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INVESTOR & ANALYST DAY

DECEMBER 13, 2022

Nasdaq: LGND

SAFE HARBOR STATEMENT

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 preclinical studies and clinical trials by Ligand and its partners; expectations regarding product approvals and commercial launches; the need for our technology and our impact on driving innovation and royalties for our partners; Ligand's position as a high-growth company and financial growth stock; the resilience of its business model; the potential for and timing of development, regulatory approval and product launch events by Ligand's partners; and outlook or guidance regarding 2022 and 2023 financial results and cash position and expectations for near-term and future revenue and the breakdown of such revenue, growth in revenue and adjusted earnings for the core business and decreased operating expenses in 2023; expected intellectual property and contractual protection for our revenue sources; expectations regarding tax payments, a non-cash valuation allowance and use of net operating losses; and anticipated near-term milestones and the funding status of OmniAb. 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 2022 or 2023; the COVID-19 pandemic has disrupted and may continue to disrupt 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; the commercial opportunity for remdesivir could be materially and adversely affected as a result of approved vaccines and alternative approved and investigational therapies, or the FDA revising or revoking its approval; Gilead may develop an alternative formulation of remdesivir that does not incorporate Captisol or uses less Captisol in such formulation; 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; the possibility that the expected cost savings from the spin-off of OmniAb will not be achieved; 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 and Pelican Expression Technology. 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 11, 47, 48, 54, 55 and 56 and the corresponding GAAP figures is shown in the earnings press release for the third quarter ended September 30, 2022 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.

Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect our good faith beliefs (or those of the indicated third parties) and speak only as of the date hereof. All forward-looking statements are qualified in their entirety by this cautionary statement, and Ligand undertakes no obligation to revise or update this presentation to reflect events or circumstances or update third party research numbers after the date hereof. This caution is made under the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934.

TODAY'S AGENDA

	Eastern Time	
Business Overview	*11:00 – 11:20*	*Todd C. Davis, CEO*
M&A Strategy and Portfolio Highlights	*11:20 – 11:40*	*Matt Korenberg, President and COO*
Pelican Overview	*11:40 – 11:50*	*Diane Retallack, PhD, SVP Platform Technology and Innovation*
Intellectual Property & ESG	*11:50 – 12:00*	*Andrew Reardon, Chief Legal Officer*
Financial Outlook	*12:00 – 12:15*	*Tavo Espinoza, CFO*
Q&A	*12:15*	

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BUSINESS OVERVIEW

Todd C. Davis, CEO

LIGAND BUSINESS OVERVIEW

Focus	BioPharma technology company, royalty growth driven
Key Financial Drivers	6 major royalty revenue contributors currently Revenue from material sales and contract payments 5 more potential approvals or NDA submissions in 2023
Pipeline	10 major mid to late-stage programs and over 100 total programs
Primary Platforms	Captisol and Pelican
Employees	79
Facilities	California Kansas Nevada

LIGAND ROYALTY MODEL

Royalty Model Objective	Aggregate high margin royalties producing superior risk-adjusted returns

Low Cost Infrastructure

- Efficient deal assessment and diligence
- Lean operations
- Clinical science value add
- Accessing new royalties / assets
- Impactful alliance management

Licensing

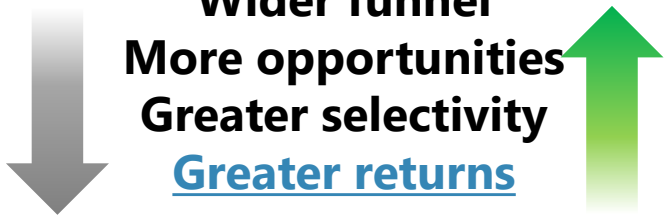
- World-class licensing capabilities
- Maximize our current assets
- Identify new assets

Sourcing

- Multiple avenues (M&A, tech license, development capital, contract purchase)
- Deep value: investing in areas with unique LGND advantages
- Significant acceleration of sourcing
- Become the partner of choice

LIGAND PLAN IN ACTION

1. First 90 days	▶	Gap assessment
2. Fill key gaps	▶	Bolster scalability
3. Expense review P&L improvement	▶	Lean deal machine
4. Accelerate deal flow / activity		Wider funnel More opportunities Greater selectivity Greater returns



THE LIGAND INVESTMENT THESIS

Investing in BioPharma is difficult	Ligand offers a simple solution
Binary development risk	Diversified portfolio of economic rights to some of the world's most important medicines
BioPharma is extremely complex	Comprehensive diligence process supported by decades of experience and in-house scientific operating team
Structure: Great products may not be great investments	Our royalties are tied to individual programs without direct exposure to later equity raises, licensing or the many other typical business risks
Significant bandwidth and diverse expertise is required to evaluate deals and clinical programs	Ligand will analyze several hundred opportunities every year with companies of all stages, sizes and geographies

LEADERSHIP TEAM

Todd C. Davis
Chief Executive Officer

Matt Korenberg
President & Chief Operating Officer

Tavo Espinoza
Chief Financial Officer

Andrew Reardon
Chief Legal Officer

Audrey Warfield-Graham
Chief People Officer

Diane Retallack, PhD
SVP Platform Technologies & Innovation

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MAJOR 2023 POTENTIAL PARTNER EVENTS

Partner	Program	Indication	Event	Timing
TRAVERE THERAPEUTICS	Sparsentan	IgA Nephropathy	FDA Approval	Feb 17, 2023
Verona Pharma	Ensifentrine	COPD	NDA Submission	H1 2023
Jazz Pharmaceuticals	Rylaze	ALL/LBL	EMA Approval	2023
NOVAN	Berdazimer Gel	Molluscum	FDA Approval	Q4 2023
palvella THERAPEUTICS	QTORIN	Pachyonychia Congenita	Phase 3 data	2023
		MLM	Phase 2 data	
		Gorlin Syndrome	Phase 2 data	
MARINUS PHARMACEUTICALS	Ganaxolone	SRE	Phase 3 data	H2 2023
VIKING THERAPEUTICS	VK2809	Nash	Phase 2b data	Q1 2023
Alvogen	Teriparatide	Osteoporosis	Therapeutic Equivalence	2023

Based on clinicaltrials.gov or partner disclosures

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LIGAND 2023 OUTLOOK

$118 to $122 million in core revenue
~20% growth over 2022*

$46 million run rate in cash operating expenses

$55 million in cash flow
$3.10 - $3.30 adjusted diluted EPS
>50% growth over 2022*

$150 million in cash and securities
Balance sheet at year end 2022 to fund 2023 investments

*growth % based on mid-point of range; core revenue excludes contributions from COVID

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FINANCIAL STRENGTH TO DRIVE SUBSTANTIAL GROWTH

Strong Financial Foundation + **Robust Growth From Core Business** + **Promising Late-Stage Blockbuster Assets** = **Outsized Growth Potential**

- **Strong** balance sheet
- **No debt** after May ‘23
- **Lean** cost structure
- **High operating margins**
- **Low** share count

- 5 **high-profile** royalty medicines
- All 3 revenue lines **growing**

- **Major** new potential products

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M&A STRATEGY AND PORTFOLIO HIGHLIGHTS

Matt Korenberg, President & COO

OMNIAB SPINOFF REVIEW

On November 1, 2022, Ligand completed the spin-off of the OmniAb antibody-discovery business

Both companies are positioned for success

	Ligand®	OmniAb®
Focused	**High-growth** company with **economic rights** to some of the world's most **important medicines**	Provides access to **technologies** that enable the discovery of **next-generation therapeutics**
Well Capitalized	**$80M excess cash** at Note Maturity Significant **cash flow** generation **Opportunistic** access to additional capital	**$95M net cash** at closing Additional **$35M of near-term** milestones **Fully funded** for foreseeable future
Clear Investment Thesis	**Financial growth** stock with diversified portfolio and **significant growth** potential from late-stage assets	**Technology leader** in one of the **largest greenfields** in the pharma industry

M&A STRATEGY

M&A OPPORTUNITY FOCUS

Development Capital

Fund late-stage clinical trials for outsized royalty interest

- Invest after proof of concept
- Leverage extensive scientific team for diligence
- Superior risk-adjusted returns

Investments

- Novan (Berdazimer Gel)
- Palvella (QTORIN)
- Aziyo (various)

Distressed Assets

>200 public life science companies trading below cash

Operational team capable of cutting costs and restructuring

- Pharmacopeia (Sparsentan)
- Vernalis (Ensifentrine)
- Metabasis (VK2809, VK0214)

Platform Technologies

Scalable Technology

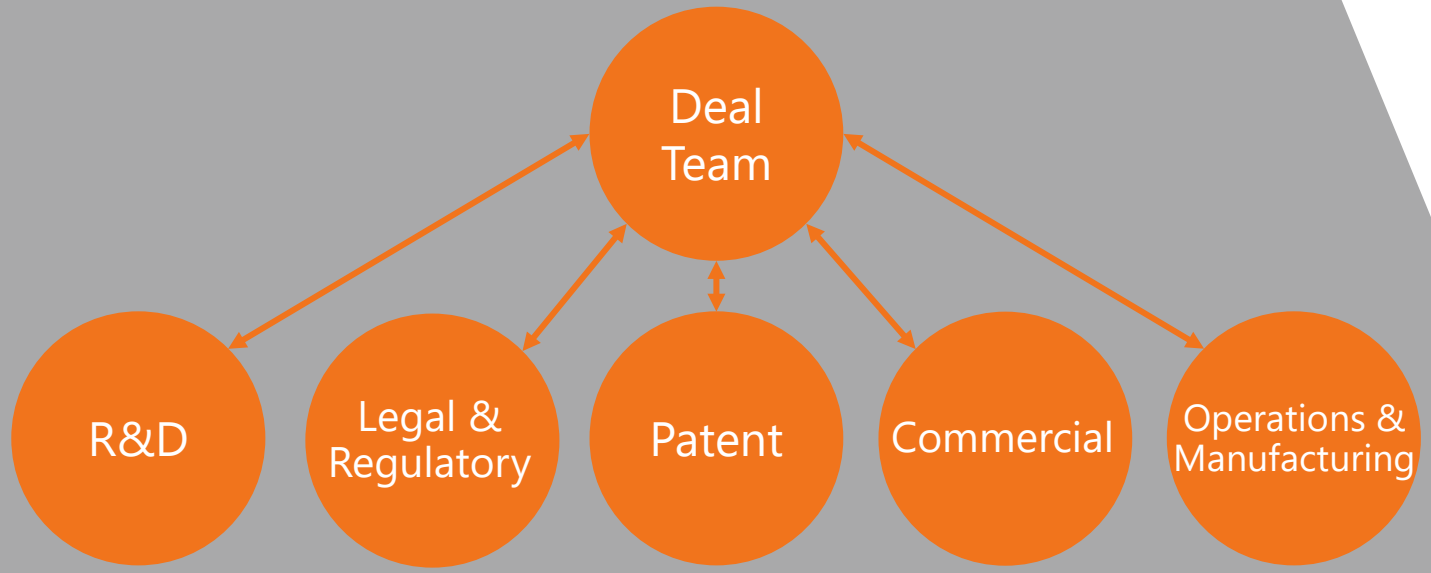
Broadly Applicable

Industry Enabling

- Captisol
- Pelican
- OmniAb (Spun off in November 2022)

