R&D Briefing

December 13, 2007

Agenda
December 2007 R&D Briefing

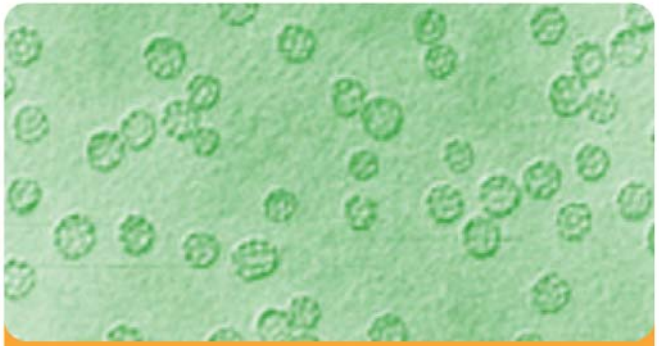
Welcome	Mark Dehring
Introduction and highlights	Andrew Cuthbertson
• Strategy, portfolio and budget mix	
ISCOMATRIX® Adjuvant	
Influenza vaccine portfolio	
Plasma Products	Simon Green
Q&A	
Tea break	
Recombinant Protein Portfolio	Andrew Cuthbertson
Pre-clinical Projects	
• CSL360 for acute myeloid leukemia	Russell Basser
Research Projects	Andrew Cuthbertson
• Long acting coagulation factors	Simon Green
Summary highlights, Q&A and wrap up	Andrew Cuthbertson

