is down 1.1% in the year-to-date period but up 7.2% in the past year.

The stock is currently trading at 37.87X forward 12-month earnings per share which compares to 61.77X for the Zacks sub-industry, 23.11X for the Zacks sector and 22.7X for the S&P 500 Index.

Over the past five years, the stock has traded as high as 136.59X and as low as 4.53X, with a 5-year median of 38.9X. Our Outperform recommendation indicates that the stock will perform better than the market. Our \$116.00 price target reflects 40X 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	37.87	61.77	23.11	22.7
	5-Year High	136.59	139.78	23.12	22.72
	5-Year Low	4.53	20.99	15.93	15.15
	5-Year Median	38.9	42.66	18.63	17.42
P/S TTM	Current	16.5	3.19	3.1	3.44
	5-Year High	33.41	4.23	4.04	3.63
	5-Year Low	8.88	2.17	2.7	2.49
	5-Year Median	23.87	2.68	3.19	3.17

As of 07/07/2020

Industry Analysis Zacks Industry Rank: Top 26% (66 out of 252)



Top Peers

Company (Ticker)	Rec	Rank
OPKO Health, Inc. (OPK)	Outperform	2
Aclaris Therapeutics, Inc. (ACRS)	Neutral	4
Alkermes plc (ALKS)	Neutral	3
Amgen Inc. (AMGN)	Neutral	3
Ascendis Pharma AS (ASND)	Neutral	3
Bristol Myers Squibb Company (BMY)	Neutral	2
JohnsonJohnson (JNJ)	Neutral	3
Nektar Therapeutics (NKTR)	Neutral	3

Industry Comparison Industry: Medical - Biomedical And Genetics				Industry Peers		
	LGND	X Industry	S&P 500	ALKS	ASND	NKTR
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	3	3	3
VGM Score	B	-	-	C	F	F
Market Cap	1.76 B	236.84 M	21.64 B	3.19 B	7.08 B	4.30 B
# of Analysts	1	3	14	7	7	6
Dividend Yield	0.00%	0.00%	1.92%	0.00%	0.00%	0.00%
Value Score	A	-	-	D	F	F
Cash/Price	0.43	0.22	0.07	0.16	0.08	0.32
EV/EBITDA	1.61	-3.77	12.68	-28.79	-27.71	-8.13
PEG Ratio	2.03	1.89	2.88	NA	NA	NA
Price/Book (P/B)	2.66	4.22	3.01	3.00	11.70	3.31
Price/Cash Flow (P/CF)	18.35	16.51	11.66	34.55	NA	NA
P/E (F1)	30.43	24.89	21.31	NA	NA	NA
Price/Sales (P/S)	16.03	17.75	2.30	2.67	624.91	31.37
Earnings Yield	3.37%	-12.64%	4.43%	-0.05%	-4.37%	-11.76%
Debt/Equity	0.69	0.02	0.76	0.26	0.06	0.11
Cash Flow (\$/share)	5.98	-1.08	6.94	0.58	-5.62	-2.43
Growth Score	D	-	-	B	F	F
Hist. EPS Growth (3-5 yrs)	15.40%	17.18%	10.90%	NA	NA	NA
Proj. EPS Growth (F1/F0)	19.74%	11.66%	-9.72%	-101.61%	-22.78%	-12.50%
Curr. Cash Flow Growth	-47.25%	15.03%	5.51%	-4.72%	55.11%	-161.76%
Hist. Cash Flow Growth (3-5 yrs)	30.59%	7.75%	8.55%	-0.32%	NA	NA
Current Ratio	40.65	5.25	1.30	2.69	13.19	3.79
Debt/Capital	40.67%	4.38%	44.46%	20.48%	5.31%	9.89%
Net Margin	-55.63%	-203.26%	10.62%	-11.63%	-2,231.94%	-335.50%
Return on Equity	3.68%	-61.23%	15.75%	4.99%	-36.56%	-28.84%
Sales/Assets	0.07	0.19	0.55	0.67	0.01	0.07
Proj. Sales Growth (F1/F0)	16.97%	4.06%	-2.57%	-14.42%	-32.62%	28.36%
Momentum Score	B	-	-	C	D	D
Daily Price Chg	-3.54%	0.00%	-1.54%	2.34%	-2.82%	0.67%
1 Week Price Chg	-1.06%	0.00%	3.66%	4.20%	1.94%	6.67%
4 Week Price Chg	-11.21%	-0.93%	-6.66%	16.33%	4.21%	8.94%
12 Week Price Chg	20.49%	21.51%	7.04%	29.20%	16.50%	25.66%
52 Week Price Chg	-6.15%	0.82%	-6.88%	-11.50%	29.33%	-30.71%
20 Day Average Volume	332,690	387,476	2,385,506	1,520,133	209,475	1,064,900
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	-3.32%	0.00%
(F1) EPS Est 4 week change	0.00%	0.00%	0.00%	0.00%	-3.32%	0.00%
(F1) EPS Est 12 week change	15.86%	0.74%	-8.21%	-88.00%	-8.70%	3.70%
(Q1) EPS Est Mthly Chg	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we have an excellent balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

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	A
Growth Score	D
Momentum Score	B
VGM Score	B

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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