SECOND QUARTER 2023 PERFORMANCE & OUTLOOK

August 8, 2023

Nasdaq: LGND

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The following presentation contains forward-looking statements by Ligand and its partners that involve risks and uncertainties and reflect Ligand's and it's partners' judgment as of the date of this presentation. Words such as "plans," "believes," "expects," "projects," "could," "anticipates," and "will," and similar expressions, are intended to identify forward-looking statements. These forward-looking statements include, without limitation, expectations regarding research and development programs; the timing of the initiation or completion of clinical trials by Ligand and its partners; the potential for and timing of development, regulatory approval and product launch events by Ligand's partners; expectations regarding future sales of products by Ligand's partners and the durability of Ligand's royalties; the ability for current and future technology platforms to generate license deals, replenish the early-stage portfolio and generate royalties; the ability of various tactics to expand the late-stage pipeline and produce revenue, including cutting costs and restructuring of acquisitions; and outlook or guidance regarding 2023 financial results and expectations for near-term and future revenue and expenses, and the breakdown of such revenue, growth in revenue and adjusted earnings; the potential to acquire Novan's assets and outlicense or sell its programs and assets; the expectations repayment of Ligand's DIP loan and receipt of milestone and royalty rights if another bid for Novan is accepted; the ability to add royalties with superior risk-adjusted returns; and anticipated near-term milestones. Actual events or results may differ from Ligand's expectations due to risks and uncertainties inherent in Ligand's business, including the inherent risks of clinical development and regulatory approval of product candidates, including that FDA or foreign regulatory authorities may not agree with our or our partners' conclusions regarding the results of clinical trials; the total addressable market for our partner's products may be smaller than estimated; Ligand faces competition with respect to our technology platforms which may demonstrate greater market acceptance or superiority; partnered commercial products may not perform as expected; Ligand relies on collaborative partners for milestone payments, royalties, materials revenue, contract payments and other revenue projections; the possibility that Ligand's and its partners' drug candidates might not be proved to be safe and efficacious and uncertainty regarding the commercial performance of Ligand's and/or its partners' products; Ligand may not achieve its guidance for 2023; Ligand may not be able to acquire, outlicense or sell Novan's programs or assets; disruption to Ligand's and its partners' business, including delaying manufacturing, preclinical studies and clinical trials and product sales, and impairing global economic activity, all of which could materially and adversely impact Ligand's results of operations and financial condition; changes in general economic conditions, including as a result of the conflict between Russia and Ukraine; there may not be a market for the product(s) even if successfully developed and approved; Ligand is currently dependent on a sole supplier for Captisol and failures by such supplier may result in delays or inability to meet the Captisol demands of its partners; Ligand's partners may terminate any of their agreements or development or commercialization of any of their products; Ligand may experience significant costs as the result of potential delays under its supply agreements; Ligand or its partners may not be able to protect their intellectual property and patents covering certain products and technologies may be challenged or invalidated; and ongoing or future litigation could expose Ligand to significant liabilities and have a material adverse effect on the company; and other risks and uncertainties described in its public filings with the Securities and Exchange Commission (the "SEC"), available at www.sec.gov. Additional risks may apply to forward-looking statements made in this presentation. Information regarding partnered products and programs comes from information publicly released by our partners. Our trademarks, trade names and service marks referenced herein include Ligand, Captisol, Pelican and PeliCRM. Each other trademark, trade name or service mark appearing in this presentation belongs to its owner.

The process for reconciliation between the non-GAAP adjusted financial numbers presented on slides 9 and 10 and the corresponding GAAP figures is shown in the earnings press release for the second quarter ended June 30, 2023 available at https://investor.ligand.com/press-releases. However, other than with respect to total revenues, the Company only provides financial guidance on an adjusted basis and does not provide reconciliations of such forward-looking adjusted measures to GAAP due to the inherent difficulty in forecasting and quantifying certain amounts that are necessary for such reconciliation. Ligand disclaims responsibility for any statement by a person other than its employees and the views expressed by persons other than Ligand employees do not necessarily reflect the views of Ligand.

