

Ligand Pharmaceuticals (LGND)

\$107.40 (As of 08/24/20)

Price Target (6-12 Months): \$113.00

Long Term: 6-12 Months	Zacks Recommendation: (Since: 07/06/20) Prior Recommendation: Outpe	Neutral
Short Term: 1-3 Months	Zacks Rank: (1-5)	2-Buy
	Zacks Style Scores:	VGM:D
	Value: B Growth: F	Momentum: B

Summary

Ligand reported encouraging Q2 results, wherein earnings and revenues beat estimates. The company'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, the company is highly dependent on its partners for revenues. Moreover, revenues are concentrated around Kyprolis, which is facing increasing competition.

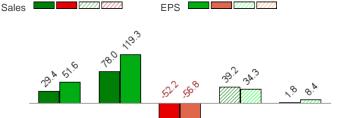
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$127.80 - \$57.24
20 Day Average Volume (sh)	239,429
Market Cap	\$1.7 B
YTD Price Change	3.0%
Beta	1.62
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Medical - Biomedical and Genetics
Zacks Industry Rank	Bottom 29% (180 out of 252)

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239,429	
\$1.7 B	
3.0%	
1.62	



2019 A

2020 E

2021 E

Last EPS Surprise	53.9%
Last Sales Surprise	46.8%
EPS F1 Est- 4 week change	13.7%
Expected Report Date	11/03/2020

Earnings ESP	0.0%
P/E TTM	34.8
P/E F1	25.9
PEG F1	1.7
P/S TTM	13.7

Sales Estimates (millions of \$)

2017 A

Sales and EPS Growth Rates (Y/Y %)

2018 A

	Q1	Q2	Q3	Q4	Annual*
2021					170 E
2020	33 A	41 A	38 E	54 E	167 E
2019	43 A	25 A	25 A	27 A	120 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*	
2021					\$4.50 E	
2020	\$0.89 A	\$1.00 A	\$0.82 E	\$1.45 E	\$4.15 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 08/24/2020. The reports text is as of 08/25/2020.

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 antibodygenerating 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,

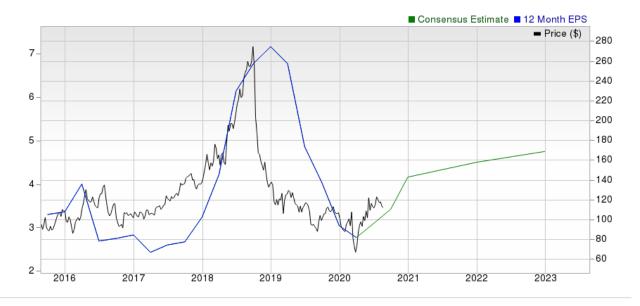
EPS Hist. and Est.

7
6
6
-5
-4
-3
-2
-1
-2015 2016 2017 2018 2019 2020 2021



Gilead and Lilly among others. The company 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 Capitsol 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 Veklury (remdesivir), which uses Captisol technology, as a COVID-19 treatment, should 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 120 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 Jun 30, 2020, the company's debt to total capital was 39.8%, lower than 40.7% as of Mar 31, 2020. A lower ratio indicates lower financial risk. Also, the company's total debt (current and long-term debt) was approximately \$459 million as of June end. The company's cash, cash equivalents, and marketable securities, totaling approximately \$810 million as of the end of June 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

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

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.

Meanwhile, COVID-19 has delayed study initiations or resulted in a slowdown in patient enrolment in some of partner-sponsored clinical studies. Ligand anticipates disruptions to its supply chain and manufacturing or shipment of drug substance and finished drug product for Captisol. 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.

Last Earnings Report

Ligand Beats on Q2 Earnings & Sales

Ligand reported second-quarter 2020 adjusted earnings of \$1.00 per share, which beat the Zacks Consensus Estimate of 65 cents. The company had reported adjusted earnings of 68 cents in the year-ago quarter.

Total revenues increased 65.8% year over year to \$41.4 million mainly due to higher Captisol revenues. Moreover, the top line surpassed the Zacks Consensus Estimate of \$28.22 million.

