

Ligand Pharmaceuticals (LGND)

\$82.16 (As of 03/12/20)

Price Target (6-12 Months): \$69.00

Long Term: 6-12 Months	Zacks Recor	nmendation:	Underperform
	(Since: 01/31/2	20)	
	Prior Recomm	endation: Neutra	I
Short Term: 1-3 Months	Zacks Rank:	(1-5)	5-Strong Sell
	Zacks Style Scores:		VGM:D
	Value: C	Growth: F	Momentum: A

Summary

Ligand reported encouraging fourth-quarter results, beating estimates on both counts. 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 revenues. The drug is also facing increasing competition. The company is highly dependent on its partners for revenues. Absence of new deals or increase in inactive licensing deals related to Ligand's technology platforms will impact future revenues. Shares of Ligand have underperformed the industry in the past year. However, Ligand's Captisol Formulation technology resulted in partnerships with several leading drug companies, providing it with funds through milestone and royalty payments.

Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$130.50 - \$81.63
20 Day Average Volume (sh)	598,645
Market Cap	\$1.4 B
YTD Price Change	-21.2%
Beta	1.18
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Medical - Biomedical and Genetics
Zacks Industry Rank	Top 38% (97 out of 253)

Average Volume (sh)	598,645
Cap	\$1.4 B
ce Change	-21.2%
	1.18
d / Div Yld	\$0.00 / 0.0%

Last EPS Surprise	4.4%
Last Sales Surprise	8.3%
EPS F1 Est- 4 week change	0.0%
Expected Report Date	05/07/2020
Earnings ESP	0.0%
P/E TTM	27.0
P/E F1	23.8
PEG F1	1.6
P/S TTM	11.3

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

*Quarterly figures may not add up to annual.

	Q1	Q2	Q3	Q4	Annual*
2021					142 E
2020	26 E	27 E	36 E	38 E	127 E
2019	43 A	25 A	25 A	27 A	120 A
EPS E	stimates				
	Q1	Q2	Q3	Q4	Annual*
2021					\$4.00 E
2020	\$0.61 E	\$0.75 E	\$1.00 E	\$1.10 E	\$3.45 E
2019	\$1.16 A	\$0.68 A	\$0.49 A	\$0.71 A	\$3.09 A

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 03/12/2020. The reports text is as of 03/13/2020.

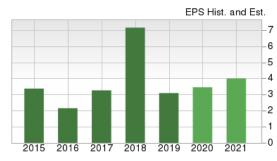
Overview

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.

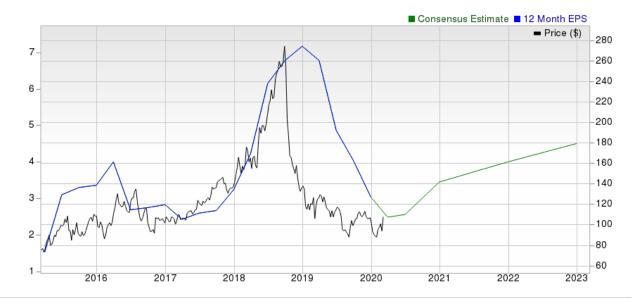
In January 2016, Ligand acquired OMT, Inc., (Open Monoclonal Technology) for about \$178 million. The acquisition added an antibodygenerating platform, OmniAb, to the company's technology portfolio. OmniAb is a patent-protected transgenic animal platform used in the discovery of fully human mono- and 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, 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 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. In addition, most of the agreements covered by Ligand's Captisol outlicensing 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

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

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.

- ▼ 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.

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. 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.

• 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.

Last Earnings Report

Ligand Beats on Q4 Earnings & Sales

Ligand reported fourth-quarter 2019 adjusted earnings of 71 cents per share, which beat the Zacks Consensus Estimate of 68 cents. The company had reported adjusted earnings of \$1.70 in the year-ago quarter. Fourth-quarter adjusted earnings exclude the impact of non-cash charge of \$8.5 million related to Ligand's investment in Viking Therapeutics, stock-based compensation and non-cash charges.