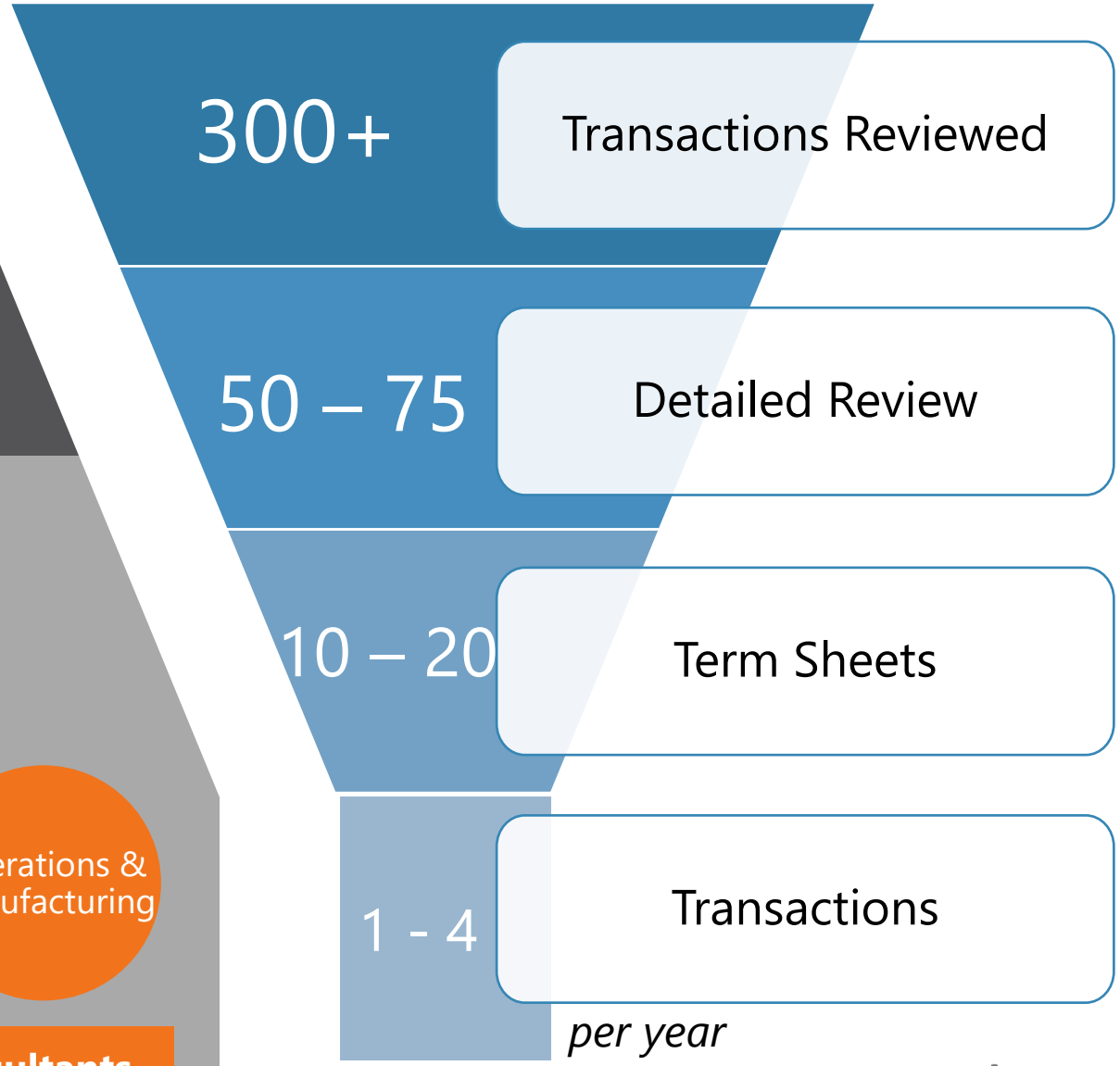
M&A LIGAND ACTIVITY

Central deal team efficiently evaluates every transaction through scalable, data-driven process refined over many years



Strengthen internal expertise with network of external consultants

Typical Deal Funnel



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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					
ACROTECH BIOPHARMA / CASI Pharmaceuticals	*EVOMELA®*	Oncology					
Alvogen	*Teriparatide*	Osteoporosis					
Jazz Pharmaceuticals	*Rylaze™*	Oncology					
MERCK	*Vaxneuvance™*	Infection					
SERUM INSTITUTE OF INDIA PVT. LTD.	*Pneumosil®*	Infection					
TRAVERE THERAPEUTICS	Sparsentan	Kidney Disease					
MARINUS PHARMACEUTICALS	Ganaxolone-IV	CNS					
Verona Pharma	Ensifentrine	Respiratory					
NOVAN	Berdazimer Gel	Infection					
palvella THERAPEUTICS	QTORIN™	Dermatology					

Partnered pipeline also includes >100 programs

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

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SPARSENTAN SELECT PIPELINE PROGRAM

- Sparsentan – A potential new treatment standard for rare kidney diseases
  - Dual inhibitor of angiotensin and endothelin receptors in development for severe kidney diseases
  - In late-stage development in focal segmental glomerulosclerosis (FSGS) and IgA nephropathy (IgAN)
  - Positive Phase 3 data generated from PROTECT (IgAN) and DUPLEX (FSGS) studies to support regulatory submissions
- Potential U.S. approval for IgAN in Q1 2023, with FSGS filing expected in U.S. and E.U. in H1 2023
  - Ligand has a 9% royalty on global net sales
  - Applying for EU approval in IgAN with partner Vifor Pharma for potential approval in the second half of 2023

TRAVERE™ THERAPEUTICS

"We continued to execute towards our goal of making sparsentan a new treatment standard for rare kidney disorders, if approved"

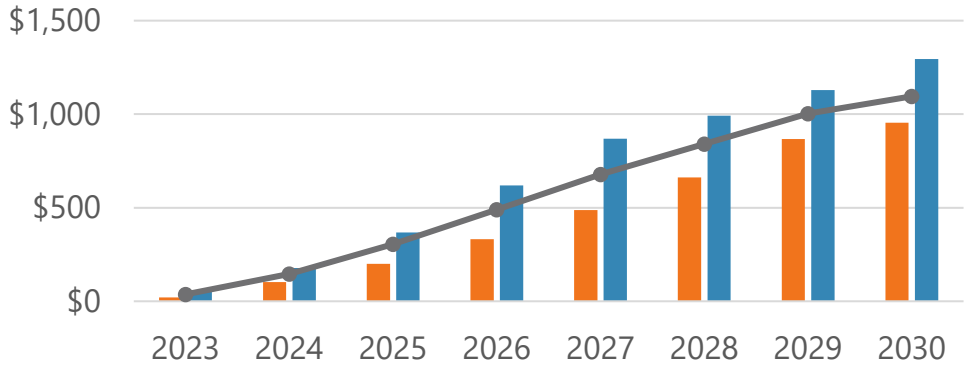
-Eric Dube, Travere CEO

SPARSENTAN MARKET SIZING

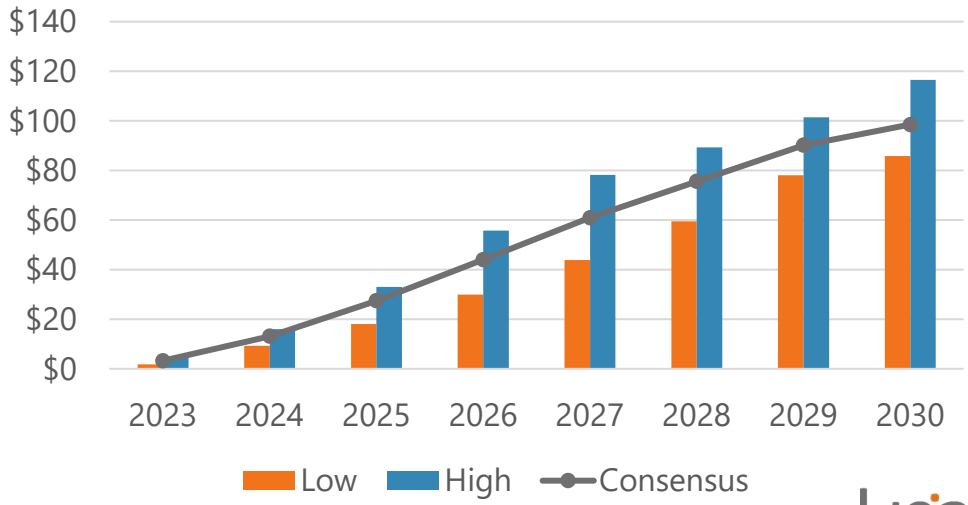
- Patient population with limited treatment options
  - IgAN: 140k patients in U.S.
  - FSGS: 40k patients in U.S.
  - Similar number of patients treated in EU
- Upcoming approval decision
  - Travere announced labeling discussions have begun with the FDA
  - If approved, Sparsentan could be the first approved treatment for FSGS and second to market in IgAN
- Favorable competitive profile
  - Better improvements in key biomarkers than any other available treatments

Analyst Revenue Estimates(1)

(Charts in millions)



Illustrative Resulting Royalty(2)



(1) Consensus analyst estimates
(2) For illustrative purposes only, not intended as guidance

