Investor Update

May 11-14 2009

CXSP
NASDAQ
LISTED

CXS
ASX
LISTED

Overview

- Oncology focused biopharmaceutical company
  - New small molecule drugs
  - Addressing unmet medical needs in leukemia
- Late-stage product pipeline
  - Submission for drug approval in US and EU in 2009
  - Potential approval and launch in US in early 2010 and EU in Q3 2010
- Strong board and senior management team

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Leadership Team

Management

Greg Collier, PhD*	Chief Executive Officer and Managing Director
Adam Craig, MD, PhD, MBA	Senior Vice President and Chief Medical Officer
James Campbell, PhD, MBA	Chief Financial Officer and Chief Operating Officer
Luana Staiger, BS	Vice President of Regulatory Affairs
Don Joseph, JD	Head of Corporate Development

Board of Directors

Brett Heading, LLB (Chairman)	McCullough Robertson Lawyers
Dan Janney, BA, MBA	Alta Partners
Geoff Brooke, MBBS, MBA	GBS Partners
Elmer Schnee, BCom Mkting	Merck Serono
George Morstyn, MBBS, PhD	Former SVP and CMO, Amgen
Don Santel, BSE, MS	Former CEO, Co-Therix
Julie Cherrington, PhD	President, Phenomix Corporation
Dennis Brown, PhD	Former Chief Scientific Officer
Jean-Luc Tétard	President, Stragen Pharma

*Also Board Member

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Key Upcoming Events

Event	Timing
Clinical data presentations at key international conferences	Q2 2009
Complete filing for drug approval in USA	Mid 2009
Establish corporate partnership(s) for EU/ex US	H2 2009
Complete filing for drug approval in Europe	Q4 2009
Anticipated approval and launch of omacetaxine in USA	Q1 2010
Anticipated approval and launch of omacetaxine in Europe	Q3 2010

Omacetaxine

A new drug with demonstrated clinical activity in a range of leukemias

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Omacetaxine Activity

- Broad clinical efficacy
  - Demonstrated clinical activity in a range of leukemias including chronic myeloid leukemia (CML), Myelodysplastic Syndrome (MDS) and acute myeloid leukemia (AML)
  - Current focus on CML
- Mechanism of action
  - Induces cell death by inhibition of key oncoproteins
  - Complementary to current therapies
- Stem cells
  - Effective at killing CML stem cells as well as peripheral leukemic cells, unlike currently approved drugs

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Current Treatment Options in CML

- World CML prevalence >200,000 patients and growing
- Gleevec® (imatinib) approved in 2001 - first effective treatment
  - Targeted tyrosine kinase inhibitor (TKI)
  - Global sales of US$3.7 billion in 2008 (60-70% in CML)
- Current challenges with Gleevec
  - Gleevec is not a cure for CML
  - Resistance is an emerging issue in CML (after 4 years up to 50%)
- Resistance is linked to gene mutations
  - 44% of Gleevec failures have mutations - T315I most frequent (15-20%)

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What are the Unmet Clinical Needs in CML?

- Two approved second line therapies
  - Sprycel (dasatinib) by BMS approved in June 2006
  - Tasigna (nilotinib) by Novartis approved in October 2007
- Approved drugs are not effective in T315I patients
  - Second generation and TKIs in development are ineffective against T315I mutation
- No therapeutic options for 3rd line interventions after failing approved therapies
- Omacetaxine may be used initially in T315I CML patients and then expanded to patients that develop resistance to current therapies

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CML – Pricing Trends Upwards

Drug	Dose	Cost at AWP per month (US$)	Cost at AWP per Year (US$)
gleevec (imatinib mesylate) tablets	400mg	3,844	46,128
	600mg	6,165	73,980
SPRYCEL dasatinib 50mg tablets	100 mg QD	5,671	68,052
	70 mg BID	5,671	68,052
Tasigna nilotinib	400 mg	6,651	79,812
	600 mg	9,976	119,712

