LIGAND

Biopharma's Technology and Capital Partner

DECEMBER 10, 2024

2024 Investor Day

Agenda

10:30 am – 12:00 pm ET

LIGAND STRATEGY Business Overview, Strategy & 2024 Accomplishments	**Todd Davis** CEO
FINANCIAL UPDATE Financial Review & Growth Expectations	**Tavo Espinoza** CFO
INVESTMENT ACTIVITY Recent Transactions & Deal Pipeline	**Paul Hadden** SVP, Investments & Business Development
PORTFOLIO REVIEW Portfolio Management & Product Updates	**Lauren Hay** VP, Strategic Planning & Investment Analytics
TECHNOLOGY UPDATE Captisol, Zelsuvmi & NITRICIL	**Karen Reeves, MD** SVP, Investments & Head of Clinical Strategy **Rich Baxter** SVP, Investment Operations
INVESTOR & ANALYST Q&A	**Management Team**
LUNCH & DISCUSSION	**All**

Safe Harbor Statement & Disclaimers

- This presentation contains forward-looking statements, as defined in Section 21E of the Securities Exchange Act of 1934, by Ligand and its partners that involve risks and uncertainties and reflect Ligand's and its partners' judgment as of the date of this presentation. All statements, other than statements of historical fact, could be deemed to be forward-looking statements, including statements that express Ligand's or its partners' opinions, expectations, objectives, assumptions, plans or projections regarding future events or future results. In some instances, words such as "plans," "believes," "expects," "anticipates," and "will," and similar expressions, are intended to identify forward-looking statements. 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. These forward-looking statements include, without limitation: Ligand's ability to expand its portfolio with life sciences royalty opportunities; the timing of clinical and regulatory events of Ligand's partners, including the expected commercial launch of ZELSUVMI or any other product; the timing of the initiation or completion of preclinical studies and clinical trials by Ligand and its partners; the timing of product launches by Ligand or its partners; and the anticipated benefits from the Apeiron transaction and current portfolio regarding the full-year 2024 financial results and projected 2025 financial results. Actual events or results may differ from Ligand's expectations due to risks and uncertainties inherent in Ligand's business, including, without limitation: Ligand relies on collaborative partners for milestone payments, royalties, materials revenue, contract payments and other revenue projections and may not receive expected revenue; Ligand may not receive expected revenue from Captisol material sales; Ligand and its partners may not be able to timely or successfully advance any product(s) in its or their internal or partnered pipeline(s) or receive regulatory approval and there may not be a market for the product(s) even if successfully developed and approved; Ligand may not achieve its revenue guidance for 2024 or 2025; Ligand faces competition in acquiring royalties and locating suitable royalties to acquire; Ligand may not be able to create future revenues and cash flows through acquisition of royalties or by developing innovative therapeutics; products under development by Ligand or its partners may not receive regulatory approval, the total addressable market for our partners' products may be smaller than estimated; Ligand faces competition with respect to its technology platforms which may demonstrate greater market acceptance or superiority; Ligand is currently dependent on a single source 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 change their development focus and may not execute on their sales and marketing plans for marketed products for which Ligand has an economic interest; Ligand's and its partners' products may not be proved to be safe and efficacious and may not perform as expected, and uncertainty regarding the commercial performance of such products; 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; Ligand's partners may terminate or attempt to terminate any of its agreements or development or commercialization of any of its products; Ligand and its partners may experience delays in the commencement, enrollment, completion or analysis of clinical testing for its product candidates, or significant issues regarding the adequacy of its clinical trial designs or the execution of its clinical trials; challenges, costs and charges associated with integrating acquisitions with Ligand's existing businesses; Ligand may not be able to successfully implement its strategic growth plan and continue the development of its proprietary programs; restrictions under Ligand's credit agreement may limit its flexibility in operating its business and a default under the credit agreement could result in a foreclosure of the collateral securing such obligations; changes in general economic conditions, including as a result of war, conflict, epidemic diseases or political event and ongoing or future litigation could expose Ligand to significant liabilities and have a material adverse effect on Ligand; and other risks and uncertainties described in our public filings with the Securities and Exchange Commission (the "SEC"), available at www.sec.gov. 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- The process for reconciliation between the non-GAAP adjusted financial numbers and corresponding GAAP figures is usually shown in the quarterly earnings press release or the fiscal year annual report, available at https://investor.ligand.com/news-and-events/press-releases/. However, other than with respect to total revenues, Ligand 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.
- 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 updated third party research numbers occurring after the date hereof. This caution is made under the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934.

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Ligand Strategy

Business Overview, Strategy & 2024 Accomplishments

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Ligand Today

Biopharmaceutical royalty aggregator focused on investing in highly differentiated clinical and commercial stage assets, as well as operating royalty-generating platform technologies

Royalty Portfolio	12 major commercial-stage revenue-generating royalty assets Over 75 additional active programs with economic rights
Royalty-Generating Technology IP Platforms	Captisol platform improves solubility, stability, bioavailability & dosing NITRICIL™ platform facilitates creation of unique new chemical entities
Execution at Scale	Robust business development & investment capabilities Rapidly increased level of investment activity in 2024
Financial Performance	$220 million of cash and investments as of the end of Q3 Lean operating structure Growing revenue and EPS guidance

Definition & Benefits of Royalty Investing

What are biopharmaceutical royalties?

A royalty is a percentage of top-line pharmaceutical net revenue

Royalties are non-dilutable

Royalty cash flows can be protected in bankruptcy

Royalty acquisition requires minimal corporate infrastructure

Royalty investing offers high-margin, predictable, compounding growth, as well as superior returns

Attractive Business Model

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- ✓ Small infrastructure
- ✓ Broad therapeutic focus
- ✓ Limited exposure to single asset PTRS

TRADITIONAL BIOTECH COMPANY

- × Large infrastructure
- × Narrow therapeutic focus
- × High exposure to single asset PTRS

PTRS: Probability of technical and regulatory success

Investment Tactics & Methods

Ligand utilizes multiple investment approaches to add late-stage programs to the portfolio

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

Project Finance

Fund late-stage clinical trials for royalty interest

- Applicable in all market conditions
- De-risked late-stage assets
- $10 – 40M per asset
- Favorable time to market

Platforms

Focus on infrastructure-light and leverageable platforms

- **Scalable**
  Limited operations
- **Broad applicability**
  Large market opportunity
- **Enabling**
  Higher royalties
- **Commercially validated**
  Existing royalties

Leadership Team

Differentiated Relationships & Biopharma Investment Experience

Deep network of biopharma relationships enable proprietary deal sourcing and rigorous due diligence

CORPORATE MANAGEMENT

Todd Davis
Chief Executive Officer

Tavo Espinoza
Chief Financial Officer

Andrew Reardon
Chief Legal Officer

Keith Marschke, Ph. D
SVP, Biology & Scientific Affairs

INVESTMENTS

Paul Hadden
SVP, Investments & Business Development

Rich Baxter
SVP, Investment Operations

Lauren Hay
VP, Strategic Planning & Investment Analytics

Michael Vigilante
VP, Investments & Business Development

CLINICAL OPERATIONS & TECHNOLOGY

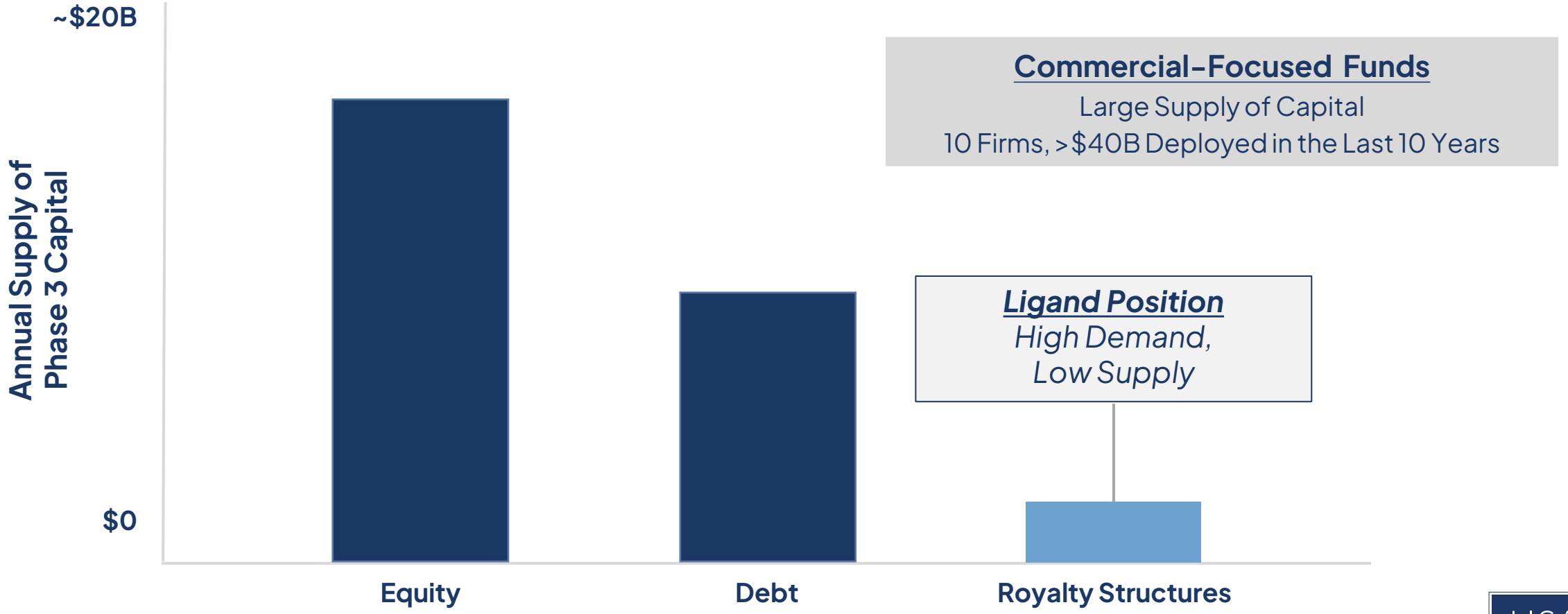
Karen Reeves, M.D.
SVP, Investments & Head of Clinical Strategy; General Manager, Captisol

