



Starpharma Holdings Limited

ASX: SPL

OTCQX: SPHRY

June 2007

Dr Jackie Fairley

CEO





This document contains certain forward-looking statements, relating to Starpharma's business, which can be identified by the use of forward-looking terminology such as "promising", "plans", "anticipated", "will", "project", "believe", "forecast", "expected", "estimated", "targeting", "aiming", "set to", "potential", "seeking to", "goal", "could provide", "intends", "is being developed", "could be", "on track", or similar expressions, or by express or implied discussions regarding potential filings or marketing approvals, or potential future sales of product candidates. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results to be materially different from any future results, performance or achievements expressed or implied by such statements. There can be no assurance that any existing or future regulatory filings will satisfy the FDA's and other health authorities' requirements regarding any one or more product candidates nor can there be any assurance that such product candidates will be approved by any health authorities for sale in any market or that they will reach any particular level of sales. In particular, management's expectations regarding the approval and commercialization of the product candidates could be affected by, among other things, unexpected clinical trial results, including additional analysis of existing clinical data, and new clinical data; unexpected regulatory actions or delays, or government regulation generally; our ability to obtain or maintain patent or other proprietary intellectual property protection; competition in general; government, industry, and general public pricing pressures; and additional factors that involve significant risks and uncertainties about our products, product candidates, financial results and business prospects. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein as anticipated, believed, estimated or expected. Starpharma is providing this information as of the date of this presentation and does not assume any obligation to update any forward-looking statements contained in this document as a result of new information, future events or developments or otherwise.



Company Overview

- World leader in developing dendrimer products for pharmaceutical and life-sciences
- Lead product VivaGel™ is being developed (with >\$20M NIH support) under IND as a topical microbicide to prevent HIV and Genital Herpes
- Deep pipeline of projects in drug delivery, siRNA delivery and drug optimisation
- Wholly-owned US subsidiary – DNT Dendritic Nanotechnologies Inc. – a leader in the development of advanced dendrimers for life science and industrial applications

Starpharma Holdings Limited (15/6/07)

ASX Code	SPL
Level 1 ADR (OTCQX)	SPHRY
Share Price SPL AUD	42.5c
12 Month High/Low AUD	64c / 35c
Shares on Issue	167.8M
Market Capitalisation USD	~ \$60M
Average Monthly Volume	4.5M shares
Cash on Hand (Mar 07) USD	\$10.7M

\$1 AUD = 0.846 USD

Starpharma is a world leader in the development of dendrimer products for pharmaceutical, life-science and other applications



Investment Summary

- Starpharma has a leading topical microbicide (VivaGel™) in development for prevention of sexually transmitted infections (STIs) HIV and genital herpes
- Topical microbicides have strong consumer demand and funding support
 - By age 25 half of all sexually active people in the US will have acquired an STI
 - Genital Herpes affects one in four US women
- VivaGel™ will be “first in class” for herpes prevention
- VivaGel™ has already achieved significant milestones and support:
 - FDA Fast track status granted for HIV
 - >US\$26M of NIH funding for microbicide development
 - Only microbicide with NIH funding for genital herpes
- Deep pipeline of pharmaceutical and life science products, balancing risk and timeframes to market
- Generating revenue through existing royalties and non-dilutive grants
- Significant US shareholder base, US operations and increasing profile

Starpharma represents a significant value proposition for investors

Company Structure



8.6%



Starpharma Holdings Limited
ASX:SPL
USOTC:SPHY

100%

Starpharma Pty Ltd

- 36 employees based in Melbourne, Australia
- Leading developer of dendrimers as pharmaceuticals
- Lead development product, VivaGel™ is a vaginal microbicide for the prevention of genital herpes and HIV
- Broad portfolio of other dendrimer projects including drug delivery, cancer and targeted diagnostics

100%

Dendritic Nanotechnologies Inc. (DNT)

- Wholly owned subsidiary based in Michigan, USA (16 employees)
- Leading developer and provider of advanced dendrimers for life science & industrial/materials applications
- Existing licensing agreements with established revenue streams for dendrimer technology