R&D Integral to Company Strategy

R&D Core Capabilities

Plasma Therapeutics

Vaccines



ISCOMATRIX® Adjuvant

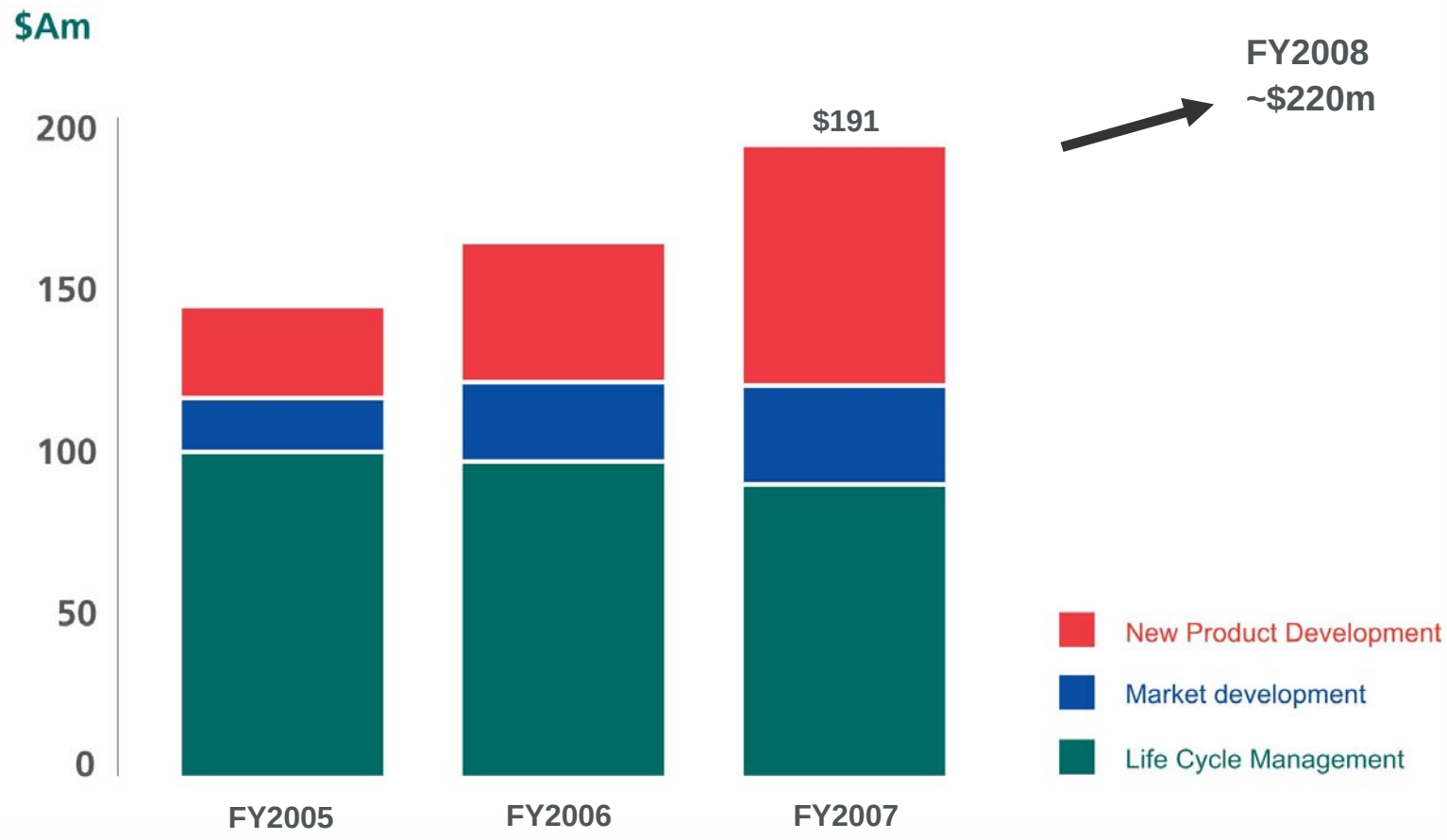
Recombinant Proteins

Global R&D: Integrated R&D Facilities

650 employees worldwide

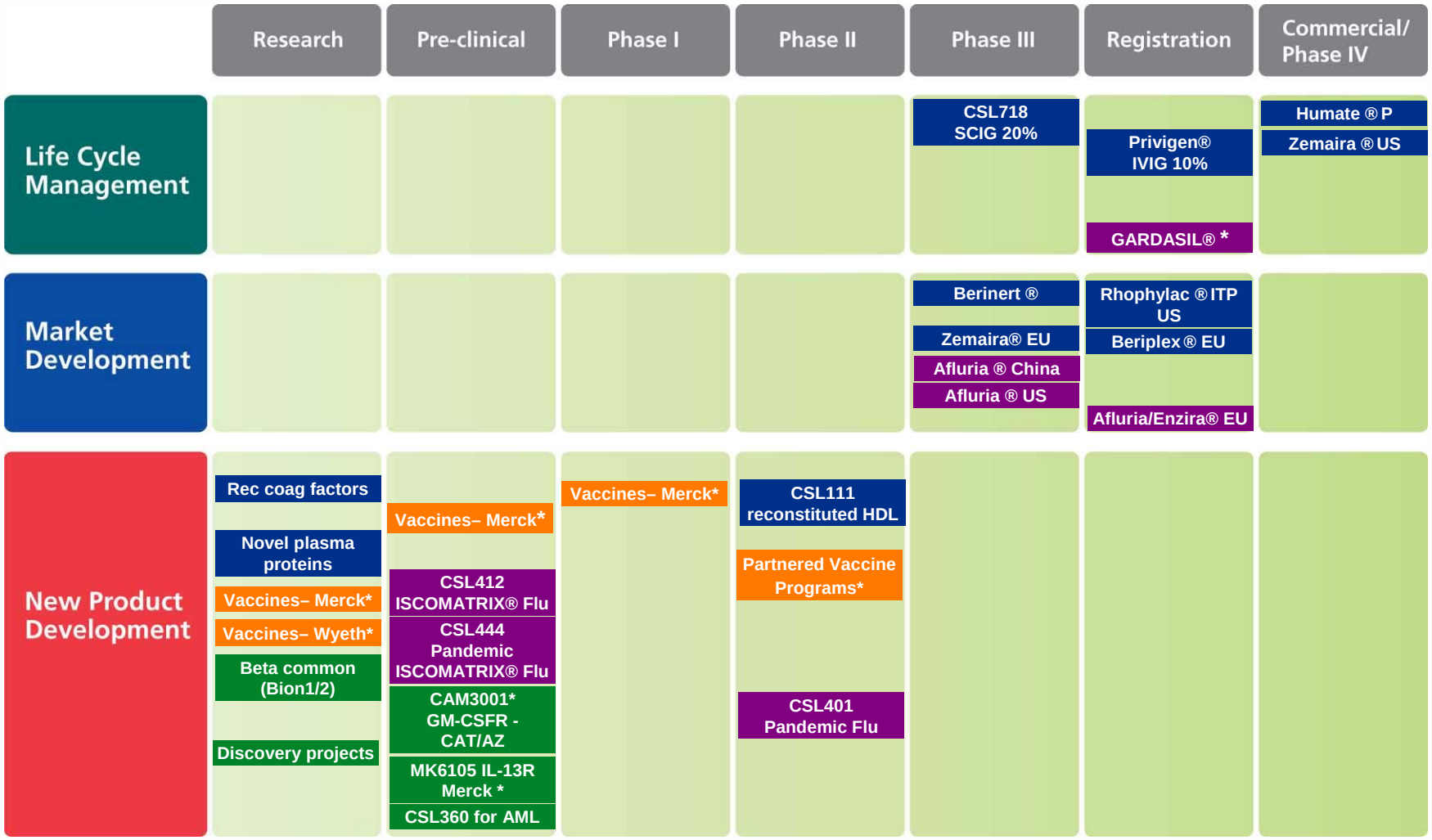
R&D Investment

Growth in new product and market development



Global Research & Development Pipeline

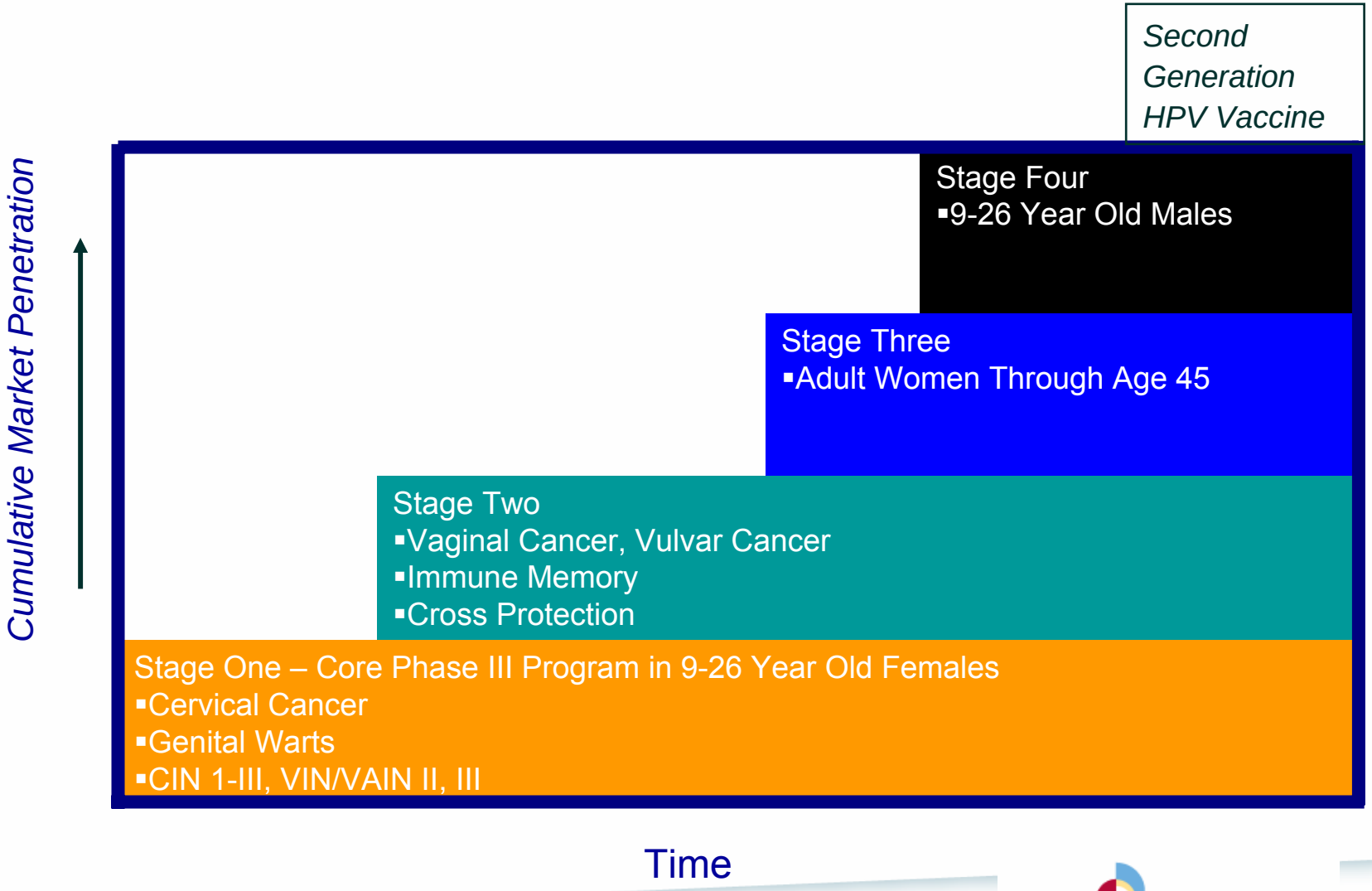
December 08



Core Capabilities: Plasma Therapeutics | Vaccines | ISCOMATRIX® Adjuvant | Recombinant Proteins

* Partnered Projects

GARDASIL®
Driving Continued Growth Through Life Cycle Management



From Merck & Co presentation Dec 11, 2007

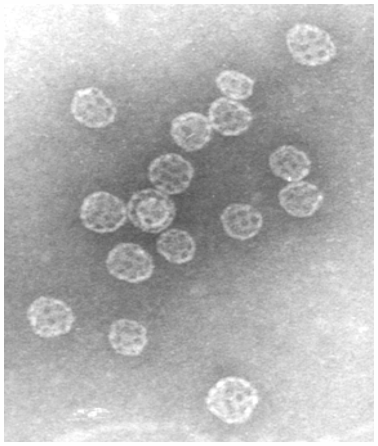
GARDASIL®
[Quadrivalent Human Papillomavirus (Types 6,11,16,18) Recombinant Vaccine]

CSL™

ISCOMATRIX® Adjuvant Technology

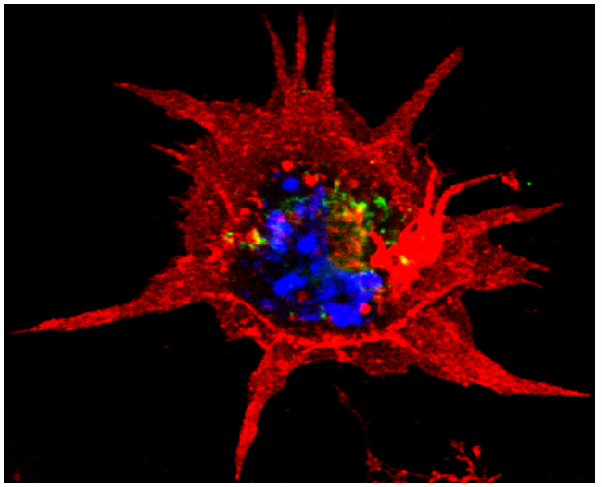
ISCOMATRIX® Adjuvant

- Proprietary biological adjuvant for use in vaccines
- Complex of ISCOPREP® saponin, cholesterol and phospholipid