Total revenues decreased to \$27 million from \$59.6 million in the year-ago quarter mainly due to lower royalty revenues. However, the top line surpassed the Zacks Consensus Estimate of \$24.9 million.

Quarter Ending	12/2019	
Report Date	Feb 06, 2020	
Sales Surprise	8.27%	
EPS Surprise	4.41%	
Quarterly EPS	0.71	
Annual EPS (TTM)	3.04	

Quarterly Highlights

Royalty revenues were \$11 million in the fourth quarter compared with \$40.2 million in the year-ago quarter. Ligand primarily earns royalties on sales of Kyprolis and Evomela, 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 fourth quarter.

License fees, milestones and other revenues were \$8.8 million in the fourth quarter compared with \$9.3 million a year ago. Material sales were \$7.1 million, down 29.7%.

Full-Year Results

Ligand's adjusted earnings per share were \$3.09 per share for the full year compared with \$7.15 per share in 2018. Full-year revenues declined 52.2% to approximately \$120.3 billion.

2020 Guidance

Ligand provided guidance for its sales and earnings for 2020 with its fourth-quarter results. The company updated its guidance following the acquisition of certain assets from privately-held lcagen in February 2020. The company expects total revenues to be approximately \$128 million, up from previous guidance of \$128 million. It expectsadjusted earnings per share for 2020 to be approximately \$3.45 compared to the previous guidance of \$3.40.

Guidance for total revenues includes approximately \$7 million from lcagen business, \$38 million in royalties, approximately \$35 million from material sales, and license fees and milestones of approximately \$48 million.

Recent News

Acquires Icagen's Assets - Feb 13

Ligand announced that it has acquired core assets of privately held Icagen's North Carolina operationfor \$15 million in cash. Icagen is also eligible to receive up to \$25 million in cash from Ligand related revenue-based milestones. The transaction is expected to be completed in April 2020. 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 internal preclinical-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.

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.

Valuation

Ligand's shares are down 21.2% in the year-to-date period and 29.4% over the trailing 12-month period. Stocks in the Zacks sub-industry and the sector are down 17.7% and 17.9%, respectively, in the year-to-date period. Over the past year, stocks in the sub-industry and the sector are down 23.4% and 18.5%, respectively.

The S&P 500 Index is down 14.9% in the year-to-date period and 3.5% in the past year.

The stock is currently trading at 23.097X forward 12-month earnings per share which compares to 149.52X for the Zacks sub-industry, 17.05X for the Zacks sector and 14.38X 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 39.73X. Our Underperform recommendation indicates that the stock will perform worse than the market. Our \$69.00 price target reflects 19.39X 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	23.09	149.52	17.05	14.38
P/E F12M	5-Year High	57.21	158.14	21.08	19.34
	5-Year Low	4.53	20.59	15.82	14.38
	5-Year Median	39.73	40.26	18.74	17.42
	Current	11.78	2.31	2.58	2.69
P/S TTM	5-Year High	33.36	5.04	4.16	3.68
	5-Year Low	8.88	2.17	2.58	2.55
	5-Year Median	24.48	2.65	3.28	3.17
	Current	1.88	3.18	3.76	3.34
P/B TTM	5-Year High	72.26	5.8	5.04	4.55
	5-Year Low	1.66	2.47	3.49	2.9
	5-Year Median	6.63	3.28	4.33	3.63

As of 03/12/2020

Industry Analysis Zacks Industry Rank: Top 38% (97 out of 253) ■ Industry Price 18 – 💻 Industry ■ Price _280 -260 -220 -140

Top Peers

BioDelivery Sciences International, Inc. (BDSI)	Neutral
Basilea Pharmaceutica AG (BPMUF)	Neutral
Insmed, Inc. (INSM)	Neutral
Kamada Ltd. (KMDA)	Neutral
Ultragenyx Pharmaceutical Inc. (RARE)	Neutral
Vericel Corporation (VCEL)	Neutral
Anika Therapeutics Inc. (ANIK)	Underperform
Heska Corporation (HSKA)	Underperform