Vince Antle, Ph. D.
SVP, Technical Operations & Quality

James Pipkin, Ph.D.
VP, New Product Development

Ability To Scale Business Model

Significant capital is required in late-stage clinical development, and a small fraction of this funding is derived from royalty capital, offering meaningful opportunity for growth



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Progress Since 2023 Investor Day

What we said a year ago …	What we did in 2024 …
2024 Initial revenue guidance: $130- $142M	✓ Increased guidance twice during 2024 Latest total revenue guidance: $160-$165M
Active management of the current portfolio	✓ Increased economics around Ohtuvayre and Palvella Invested in the Captisol business, a future growth driver Approval of 3 major commercial stage royalty generating assets: • Zelsuvmi • Ohtuvayre • Capvaxive
Focused Investment Approach	✓ $192M deployed in 2024 across 8 different investments: • Qarziba • invIOs • Bot/Bal + 6 additional programs • 4 Ohtuvayre inventors • Palvella

Ligand 2022 To 2024 Comparison

	2022	2023	2024[1]
Royalty Revenue	$73 million	$84 million	$105 – 108 million
Cash OpEx	$92 million	$40 million	$35 million
Adjusted EPS	$2.44	$4.06[2]	$5.50 – 5.70[2]
Platforms	Captisol, OmniAb, Pelican	Captisol	Captisol, NITRICIL
FTEs	170	35	42

During the last two years, Ligand has transformed its business model to an operationally light strategy focused on a strategy of profitable and compounding growth

1. *Aggregate amounts for 2024 are estimated based upon guidance provided during the third quarter 2024 earnings call, as set forth in our press release announcing financial results for the three and nine months ended September 30, 2024 (furnished as Exhibit 99.1 to our Current Report on Form 8-K which was filed with the SEC on November 7, 2024).*
2. *Adjusted EPS excluding VKTX stock sales. A reconciliation of forward-looking non-GAAP core adjusted earnings per diluted share to the most directly comparable GAAP measure is not available without unreasonable effort, as certain items cannot be reasonably predicted because of their high variability, complexity and low visibility. Specifically, non-cash adjustments that could be made for changes in contingent liabilities, changes in the market value of its investments in public companies, share-based compensation expense and the effects of any discrete income tax items, directly impact the calculation of our core adjusted earnings per diluted share.*

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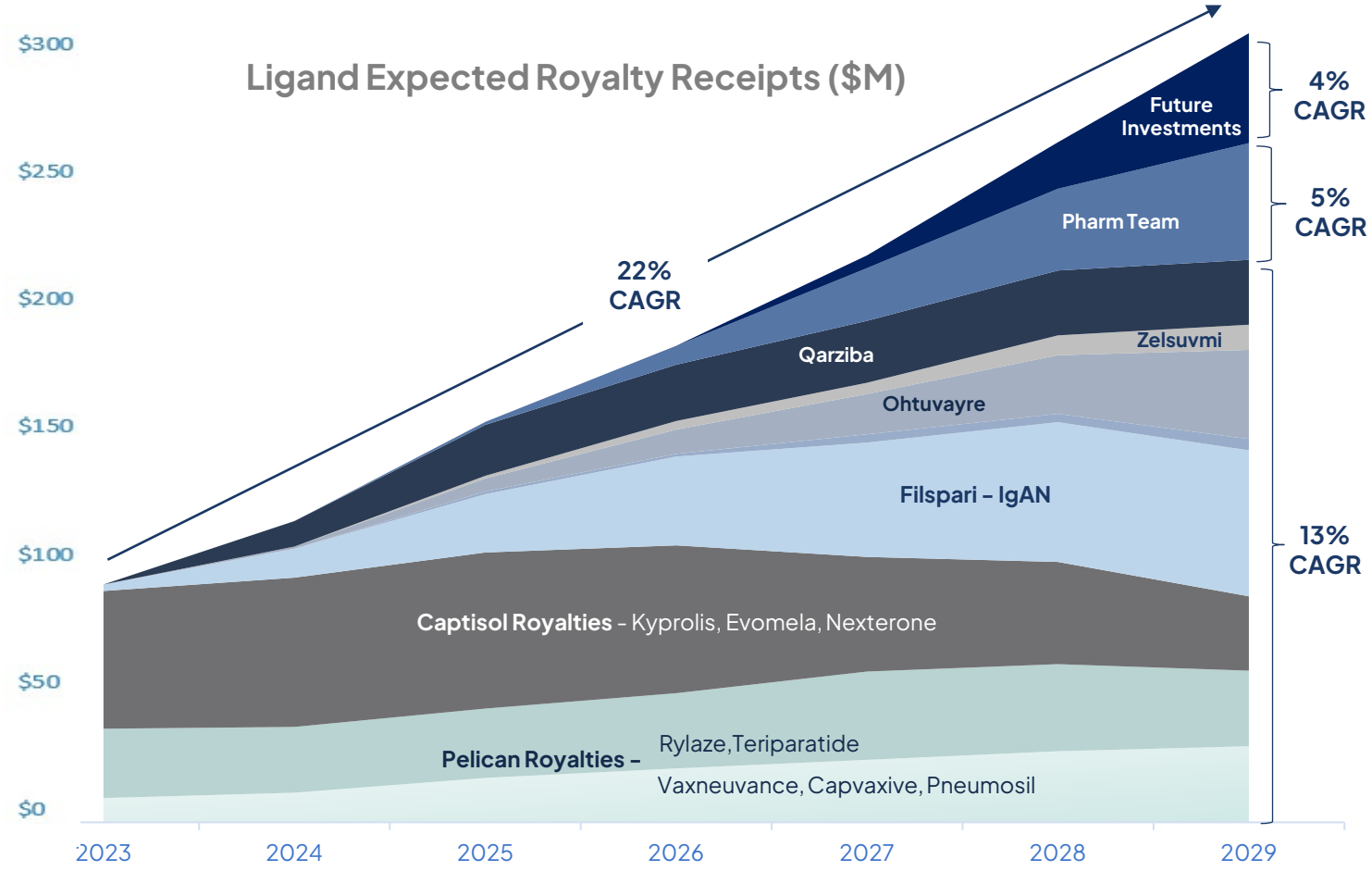
Updated 5 -Year Outlook

Expected Royalty Receipts CAGR 22% from 2024-2029

Current portfolio of commercial and late-stage programs + new deals drive growth

- Long-term royalty receipt outlook on pace to meet or exceed 22% CAGR previously shared at analyst day in December 2023
- Existing commercial programs (13%) and late-stage pipeline ("Pharm Team") (5%) supports Royalty Receipts CAGR of 18%
- Pharm Team includes risk-adjusted development stage programs including Filspari for FSGS, Verona's Phase 2 Ohtuvayre, Agenus' BOT/BAL, Viking's VK-2809, Palvella's PTX-022 and other mid to late-stage programs



1. Sell-side consensus sales estimates used to arrive at royalty revenue from commercial programs.

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Financial Update

Financial Review & Growth Expectations

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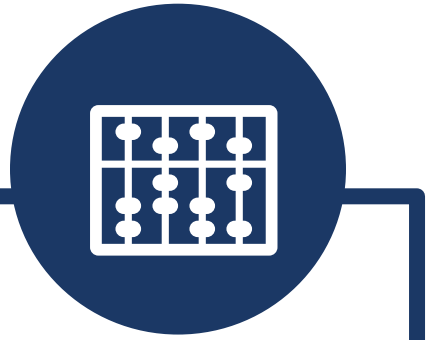
Overview



Review 2024 and introduce 2025 guidance

Deeper dive into long-term 2029 outlook

Cash position and sources of investable capital

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Reiterating 2024 Guidance

27% Royalty Revenue Growth, 38% Adjusted Core EPS Growth

	2023(A)	2024(G)	% Change
Royalty Revenue	$84M	$105 – 108M	27%
Captisol Sales	$28M	$27 – 29M	-
Contract Revenue	$19M	$28M	47%
Total Revenue	$131M	$160 – 165M	24%
COGS	$10M	$11M	-
Core Cash OpEx*	$39M	$35M	(10%)
Cash Operating Profit*	$82M	$114 – 119M	38%
Share Count	17.6	19.0	8%
Adjusted Core EPS**	$4.06	$5.50 – 5.70	38%

- Royalty revenue growth driven by Kyprolis, Qarziba and Filspari
- Contract revenue is event driven/not linear given it's largely tied to earned regulatory milestone payments. Travere approval in 2023 resulted in $15M milestone, Ohtuvayre approval and launch resulted in $20M milestone
- Increase in share count driven by ATM issuance and higher stock price
- Increase in Adjusted Core EPS driven by increase in operating profit, offset by increase in share count

*Excludes costs incurred to incubate the Pelthos business and Viking stock gains.