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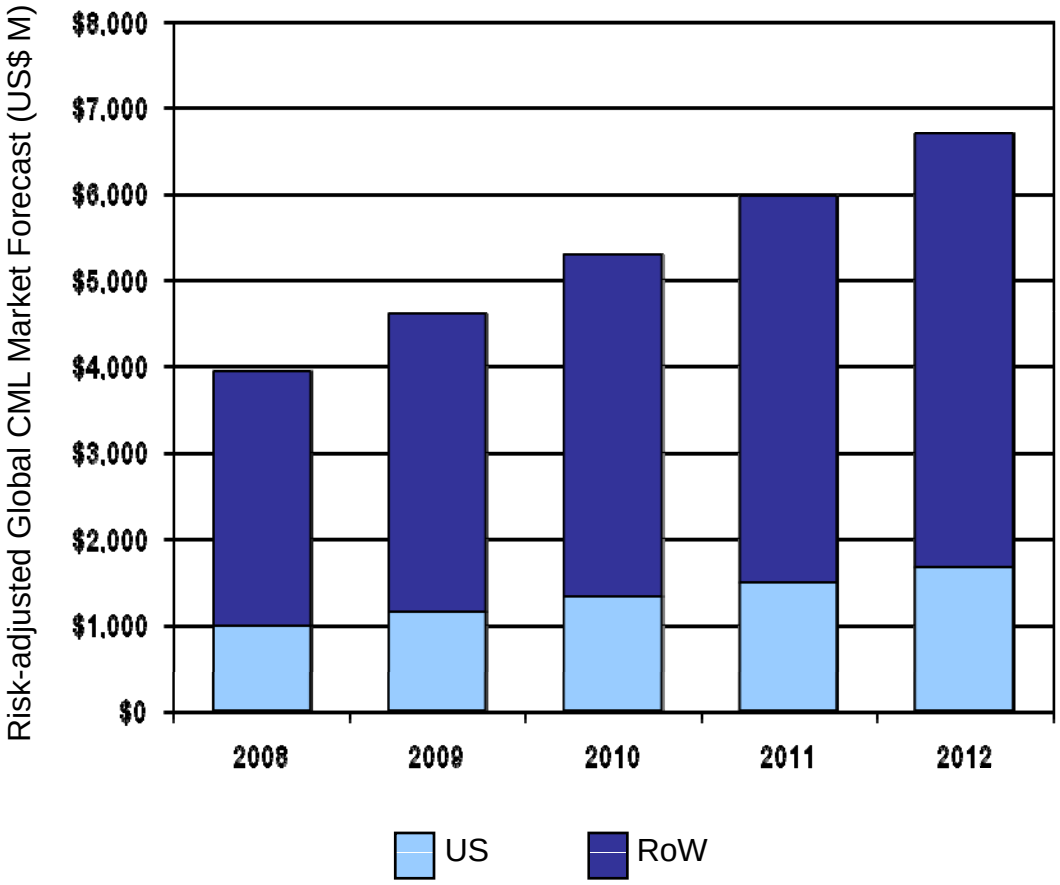
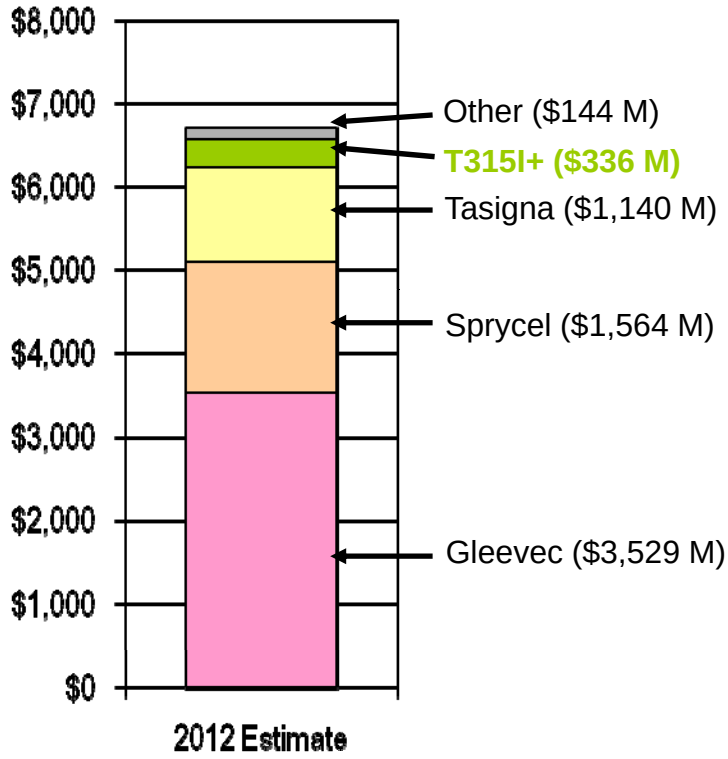
Estimates Put Global CML Market Growth Above 18%