Industry Comparison Industry	ndustry Comparison Industry: Medical - Biomedical And Genetics		cs	Industry Peers		
	LGND Underperform	X Industry	S&P 500	ANIK Underperform	HSKA Underperform	VCEL Neutra
VGM Score	D	-	-	D	F	В
Market Cap	1.36 B	137.17 M	17.38 B	428.87 M	551.51 M	494.40 N
# of Analysts	1	2	13	3	2	4
Dividend Yield	0.00%	0.00%	2.51%	0.00%	0.00%	0.00%
Value Score	С	-	-	В	F	D
Cash/Price	0.60	0.22	0.05	0.31	0.12	0.11
EV/EBITDA	1.04	-2.00	10.90	9.23	72.30	-52.44
PEG Ratio	1.59	1.50	1.54	2.17	NA	N.A
Price/Book (P/B)	1.88	2.82	2.35	1.50	3.57	4.43
Price/Cash Flow (P/CF)	13.73	12.07	9.60	12.06	76.98	54.81
P/E (F1)	23.89	26.11	13.98	21.67	NA	83.02
Price/Sales (P/S)	11.27	10.42	1.89	3.74	4.50	4.20
Earnings Yield	4.20%	-22.55%	7.07%	4.63%	-0.57%	1.18%
Debt/Equity	0.85	0.02	0.70	0.07	0.32	0.20
Cash Flow (\$/share)	5.98	-1.09	7.01	2.51	0.91	0.20
Growth Score	F	-	-	F	D	Α
Hist. EPS Growth (3-5 yrs)	24.48%	18.12%	10.85%	0.43%	17.69%	NA NA
Proj. EPS Growth (F1/F0)	11.65%	5.76%	5.99%	-31.87%	-208.11%	-26.39%
Curr. Cash Flow Growth	-47.25%	15.46%	6.15%	9.62%	-54.59%	-289.18%
Hist. Cash Flow Growth (3-5		7.56%	8.52%	5.10%	2.54%	19.90%
yrs)	30.59%	4.83	1.24	14.40	4.34	5.64
Current Ratio	66.09	4.09%	42.57%	6.90%	24.44%	16.68%
Debt/Capital	45.82%	-226.92%	11.64%	23.73%	-1.07%	-8.20%
Net Margin	523.19%	-66.96%	16.74%	10.81%	0.08%	7.84%
Return on Equity	4.34%	0.21	0.54	0.37	0.62	0.85
Sales/Assets	0.07	13.44%	3.54%	42.00%	13.67%	23.49%
Proj. Sales Growth (F1/F0)	5.91%			<u> </u>		
Momentum Score	A	<u>-</u>	<u>-</u>	D	D	С
Daily Price Chg	-10.53%	-10.99%	-10.03%	-16.82%	-14.02%	-8.94%
1 Week Price Chg	14.90%	0.00%	-0.67%	-0.84%	-2.61%	-9.20%
4 Week Price Chg	-14.13%	-29.05%	-28.22%	-27.10%	-31.84%	-41.65%
12 Week Price Chg	-24.69%	-24.47%	-25.63%	-43.02%	-26.30%	-36.60%
52 Week Price Chg	-30.49%	-37.21%	-16.72%	2.16%	-12.25%	-42.77%
20 Day Average Volume	598,645	235,010	3,061,271	235,757	67,896	803,638
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	0.00%	0.00%	-0.32%	-12.98%	-316.22%	-62.94%
(F1) EPS Est 4 week change	-22.79%	0.00%	-0.65%	-13.79%	-316.22%	-57.94%
(Q1) EPS Est Mthly Chg	-22.1970	0.00%	-0.62%	35.59%	-122.73%	-242.86%

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	С
Growth Score	F
Momentum Score	Α
VGM Score	D

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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