**For 2023, see the non-gaap reconciliation included in our fourth quarter and full-year 2023. For 2024 projected financial results, reconciliation of forward-looking non-GAAP core adjusted earnings per diluted share to the most directly comparable GAAP measure is not available without unreasonable effort, as certain items cannot be reasonably predicted because of their high variability, complexity and low visibility.

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Strong Tailwinds Heading Into 2025

New commercial programs and a strong balance sheet sets up well heading into 2025 and beyond

- ✓ **Captisol business – Gilead will take shipments in 2025 for Captisol enabled Veklury**
  - –Expected to be part of our recurring commercial business going forward

- ✓ **Travere's Filspari obtained full FDA approval and label expansion, Ligand earns 9% royalty**
  - –$230 million assumed sales in 2025
  - –Potential indication expansion into FSGS presents significant upside beyond 2025

- ✓ **Acquisition of Qarziba will add $1 in adjusted EPS on an annualized basis**

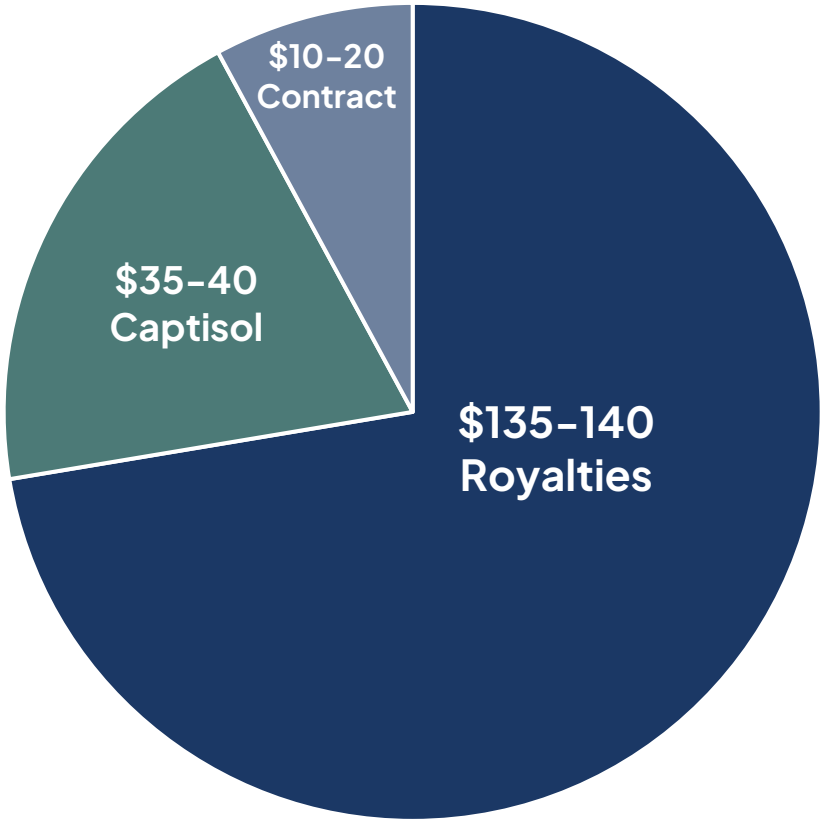
- ✓ **Verona's Ohtuvayre – FDA Approved in June**
  - –Consensus peak sales of $1.5B can be surpassed by capturing 2% of 8.5M patient US market

- ✓ **Merck's Capvaxive – FDA Approved in June**
  - –Obtained CDC recommendation for patients over 50, positioned to lead the segment

2025 Revenue Guidance – 17% Growth over 2024

Forecasting Total Revenue of $180–$200M

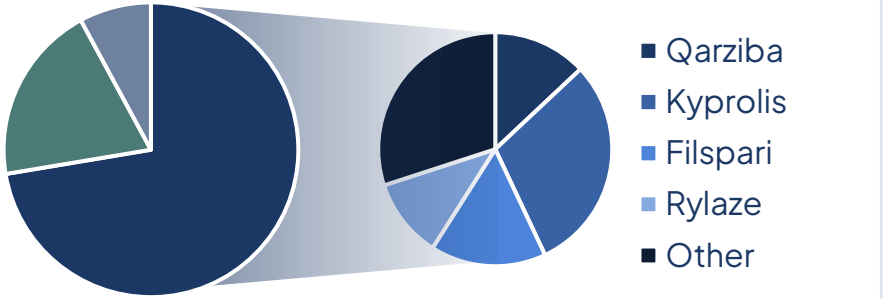
(in millions)



Royalty Revenue Expected to Grow 30% over 2024

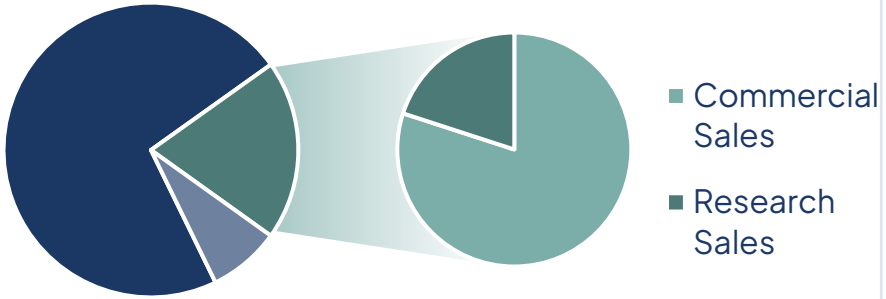
Royalties

30% Growth driven by Filspari, Qarziba and Ohtuvayre



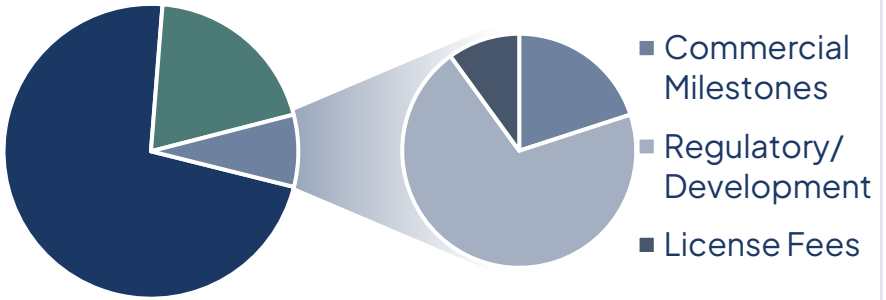
Captisol

Demand from existing customers and orders for Gilead's Veklury drive 33% growth in 2025



Contract

Guidance range due to $10M VK-2809 Phase 3 milestone that may come at end of 2025



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2025 Financial Guidance

	2024 Guidance	2025 Guidance
Total Revenue	$160 – 165M	$180 – 200M
COGS	$11M	$11 – 15M
Core Cash OpEx	$35M	$37 – 39M
Cash Operating Profit*	$114 – 119M	$132 – 146M
Other Income**	$17M	$9 – 10M
Adjusted Net Income*	$105 – 108M	$114 – 125M
Share Count	19.0	19.0 – 20.0
Adjusted Core EPS*	$5.50 – 5.70	$6.00 – 6.25

- **Royalty revenue** and **Captisol sales** drive revenue growth at 30% and 33%, respectively
- Increase in **Core cash opex** driven by investments made to build the Business Development and Investments team
- **Core cash opex** excludes stock-based compensation and costs incurred to incubate the Pelthos business.
- **Other income** decrease driven primarily by lower forecasted interest income due to lower interest rates
- Increase in share count places some pressure on **Adjusted Core EPS**

A reconciliation of forward-looking non-GAAP core adjusted earnings per diluted share to the most directly comparable GAAP measure is not available without unreasonable effort, as certain items cannot be reasonably predicted because of their high variability, complexity and low visibility.