ISCOMATRIX® Adjuvant has an Integrated Mechanism of Action

- Delivery
  - ~40nm particle
  - Accelerated and long-lived antigen presentation
- Immunomodulation
  - ISCOPREP® saponin
  - Cytokines/chemokines
  - Recruit and activate immune cells



Manufacture of ISCOMATRIX® Adjuvant Optimised and at Industrial Scale

- Developed robust processes focussed on key characteristics
- Kankakee, USA
- ISCOPREP® Saponin
  - Pilot scale
  - Commercial scale
- ISCOMATRIX® Adjuvant
  - Commercial scale
- Routine GMP manufacture

Merck & Co. Inc. Continues to Show Confidence in ISCOMATRIX® Adjuvant for Vaccine Development Programs

- Aug05/Dec06 agreements
- Dec07 – 2 new licences added
- Upfront payment and milestones
- Royalties on products
- Distribution rights for Australia
- Exclusive supply of ISCOMATRIX® adjuvant
- Clinical programs continuing

Influenza Vaccine Program

Influenza

- Manufacturing influenza vaccine since 1968
- Largest supplier in the Southern Hemisphere
- Doubling capacity to 40 million doses per season
- Bulk antigen supplied for vaccines sold in 24 countries
- Registered in 18 countries

Global Influenza Vaccine Program

- Expand influenza business
  - Licensure in Germany and Ireland
    - On track to launch in 2008
  - Regulatory dossier submitted to enable launch in China in 2008
- Competitive advantages
  - Global pre-filled syringe capacity
  - Thiomersal free vaccine

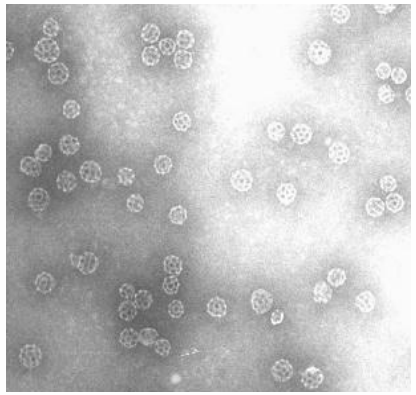
United States

- US licensure
  - BLA approval for Afluria® on 28 Sept 07
- Product launched October 07
- Post-marketing clinical commitments
  - Clinical Endpoint Study (Aus/NZ 2008)
  - At-risk Population Study (US 2008)
  - Paediatric Population (Aus/US 2009)

Influenza ISCOMATRIX® Vaccine

Global presence & expertise

+



Proprietary ISCOMATRIX® adjuvant & expertise

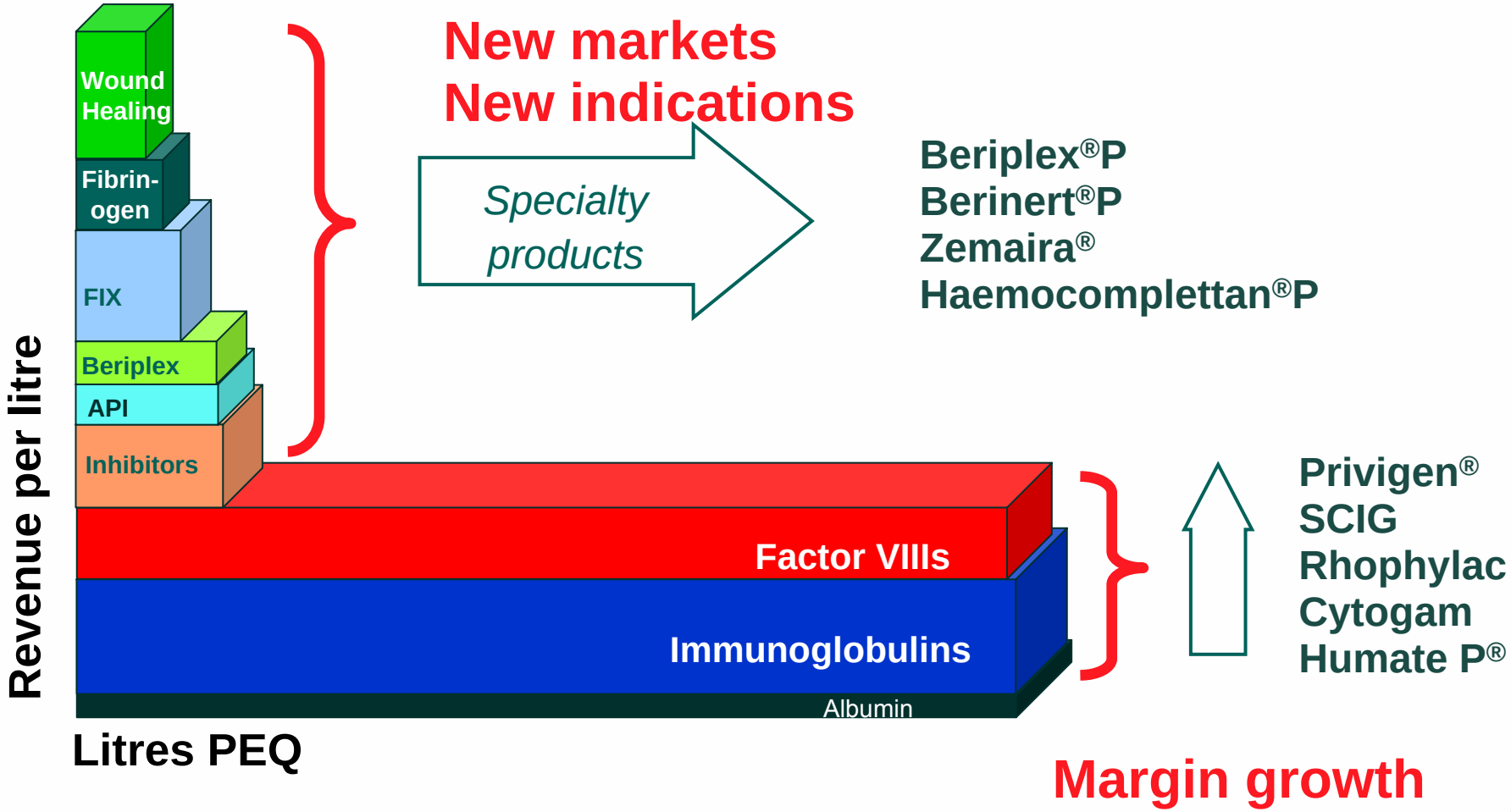
- Reduction of incidence of influenza-associated illness and mortality in people aged 65yrs and older
- Phase IIa clinical study well advanced. Results in 1H 08.