Estimated Market Size



Estimated Market Structure



Source: Bernstein Research January 2007

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Clinical & Regulatory

Positive clinical data

Regulatory submissions in 2009

Anticipated approvals in 2010

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Omacetaxine – Potential Product Profile – 2010

Label Category	Target Product Profile
Product Description	A first in-class cetaxine with clinical activity against T315I+ Chronic Phase CML disease
Clinical Indication	T315I+ CML CP patients who have failed a minimum of imatinib therapy
Dosage and Formulation	5 mg sterile lyophilized vials; 2 vial daily dose pack
Dose Regimen	1.25 mg/m^2 subcutaneously, twice a day, by self administration – 14 days per month induction until a response, then 7 days a month maintenance
Efficacy	10-20% major cytogenetic response (MCyR) rate and 70%+ complete hematologic response (CHR) rate
Side Effects	Myelosuppression (managed by reduction in dosing days)

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Interim Clinical Results

Response Number (%)	Chronic Phase N=25	Accelerated Phase N=11	Blast Phase N=8
Hematologic Response			
Overall	20 (80)	5 (45)	1 (13)
Complete Hematologic Response (CHR)	20 (80)	2 (18)	-
Cytogenetic Response			
Overall	7 (28)	1 (9)	-
Major	5 (20)	-	-

- Recently completed enrollment target for T315I+ CML clinical trial
- Data from clinical studies submitted for presentation at the ASCO Annual Meeting in Orlando (May 29 – June 2) and EHA Annual Meeting in Berlin (June 4-7)

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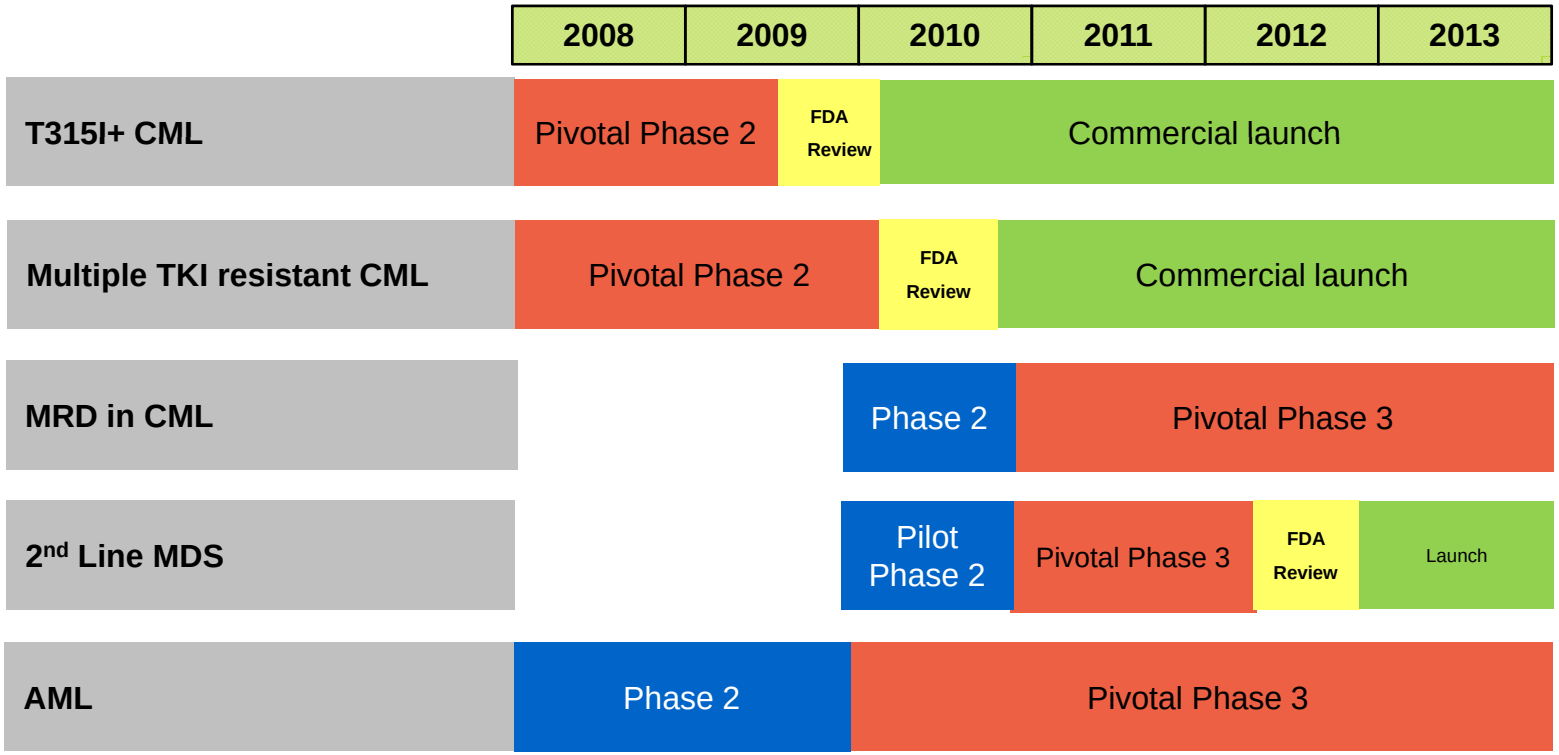
Omacetaxine Clinical and Regulatory Timeline - USA