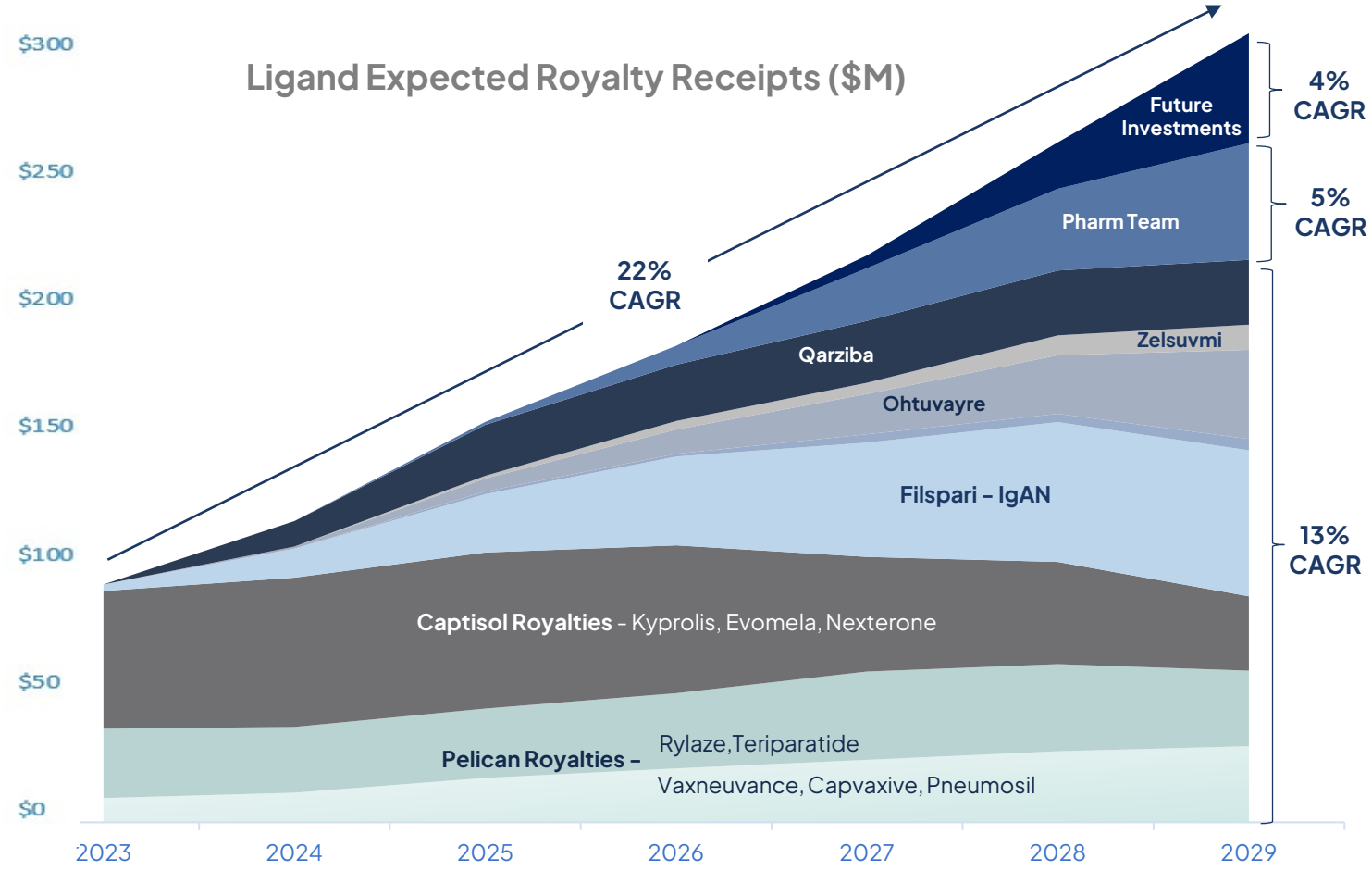
***Includes interest income and 'amortization of financial royalty assets' which represents contract payments and royalty receipts that are applied to reduce the carrying balance of our financial royalty assets.*

Updated 5 -Year Outlook

Expected Royalty Receipts CAGR 22% from 2024-2029

Current portfolio of commercial and late-stage programs + new deals drive growth

- Long-term royalty receipt outlook on pace to meet or exceed 22% CAGR previously shared at analyst day in December 2023
- Existing commercial programs (13%) and late-stage pipeline ("Pharm Team") (5%) supports Royalty Receipts CAGR of 18%
- Pharm Team includes risk-adjusted development stage programs including indication expansion for Filspari and Verona, Agenus' BOT/BAL, Viking's VK-2809, Palvella's PTX-022 and other mid to late-stage programs



1. Sell-side consensus sales estimates used to arrive at royalty revenue from commercial programs.

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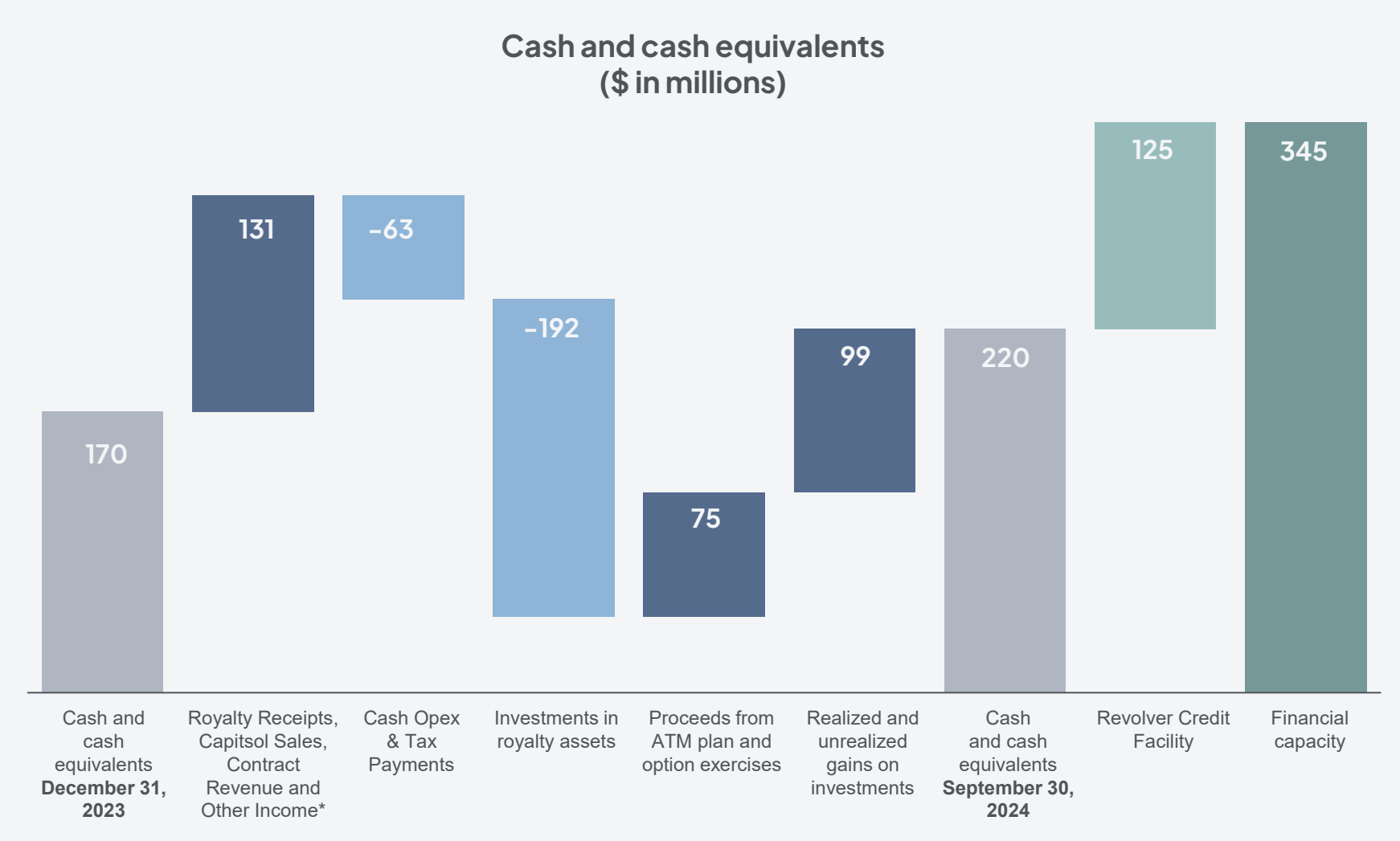
Significant Financial Capacity

- $220 million of cash and cash equivalents as of September 30, 2024
- $125 million available under credit facility (expandable to $175M)
- Financial capacity of ~$350 million with cash on hand and credit facility
- Other sources of capital include the debt and equity markets including ATM with ~$65 million remaining under existing program



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Investment Activity

Recent Transactions & Deal Pipeline

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Ligand Investment Team Progress

Ligand continued to strengthen its investment team and deal activity in 2024

	2022	2023	2024
Investment Team Locations	San Diego	San Diego, Boston	San Diego, Boston, Jupiter
Investment Team Professionals	3	8	12
Capital Invested	–	$82M	$192M
Total Investments	–	5	8