Pandemic Vaccine Development

- Testing human immune response to avian influenza vaccine
  - 2 x 30µg doses of vaccine and $AlPO_4$ required
  - Persistence of antibody & strong booster response at 6 months
    - 18-64 and >65yrs
  - Safety and tolerability similar to seasonal flu vaccine
- Core Pandemic Dossier submitted to TGA April 07
  - Paediatric data expected early 2008
  - Registration of prototype vaccine expected April 08

Plasma Products Portfolio

Profitable Litre Objective for Margin Expansion



Immunology - Liquid IVIG

Highlights

- US Approval in July 07
- EMEA submission, Jan 07

Compelling Features

- Excellent stability profile - 24 month, room temperature
- Improved production yield over time

Annual Capacity

- 3 million grams currently available
- Additional 10 million gram capacity available 1H cal. 2009
- Further capacity proposed for 2011

Immunology – Liquid SCIG

Vivaglobin®

Vivaglobin®
Immune Globulin Subcutaneous (Human)
The alternative to IVIg

- 16% liquid formulation
- Successfully marketed in 20 EU countries, USA and Canada for PID
- First subcutaneous product licensed in the USA

IgPro20: 2nd Generation Product

- 20% liquid formulation
- High yielding chromatography process
- Phase III clinical trial status
    - USA: recruitment complete. 50% infusions done
    - Europe: recruitment initiated

CSL™

Next generation Anti-D – pure & simple

High Purity
Rhophylac®
Human Anti-D Immunoglobulin

- Indicated for Haemolytic Disease of the Newborn
- Marketing authorisation received in the USA in April 07 for a new clinical indication “ITP”

CSL

Haemophilia

Humate P®

- Indicated for patients with FVIII and vWD deficiency

Improvement of patient convenience

- Needless transfer device
- Reduction of infusion volume by 50%
- 24 month shelf life at room temperature

Clinical

-Surgical label for vWD approved by FDA April 07

Specialty Products – Market Expansion

Beriplex® P/N – Market expansion

- Indicated for acquired bleeding deficiency
- Expansion into 12 new EU European markets
  - Positive results from phase III clinical trial.
  - Regulatory submission June 07. Approval Q1, 08

- Expansion into US market
  - IND submission June 07
  - Initiation of clinical program, 2008

Berinert® P

- C1 esterase inhibitor indicated hereditary angioedema
- Positive phase III clinical trial results announced Dec 07

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Specialty Products – Market Expansion

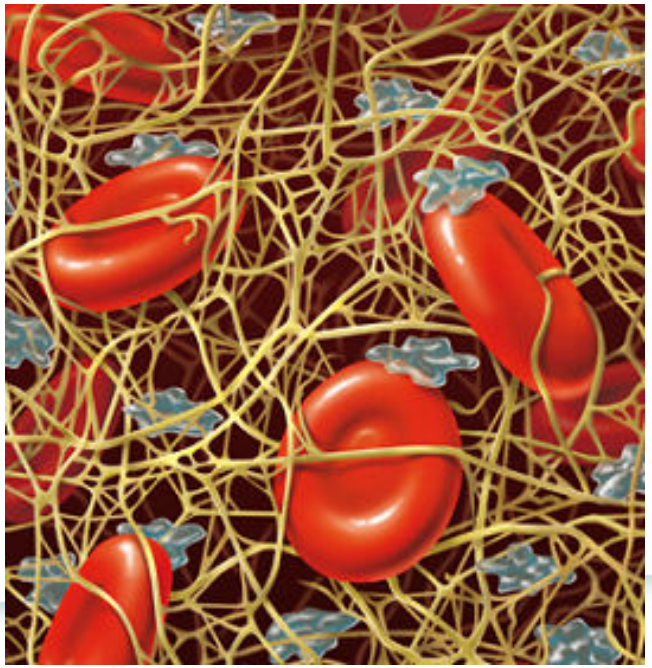
Zemaira®

- Indicated for Alpha1 Proteinase Inhibitory Deficiency
- FDA Phase IV post approval commitment
- Clinical data to support European registration

Zemaira®
alpha$_1$-proteinase inhibitor (Human)
Unmatched purity. Uncompromised care.

Haemocomplettan® P (Fibrinogen)

- Indicated for congenital fibrinogen deficiency
- Market expansion in Europe and USA
- IND submission Nov 06
- Orphan drug application submitted June 07
- Clinical program underway. Recruitment 50% completed



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Q&A

Break

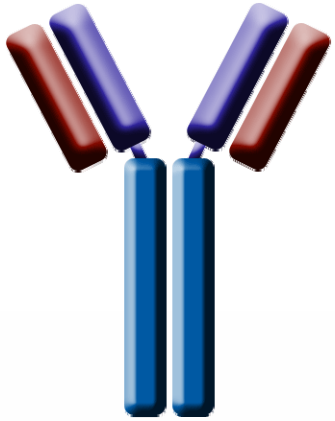
Recombinant Protein Portfolio

Pre-clinical / early clinical projects
Research Projects

Pre-clinical / Early Clinical Projects

- “Cytokine” rMAbs
- Partnered projects IL13R and GM-CSFR

- CSL 360 (TLA) for leukemia: type of product we can develop
  - Celltrion agreement

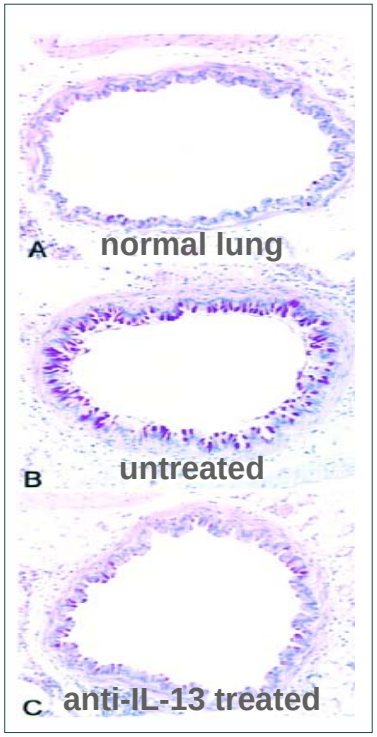


IL-13R – Asthma

- Market opportunity –

severe persistent asthma (5-10%)

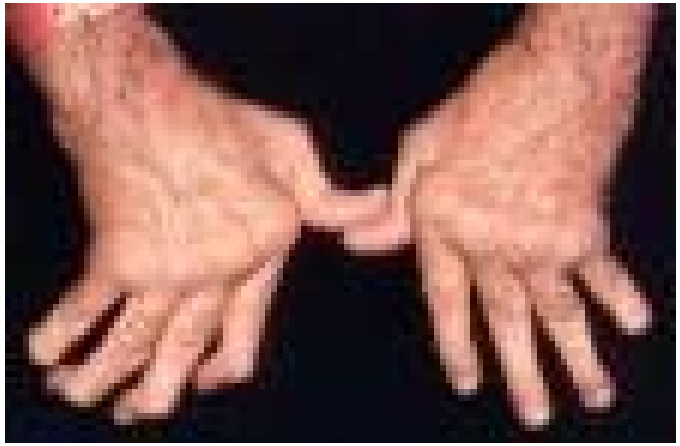
- IL-13 antagonists inhibit disease
  - eosinophilic inflammation
  - airway hyperresponsiveness
  - mucus hypersecretion
- Licensed to Merck



From Wills-Karp *et al*.
1998
Science 282:2258

GM-CSFR – Rheumatoid Arthritis

- CAM-3001 licensed to MedImmune (AZ)
- Phase I clinical study commenced Dec 2007