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GROWTH DRIVERS

Ligand is positioned for significant financial growth

Commercial Products	7 major commercial-stage royalty streams
Key Pipeline	Multiple, late-stage partner events that can contribute to future royalty growth

Driving significant royalty growth

Pharm Team	Portfolio of 75+ programs, all with the potential to be royalty contributors
Platforms	New licensing deals utilizing our existing platforms
New Deals	Strong balance sheet to add new royalties with superior risk-adjusted returns

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HIGHLIGHTS

Outstanding performance	**Strong quarter revenues of $26 million**
Strong Balance Sheet	$219 million of cash and short-term investments, after repayment of convertible debt and sale of $26M in Viking shares
Lean operating structure	Expense reductions implemented in 2023
Focused strategy	Create a diversified portfolio of high-margin royalties producing superior risk-adjusted returns
Major partner catalysts	Expected throughout 2023 and beyond
Positive track record	15 years of acquisition history created significant value for shareholders

Proven business model

OUR STRATEGY

Significant opportunity to expand our late-stage pipeline in the current environment

Project Finance

Fund late-stage clinical trials for royalty interest

- Derisked late-stage assets
- $10 – 40M per asset
- Revenue 4 years or less

Royalty Monetization

Acquire existing royalty contracts

- Inventors
- Universities
- Non-strategic assets held by companies

M&A

Identify companies with attractive royalty contracts and technology

Significant discounts in current equity environment

Operational team capable of cutting costs and restructuring

Platforms

Focus on infrastructure-light and leverageable platforms:

Scalable → Limited operations

Broad applicability → Prolific

Enabling → Higher royalties

Flexibility to grow our portfolio using all of the above tactics

EXECUTION AT SCALE

Ligand's goal: Scale our process for origination and deal making

Institute our deal process and implement best practices → improving how we originate, negotiate and execute transactions

Expanding deal team → growing deal capacity and diligence capabilities

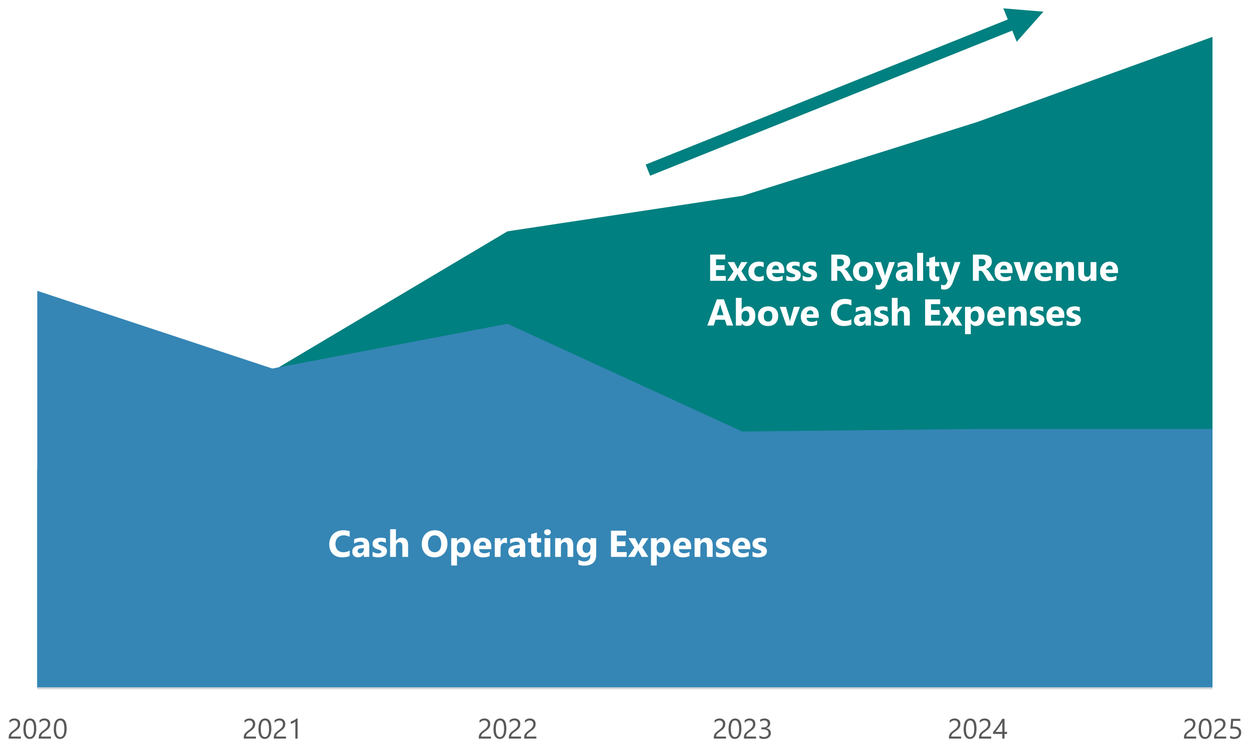
Increasing deal funnel → leading to more high-quality opportunities and better returns

