Ligand Pharmaceuticals

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Safe Harbor Statement

- The following presentation contains forward-looking statements regarding Ligand's prospects, plans and strategies, drug development programs and collaborations. Forward-looking statements include financial projections, expectations regarding research and development programs, and other statements including words such as "will," "should," "could," "plan," etc. Actual events or results may differ from Ligand's expectations. For example, expense reductions and drug development programs may not be realized. In addition there can be no assurance that Ligand will achieve its guidance in 2011.
- The forward-looking statements made in the presentation are subject to several risk factors, including, but not limited to, Ligand's reliance on collaborative partners for milestone and royalty payments, regulatory hurdles facing Ligand's and partner's product candidates, uncertainty regarding Ligand's and partner's product development costs, the possibility that Ligand's and partner's drug candidates might not be proved to be safe and efficacious and commercial performance of Ligand's and/or its partner's products. Additional risks may apply to forward-looking statements made in this presentation.
- The risk factors facing Ligand are explained in greater detail in Ligand's filings with the SEC, including the most recently filed annual reports on Form 10-K and quarterly reports on Form 10-Q, as well as other public filings.
- While forward-looking statements reflect our good faith beliefs (or those of the indicated third parties), they are not guarantees of future performance. We disclaim any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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Ligand Overview

People and Place

- Located in La Jolla, CA
- ~30 Employees

Stock

- Shares Outstanding- 19.6M
- Market Cap- ~ $260M

Key Assets

- Promacta
- Numerous royalty revenue streams
- Revenue from Captisol material sales
- Over 50 fully-funded partnered programs
- Substantial tax assets
- Innovative internal R&D programs

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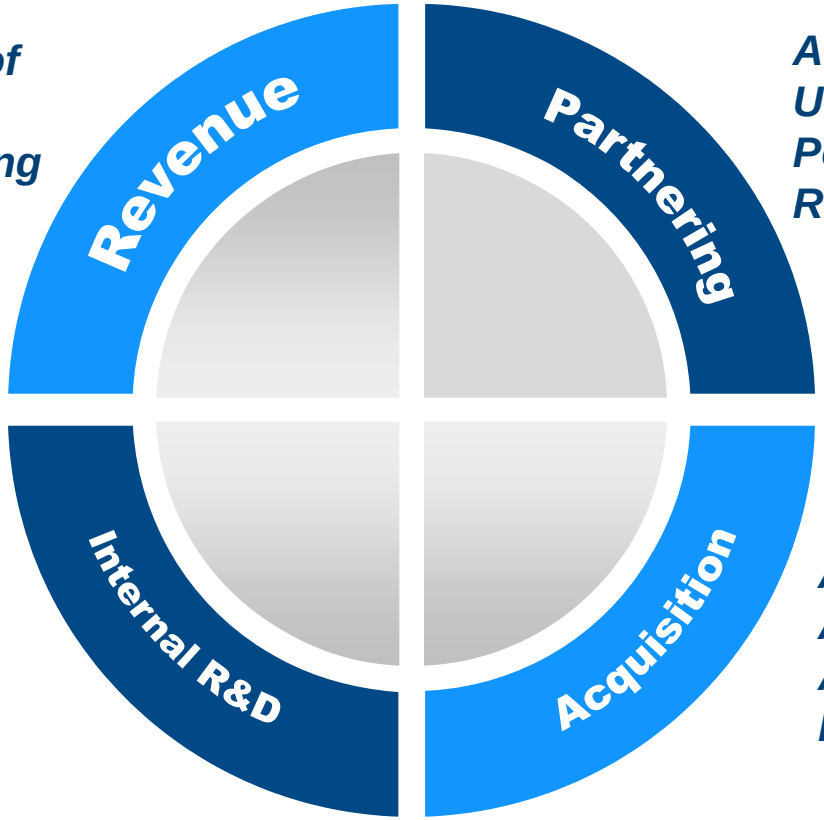
The Ligand Business Vision

The Key Elements Of The Ligand Core Strategy

Build A Large Portolio of Sustainable Revenue Streams To Support Long Term Shareholder ROI

Assemble An Industry Unprecedented Partnered Portfolio To Support Revenue Expansion