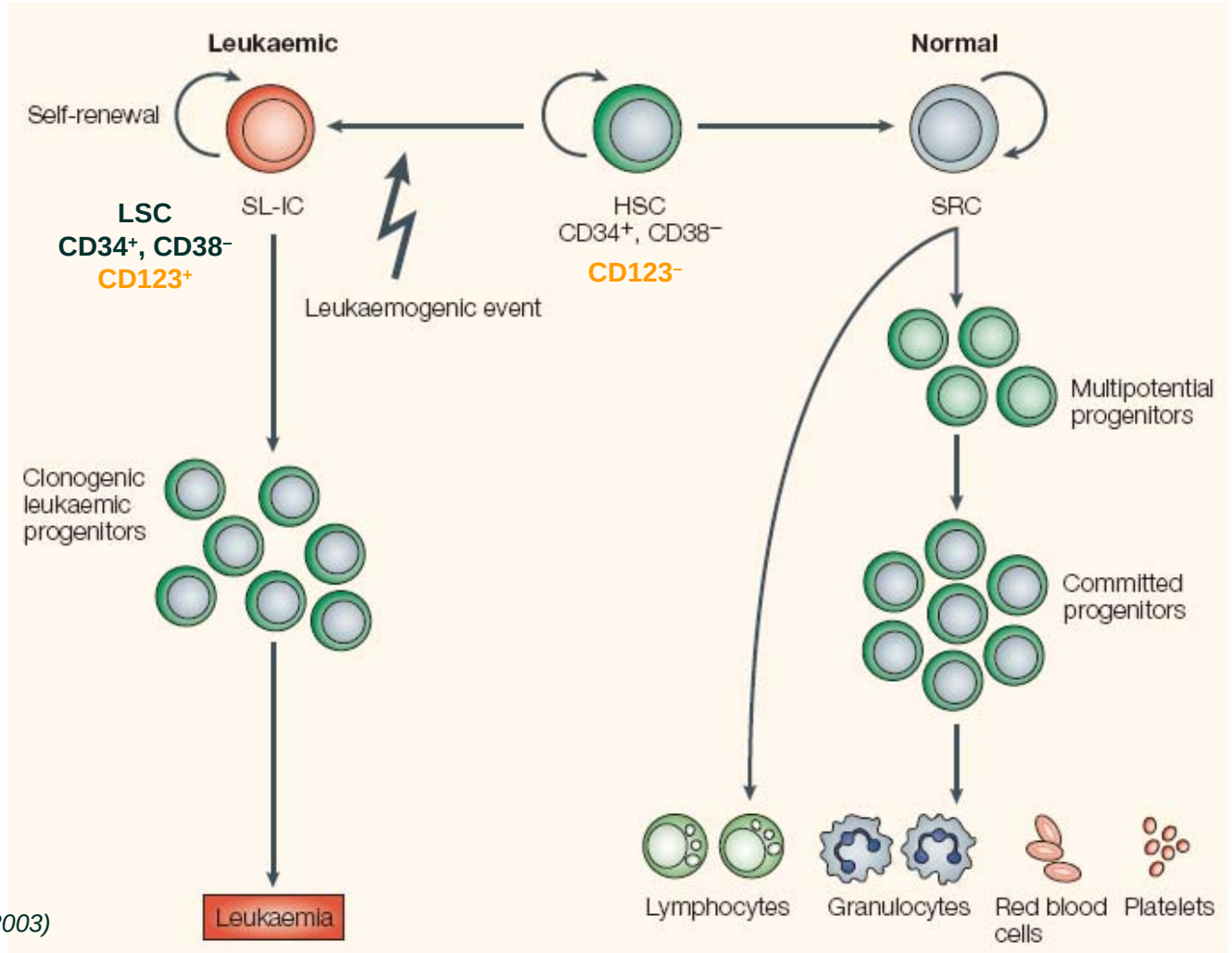


CSL360 for acute myeloid leukemia

What is Acute Myeloid Leukemia?

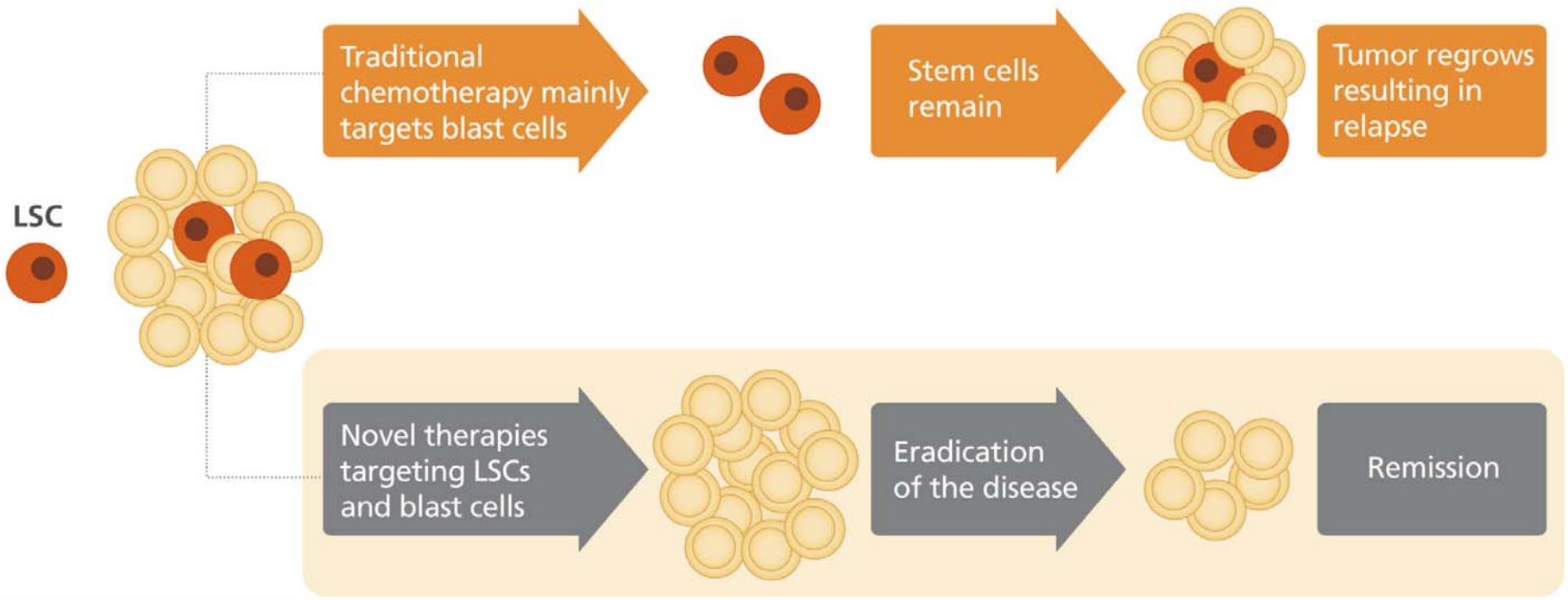
- Cancer of immature blood cells
- Patients die of insufficient normal blood cells - infection, bleeding
- US Incidence - 10,500 per year
- Outcome depends on number of factors
  - < 50yrs old: 5yr survival 30-40%
  - > 60yrs old: 1yr survival 10-20%
- No major changes in treatment for last 20 years
  - Based on aggressive chemotherapy
  - Sometimes bone marrow transplantation
  - Otherwise palliative (maintaining best quality of life)

15 years of Scientific Evolution: the Development of Normal Blood & Leukemia is Alike