Origination Strengths

01 Seasoned investment team with decades of experience

02 Robust outbound efforts driven by focused investment criteria

03 Relationships with multiple potential royalty sellers

04 Structural flexibility to participate across the capital structure

05 Nimble organization and ability to move quickly

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Investment Criteria

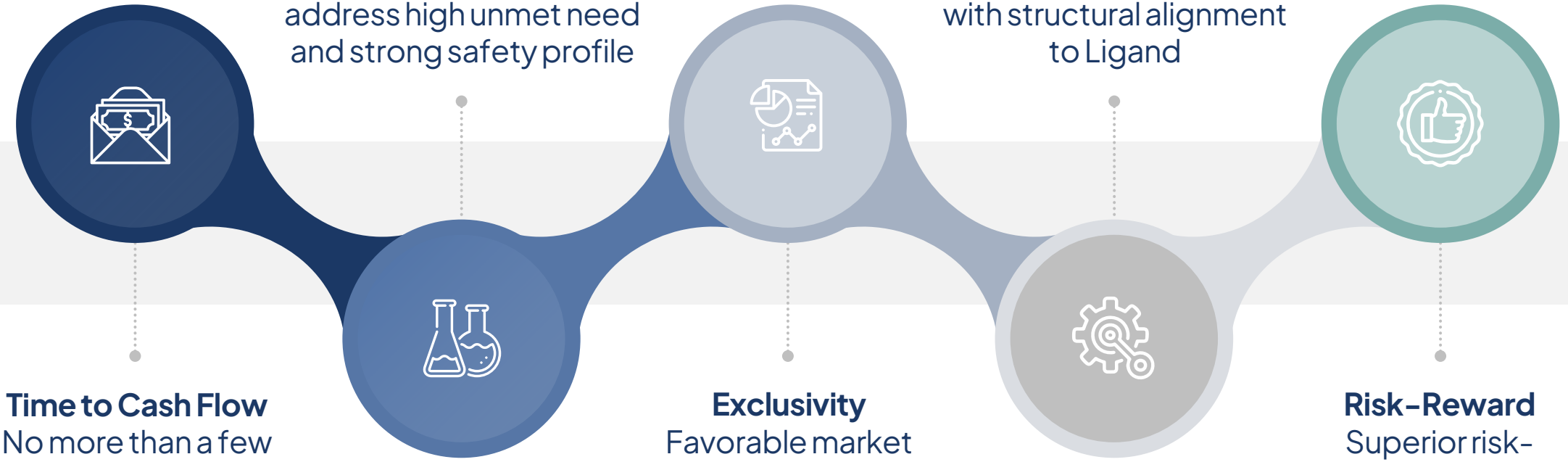
Time to Cash Flow
No more than a few years from potential approval

Clinical Differentiation
Data supports ability to address high unmet need and strong safety profile

Exclusivity
Favorable market exclusivity

Structural Alignment
Competent counterparty with structural alignment to Ligand

Risk-Reward
Superior risk-reward profile



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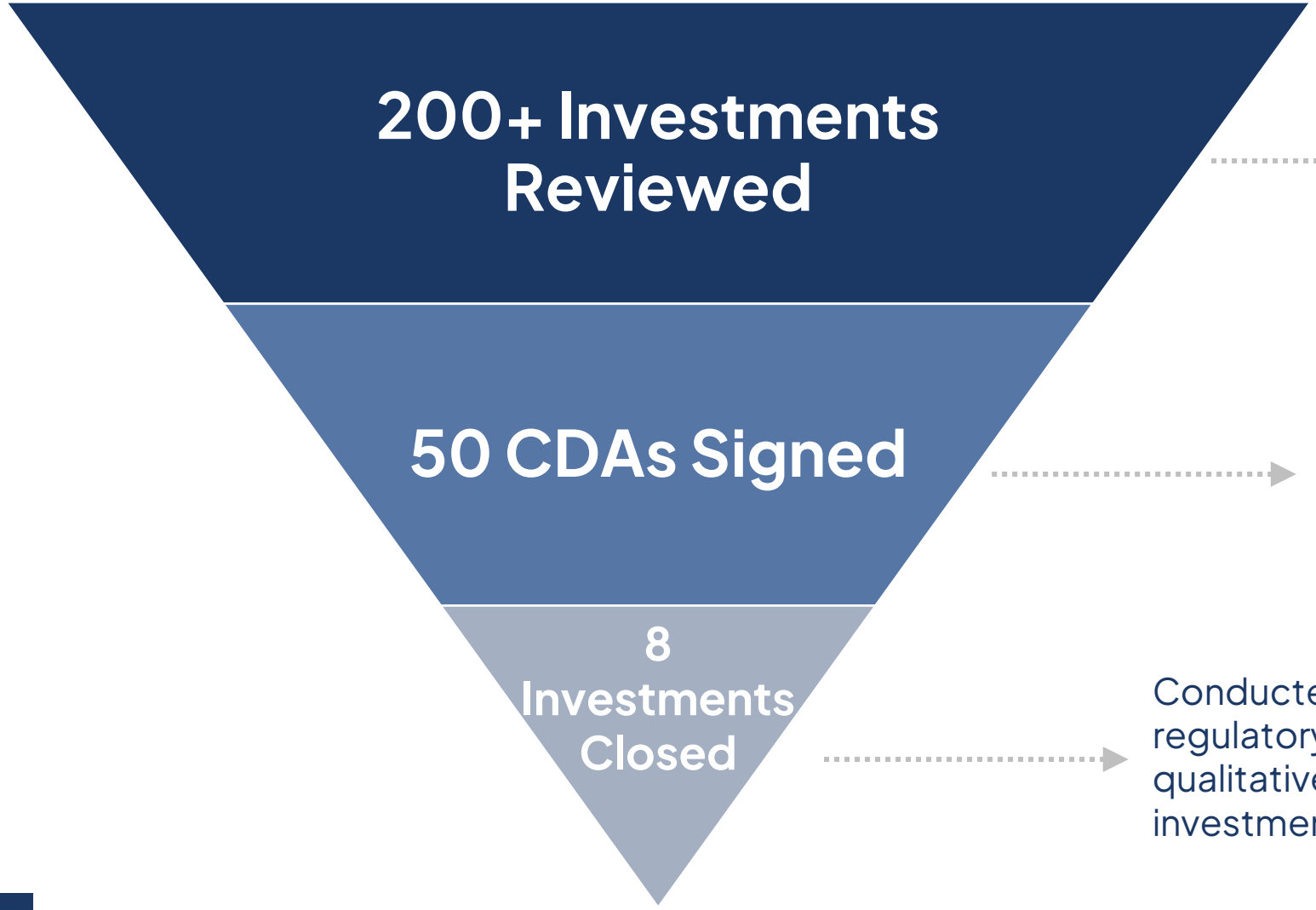
Diligence Process

Clinical & Regulatory	Ligand's scientific expertise is supplemented with **therapeutic area-specific consultant** input on PTRS KOLs are interviewed to understand the **treatment paradigm**, **product selection drivers**, **competitive landscape**, **unmet needs**, and **asset opportunity**
CMC	Ligand engages deep subject matter experts to review and validate all CMC processes and protocols and provide comprehensive insights into **potential risks of delayed approval or post-approval supply chain disruption**
Commercial	Highly specialized disease experts are engaged across three major commercial areas: **Sales and Marketing, Forecasting, and Market Access**
Intellectual Property	Counsel conducts a thorough **review of all IP** protecting the asset Diligence first quickly focuses on any potential **dealbreakers** on patent term and strength, followed by a more **fulsome review of the IP estate**
Legal	Initial focus is on **underlying contracts**, as well as definitions of **valuation criteria** Subsequent focus involves **contracting**, seeking to protect Ligand from any contractual risks

2024 Investment Activity



Leveraged team's extensive experience across therapeutic categories and technologies to facilitate quick kills and focus on highest value opportunities

Initiated in-depth research and engaged external consultants to rapidly identify and focus on key opportunities, risks, and diligence questions. Evaluated revenue and valuation dynamics

Conducted thorough due diligence across clinical, regulatory, commercial, IP, and legal categories to qualitatively and quantitatively characterize the investment opportunity

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Ligand 2024 Investments

Our 2024 investments reflect the diverse strategic approaches we can pursue

Investment Approach and Counterparties

Royalty Monetization	Project Finance	M&A	Special Situations
January 2024	July 2024	July 2024	Ongoing
Ohtuvayre (ensifentrine) Inhalation Suspension 3 mg/2.5 mL	palvella THERAPEUTICS	APEIRON BIOLOGICS	Pelthos Therapeutics
May 2024			
agenus			

Ligand invested ~$200M in capital during 2024

Note: Illustrative, but not comprehensive, overview of breadth of Ligand's investment flexibility

2025 Investment Outlook

INVESTMENT PIPELINE

Ligand's Q4 pipeline has over 30+ actionable opportunities representing in excess of $1B of potential investments

2025 OUTLOOK

Ligand is well positioned and resourced to close multiple investments in 2025, depending on the size and quality of the opportunities

Portfolio Update

Commercial Portfolio, Pipeline Progress, & Operational Updates

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Portfolio Management Process