Develop Innovative Internal R&D Programs To Fuel Partnered Portfolio Expansion

Aggressively Acquire Assets To Expand And Adapt The Ligand Business

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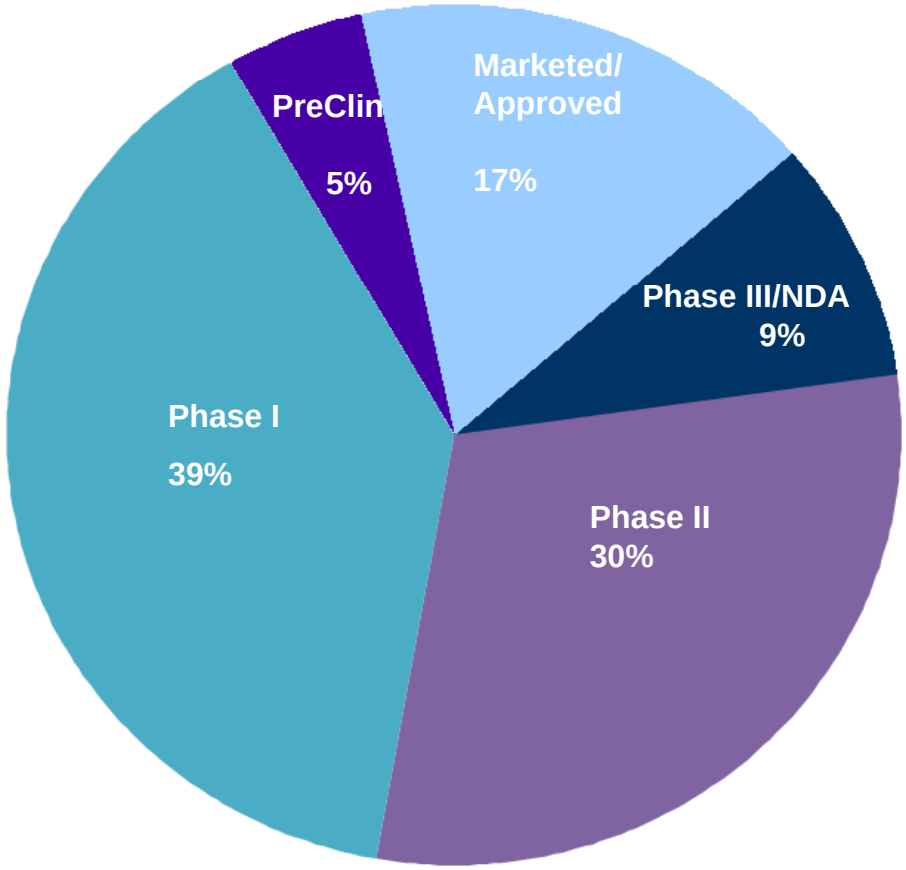
Ligand Partnered Portfolio

Over 50 Partnered Programs



Ligand Partnered Portfolio

- Over 25 different partners
- Over 10 different therapeutic areas
- Over half of the portfolio is PII or later
- Ligand estimates that partners collectively spend over $150M per year on this portfolio
- Significant quarterly news flow

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Ligand Partnered Portfolio

Substantial Portfolio News Flow Expected During The Next 4 Quarters

Select Ligand Partner Programs

- Promacta (GSK)
- Viviant (Pfizer)
- Nexterone (Baxter)
- Aprela (Pfizer)
- Carfilzomib (Onyx)
- Merck Captisol
- Navarixin (Merck)
- Dinaciclib (Merck)
- Clopidogrel (TMC)
- IL-9 (AstraZeneca)

Potential Upcoming Events

- New Territory Launches
- New Product Launches
- NDA Approvals
- NDA Filings
- PIII Data Announcements
- PIII Trial Initiations
- PII Data Releases

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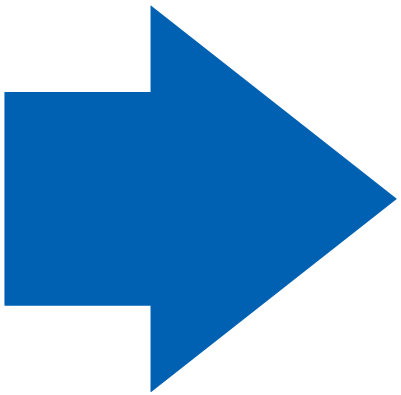
Ligand Revenue Summary