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ENSIFENTRINE SELECT PIPELINE PROGRAM

- Ensifentrine is a Phase 3, first-in-class candidate for the maintenance treatment of COPD
  - Positive topline Phase 3 results released showing clinically meaningful 42% reduction in the rate of exacerbations observed over 24 weeks in symptomatic patients
  - NDA submission with FDA expected in H1 2023
- COPD estimated to be a $10.5 billion market in the U.S. today
  - Ensifentrine is also being developed as a treatment in other large markets including asthma and cystic fibrosis
- If approved, Ligand will collect a low-single-digit royalty on sales
  - Ligand is also entitled to a £5.0 million approval milestone

Verona Pharma

COPD is the 3rd leading cause of death, afflicting 384 million worldwide

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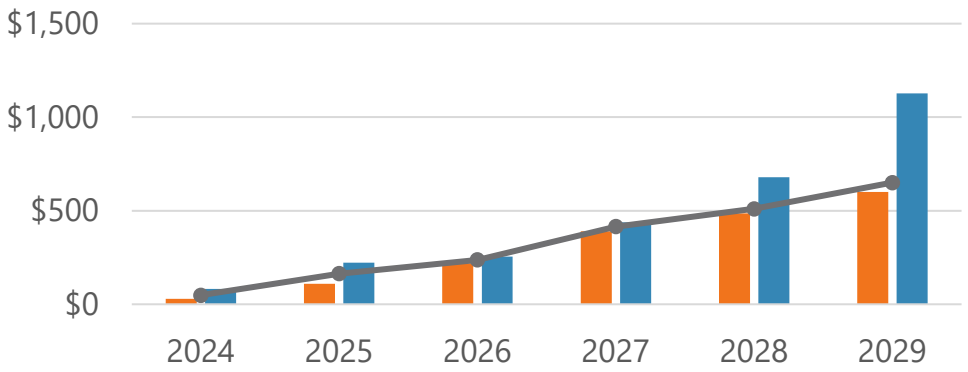
ENSIFENTRINE MARKET SIZING

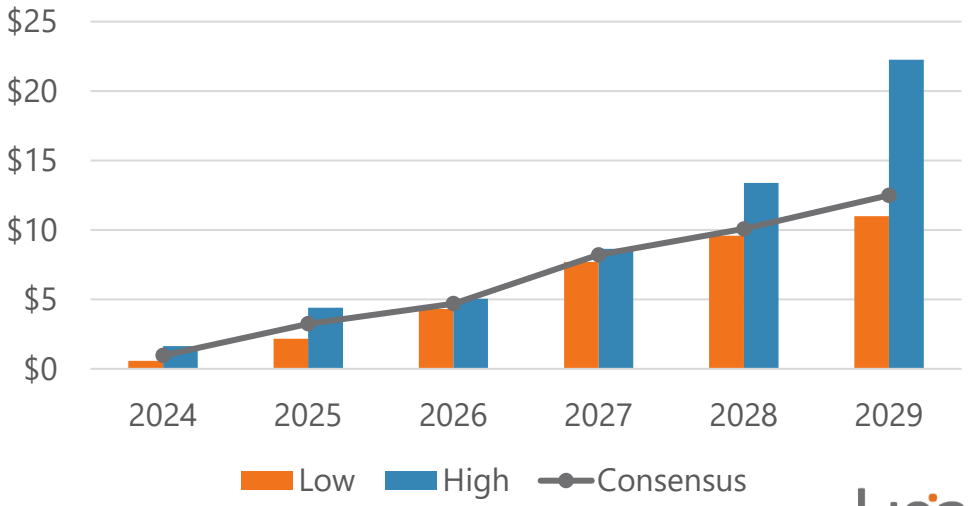
- Ensifentrine is complementary to existing therapies
  - Potentially first new drug class for COPD in decades
  - 70% of patients have activity limitations
- Significant U.S. market opportunity at launch
  - 6 million patients on chronic treatment in the U.S.; 40% of which remain symptomatic
  - >$1,100 average monthly WAC of branded nebulizer COPD treatments
  - Expansion into earlier treatment provides meaningful upside

Analyst Revenue Estimates(1)

(Charts in millions)



Illustrative Resulting Royalty(2)



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BERDAZIMER GEL SELECT PIPELINE PROGRAM

- Berdazimer Gel (formerly SB206) is being developed by Novan as a topical treatment for molluscum and acne vulgaris
  - Novan announced positive Phase 3 clinical results in 2022 in molluscum and expects to submit an NDA in Q4 2022
- Current treatments for molluscum are cumbersome and involve potentially painful in-office visits
  - A rapid treatment benefit, if approved, would satisfy an important patient-care need for the treatment of molluscum
- If approved, Ligand will collect a 7% – 10% royalty as well as $20 million in regulatory and commercial milestones

NOVAN

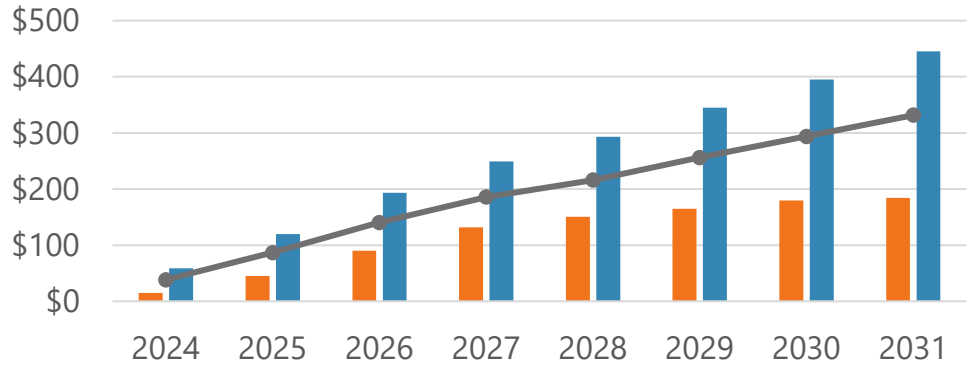
There are currently no FDA approved prescription therapies available for the treatment of molluscum, a viral skin infection that impacts as many as 6 million people each year, mostly children

BERDAZIMER GEL MARKET SIZING

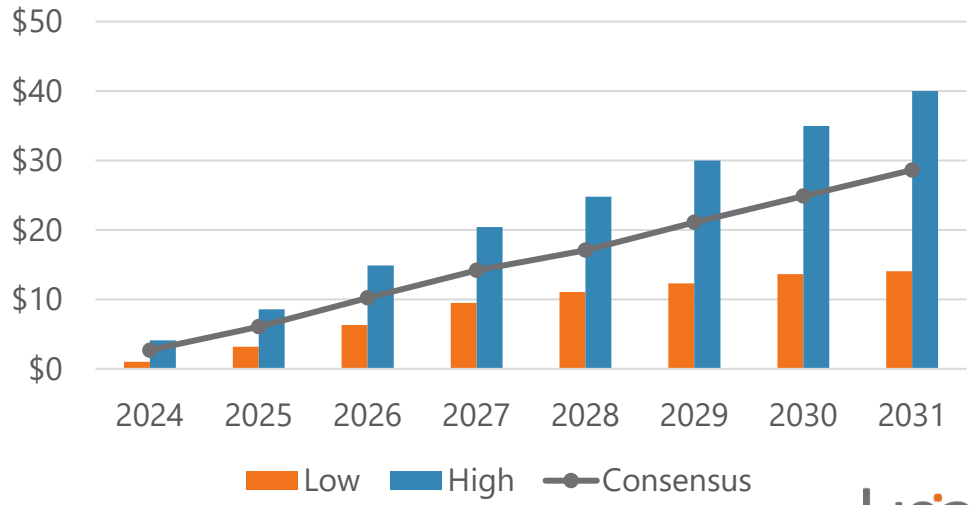
- Potentially first FDA approved treatment for molluscum
  - 6 million patient addressable market in U.S.
- Lack of approved alternatives will likely limit payor-mandated step edits or non coverage
  - Primarily impacts pediatric patients
  - Without treatment, condition typically takes several months to resolve
- Novan is ready to execute on their launch plan with an established commercial infrastructure, pricing and reimbursement strategy
  - Engaged with ~4,000 HCPs across 42 U.S. territories
  - If approved, launch expected in early 2024

Analyst Revenue Estimates

(Charts in millions)



Illustrative Resulting Royalty



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CAPTISOL TECHNOLOGY

CAPTISOL TECHNOLOGY

CAPTISOL®
A Ligand TECHNOLOGY

- Addresses consistent and enduring industry need: **formulation solubility and stability**
  - An estimated **40%** of small molecule drug candidates have **low solubility**(1)
- Clinical and regulatory success, combined with vast safety database **have significantly increased awareness, visibility and use** of the technology and positioned it for growth
- Ligand continually focuses on **quality, reliability and customer service**

(1) Reference: Sanches & Ferreira, Int. J. of Pharmaceutics, 2019

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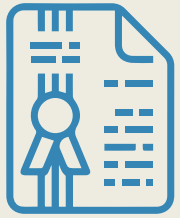
CAPTISOL KEY TECHNOLOGY FEATURES

CAPTISOL® A Ligand TECHNOLOGY

Global Reach

Captisol-enabled drugs are marketed in >70 countries

>40 partners have Captisol-enabled drugs in development

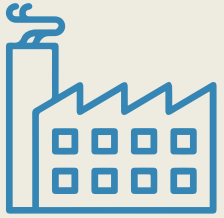


Intellectual Property

- Substantial know-how
- Patents extend until 2033*

Drug Master Files

- Type 4 and 5 DMFs in U.S. with >20,000 pages containing manufacturing, safety data (IV, inhaled, SubQ, oral, etc.)
- Also have DMFs in Japan, China and Canada