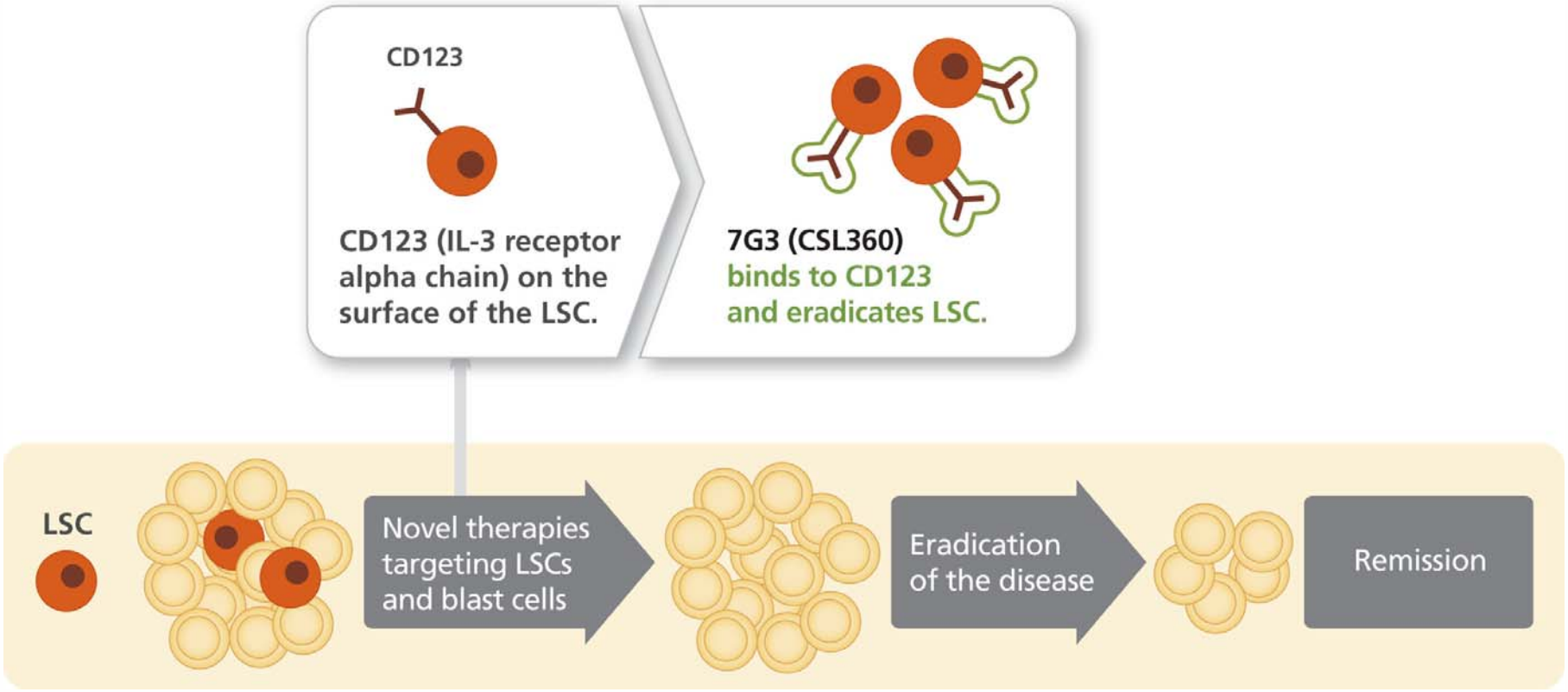


Huntly, Nature (2003)

Targeting Cancer Stem Cells in Leukemia



CSL360 is an Antibody that Neutralises the Activity of CD123



Evidence that CSL360 Might be an Effective New Treatment (1)

Experiment 1

Control

Richard Lock,
ASH 2007, Abstract #161

Evidence that CSL360 Might be an Effective New Treatment (2)

Experiment 2

Control

Richard Lock,
ASH 2007, Abstract #161

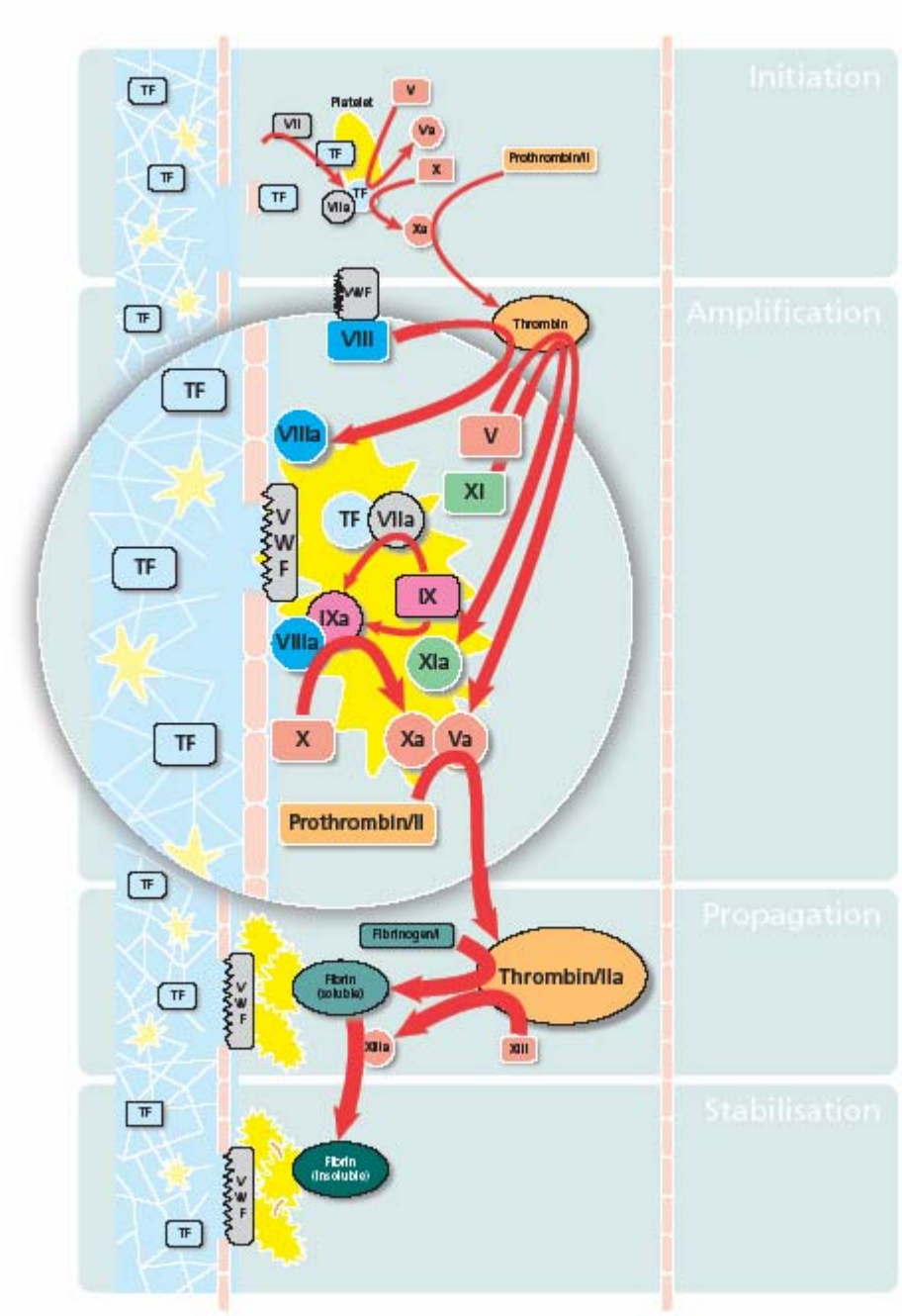
Future of CSL360

- Phase I clinical study ongoing in Australia
- Phase II studies planned in AML if CSL360 safe and biologically active in patients

Research Projects

Examples of CSL Research

- Recombinant coagulation factors
- Anti-cytokine rMAbs
- Alzheimer's Disease
- Adjuvant technology



Recombinant Coagulation Factors with Albumin Fusion Technology

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Half-life Improvement for Coagulation Products