Ligand's robust process was designed to efficiently manage and identify new opportunities within the company's portfolio of over 90 therapeutic assets

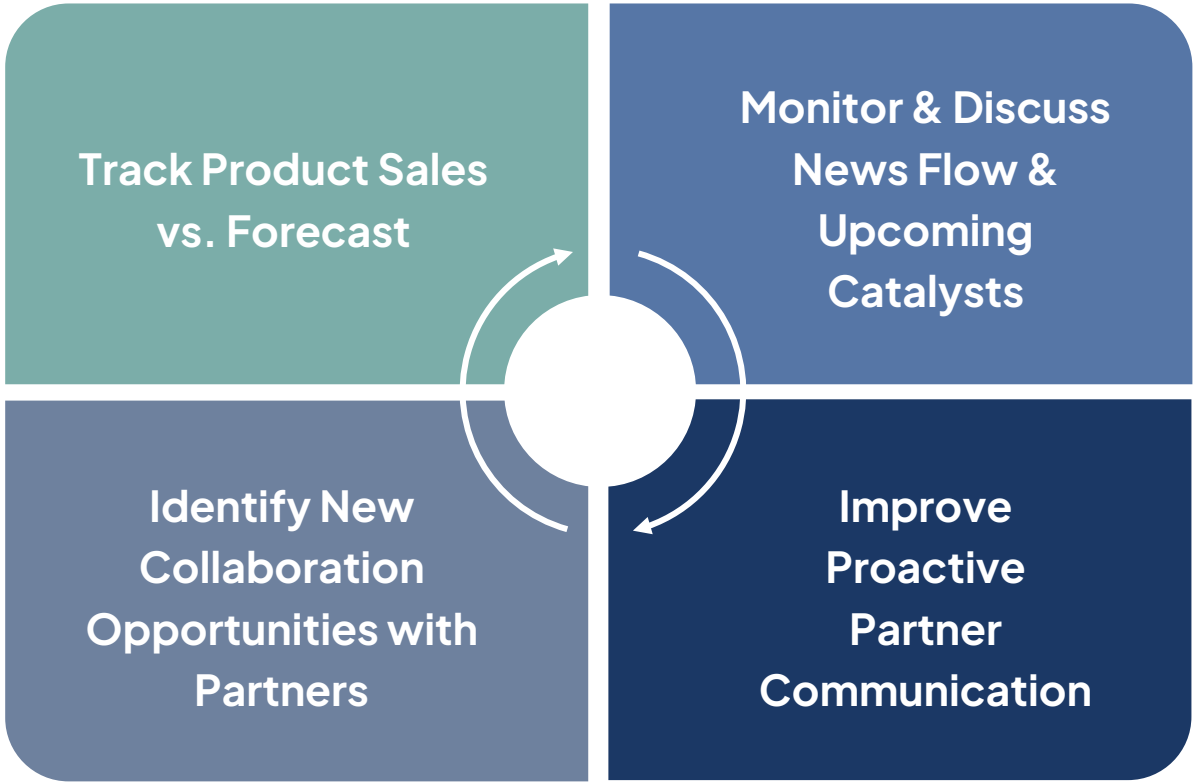
Approach:

01 Align assets to four tiers relative to portfolio contribution

02 Assign Ligand Alliance Manager and support team to each asset

03 Conduct quarterly portfolio review meetings with the full investment team

Portfolio Management Objectives



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Qarziba Background

Qarziba® Dinutuximab beta

RECORDATI RARE DISEASES

Indication	High-risk neuroblastoma
Phase of Development	Ex-US approval May 2017
Investment Background	Ligand acquired Apeiron Biologics in July 2024 for ~$100M and received rights to Qarziba royalties
Royalty Rate	Tiered mid-teen royalty
Recent Sales	Recordati reported €176M YTD through Q3 2024 for Oncology franchise (17% growth vs. the same period in 2023)

Qarziba Updates

Product Value Proposition

- Very high unmet need in rare pediatric indication
- Well-established in ex-US treatment paradigm
- Geographically well-diversified across >35 countries
- Strong commercial partner in Recordati Rare Disease

Recent News

- **June 2024:** Qarziba receives approval in South Korea
- **July 2024:** Recordati completed Type C meeting with FDA regarding potential BLA path for Qarziba

Key Upcoming Catalysts

- **Mid-2025:** Meeting with FDA on further analysis and discussion of additional data for BLA in relapsed/refractory setting
- **2025:** Continued geographic expansion

Ohtuvayre Background

Ohtuvayre™ (ensifentrine) Inhalation Suspension 3 mg/2.5 mL

Verona Pharma

Indication	Maintenance treatment of COPD
Phase of Development	US approval June 2024
Investment Background	Ligand acquired Vernalis in 2018 Ligand acquired additional rights from Ohtuvayre inventors during the course of 2024
Royalty Rate	~3% royalty
Recent Sales	>$11M in first 4 months following approval

Ohtuvayre Updates

Product Value Proposition

- First inhaled product with novel mechanism in over 20 years for COPD
- Addresses high unmet need for patients uncontrolled on current therapies
- Blockbuster sales potential with ~8.6M maintenance treated COPD patients, 50% of whom remain persistently symptomatic
- Potential for indication expansion in non-cystic fibrosis bronchiectasis, cystic fibrosis, asthma, and other respiratory diseases

Recent News

- **June 2024:** FDA approval
- **Nov 2024:** Verona reports $5.6M in Q3 and > $5.6M in October 2024 sales
- **Nov 2024:** Added to GOLD guidelines

Key Upcoming Catalysts

- **Jan 2025:** Permanent J-code
- **2025:** Build on strong launch momentum
- **2025:** Potential ex-US partnership

Filspari Background

FILSPARI® (sparsentan) tablets 200 mg/400 mg

TRAVERE® THERAPEUTICS

Indication	Primary Immunoglobulin A Nephropathy (IgAN) Focal Segmental Glomerulosclerosis (FSGS)
Phase of Development / Approval Date	IgAN: Full FDA approval September 2024 FSGS: Type-C meeting scheduled with FDA
Investment Background	Pharmacopeia acquisition
Royalty Rate	9%
Recent Sales	$35.6M in Q3 2024 (31% growth from Q2 2024)

Filspari Updates

Product Value Proposition

- First and only non-immunosuppressive therapy approved for IgAN, a rare kidney disease that leads to diminished kidney filtering, proteinuria, and progressive kidney function loss
- Potential to be the first FDA approved treatment for FSGS

Recent News

- **Sept 2024:** FDA full approval and label expansion to slow kidney function decline in adults with IgAN at risk for disease progression
- **Oct 2024:** PARASOL working group meeting, which recommended a potential proteinuria-based endpoint for FSGS
- **Oct 2024:** Travere announced it has scheduled a Type C meeting with the FDA to discuss a regulatory pathway in FSGS

Key Upcoming Catalysts

- **Q1 2025:** Results from FDA Type C meeting on FSGS regulatory path
- **2025:** Potential sNDA approval of modification to REMS liver monitoring requirement in IgAN

Capvaxive Background

CAPVAXIVE™
Pneumococcal 21-valent
Conjugate Vaccine

MERCK

Indication	Pneumococcal prophylactic vaccine
Phase of Development / Approval Date	Approved June 2024
Investment Background	Pfenex acquisition (Pelican)
Royalty Rate	Low single-digit
Recent Sales	Launching

Capvaxive Updates

Product Value Proposition

- Capvaxive protects against strains that cause 84% of invasive pneumococcal disease vs. just 52% from other pneumococcal conjugate vaccines
- Merck expects Capvaxive will achieve majority market share in the adult setting

Recent News

- **June 2024:** CDC's ACIP recommended Capvaxive for all adults age 65+ who have not previously received a pneumococcal conjugate vaccine
- **Oct 2024:** ACIP voted to expand the age-based recommendations for Capvaxive to all adults 50+

Key Upcoming Catalysts

- **2025:** Continued commercial launch which began in Q3 2024

PTX-022 Background

PTX-022

QTORIN™ rapamycin 3.9%

palvella THERAPEUTICS

Indication	Microcystic Lymphatic Malformations (MLM) Venous Malformations (VM)
Phase of Development / Approval Date	MLM: Phase 3 VM: Phase 2
Investment Background	Project Finance (2018, 2023) Convertible Note (2024)
Royalty Rate	8 – 9.8%
Recent Sales	N/A

PTX-022 Updates

Product Value Proposition

- Novel targeted topical therapy, using the QTORIN platform to deliver rapamycin to deep layers of the skin to locally treat a broad spectrum of rare skin diseases
- Breakthrough Therapy Designation
- No FDA-approved therapies indicated for MLM or VM, both rare genetic skin diseases

Recent News

- **July 2024:** Palvella and Pieris Pharma announce merger agreement, with $80M in PIPE financing
- **Oct 2024:** Palvella awarded grant by FDA Office of Orphan Product Development up to $2.6M
- **Nov 2024:** First patient dosed in Phase 3 SELVA trial of PTX-022 for MLM