Manufacturing, Quality & Scale

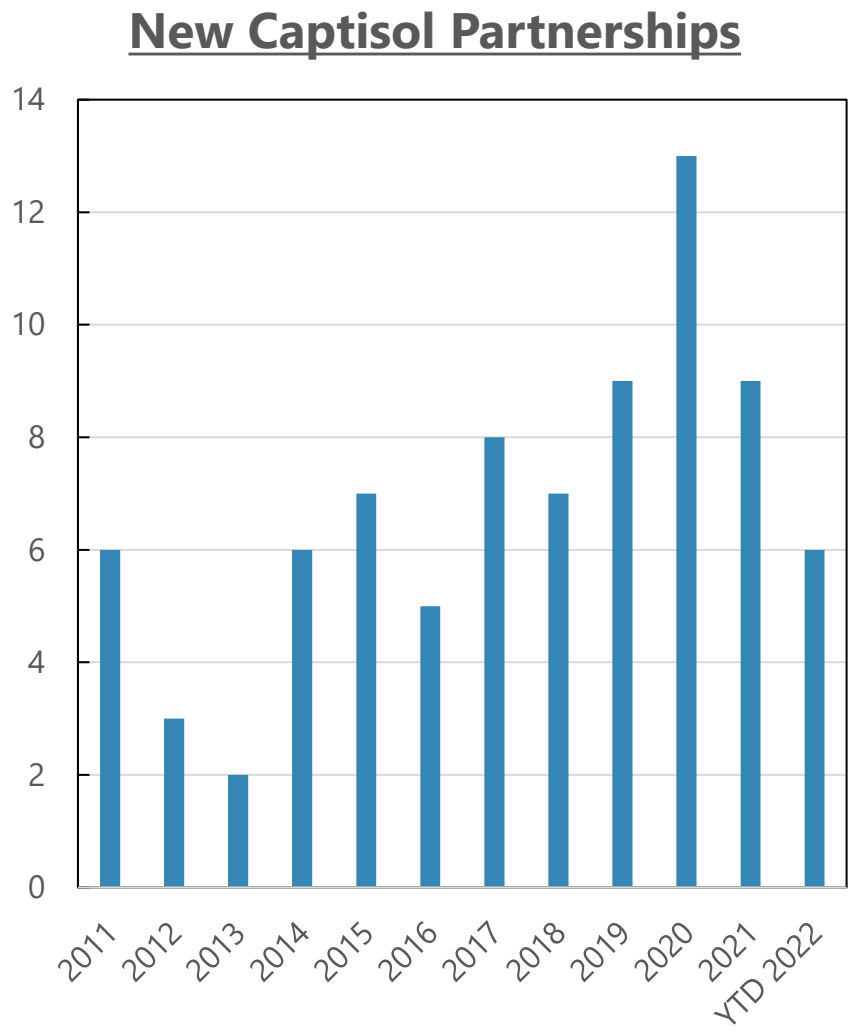
Manufacturing is conducted in cGMP plants via validated processes, distribution out of multiple facilities

Substantial capacity increases recently completed

* Ligand maintains a broad global patent portfolio for Captisol with more than 400 issued patents worldwide relating to the technology (including 46 in the U.S.) and with the latest expiration date in 2033. Other patent applications covering methods of making Captisol, if issued, extend to 2041.

CAPTISOL TRACK RECORD OF PARTNERSHIPS

A LONG HISTORY OF SUCCESSFULLY BRINGING IN NEW PARTNERS



- Captisol remains an important tool in the drug discovery and development process
- Ligand has consistently generated new interest each year demonstrated by the continued pace of new deal making
- 2022 new partners span a variety of large and small BioPharma companies

Merck KGaA
Darmstadt, Germany

AstraZeneca

MSD

FAREVA

KIORA

ESCAPE BIO

Ligand

CAPTISOL FOR REMDESIVIR

FIRST FDA-APPROVED COVID TREATMENT

- Remdesivir is an intravenous, hospital-administered antiviral treatment developed by Gilead for COVID-19
  - Product highly insoluble and requires Ligand's Captisol to enable the drug
- Pandemic demand required Ligand to invest in manufacturing scale-up to produce 10x the typical amount for the past 3 years
- Between 2020 to 2022 (peak pandemic years), Ligand will sell over $300 million of Captisol
  - Ligand also sells between $15 to $25 million of Captisol annually to over 50 other customers
- Forecasting the pandemic and related Captisol sales is extremely difficult
  - Ligand will exclude Captisol for remdesivir from its guidance and update investors as orders are received and shipped each quarter

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PELICAN OVERVIEW

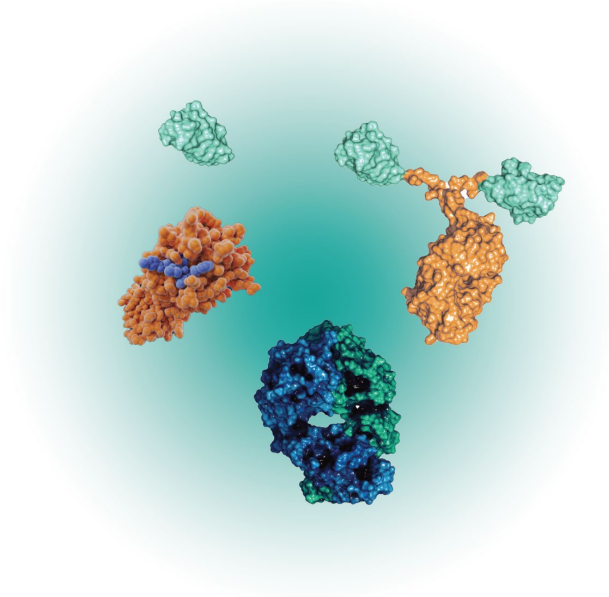
Diane Retallack, SVP Platform Technologies & Innovation

PELICAN

SOLVING OUR INDUSTRY'S PROTEIN PRODUCTION CHALLENGES

- Over 30% of all approved protein therapeutics are manufactured in traditional microbial systems
    - Our Pelican Expression Technology™ Platform offers key advantages over traditional microbial systems for **complex protein drug production**
- As protein therapeutics become more complex, the **demand for more robust manufacturing technologies** is increasing
- Protein therapeutics are often of a physical size that is orders of magnitude larger than small-molecule drugs and exhibit **complex secondary, tertiary and quaternary structures that must be maintained in production**

PELICAN®
P. fluorescens expression technology
A Ligand Technology



PELICAN A UNIQUE VALUE-DRIVING PLATFORM

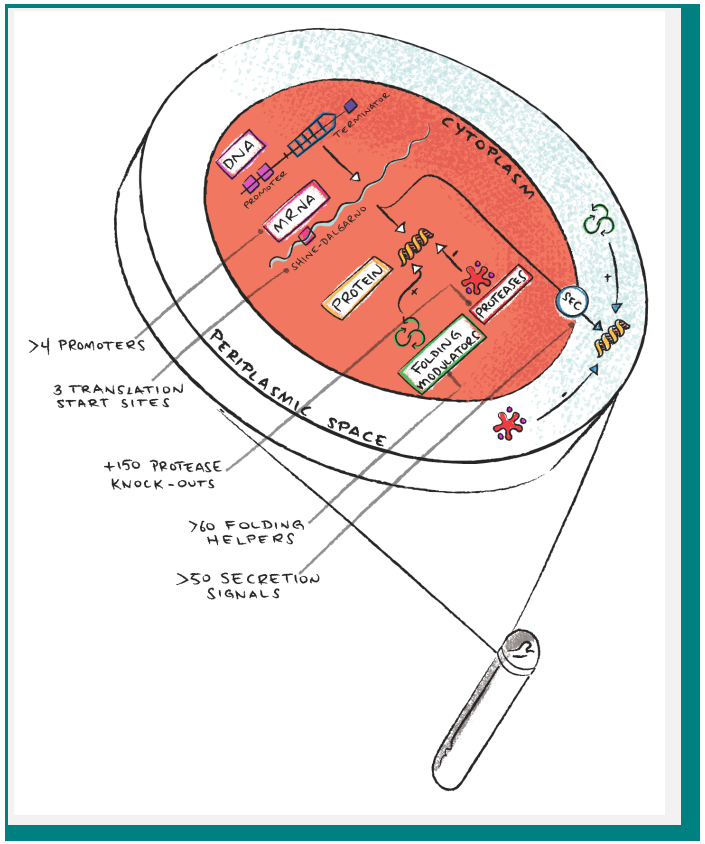
PELICAN®
P. fluorescens expression technology
A Ligand Technology

Platform **delivers significant competitive advantages to our partners**, including:

- ✓ **Regulatory and commercial validation** with five approved products produced using the platform
- ✓ **Diverse toolbox** to address challenging and complex proteins
- ✓ **Speed** to identifying a robust manufacturing strain
- ✓ **High success rates** that reduce the time and cost of development
- ✓ **Efficient production** with high yields and high quality
- ✓ **Decreased long-term cost-of-goods**

Significant institutional knowledge of protein production developed over **three decades**

Pelican Expression Technology® platform has given rise to approved products and has maintained a **success rate ~80%** in expressing a variety of "lead" protein candidates