Products with improved half-life will be beneficial to patients

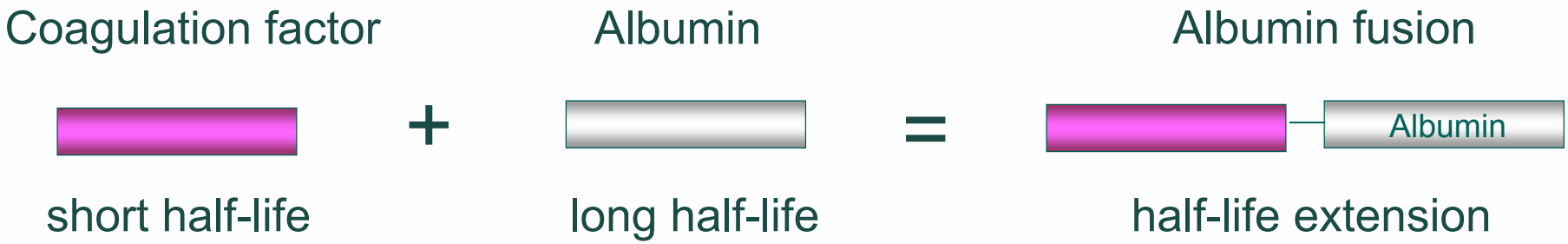
- Less frequent injections
- Improved compliance
- May enable prophylaxis

Numerous technologies to extend half-life of proteins

- Sustained delivery
- Chemical modification
- Genetic mutation
- Fusion with carrier proteins (Fc fusion, Albumin)

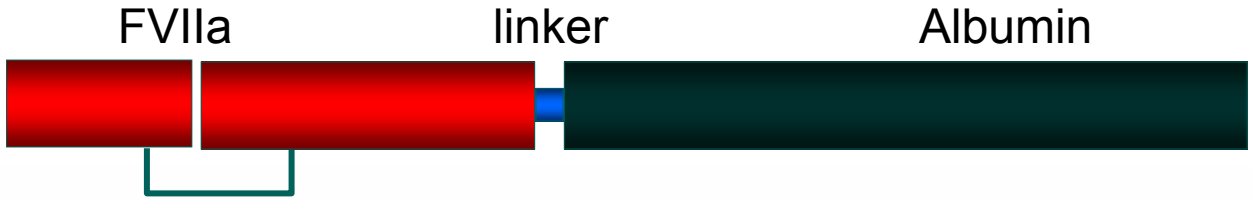
Albumin as a Carrier Protein

- Albumin has a naturally long half-life (~20 days)
- Highly abundant protein
- Molecular structure is known
- Proof of principle data for fusion proteins



rFVIIa - Albumin Fusion Protein

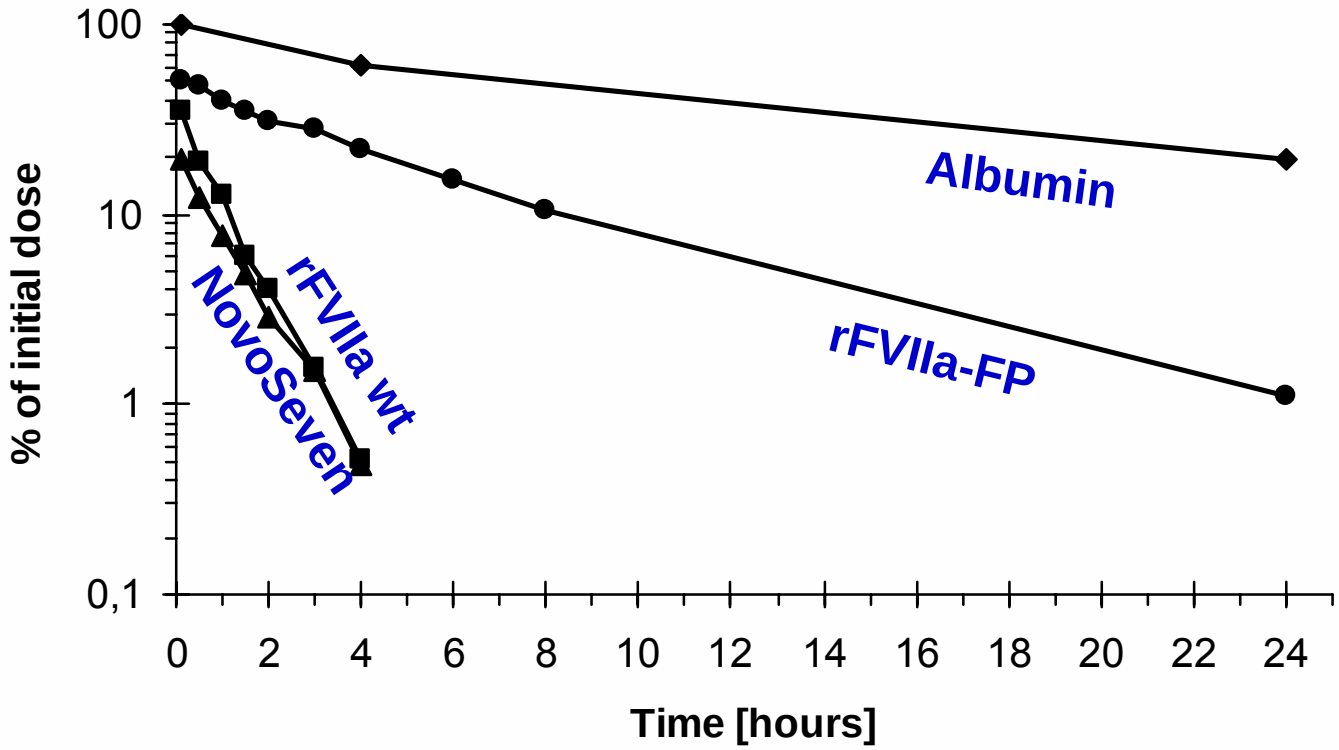
- Albumin fused to the C-terminus of FVII
- Flexible glycine-serine linker
- Expression in mammalian cell culture



- Proof of principle research data presented by Schulte et al, at the American Society of Hematology 49th Annual Meeting and Exposition. Dec 2007.