Illustrative Growth of Revenue

2012

- Promacta
- Avinza
- Conbriza
- Nexterone
- Carfilzomib

> $30 Million Revenue*



2015

- Promacta
- Avinza
- Conbriza
- Nexterone
- Carfilzomib
- Aprela
- Navarixin
- Clopidogrel
- Melphalan
- Carbamazepine
- Merck Captisol Program

> $200 Million Revenue*

* Plus License Fees

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Promacta Program

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Promacta

Ligand's Most Valuable Revenue Asset is Promacta

gsk GlaxoSmithKline

PROMACTA™ (eltrombopag olamine)

Promacta

▪ Marketed drug for thrombocytopenia: serious and chronic blood disorder
▪ Opportunity for significant label expansion
  ▪ 18 ongoing studies conducted by GSK and investigators
  ▪ Large market focus: Hepatitis C and cancer-related Thrombocytopenia
▪ Major Upcoming Catalyst: 2 pivotal Phase III trials, one pivotal trial completed
▪ Long patent life – thru 2025
▪ Significant tiered royalties (~9% on $1 billion in annual sales)

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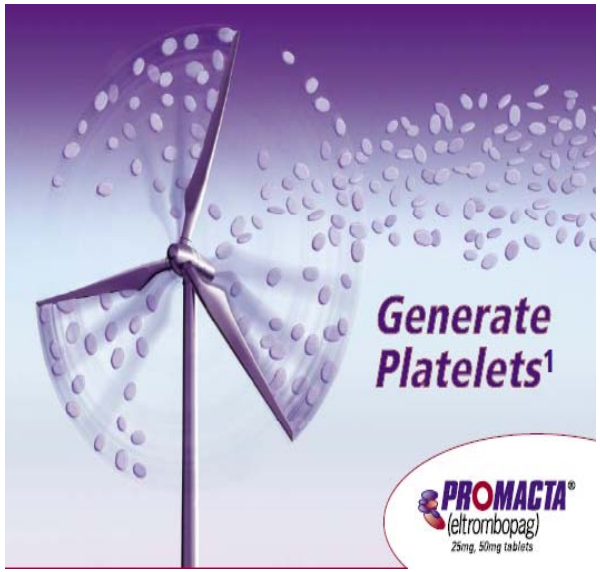
Promacta Background



What is Promacta?

- Once-daily oral medicine that activates the thrombopoietin (TPO) receptor
- Activation of the TPO receptor causes platelets to increase, relieving conditions of low platelets known as thrombocytopenia

Background

- Ligand and GSK jointly discovered Promacta as part of a thrombopoietin (TPO) receptor agonist research collaboration started in 1995
- GSK later licensed from Ligand the follow-on TPO receptor agonist LGD-4665 in 2008

Promacta: A Strong Foundation For Ligand Growth

Attributes Of The Promacta Franchise

☑ Approved drug in all major markets	Approved for ITP
☑ Marketed by premier pharma company	Marketed by GSK
☑ Major potential for label expansion	ITP ⇨ HepC ⇨ Oncology
☑ Long patent protection	Patented until July 2025
☑ Significant royalty interest	5-10%, blended 9% on $1B
☑ Major upcoming catalyst events	PIII Hep C data release
☑ Life-cycle management opportunity	LGD-4665 Follow-On in PII