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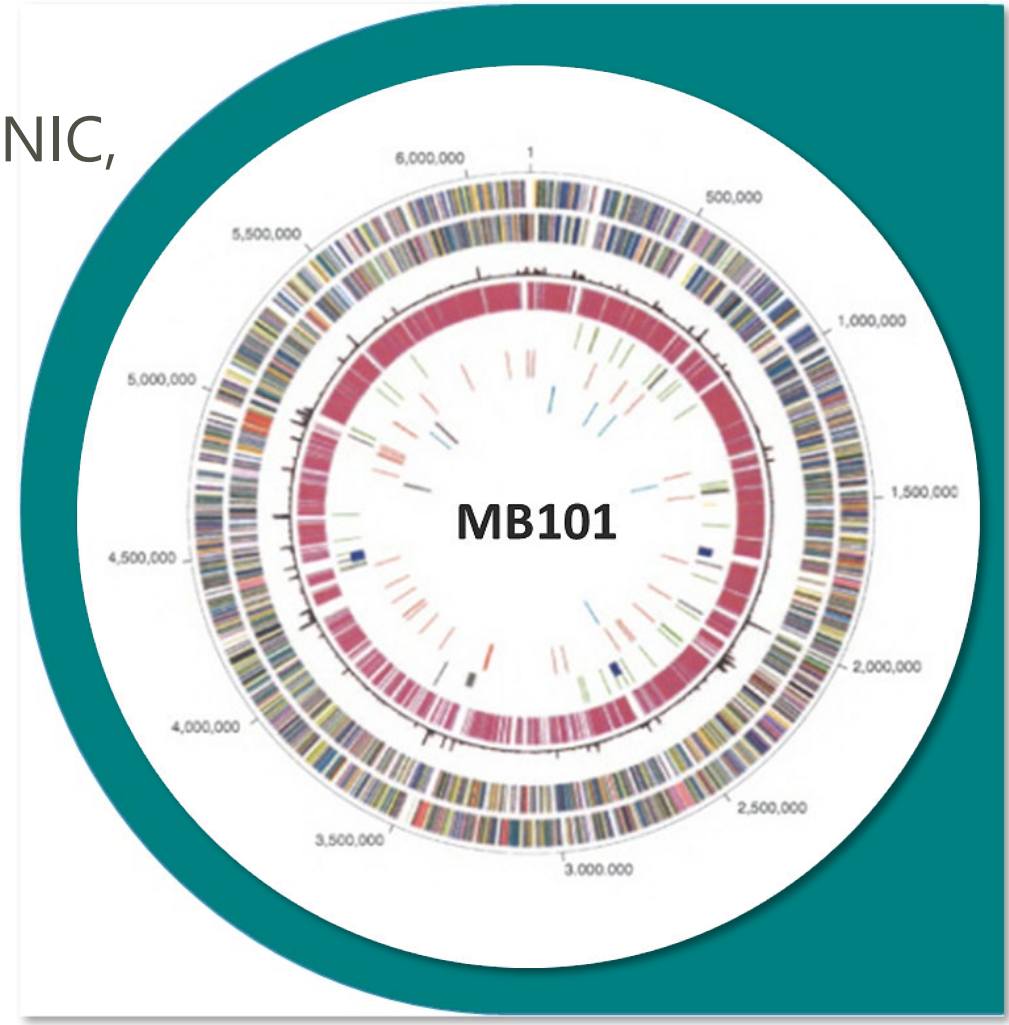
PELICAN

ONE OF THE INDUSTRY'S DEEPEST PROKARYOTIC PROTEIN PRODUCTION PLATFORMS

P. fluorescens: A GRAM-NEGATIVE, NON-PATHOGENIC, METABOLICALLY VERSATILE ORGANISM

- Genomic, RNAseq and proteomics data leveraged to engineer host strains and design expression plasmids
- Animal origin-free and used with antibiotic-free processes
- Capable of producing multiple complex disulfide bonds (e.g., antibody derivatives)
- Automated, high-throughput growth and test methods



Clinically and **commercially validated** with five approved therapeutics and vaccines

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RYLAZE® (RECOMBINANT ERWINIA ASPARAGINASE)

FROM GENE TO MARKET IN UNDER 6 YEARS

Jazz Pharmaceuticals

RYLAZE® asparaginase erwinia chrysanthemi (recombinant)-rywn for injection 10mg/0.5mL per vial

- **Erwinia asparaginase:** treatment for ALL and LBL patients with hypersensitivity to *E. coli* derived asparaginases
- **~20% of ALL patients exhibit hypersensitivity** to *E. coli* asparaginase
- **Supply issues** hindered patient access to *Erwinia* asparaginase
- **Pelican solution**: rapid development of robust production strain and manufacturing process
- **Rylaze®** asparaginase Erwinia chrysanthemi (recombinant) FDA approval June 30, 2021

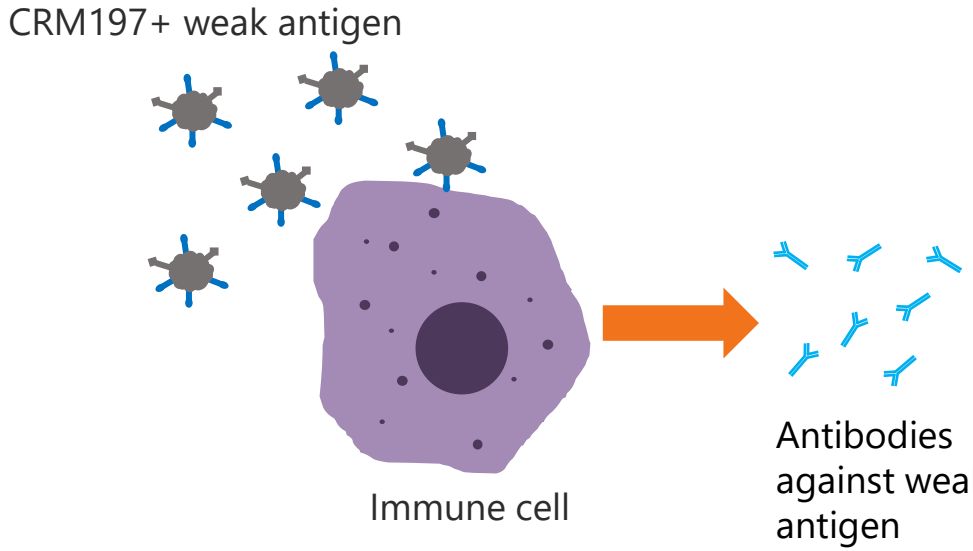
- **Strong U.S. launch**
  - $86M in net sales for 2H2021 following July ‘21 launch
  - **>$200M net sales reported Q1-Q3 2022**, matching 2016 Erwinaze annual global net sales
  - **Unconstrained supply**: doctors returning to best clinical practice by switching earlier when there has been a hypersensitivity reaction to *E. coli* –derived asparaginase
- **Label expansion and regulatory submissions**
  - U.S. sBLAs **more convenient dosing:** IM M/W/F schedule (approved Nov ‘22) and IV dosing (submitted April ‘22)
  - EU MAA filing in May ‘22 (IV and IM dosing) **potential 2023 EU approval**
  - Advancing program for **potential Japan submission**

CRM197 CARRIER PROTEIN

NON-TOXIC DIPHTHERIA TOXIN MUTANT FOR CONJUGATE VACCINES

Vaccine Carrier Protein – Immunostimulant

- CRM197 is mutant of diphtheria toxin that is used in conjugate vaccines to boost the immune response against weak antigens that are attached to it
- Weak antigens (e.g., complex sugars on the surface of disease-causing bacteria) are not able to induce an immune response on their own



Robust Manufacturing of CRM197

- CRM197 is typically produced using the native pathogen, which requires special containment and is an inefficient, inconsistent manufacturing process
- Pelican uses *Pseudomonas fluorescens* to achieve a consistent, high-yield recombinant CRM197 to support conjugate vaccine development and commercial supply

CRM197 VACCINE PARTNERSHIPS

MERCK

Vaxneuvance™
Pneumococcal 15-valent
Conjugate Vaccine

Vaxneuvance™ (15 valent)

- U.S. pediatric approval June ‘22 and now included in the CDC immunization schedule (~1yr ahead of Prevnar20); EU pediatric approval Oct ‘22

Pediatrics are ~75% of pneumococcal vaccine market

V116 (21 Valent Pneumo Vaccine)

- Specifically designed for adult population, targeting 85% of invasive disease
- 8 serotypes not present in any licensed vaccine
- Granted breakthrough status by FDA
- **Phase 3 initiated in August ‘22**

SERUM INSTITUTE OF INDIA
Cyrus Poonawalla Group

Pneumosil
Pneumococcal Polysaccharide Conjugate Vaccine (Adsorbed, 10-Valent)

Pneumosil® (10 Valent)

- Developed for middle-income countries and developing world
- Launch progressing and royalties flowing in

Meningococcal conjugate vaccine

- Pentavalent meningococcal vaccine developed for African countries and the developing world
- Recently approved in India
- WHO pre-qualification pending

Ligand®

INTELLECTUAL PROPERTY & ESG

Andrew Reardon, Chief Legal Officer

LEGAL PROTECTIONS FOR REVENUE SOURCES

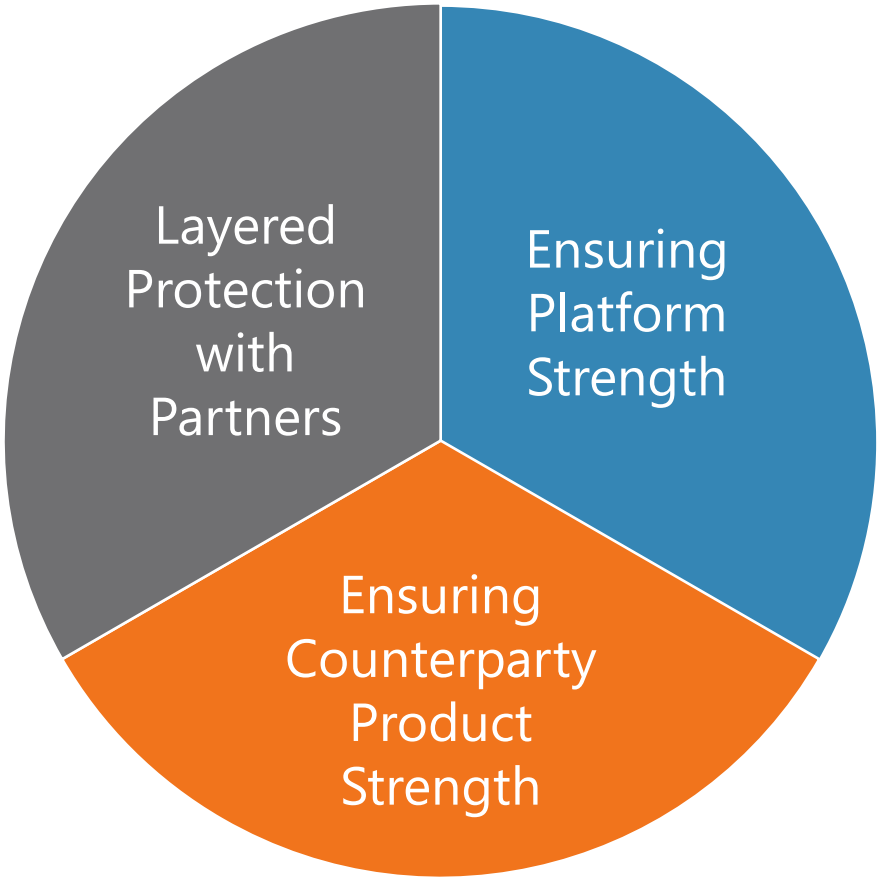
INTELLECTUAL PROPERTY PROTECTIONS

- Ligand's continued innovation strengthens IP
- Ligand's revenue tied to strength of both internal IP and partner IP