Improved Half-life for rFVIIa - Albumin Fusion

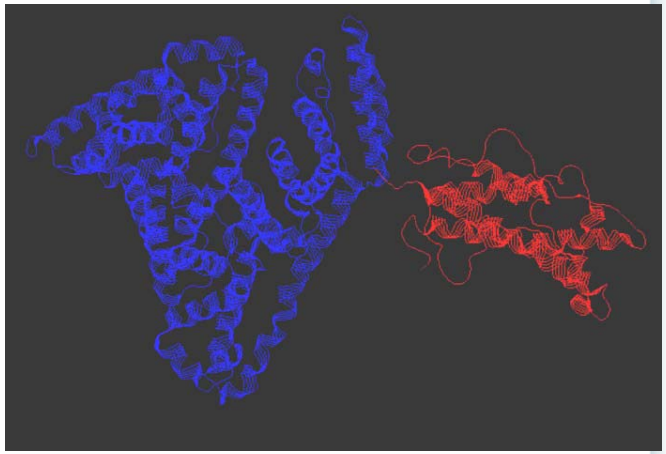
Pharmacokinetic data in rats



- 6 to 9 fold improvement in half-life

Novozymes Biopharma & CSL Behring

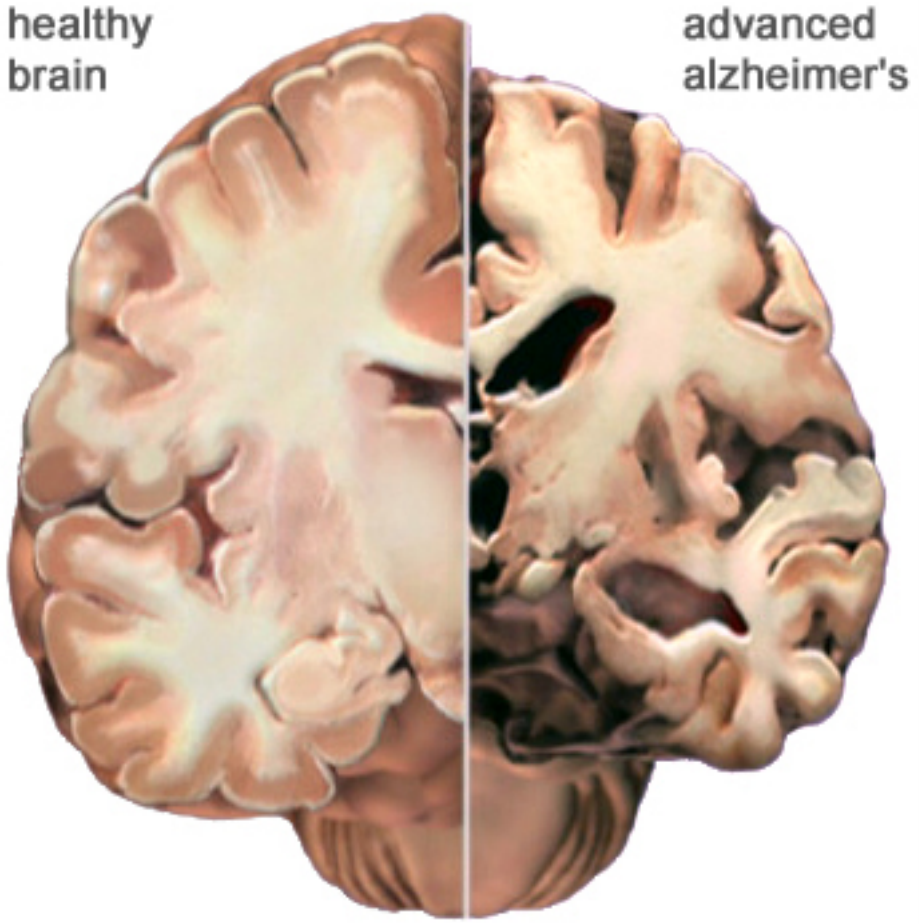
- CSL Behring has exclusive rights to the Albumin Fusion Technology from Novozymes Biopharma for selected plasma coagulation factors. Patent protection until 2021



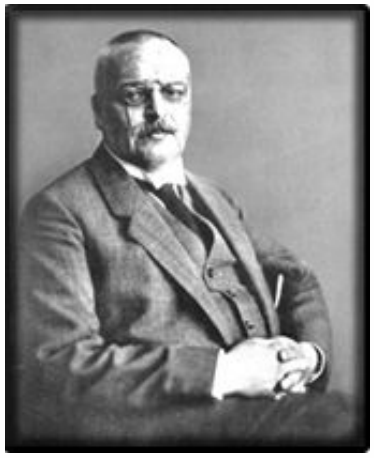
- CSL research program has generated “own” IP for various product candidates and molecular constructs. Patent applications filed.

Alzheimer's Disease

Brain Changes in Alzheimer‘s Disease

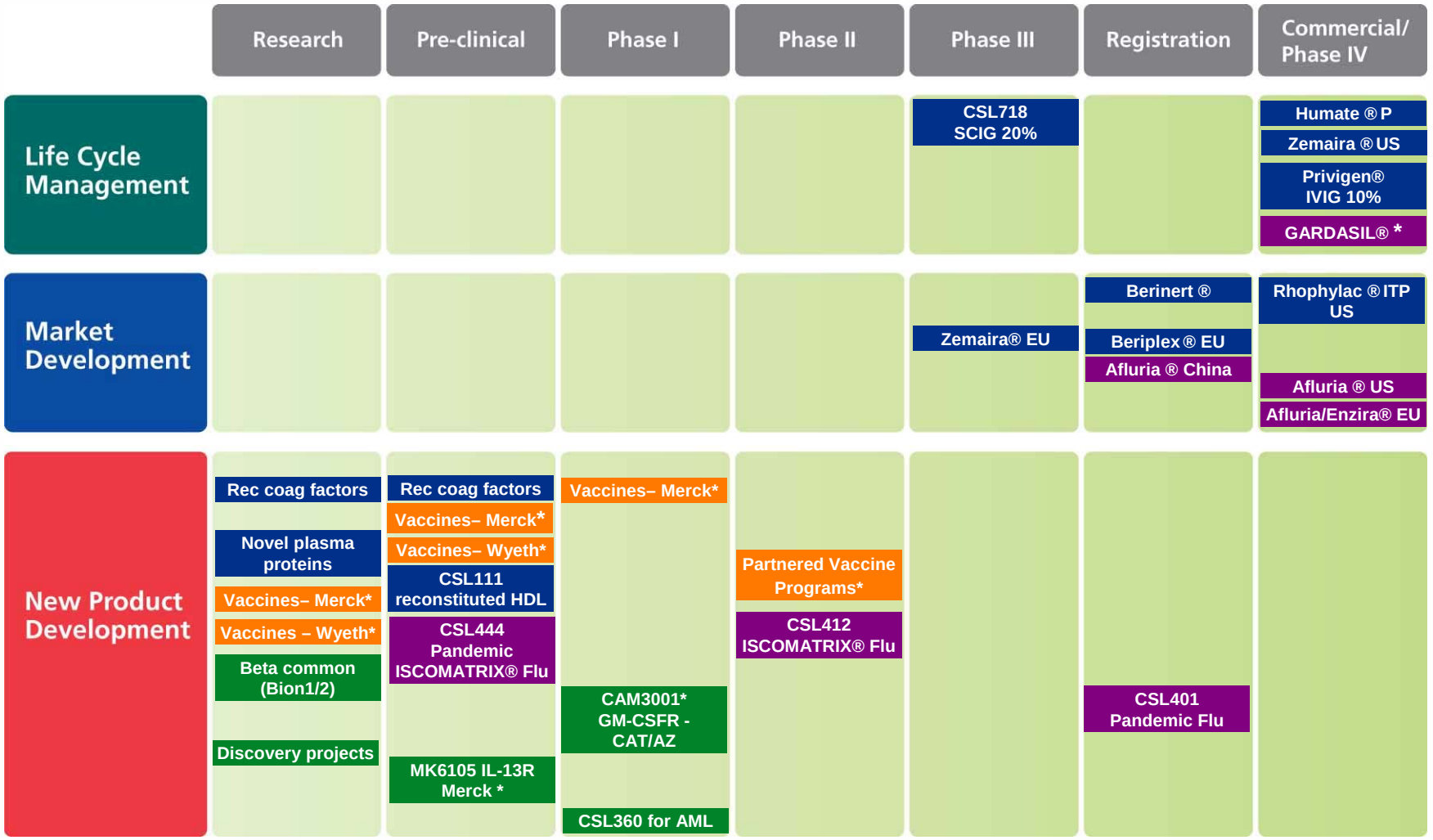


- Shrinkage
  cortex & hippocampus
- Large ventricles



Global Research & Development Pipeline

December 07



Core Capabilities: Plasma Therapeutics | Vaccines | ISCOMATRIX® Adjuvant | Recombinant Proteins

* Partnered Projects

Q&A