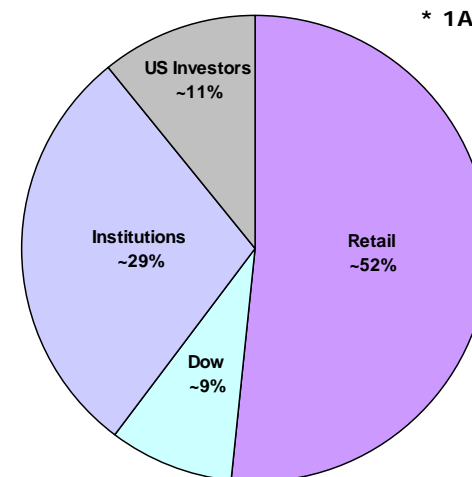
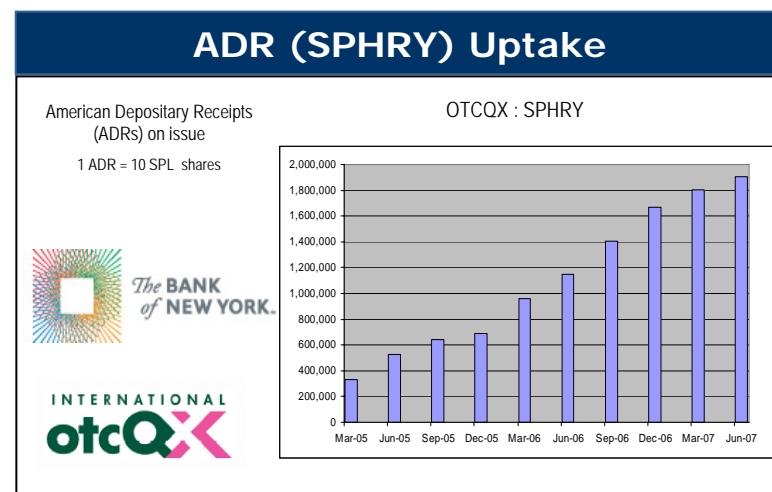
Shareholding and OTCQX:SPHRY

- **Major shareholders include:**
 - The Dow Chemical Company (NASDAQ:DOW)
 - Acorn Capital
 - Biotech Capital
 - Queensland Investment Corporation
 - Irrewarra/ GoldmanSachs-JBW

- **Exceptional Level 1 ADR program**
 - >72% growth in ADRs issued in the past 12 months
 - ~11.2% of issued capital
 - Most heavily traded Australian biotech Level-1 ADR

- **OTCQX launched March 2007**
 - Premium market tier for Level 1 ADRs
 - Daily volumes increased (+ ~55%)
 - Merriman Curhan Ford appointed as PAL* April 2007
 - Active brokers include Merriman, Merrill, UBS, Jefferies, NITE

- **Ongoing program to build liquidity and US interest in SPL/SPHRY**



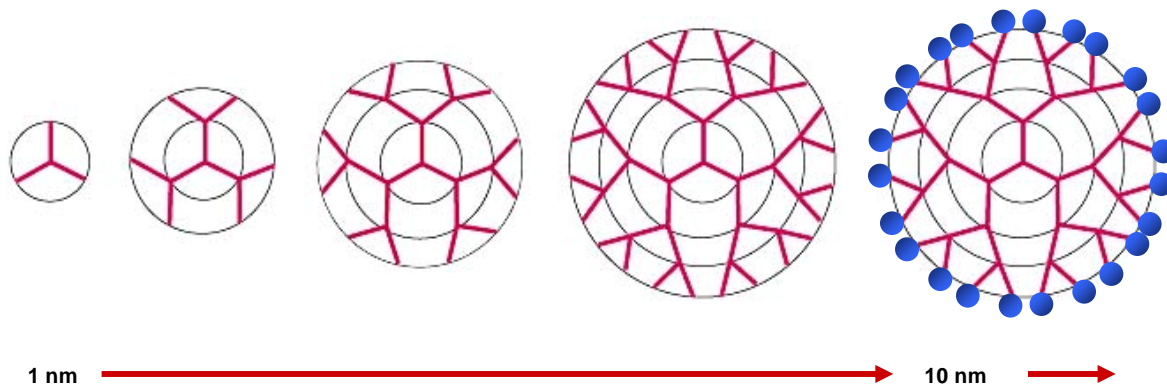
*Principal American Liaison

Technology Overview

Unique Characteristics of Dendrimers:

- Precisely defined, synthetic macromolecules (1-10nm)
- Precisely defined surface topology
- Can be designed to optimize potency, pharmacokinetics and localization; heat stable or biodegradable
- High multivalent binding affinity - ability to disrupt protein-protein interactions

*Dendrimer as a drug
e.g. VivaGel™ anti-viral active
ingredient*



Starpharma's existing commercial agreements for dendrimers

Stratus CS® : Cardiac marker diagnostic licensed to Dade Behring

DADE BEHRING

SuperFect® : Gene transfection technology licensed to Qiagen



STARBURST® dendrimers commercially available via Sigma Aldrich

ALDRICH

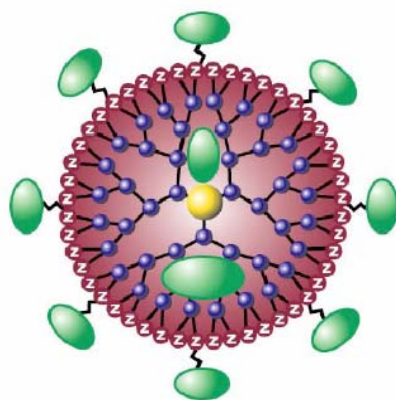
Prioject® siRNA & DNA transfection reagents



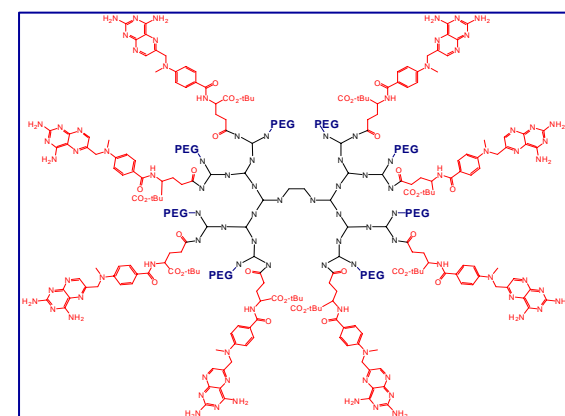
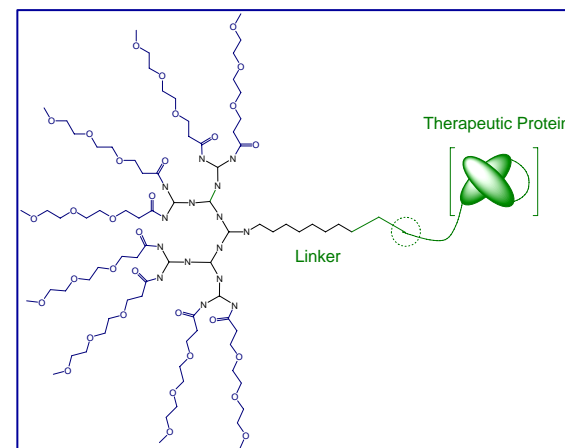
Technology Overview (continued)

Commercial Advantages of Dendrimers:

- Key enabling nanoscale technology
- Highly versatile technology:
 - application as drugs (VivaGel), in drug delivery, RNAi delivery, diagnostic & materials applications
- Scalable chemical manufacturing process
- can tailor features for tissue targeting
- competitive COGs
- Well tolerated