TRANSACTIONAL PROTECTIONS

- Licensing of owned technologies
- Funding of third-party product development

REVENUE PROTECTION IP



Ligand IP

- Layered protection with partners
  - Combining with our IP can increase market potential
- Ensuring platform performance
  - The stronger our IP, the more partnerships may be directed to us (i.e. patents, knowhow, DMF)
  - The longer our IP, the longer we can monetize our assets (i.e Royalty duration, partner sales prospects)

Partner IP

- Ensuring counterparty product strength
  - IP strength
  - IP life
  - IP maintenance

REVENUE PROTECTION TRANSACTIONS

Technology Licensing

Providing access to Ligand's technology platforms

- **Assurance of continued effort**
- **Tiered royalties**
- **Maintenance of IP**
- **Reversionary rights**

Development Capital

Funding of third-party product development

- **IP assessment and protections**
- **Alignment with partners**
- **Structural features**
- **Financial instability protections**

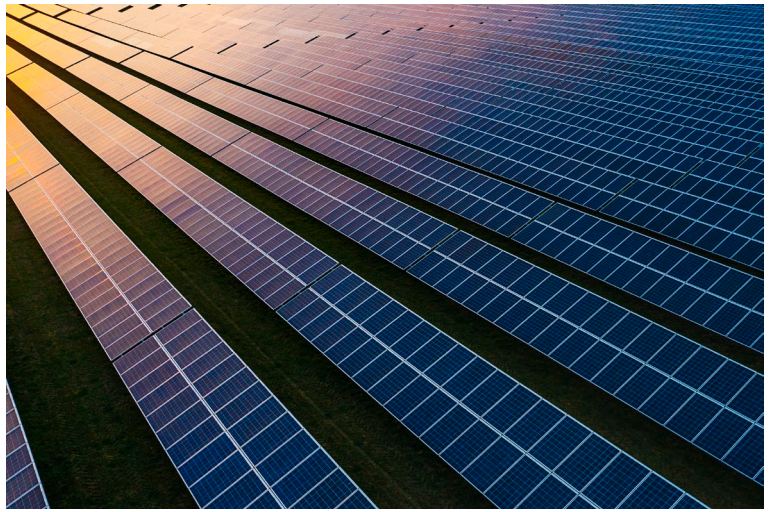
Note: Examples are illustrative and not intended to be exclusive, actual provisions and protections are transaction dependent

2022 ESG REPORT

GOOD PROGRESS ***RENEWED FOCUS*** ***BRIGHT FUTURE***

2022 ESG REPORT GOOD PROGRESS

- $2.5 million solar investment at Kansas University Innovation Park
- Modified Captisol manufacturing process resulting in water savings and packaging reduction
  - 11 million liters of water saved, 2.4 million liters of ethanol saved, and 9,100 kg of carbon filtered, in one year
- Diverse Workforce
  - 26% Asian, 14% Hispanic(1)
- Charitable donations
- Numerous initiatives from our outreach committees
  - ASE (Ligand's Alliance for Social Equality)
  - LEAF (Ligand Environmental Action Force)



(1) As of December 1, 2022

Ligand®

2022 ESG REPORT RENEWED FOCUS

WE RECOGNIZE OUR INCREASING RESPONSIBILITY

- Patients
- Employees
- Partners
- Investors
- General public
- Planet

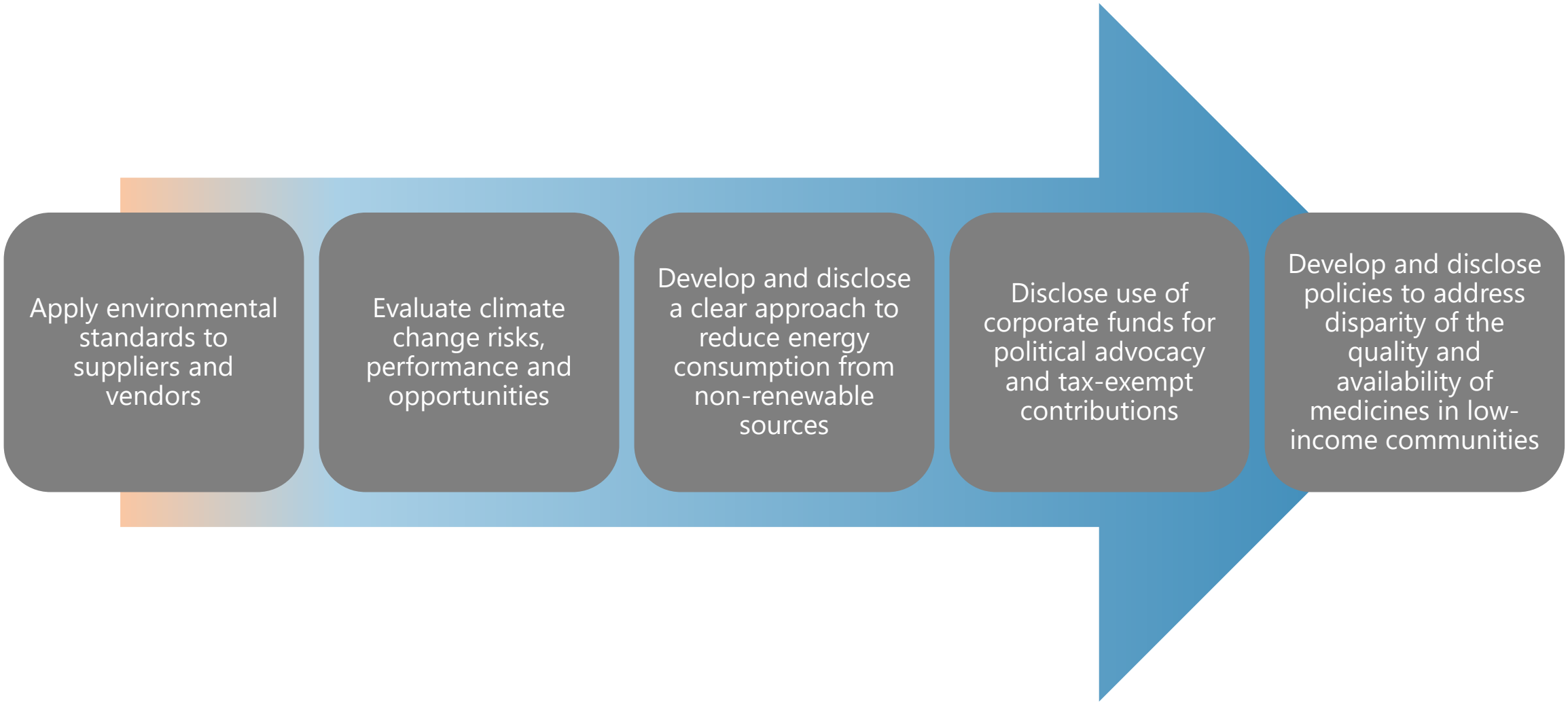
CONSTANTLY IMPROVING OUR ROBUST PROCESSES

- Board discussion
- Employee engagement
- Partnership influence
- Community involvement

SEEKING TO INCREASE DISCLOSURE AND PUBLICITY

- Participation with like-minded organizations
- Community visibility
- Access to policy on corporate website

2022 ESG REPORT BRIGHT FUTURE



Ligand®

FINANCIAL OUTLOOK

Tavo Espinoza, CFO

2022 FINANCIAL GUIDANCE

Royalties on partners' recent product approvals expected to drive significant financial growth going forward

Core Captisol business expected to grow; Expect additional $85M of COVID-related Captisol sales in 2022

Over $1 billion in potential milestones support continued contract revenue growth

Core Business Financial Outlook

Excludes COVID-related Revenue

Royalty Revenue	$66 – 69M
Core Captisol Sales	$15M
Contract Revenue	$18 – 20M
Total Core Revenue	$99 – 104M
Adjusted Diluted EPS	$2.05 - 2.20

Expected additional $85M of COVID-related Captisol sales in 2022 will translate to an additional $2.25 of "non-Core" EPS resulting in total company EPS of $4.30 - $4.45

2022 & 2023 FINANCIAL GUIDANCE

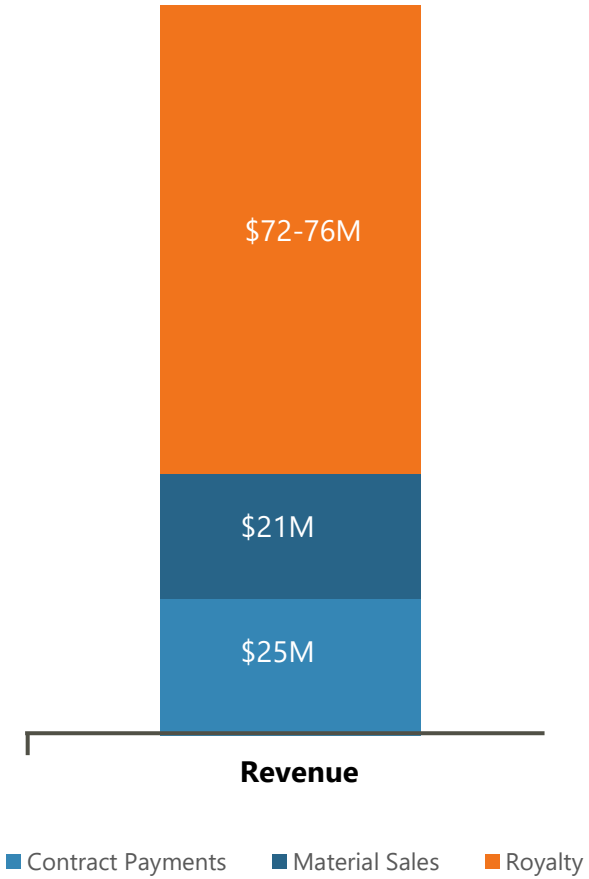
	2022	2023
Core Revenue*	**$99 - 104M**	**$118 - 122M**
Cost of Goods Sold	$6M	$7M
Cash Opex	$53M	$46M
Other Income, net	$3M	$3M
Tax Rate	**19-21%**	**21-22%**
Core Adjusted EPS*	**$2.05 - 2.20**	**$3.10 - 3.30**
Share Count	**17.1**	**17.2**