Notable progress underway

- ✓ Opened Boston office
- ✓ Paul Hadden, SVP, Investments & Business Development, now located in Boston
- ✓ Added several investment analysts and strengthened our legal resources

ROYALTY REVENUE DRIVES CASH FLOW GROWTH

Royalty Revenue & Cash Operating Expenses



$219M in cash at June 30 and no debt

Leverage from royalty revenue growth and lean operating expenses

Operating structure expected to support growing profitability and cash flow

FINANCIAL REVIEW AND 2023 GUIDANCE

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Q2 2023 FINANCIAL PERFORMANCE

$ in millions, except for per share amounts (unaudited)	Three Months Ended June 30	
	2023	**2022**
Revenues:		
Royalties	20.4	17.8
Captisol - Core	5.2	3.3
Captisol - COVID	-	26.2
Contract revenue	0.7	2.8
Total revenues	26.4	50.1
Operating costs and expenses:		
Cost of Captisol	1.7	12.4
Amortization of intangibles	8.5	8.6
R&D Expense	6.9	8.5
G&A Expense	11.3	12.1
Total Operating Expenses	28.3	41.5
Operating Income (Loss)	(2.0)	8.7
Gain (loss) from sale of investments	4.0	(1.9)
GAAP Net Income (Loss) from Cont. Ops	2.3	12.6
Non-GAAP Net Income (Loss) from Cont. Ops(1)	25.1	19.1
GAAP Diluted from EPS	$0.13	$0.74
Non-GAAP Diluted EPS(1)	$1.42	$1.12
Non-GAAP Diluted EPS(1) *(excluding COVID-19 related Captisol gross profit)*	$1.42	$0.43

- Total revenue grows 10% when excluding Captisol used for COVID
- Royalty revenue grows 15%
- G&A and R&D operating expense decrease 12%
- Non-GAAP Diluted EPS of $1.42

(1) The process for reconciliation between the non-GAAP adjusted financial numbers presented and the corresponding GAAP figures is shown in the earnings press release for the second quarter ended June 30, 2023 available at https://investor.ligand.com/press-releases.

REVENUE & EPS – Q2'23 ACTUALS

- YoY royalty revenue grows 15% due to strong sales of Kyprolis, launch of Filspari and continued growth of Rylaze and Vaxneuvance
- Sold an additional $26M of Viking Therapeutics shares resulting in realized gain of $16.6M
- Zero COVID Captisol sales recorded 1H'23 or assumed in 2023 guidance

	Q2 2023 Actuals	Prior FY 2023 Guidance	Updated FY 2023 Guidance
Royalty Revenue	$20.4M	$78M - $82M	$78M - $82M
Captisol Sales	$5.2M	$21M	$24M
Contract Revenue	$0.7M	$25M	$22M
Total Revenue	$26.4M	$124M - $128M	$124M - $128M
Adjusted EPS	$1.42	$4.60 - $4.75	$4.85 - $5.00