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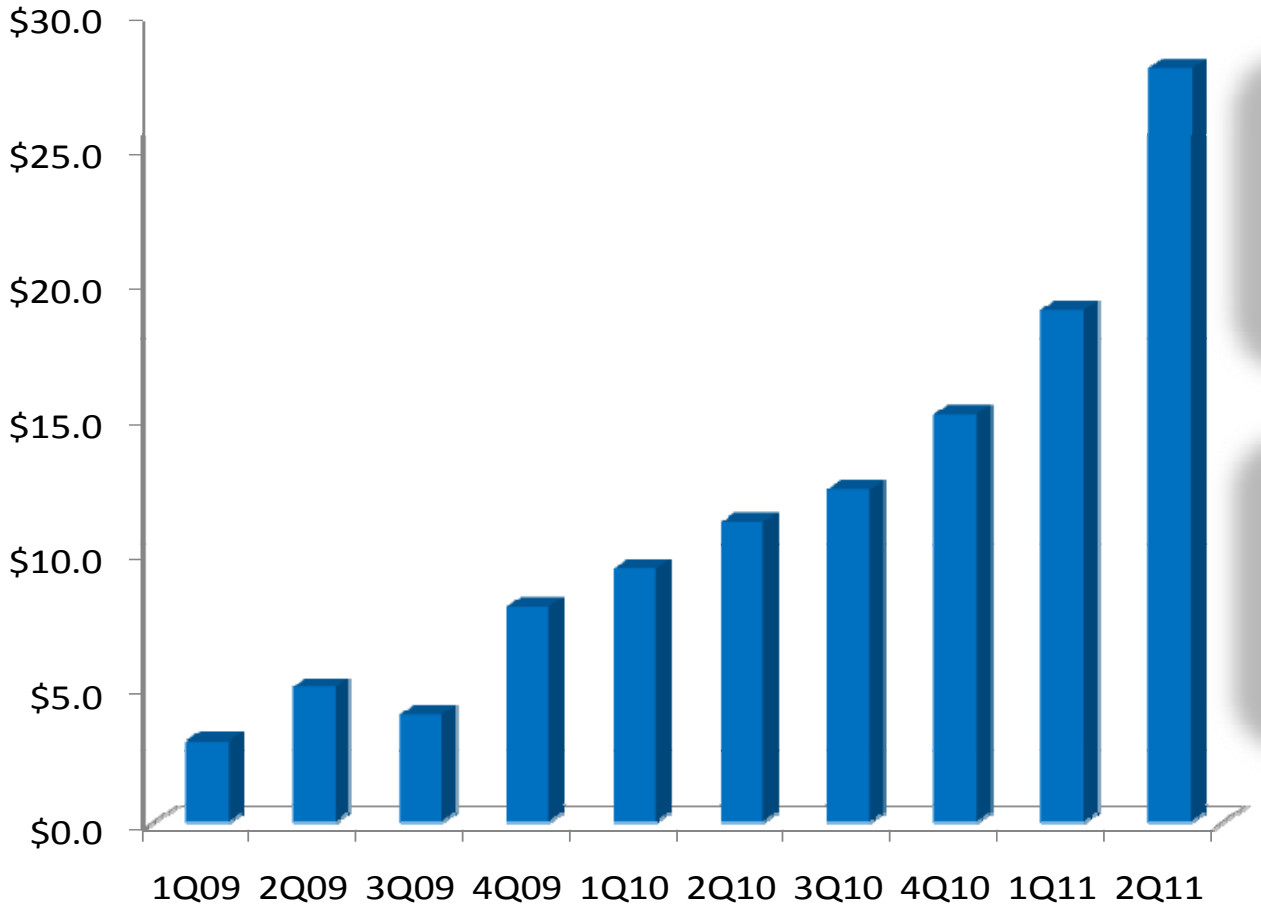
Promacta Quarterly Sales



New markets and new indications should help accelerate revenue growth

Ligand expects to receive royalties for another 14 years

(sales in millions)