- ~ 20% core revenue growth over 2022
  - Royalties $72 - 76M
  - Contract $25M
  - Captisol $21M
- Gross margin projected to improve in 2023 to mid 60%s
- Decrease in opex due primarily to leaner G&A and R&D support functions post OmniAb
- ~ 50% EPS growth over 2022

* Core Revenue and Core Adjusted EPS excludes COVID-related Captisol sales. Expect additional $85M of COVID-related Captisol sales in 2022 will translate to an additional $2.25 of "non-Core" EPS resulting in total company EPS of $4.30 - 4.45

REVENUE BREAKDOWN POST OMNIAB SPIN

2023 Revenue Guidance of $118 - $122 million



Royalty

- Contribution from 10 commercial products
- Amgen's Kyprolis contributes 45% of total
- Projected commercial launch of Travere's Sparsentan in 2023

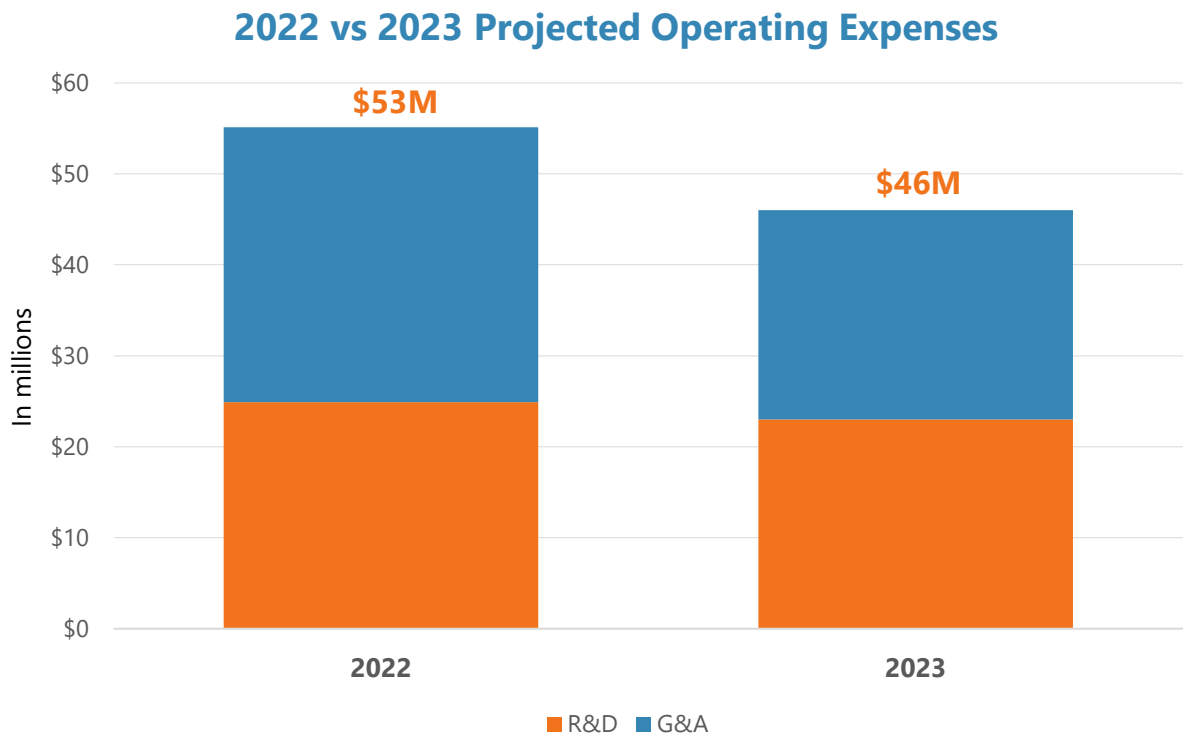
Material Sales

- Captisol for commercial use comprises most of material sales
- Core Captisol sales expected to return to pre-COVID levels

Contract Payments

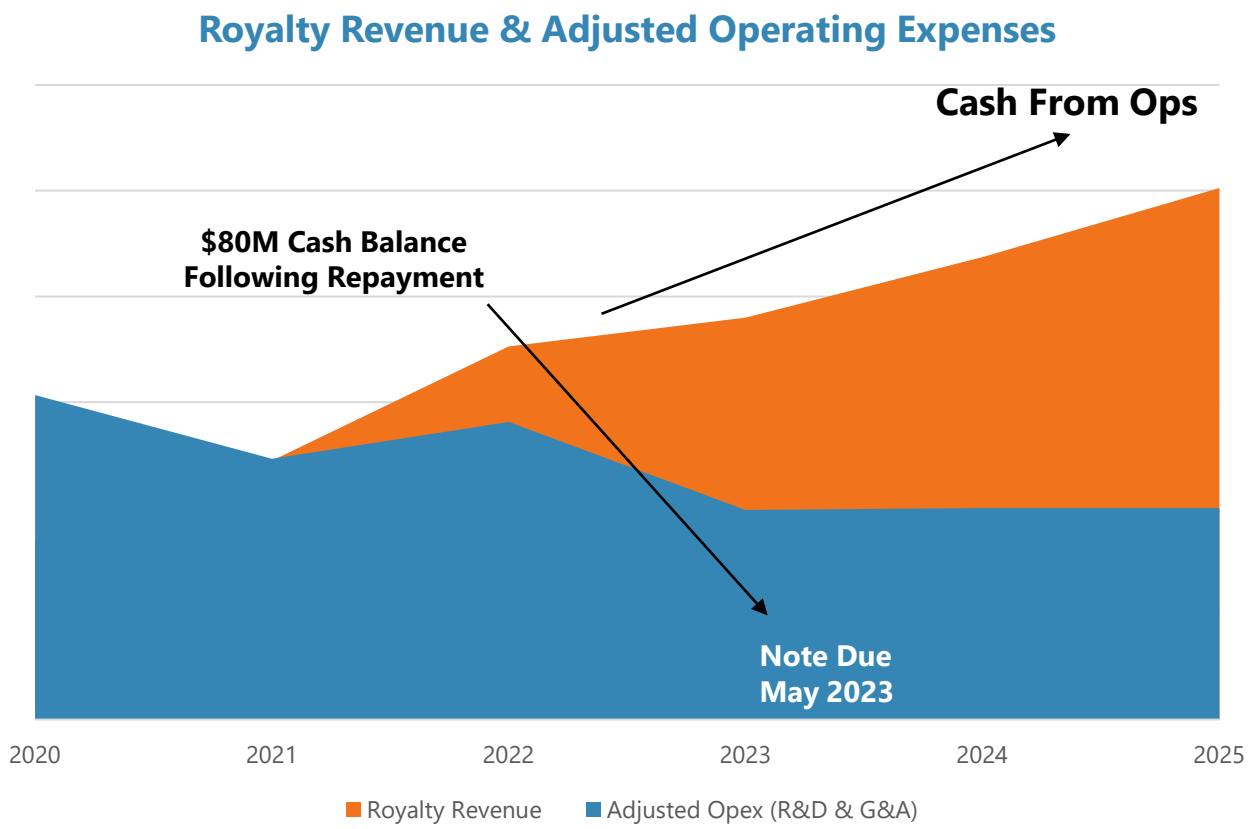
- Sparsentan FDA approval projected for Q1'23 results in $15M milestone
- Wide diversity of payments with more than 15 programs contributing to projected contract revenue guidance in 2023

PROJECTED CORE BUSINESS OPERATING EXPENSES



- Projected core business cash operating expenses exclude expenses directly attributable to OmniAb
- Decrease in opex due primarily to leaner G&A and R&D support functions post OmniAb
- Lean corporate cost structure and growing revenue drives growing profits in 2023 and beyond

ROYALTY REVENUE DRIVES CASH GENERATION



- Estimated cash and investment balance of $150M at 12/31/22 (excluding 6.6M share investment in Viking)
- $77M convertible note expected to be paid in cash in May 2023
- $80M cash and investment balance post debt extinguishment expected to grow
- Leverage from royalty revenue growth and flat operating expenses
- Royalty revenue alone will fund operations plus contribute significantly to cash generation

TAX ATTRIBUTES POST OMNIAB SPIN

- Ligand has approximately $85 million U.S. federal and $168 million state (mostly California) net operating losses (NOLs) to offset future taxable income
  - NOLs will provide some relief on taxable income as the company projects tax profits will grow
- Due to tax code, NOLs are limited in the quantity and the timing in which they can be used, so we do not expect to get a full offset on taxable income immediately
- Estimated cash tax payments made in 2022 is $11M. We're projecting minimal cash tax payments in 2023

COMPONENTS OF ADJUSTED DILUTED EPS

Item	Rationale
Stock-based compensation and associated tax benefits	• Non-cash expense based on Black-Scholes valuation of option grants • Value is fixed at time of grant; value based on stock price
Amortization of acquired intangible assets	• Non-cash expense representing the amortization of intangible assets associated with acquired entities (primarily Cydex and Pfenex)
Non-cash interest expense	• Amounts represent non-cash debt related costs that are calculated in accordance with the authoritative accounting guidance for convertible debt instruments that may be settled in cash
Change in contingent liabilities	• Non-cash adjustment in fair value of CVRs and contingent payout liabilities associated with past acquisitions
Unrealized gain or loss from short-term investments	• Non-cash adjustment in fair value of short-term investments which includes Viking Therapeutics stock and other equity securities
Other	• Amounts primarily relate to (gain) loss on debt extinguishment and certain legal settlement expense

GAAP TO NON-GAAP RECONCILIATION

NET INCOME FROM CONTINUING OPERATIONS AND DILUTED EPS FOR FY 2021 & YTD 9/30/2022 (UNAUDITED)