Key Upcoming Catalysts

- **Q1 2026:** Data readout from Phase 3 SELVA trial

Ligand Strategy

Captisol & NITRICIL™ Platforms

LIGAND

Ligand Captisol IP-Enabling Platform Technology

CAPTISOL®
A LIGAND TECHNOLOGY

Acquired through CyDex investment in 2011

Solvent-free, all-aqueous processed modified cyclodextrin to improve formulation solubility and stability

Captisol Platform Technology

Strategic Focus Update

CAPTISOL® A LIGAND TECHNOLOGY

01	Expand team for growth: Karen Reeves, MD & Ben Perrone, PhD
02	IP-enabling vs infrastructure-enabling
03	Leverage and expand upon our partnerships, licenses, & asset management
04	Advance expanded marketing and outreach
05	Pursue science and explore opportunities

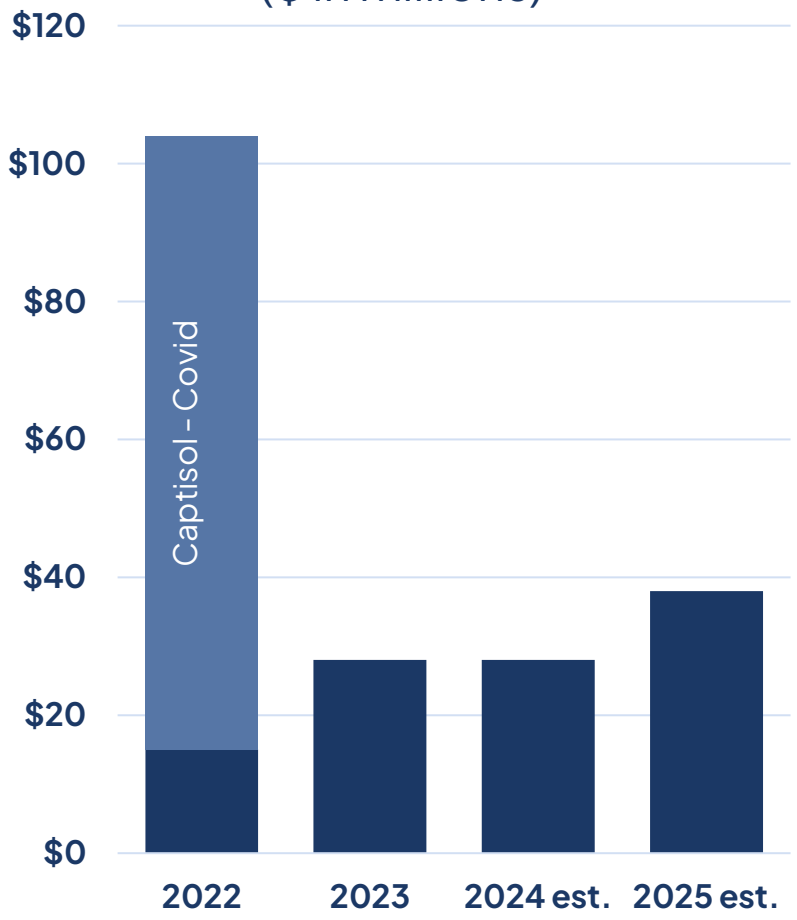
Captisol Overview

CAPTISOL® A LIGAND TECHNOLOGY

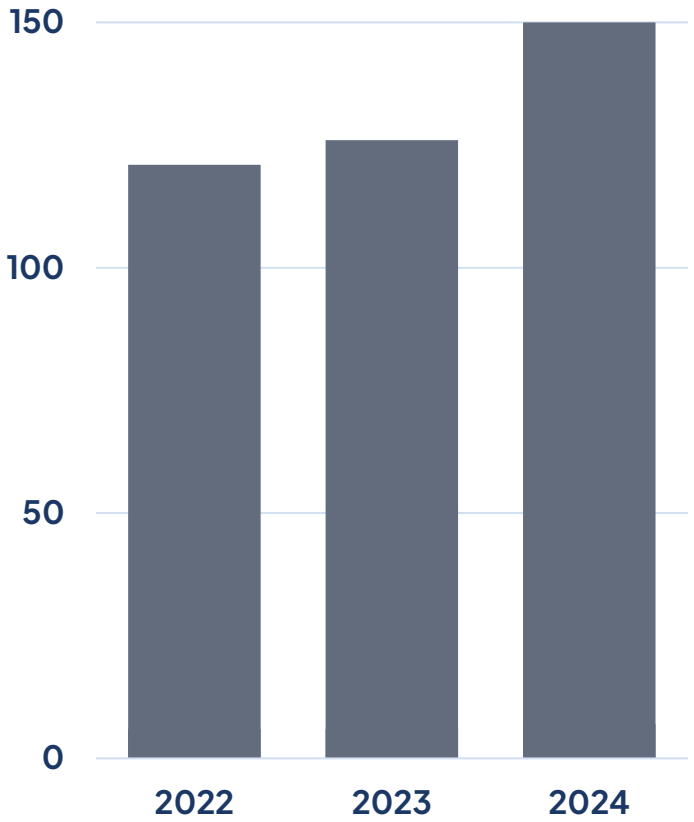
Infrastructure Light	Ligand owns and operates the Captisol technology platform with a lean and experienced scientific and commercial operational team Captisol requires only 6 FTEs and ~$5M of annual operational spend
Broad Applicability	Captisol addresses a consistent and enduring industry need: formulation solubility and stability An estimated 40% of small molecule drug candidates have low solubility
IP-Enabling	Ability to enable licensing of IP: Captisol's recurring customer base generates material revenue, as well as royalty interests in partnered programs Ligand is entitled to receive royalties ranging from single digit to low double digit on many Captisol enabled products
Commercially Validated	Captisol is used in 16 (15 FDA & 1 Japan) approved products Clinical and regulatory success, plus a vast safety database, have significantly increased awareness, visibility, and use of the technology, positioning it for growth

Captisol Material Sales
Research, Supply & License Agreements

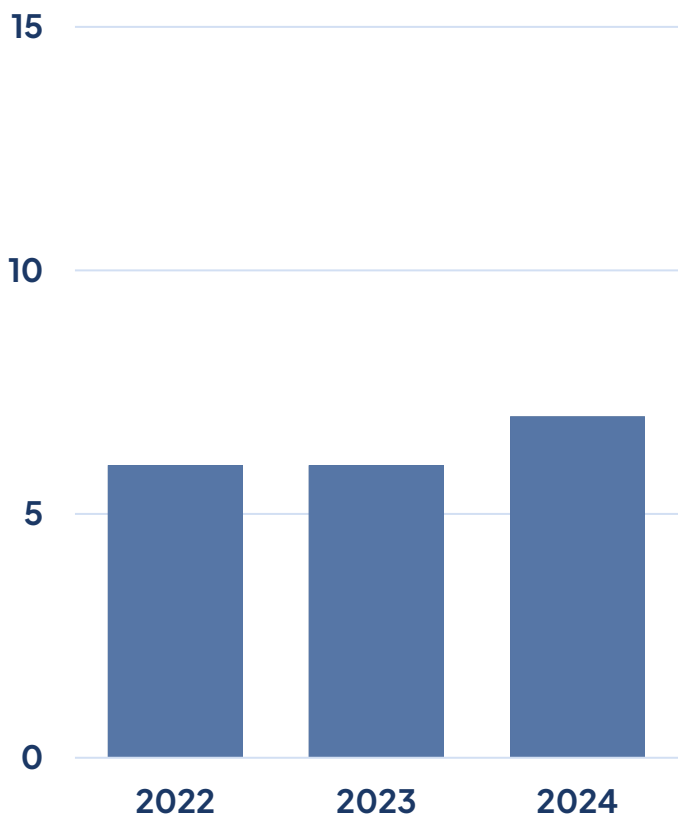
Captisol Material Sales ($ in millions)