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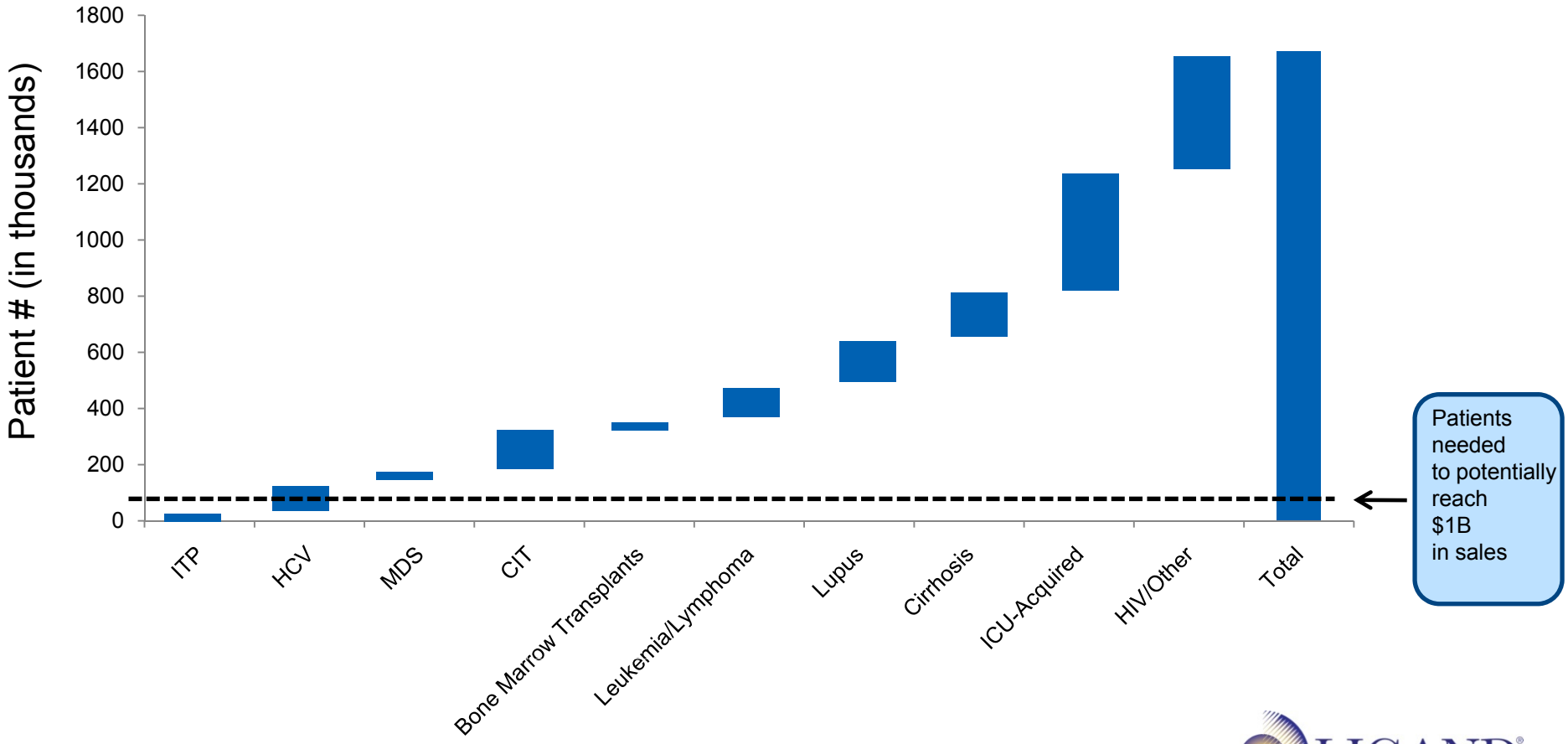
Thrombocytopenia: A Multi-Billion Dollar Opportunity

Thrombocytopenia Is Comprised Of Multiple Sub-Markets of Thrombocytopenia-Inducing Diseases, Similar to Anemia and Neutropenia



Wall Street Research on GSK published Nov. 21, 2005

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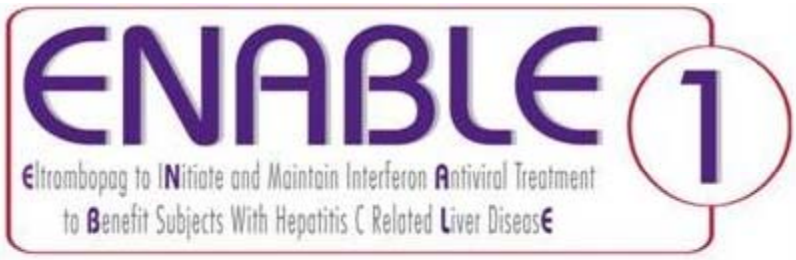
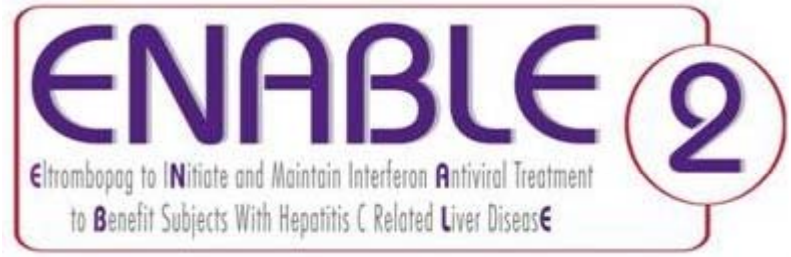
The Promacta ENABLE Studies