	For the year ended December 31, 2021			For the 9-months ended September 30, 2022		
(in thousands, except per share amounts)	As Reported	Discontinued Operations	Continuing Operations	As Reported	Discontinued Operations	Continuing Operations
Revenues	$ 277,133	$ 35,558	$ 241,575	$ 169,200	$ 23,336	$ 145,864
Cost of Captisol	62,176	-	62,176	31,213	-	31,213
Amortization of intangibles	47,167	12,945	34,222	35,455	9,756	25,699
Research and development	69,012	37,463	31,549	61,461	34,164	27,297
General and administrative	57,483	10,693	46,790	50,210	11,281	38,929
Other operating income	(37,600)	-	(37,600)	-	-	-
Total operating costs & expenses	198,238	61,101	137,137	178,339	55,201	123,138
Income (loss) from operations	78,895	(25,543)	104,438	(9,139)	(31,865)	22,726
Other income (expense), net	(31,597)	49	(31,646)	(10,780)	485	(11,265)
Income (loss) before income taxes	47,298	(25,494)	72,792	(19,919)	(31,380)	11,461
Income tax benefit (expense)	9,840	5,354	4,486	4,043	6,590	(2,547)
Net income (loss):	$ 57,138	$ (20,140)	$ 77,278	$ (15,876)	$ (24,790)	$ 8,914
GAAP Diluted net income (loss) per share	$ 3.31	$ (1.17)	$ 4.48	$ (0.94)	$ (1.47)	$ 0.53
Shares used	17,246	17,246	17,246	16,860	16,860	16,860
Non-GAAP Adjustments:						
Share-based compensation expense	$ 38,783	$ 9,457	$ 29,326	$ 31,140	$ 7,923	$ 23,217
Non-cash interest expense [1]	16,692	-	16,692	639	-	639
Amortization of intangible assets	47,167	12,945	34,222	35,455	9,756	25,699
Amortization of commercial license rights [2]	79	-	79	(323)	-	(323)
Change in contingent liabilities [3]	(36,962)	(1,210)	(35,752)	(1,328)	(485)	(843)
Acquisition and integrations costs [4]	472	-	472	-	-	-
Transaction costs [5]	3,702	3,702	-	4,955	4,955	-
Loss (gain) from short-term investments	3,997	(1,266)	5,263	15,709	-	15,709
Realized gain from short-term investments	6,647	1,266	5,381	(284)	-	(284)
Other [6]	9,768	1,550	8,218	(1,938)	-	(1,938)
Income tax effect of items above	(23,088)	(6,758)	(16,330)	(15,082)	(3,964)	(11,118)
Excess tax benefit from stock comp [7]	(13,634)	(3,325)	(10,309)	129	34	95
Adjusted net income	$ 110,761	$ (3,779)	$ 114,540	$ 53,196	$ (6,571)	$ 59,767
Captisol - COVID gross profit, net of tax [8]	67,345	-	67,345	30,332	-	30,332
Adjusted net net income after Captisol - Covid	$ 43,416	$ (3,779)	$ 47,195	$ 22,864	$ (6,571)	$ 29,435
Adjusted EPS	$ 6.42	$ (0.22)	$ 6.64	$ 3.11	$ (0.38)	$ 3.49
Adjusted EPS - Excluding Captisol - Covid	$ 2.52	$ (0.22)	$ 2.74	$ 1.33	$ (0.38)	$ 1.72
Shares used	17,246	17,246	17,246	17,128	17,128	17,128

Ligand®

GAAP TO NON-GAAP RECONCILIATION

NET INCOME (LOSS) FROM CONTINUING OPERATIONS AND DILUTED EPS FOR THE 3-MONTHS ENDED 12/31/21, 3/31/22, 6/30/22 & 9/30/22 (UNAUDITED)

(in thousands, except per share amounts) (unaudited)	For the 3-months ended December 31, 2021			For the 3-months ended March 31, 2022			For the 3-months ended June 30, 2022			For the 3-months ended September 30, 2022		
	As Reported	Discontinued Operations	Continuing Operations	As Reported	Discontinued Operations	Continuing Operations	As Reported	Discontinued Operations	Continuing Operations	As Reported	Discontinued Operations	Continuing Operations
Revenues	$ 72,473	$ 15,037	$ 57,436	$ 45,693	$ 9,371	$ 36,322	$ 57,419	$ 7,099	$ 50,320	$ 66,088	$ 6,866	$ 59,222
Cost of Captisol	11,984	-	11,984	4,699	-	4,699	12,361	-	12,361	14,153	-	14,153
Amortization of intangibles	11,776	3,222	8,554	11,813	3,233	8,580	11,824	3,273	8,551	11,818	3,250	8,568
Research and development	18,243	10,632	7,611	20,307	10,425	9,882	19,118	11,044	8,074	22,036	12,695	9,341
General and administrative	17,736	5,161	12,575	18,180	6,256	11,924	14,585	2,500	12,085	17,445	2,525	14,920
Other operating income	-	-	-	-	-	-	-	-	-	-	-	-
Total operating costs & expenses	59,739	19,015	40,724	54,999	19,914	35,085	57,888	16,817	41,071	65,452	18,470	46,982
Income (loss) from operations	12,734	(3,978)	16,712	(9,306)	(10,543)	1,237	(469)	(9,718)	9,249	636	(11,604)	12,240
Other income (expense), net	(19,760)	(491)	(19,269)	(10,834)	443	(11,277)	(167)	(166)	(1)	221	208	13
Income (loss) before income taxes	(7,026)	(4,469)	(2,557)	(20,140)	(10,100)	(10,040)	(636)	(9,884)	9,248	857	(11,396)	12,253
Income tax benefit (expense)	1,610	938	672	4,755	2,121	2,634	(259)	2,076	(2,335)	(453)	2,393	(2,846)
Net income (loss):	$ (5,416)	$ (3,531)	$ (1,885)	$ (15,385)	$ (7,979)	$ (7,406)	$ (895)	$ (7,808)	$ 6,913	$ 404	$ (9,003)	$ 9,407
GAAP Diluted net income (loss) per share	$ (0.32)	$ (0.21)	$ (0.11)	$ (0.91)	$ (0.47)	$ (0.44)	$ (0.05)	$ (0.46)	$ 0.41	$ 0.02	$ (0.53)	$ 0.55
Shares used	16,733	16,733	16,733	16,824	16,824	16,824	16,868	16,868	16,868	17,132	17,132	17,132
Non-GAAP Adjustments:												
Share-based compensation expense	$ 10,408	$ 2,104	$ 8,304	$ 9,044	$ 1,935	$ 7,109	$ 9,499	$ 2,498	$ 7,001	$ 12,597	$ 3,490	$ 9,107
Non-cash interest expense	3,828	-	3,828	326	-	326	175	-	175	138	-	138
Amortization of intangible assets	11,776	3,222	8,554	11,813	3,233	8,580	11,824	3,273	8,551	11,818	3,250	8,568
Amortization of commercial license rights	(72)	-	(72)	(90)	-	(90)	(147)	-	(147)	(86)	-	(86)
Change in contingent liabilities	2,415	(1,756)	4,171	(1,034)	(443)	(591)	(182)	166	(348)	(112)	(208)	96
Acquisition and integrations costs	105	-	105	-	-	-	-	-	-	-	-	-
Transaction costs	3,558	3,558	-	4,773	4,773	-	182	182	-	-	-	-
Loss (gain) from short-term investments	12,132	(1,266)	13,398	12,877	-	12,877	1,909	-	1,909	923	-	923
Realized gain from short-term investments	907	1,266	(359)	(240)	-	(240)	(44)	-	(44)	-	-	-
Other	929	-	929	(1,666)	-	(1,666)	(1,700)	-	(1,700)	1,428	-	1,428
Income tax effect of items above	(8,230)	(1,276)	(6,954)	(7,306)	(1,938)	(5,368)	(3,113)	(885)	(2,228)	(4,663)	(1,141)	(3,522)
Excess tax benefit from stock comp	(885)	(179)	(706)	17	4	13	70	18	52	42	12	30
Adjusted net income	$ 31,455	$ 2,142	$ 29,313	$ 13,129	$ (415)	$ 13,544	$ 17,578	$ (2,556)	$ 20,134	$ 22,489	$ (3,600)	$ 26,089
Captisol - COVID gross profit, net of tax	14,726	-	14,726	3,094	-	3,094	11,833	-	11,833	15,405	-	15,405
Adjusted net income after Captisol - Covid	$ 16,729	$ 2,142	$ 14,587	$ 10,035	$ (415)	$ 10,450	$ 5,745	$ (2,556)	$ 8,301	$ 7,084	$ (3,600)	$ 10,684
Adjusted EPS	$ 1.81	$ 0.12	$ 1.68	$ 0.76	$ (0.02)	$ 0.79	$ 1.03	$ (0.15)	$ 1.18	$ 1.31	$ (0.21)	$ 1.52
Adjusted EPS - Excluding Captisol - Covid	$ 0.96	$ 0.12	$ 0.84	$ 0.58	$ (0.02)	$ 0.61	$ 0.34	$ (0.15)	$ 0.49	$ 0.41	$ (0.21)	$ 0.62
Shares used	17,421	17,421	17,421	17,193	17,193	17,193	17,058	17,058	17,058	17,132	17,132	17,132

GAAP TO NON-GAAP RECONCILIATION

The company is in the process of finalizing tax impact from the discontinued operations. For this presentation, the Company assumed 21% tax rate for the discontinued operations for all periods presented.

(1) Amounts represent non-cash debt related costs that are calculated in accordance with the authoritative accounting guidance for convertible debt instruments that may be settled in cash.

(2) Amounts represent the amortization of commercial license and other economic rights to revenue and research and development expenses.

(3) Amounts represent changes in fair value of contingent consideration related to Pfenex, Icagen, Crystal, CyDex and Metabasis transactions.

(4) Amounts represent severance costs, legal fees, and certain contract termination costs in connection with the acquisitions.

(5) Amounts represent incremental costs including primarily legal fees, accounting fees, and advisory fees incurred by Ligand to spin off OmniAb into a standalone, publicly traded company.

(6) Amounts primarily relate to (gain) loss on debt extinguishment, certain legal settlement expense, adjustments associated with our equity investment in Nucorion, and current expected credit losses adjustments.

(7) Excess tax benefits from share-based compensation are recorded as a discrete item within the provision for income taxes on the consolidated statements of operations as a result of the adoption of an accounting pronouncement (ASU 2016-09) on January 1, 2017. Prior to the adoption, the amount was recognized in additional paid-in capital on the consolidated statement of stockholders' equity.

(8) Captisol - COVID gross profit, net of tax, represents gross profit, net of tax, for Captisol supplied for use in formulation with remdesivir, an antiviral treatment for COVID-19.

QUESTIONS?

LIGAND INVESTOR AND ANALYST DAY

DECEMBER 13, 2022

Nasdaq: LGND