New Research Agreements



License & Supply Agreements



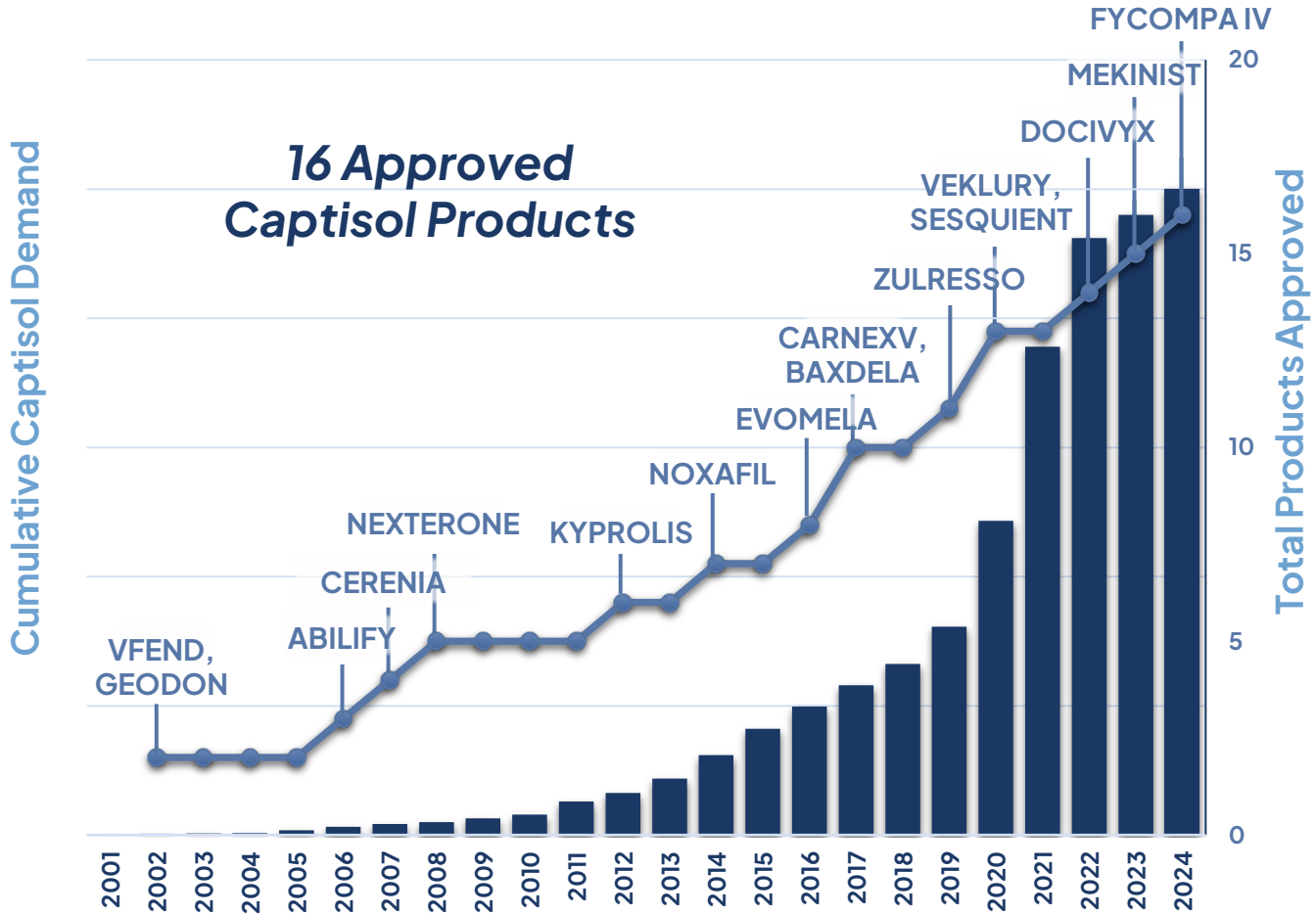
Captisol Platform Technology

CAPTISOL® A LIGAND TECHNOLOGY

Highly productive technology platform

- Significant royalty revenue generated across multiple programs
- Minimal cash operating expense
- Strong breadth of applicability across 16 approved products and many more in clinical development

Ligand continuously focuses on quality, reliability, and customer service



LIGAND

Pelthos & NITRICIL IP-Enabling Platform

Pelthos Therapeutics

Zelsuvmi™
(berdazimer) topical gel, 10.3%

Acquired through Novan investment in 2023

First FDA-approved at-home treatment for molluscum contagiosum

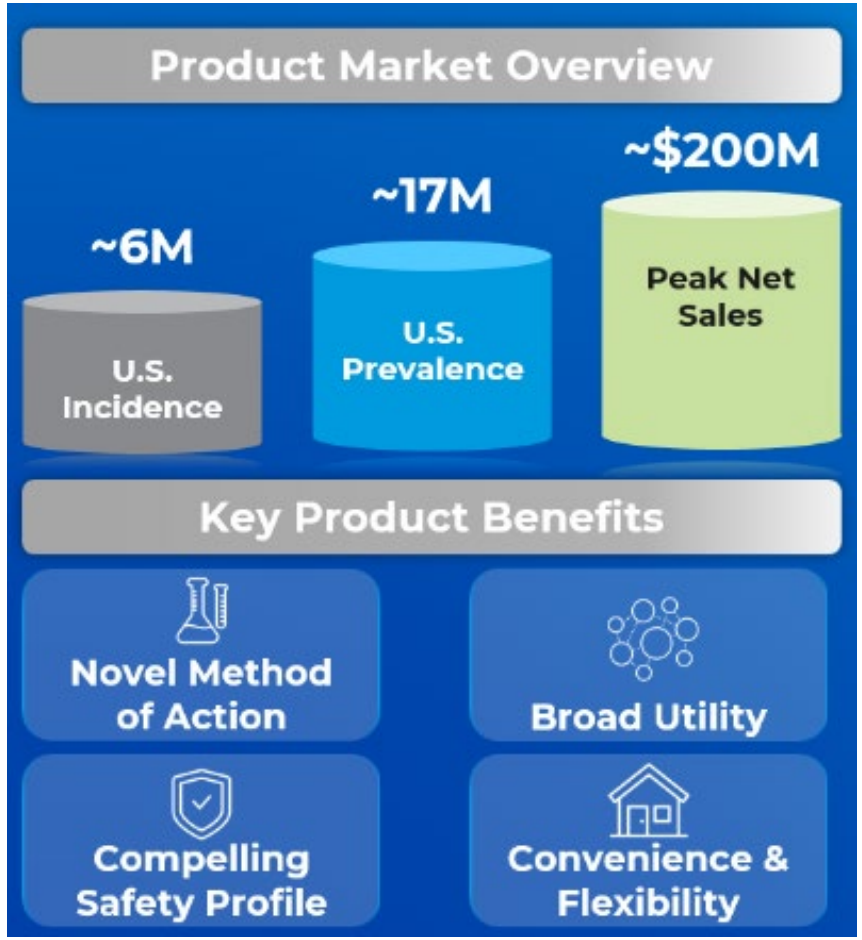
NITRICIL™
A LIGAND TECHNOLOGY

Acquired through Novan investment in 2023

Leverages nitric oxide's naturally occurring antimicrobial and immunomodulatory effects to develop new therapies for unmet medical needs across multiple therapeutic areas

Zelsuvmi Commercial Positioning & Opportunity

- Pelthos' lead product, Zelsuvmi , is an FDA-approved, novel product for Molluscum contagiosum, a highly-infectious viral dermatological infection, indicated for patients >1 year
  - Molluscum affects 17 million patients with an annual incidence of ~6 million patients in the US, primarily children
- Zelsuvmi is the 1st and only at-home treatment for molluscum that can be administered by patients, parents or other caregivers rather than by medical professionals in multiple visits to an office or other medical setting
- ~$200M peak net sales opportunity, which Ligand believes will be exceeded



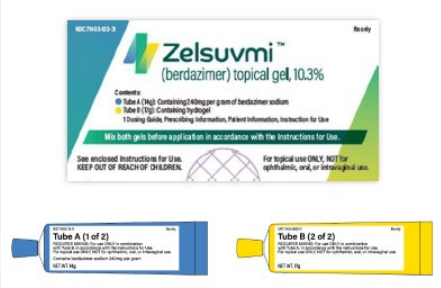
LIGAND

Pelthos 2024 Accomplishments

Q1	Q2	Q3	Q4
FDA Approval of Zelsuvmi for at-home use in molluscum	Establishment of Pelthos Therapeutics and Board of Directors	Execution of key pre-launch commercial activities	Validation of 1st commercial batches in process ahead of H1 '25 partnering & launch

Zelsuvmi™ (berdazimer) topical gel, 10.3%

Pelthos Therapeutics



LIGAND

NITRICIL™ Overview

NITRICIL™ A LIGAND TECHNOLOGY

Infrastructure Light	Ligand owns the NITRICIL platform, which is operated by Pelthos Therapeutics NITRICIL can be leveraged as desired, enabling cost and time efficient product candidate development and manufacturing
Broad Applicability	Nitric oxide platform allows for tunable dosing, permitting an adjustable drug release profile to allow proprietary formulations that target a broad range of indications
Enabling	NITRICIL's capability to generate multiple therapeutic products generates royalty interests for Ligand on any commercialized programs, including Zelsuvmi
Commercially Validated	NITRICIL is leveraged in 1 FDA approved product, Zelsuvmi Clinical development success positions the NITRICIL platform well for future expansions into other skin conditions

Closing Remarks

LIGAND

Ligand's Future Is Bright

- The New Ligand Business Model:
  - **Diversified Growth:** Strong foundation of ~90 partnerships to build upon
  - **Compounding Growth:** Our cash flow is reinvested, compounding our growth over time
  - **Uncapped Growth:** Unique investment strategy in a very large market where demand for capital is well is excess of supply
  - **Favorable Operating Leverage:** Lean corporate cost structure scales into a very large business opportunity
  - **Advantageous Business Model:** While avoiding the concentration risk and heavy infrastructure requirements of the typical biotech business model
- Results oriented focus:
  - Royalties projected to grow at a CAGR >20% from 2024 to 2029

(1) Consensus analyst estimates

Investor & Analyst Q&A

LIGAND