06/2020		
Aug 03, 2020		
46.78%		
53.85%		
1.00		
3.09		

Quarterly Highlights

Beginning first-quarter 2020, the company reports revenues under four categories — Royalties, Captisol, Service revenues and Contract revenues.

Royalty revenues were \$7.2 million in the second quarter compared with \$6.6 million in the year-ago quarter. Ligand primarily earns royalties on sales of Amgen's Kyprolis and Acrotech Biopharma's Evomela, which were developed using its Captisol technology.

Captisol sales were \$24.5 million compared with \$8.5 million in the year-ago quarter. The significant increase was due to higher sales of Captisol to support availability of Gilead's Veklury as a treatment for patients with severe COVID-19. The drug received FDA's Emergency Use Authorization on May 1. Based on Ligand's current outlook, it plans to increase annual production capacity of Capitsol more than eight-fold next year.

Contract revenues were \$5.2 million in the second quarter compared with \$5.3 million a year ago. The company recorded Service revenues of \$4.6 million, almost flat year over year.

2020 Guidance Raised

Ligand raised its guidance for sales and earnings for 2020. The company expects total revenues and earnings for 2020 to be approximately \$165 million and \$4.10 per share, respectively compared with the previous guidance of \$140 million and \$3.65 per share. The Zacks Consensus Estimate for revenues and earnings per share is pegged at \$140.7 million and \$3.70, respectively.

Recent News

Announces Kyprolis Label Expansion - Aug 24

Ligand announced that the FDA has approved a label expansion of Kyprolis in combination with J&J's Darzalex and dexamethasone (DKd) as second to fourth-line treatment option for patients with relapsed/refractory multiple myeloma.

Announces Agreement to Acquire Pfenex – Aug 10

Ligand announced that it has signed an agreement to acquire Pfenex for approximately \$438 million in an all-cash deal. Ligand will also pay \$78 million as a contingent value right in the event the achievement of a predefined regulatory milestone by Dec 31, 2021. The transaction is expected to close in the fourth quarter.

The acquisition will add a platform of proprietary, protein expression technology to Ligand's existing drug-discovery technologies. Pfenex's existing collaborations with leading pharmaceutical companies based on its technology platform will also be part of Ligand. Moreover, Pfenex's profitable, cash-flow positive business is projected to be accretive to Ligand's adjusted EPS beginning in 2021.

CStone's OmniAb-Derived Candidate Meets Phase III Endpoint - Aug 7

Ligand announced that its partner CStone's anti-PD-L1 monoclonal antibody candidate, CS1001, derived using OmniAb platform has met primary endpoint in a phase III study. The study was evaluating the drug as first-line treatment of stage IV squamous and non-squamous non-small cell lung cancer.

Valuation

Ligand's shares are up 3% in the year-to-date period and 15.7% over the trailing 12-month period. Stocks in the Zacks sub-industry are up 0.1% while stocks in the Zacks sector are down 0.2% in the year-to-date period. Over the past year, stocks in the sub-industry and the sector are up 13.3% and 8.8%, respectively.

The S&P 500 Index is up 6.5% in the year-to-date period and 19.5% in the past year.

The stock is currently trading at 24.54X forward 12-month earnings per share which compares to 51.44X for the Zacks sub-industry, 22.11X for the Zacks sector and 23.05X 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 39.04X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$133.00 price target reflects 25.82X 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	
	Current	24.54	51.44	22.11	23.05	
P/E F12M	5-Year High	136.59	67.1	23.21	23.05	
	5-Year Low	4.53	21.11	15.89	15.25	
	5-Year Median	39.04	37.65	18.97	17.58	
	Current	14.19	3.05	3.12	3.8	
P/S TTM	5-Year High	33.41	4.87	3.82	3.8	
	5-Year Low	8.88	2.24	2.29	2.44	
	5-Year Median	23.5	3.21	3.19	3.22	
	Current	2.48	3.01	3.82	4.64	
P/B TTM	5-Year High	29.04	5.87	5.07	4.64	
	5-Year Low	1.45	2.06	2.94	2.83	
	5-Year Median	6.46	3.87	4.29	3.76	