Two Large PIII Studies For HepC-Related Thrombocytopenia Are Scheduled For Completion In 3Q11





Study Descriptions

- 2 parallel global Phase III studies
  - **ENABLE 1 -** peginterferon **alfa-2a (PEGASYS)** plus ribavirin
  - **ENABLE 2 -** peginterferon **alfa-2b (PEG-Intron)** plus ribavirin
- Double blind, placebo control, 750 patients each
- More than 300 sites worldwide
- Primary endpoint is SVR at 6 months post antiviral treatment (48-72 weeks)

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Recent Announcement On ENABLE-1 Study

GSK Announced Primary Endpoint Met in ENABLE-1 Study

ENABLE-1 Announcement

- GSK on July 26th that the ENABLE-1 study had completed and has met its primary endpoint with strong statistical significance
- Data to be presented at a scientific conference in 4Q11
- ENABLE-2 study will complete in 3Q11 as planned

Comments from GSK CEO Andrew Witty…..

"ENABLE-1 results were so positive that we felt it would have been just completely wrong to delay sharing that information."

"The first trial (ENABLE-1) was extraordinarily positive. Hopefully the second (ENABLE-2) will be the same, but based on the first, we would be very surprised to not see that".

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Ligand Partnered Portfolio

Onyx Pharmaceuticals

Carfilzomib

- Onyx formulated Carfilzomib with Ligand's Captisol formulation technology for refractory multiple myeloma
- Onyx expected to submit NDA in August 2011
- Two large ongoing Phase III studies targeted for completion in 2012
- Recent Phase II Data
  - 24.1% overall response rate with no worsening of neuropathy
  - Strong potential for improvement over Velcade®
- Commercial Outlook:
  - Third-party analysts project peak annual sales of carfilzomib over $1B
  - Ligand entitled to milestones, royalties and revenue from Captisol material sales

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Ligand Partnered Portfolio

Ligand's Newest Revenue Stream Begins in 2011 with Baxter's Launch of Nexterone in 2Q11

Baxter

Nexterone
(amiodarone HCl) Premixed Injection

Nexterone

- Baxter Acquired Prism/Nexterone in April 2011 for $338M in upfront and milestone payments
- Baxter launched Nexterone franchise in mid-June 2011
- Ligand receives milestones, royalties and Captisol material sales from the Nexterone program
- Baxter CEO has projected peak sales to be at $150-200M/year

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Ligand Melphalan Program

Ligand's Captisol-Enabled Melphalan Program Summary

Ligand's Melphalan IV program gives Ligand the ability to own a program through FDA approval and beyond with modest investment

Market	>50,000 multiple myeloma patients U.S.
Development Status	2009 filed patent application; IND filed, 2010 clinical studies initiated; projected 505(b)(2) NDA filing mid 2013
Financial Opportunity	Addresses $80+ MM market; 7-year marketing exclusivity post approval; PDUFA fee waiver (Orphan Designation)

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Ligand Melphalan Program

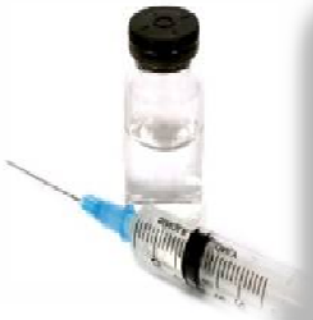
Advantages of Ligand's Melphalan Product

Product Advantages:

- Improved stability and use time in an all aqueous formulation
- Longer administration durations, slower infusion rates
- Elimination of two-vial system

Physicians expected to:

- Safely achieve higher dose intensity
- Easily deliver concomitant meds in high-dose regimens
- Modulate dose to patient tolerability
- Higher dosage → potential for improved response rates