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Commercialization

Significant market for T315I CML

Ex-US partnering targeted for 2009

Cost-effective US launch in 2010

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Commercialization Strategy

- Strategic goal
  - Retain product rights in the USA
  - Out-license other territories to fund product development
- Ideal European partner profile
  - European focused, commercial infrastructure
  - Hematology/oncology product and sales force presence
  - At least 5 major markets plus distributor relationships

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Commercialization Strategy

- Q3 2009, appointment of key senior Commercialization Officer
- Strategy to maximize opportunity of identifying CML patients with T315I mutations in key cancer centres around USA
- This will not be a traditional sales and marketing approach and will allow a targeted, cost-effective sales and marketing effort

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Summary

Transformational year ahead

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ChemGenex – Year Ahead

- Recently completed enrollments for clinical trial of omacetaxine in CML patients with the T315I mutation
- US and EU regulatory filings to be completed this year
- Adequate financing could fund company to profitability
  - Complete regulatory filings
  - Staged implementation of US sales and marketing operations
  - Complete European distribution partnership
  - Pursue distribution alliances for Rest of World
  - Clinical trials to confirm potential in other leukemias
- Subject to clinical, regulatory and commercial risks

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Financial Snapshot

Financial Parameter	Measurement
ASX[#]	CXS 280 million shares
NASDAQ Small Cap	CXSP (1 ADR = 15 shares)
Market Capitalization[#*]:	A$ 120 million
Cash held[#]:	A$ 21 million
Significant Shareholders	Alta Partners (16%), Stragen Pharma (14%), Merck KGaA (9%), GBS (8%)

[#] Assumes complete update of current Rights Issue (A$7.4 million)
* Effective 27 March 2009
** Estimate 31 December, 2008

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Current Rights Issue Summary

- $10m placement at $0.43 per share completed to institutional and sophisticated investors (supported by Merck, GBS, Orbis)
- 1 for 14 non-renounceable rights issue to raise up to $7.4m at $0.43 per share
- Underwritten to $5m by ABN AMRO Morgans Corporate provides sufficient funding through to launch
- Top-Up Facility - Shareholders may apply for additional shares
- Rights Issue commitments received from a number of shareholders, including Alta Partners, GBS, Orbis
- Broker Stamping Fee - 1.5% capped at $300 per application paid by the Underwriter

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Rights Issue Timetable

Event	Timing
Announcement of the Offer	Tuesday 21 April
Ex Date	Thursday 23 April
Record Date for determining entitlements (7.00 pm AEST)	Wednesday 29 April
Despatch of Information Booklet and Acceptance Form	Monday 4 May
Closing Date (5.00 pm AEST)	Friday 22 May
Company notifies ASX of under subscriptions	Wednesday 27 May
Allotment and issue of New Shares	Thursday 28 May
Despatch of holding statements in respect of New Shares	Friday 29 May
Trading of New Shares expected to commence on ASX	Friday 29 May

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