As of 08/24/2020

Industry Analysis Zacks Industry Rank: Bottom 29% (180 out of 252) ■ Industry Price Industry ■ Price _280 -260 -200 -60

Top Peers

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

Industry Comparison Industry: Medical - Biomedical And Genetics			Industry Peers			
	LGND	X Industry	S&P 500	ALKS	ASND	NKTF
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutra
Zacks Rank (Short Term)	2	-	-	3	3	4
VGM Score	D	-	-	В	E	F
Market Cap	1.73 B	270.20 M	23.81 B	2.65 B	7.31 B	3.43 E
# of Analysts	1	3	14	9	6	(
Dividend Yield	0.00%	0.00%	1.64%	0.00%	0.00%	0.00%
Value Score	В	-	-	С	F	F
Cash/Price	0.45	0.23	0.07	0.20	0.08	0.30
EV/EBITDA	1.54	-3.92	13.37	-23.24	-28.68	-6.65
PEG Ratio	1.74	1.74	3.02	63.93	NA	N.A
Price/Book (P/B)	2.48	4.02	3.17	2.50	10.97	2.71
Price/Cash Flow (P/CF)	17.95	18.69	12.77	28.70	NA	N/
P/E (F1)	26.08	25.78	21.72	170.69	NA	N/
Price/Sales (P/S)	13.66	15.30	2.48	2.28	645.11	21.09
Earnings Yield	3.86%	-12.77%	4.44%	0.60%	-4.68%	-15.19%
Debt/Equity	0.66	0.02	0.76	0.26	0.06	0.11
Cash Flow (\$/share)	5.98	-1.08	6.93	0.58	-5.62	-2.43
Growth Score	F	-	-	В	F	F
Hist. EPS Growth (3-5 yrs)	14.14%	19.03%	10.41%	NA	NA	N/
Proj. EPS Growth (F1/F0)	34.30%	15.73%	-5.05%	-86.23%	-23.14%	-15.28%
Curr. Cash Flow Growth	-47.25%	13.92%	5.20%	-4.72%	55.11%	-161.76%
Hist. Cash Flow Growth (3-5 yrs)	30.59%	7.73%	8.50%	-0.32%	NA	N/
Current Ratio	29.51	5.99	1.33	2.95	13.19	9.29
Debt/Capital	39.77%	3.39%	44.50%	20.46%	5.31%	10.13%
Net Margin	-19.51%	-199.98%	10.13%	-10.87%	-2,231.94%	-264.38%
Return on Equity	4.41%	-59.07%	14.66%	4.47%	-36.56%	-28.23%
Sales/Assets	0.09	0.19	0.51	0.65	0.01	0.09
Proj. Sales Growth (F1/F0)	38.89%	1.00%	-1.45%	-15.19%	-36.14%	26.16%
Momentum Score	В	-	-	Α	C	D
Daily Price Chg	-4.09%	-1.44%	1.32%	-2.23%	-1.63%	0.05%
1 Week Price Chg	-1.12%	0.00%	-1.45%	-8.03%	-1.25%	-2.05%
4 Week Price Chg	-13.51%	-3.60%	3.38%	-19.22%	-0.94%	-18.99%
12 Week Price Chg	5.05%	-1.36%	7.69%	0.36%	-5.35%	-11.42%
52 Week Price Chg	15.69%	7.36%	3.85%	-14.80%	20.62%	10.81%
20 Day Average Volume	239,429	314,687	1,873,293	1,145,980	164,587	820,549
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	13.69%	0.00%	1.00%	45.61%	0.00%	-2.61%
(F1) EPS Est 12 week change	13.69%	1.34%	3.40%	50.53%	-6.76%	-2.61%
(Q1) EPS Est Mthly Chg	-23.29%	0.00%	0.00%	62.70%	0.00%	-28.57%

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.

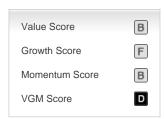
Zacks Rank

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.



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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