Captisol-enabled® Melphalan for Injection

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Internal Development Asset

One vial system
Propylene glycol-free

24 hr infusion window
Treatment Flexibility

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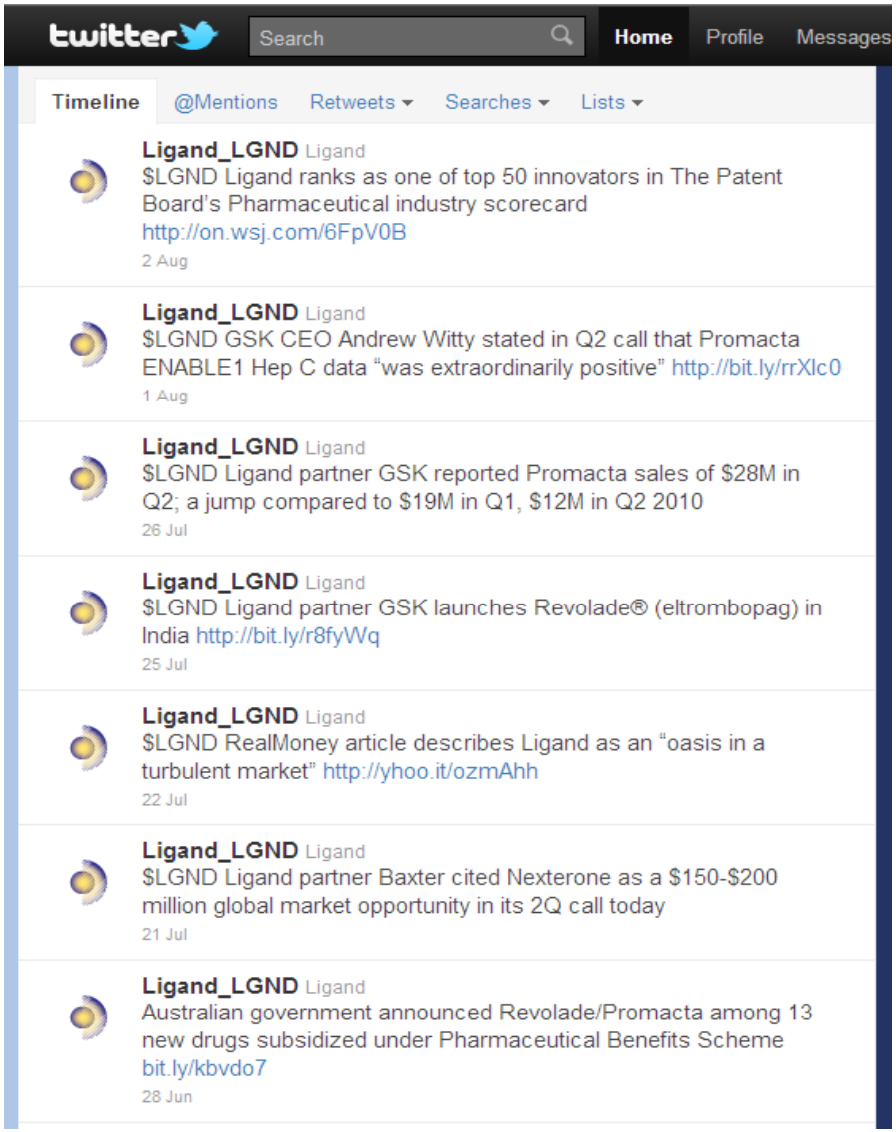
Ligand on Twitter



Ligand Twitter Feed Delivers Diverse Partner News To Ligand followers

Ligand Tweets

- Ligand has many partnered programs and frequent news developments that often don't warrant a full press release and otherwise may not be picked up by our investors
- Follow Ligand by visiting www.twitter.com and typing in "Ligand_LGND" in the search box and click on "Follow"

Ligand Is A Now Story

1	Promacta® is a major-near term catalyst, recent positive news
2	Significant expansion (doubling of portfolio to over 60 programs) in past 6 months as a result of Cydex acquisition
3	A number of positive news events by partners in 2011
4	Most revenue generating assets ever on lowest cost structure
5	Positive clinical data announced in the past three months
6	Directors have personally purchased over $1.2 million of Ligand stock (131,125 shares) over the past 6 months. Directors now own 10% of Ligand.
7	Over past year, daily trading volume has increased by ~30%
8	Important new additions to senior management and Board of Directors

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Potential Upcoming News Flow

Timing*	Projected Event
3Q11	Carfilzomib NDA filing
4Q11	Promacta PIII HepC Results Aprela NDA filing SARM program update Captisol Partnership
1Q12	Initiate pivotal Melphalan study Top Line IL-9 PII Results Clopidogrel 505(b)(2) study initiation
2Q12	Merck CXCR2/COPD Study Completion Carfilzomib NDA Approval Promacta sNDA filing for HepC

*Ligand internal estimates

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