- Sale of Viking Therapeutics stock in Q2'23 results in $16.6M gain and translates to ~$0.69 EPS
- 2023 EPS guidance range increased $0.25 from $4.60-$4.75 to $4.85-$5.00

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GROWTH DRIVERS AND PORTFOLIO REVIEW

PARTNERED PIPELINE SNAPSHOT

Over 100 active programs with economic rights

Partner	Program	Therapy Area	*Phase 1*	*Phase 2*	*Phase 3*	*NDA*	*Approved*
AMGEN	Kyprolis®	Oncology					
TRAVERE THERAPEUTICS	FILSPARI™	Kidney Disease					
ACROTECH BIOPHARMA / CASI Pharmaceuticals	EVOMELA®	Oncology					
Alvogen	Teriparatide	Osteoporosis					
Jazz Pharmaceuticals	Rylaze™	Oncology					
MERCK	Vaxneuvance™	Infection					
SERUM INSTITUTE OF INDIA PVT. LTD.	Pneumosil®	Infection					
NOVAN	Berdazimer Gel	Infection					
Verona Pharma	Ensifentrine	Respiratory					
MARINUS PHARMACEUTICALS	Ganaxolone-IV	CNS					
MERCK	V116	Infectious Disease					

Partnered pipeline also includes >100 programs

Status of partnered programs from information released by our partners and from clinicaltrials.gov

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COMMERCIAL PRODUCTS

Our existing portfolio of commercial stage royalties are expected to continue driving short- and medium-term financial growth

Program	Partner	Sales Trends
Kyprolis	Amgen / Beigene	Label expansion with new combinations, indications and geographies
Filspari	Travere	Launched in February 2023; Potential to be Ligand's largest royalty stream
Evomela	CASI / Acrotech	Large royalty on niche product with significant market share in China
Teriparatide	Alvogen	Additional generic competition has not yet materialized
Rylaze	Jazz	Successful launch following immediate switch from legacy product
Vaxneuvance	Merck	Continued strong launch into pediatric market
Pneumosil	Serum Institute	Large orders from WHO/UNICEF provide long-term revenues
Captisol Sales	Various	Core Captisol sales provide stable revenue and cash flows

KEY 2023 DEVELOPMENT PIPELINE CATALYSTS

Beyond the existing approved royalty streams, a number of late-stage partnered products with anticipated catalysts in 2023

Partner	Program	Indication	Event	Timing	Royalty
Sermonix	Lasofoxifene	Metastatic breast cancer	Phase 3 start	March 9, 2023	6 – 10%
Viking	VK2809	NASH	Phase 2b data	May 16, 2023	3.5 – 7.5%
Verona	Ensifentrine	COPD	NDA submission	June 27, 2023	Low-single-digit
Merck	V116	Pneumococcal Vaccine	Phase 3 data	July 27, 2023	Low-single-digit
Marinus	Ganaxolone	SRE	Phase 3 data	H2 2023	Low-to-mid-single-digit
Jazz	Rylaze	ALL/LBL	EMA approval	2023	3-5%

LIGAND OFFERS $15 MILLION TO ACQUIRE ASSETS OF NOVAN

Background

- On July 17, Ligand entered an agreement to acquire the assets of Novan, Inc. (Nasdaq: NOVN) for $15M, which contemplated Novan filing for bankruptcy relief.
- The agreement, which is subject to Bankruptcy Court approval, also contemplated Ligand providing up to $15M in debtor in possession (DIP) financing related to Novan's Chapter 11.
- Ligand has a royalty interest in Novan's lead asset, berdazimer gel, in development for molluscum contagiosum.

Next Steps

- If the agreement is approved by the Bankruptcy Court and Ligand's bid is successful, it will acquire all the assets of Novan. Ligand will then seek to out license or sell Novan's existing development programs and commercial business assets.
- If a bid from another party is accepted, the agreement provides that Ligand's DIP loan will be repaid and Ligand expects that its milestone and royalty rights will be preserved.

Ligand has a proven track record of finding and investing in attractive assets and maximizing value and is well-positioned to take advantage of special situations such as the proposed Novan acquisition

Q&A