Example: dendrimer as a drug delivery vehicle





Product Pipeline



Starpharma's Pipeline: Balanced for Risk

Pharmaceutical & Medical Products	Proof of Concept	Lead	Clinical Trials	Sales
VivaGel™ * HSV-2 prevention * HIV prevention * condoms coating & other line extensions	→	→	→	
ADME Engineering™ * Therapeutic protein PK optimisation	→			
Drug Delivery - Small Molecules * Cancer therapeutic	→			
Drug Optimisation * Enhanced solubilisation	→			
in-vivo and in vitro Diagnostics * Stratus CS® (Cardiac Diagnostic) * MRI imaging (Ovarian cancer & cardiovascular disease)	→	→	→	
Life-science Products	Proof of Concept	Prototype	Pre-launch	Sales
Gene Transfection Reagents * SuperFect®	→	→	→	
siRNA Transfection Reagents * PrioFect™	→	→	→	
Materials Sciences Products	Early	Intermediate	Advanced, Partnered	Sales
Specialty & Fine Chemicals * Priostar™ Dendrimers (multiple applications) * Starburst™ Dendrimers (Catalogue of over 200 products)	→	→	→	



VivaGel™ - Lead Product for Prevention of Sexually Transmitted Infections STIs





VivaGel™ – Lead Product for Prevention of Sexually Transmitted Infections (STIs)

- VivaGel™ is a topical vaginal microbicide being developed to prevent STIs in women
- Currently being developed under two INDs for the prevention of HIV and genital herpes
- Gel-based formulation with a nanotech active (SPL7013), delivered via an applicator
- Dendrimer active inactivates HIV and HSV-2 (genital herpes) virus by binding to the virus preventing it attaching to the host
- Significant and growing recognition that microbicides offer the best alternative for prevention



HIV

- Major health burden in both developed and developing countries
- 39 million people living with HIV; every day 7,000 women are newly infected
- No cure - more than 50 HIV vaccines have failed and estimates are that an effective vaccine is many years away

Genital Herpes

- Recurrent, lifelong viral infection
- Estimated to infect between 15-25% of adults in developed countries, growing to between 40-50% women in the US by 2025
- Existing prevention methods have proven ineffective and developmental vaccines disappointing



Commercial Opportunity for Microbicides

- **Large, addressable markets**
 - HIV primarily in developing countries
 - HSV-2 in both developing and developed countries
- **Increasing market support for products**
 - US government firmly committed to development of safe and effective microbicides
 - US opinion leaders now calling for National Herpes Control Program
- **Several industry surveys have confirmed strong consumer demand**
 - 30-40% female US college students would buy a microbicide - 70% with contraceptive properties
 - Over 20 million women in US would use a microbicide
 - Microbicide market estimates > \$1.5-3 Billion

Estimated Market for microbicides in Developed Countries

Market Penetration	Average Frequency of Use Per Annum		
	25x US\$M	50x US\$M	100x US\$M
2.5%	365	730	1,460
5.0%	725	1,450	2,900
10.0%	1,450	2,900	5,800

Key assumptions

291m women of reproductive age (15-49) in developed countries

Unit sale price circa US\$2

Usage rates according to published data

“If I had a magic bullet to accelerate something it would be the microbicide...”

Bill Gates, July 2006



VivaGel™ – Product Features and Performance

VivaGel™ Offers Several Key Advantages

- Market research indicates significant (international) user and payor demand for microbicide gels
- VivaGel™ will be “first in class” for Herpes
- Compelling HSV-2 & HIV efficacy and potent contraceptive activity in animal models
- Significant NIH support for development
- Viruses appear not to develop resistance to VivaGel™

Excellent Results in Human and Animal trials

- Successfully trialled in both men and women under IND
- VivaGel™ is currently in expanded safety human studies (Phase I/IIa) in USA & Africa
- VivaGel™ shows excellent activity in relevant HIV & HSV-2 strains in very stringent animal models
- Well tolerated in male and female subjects

Excellent Drug Characteristics

- Lower development risk : Topical gel, external to body
- Full development package; well defined chemical entity, scalable
- Affordable – Low manufacturing cost
- Excellent IP position



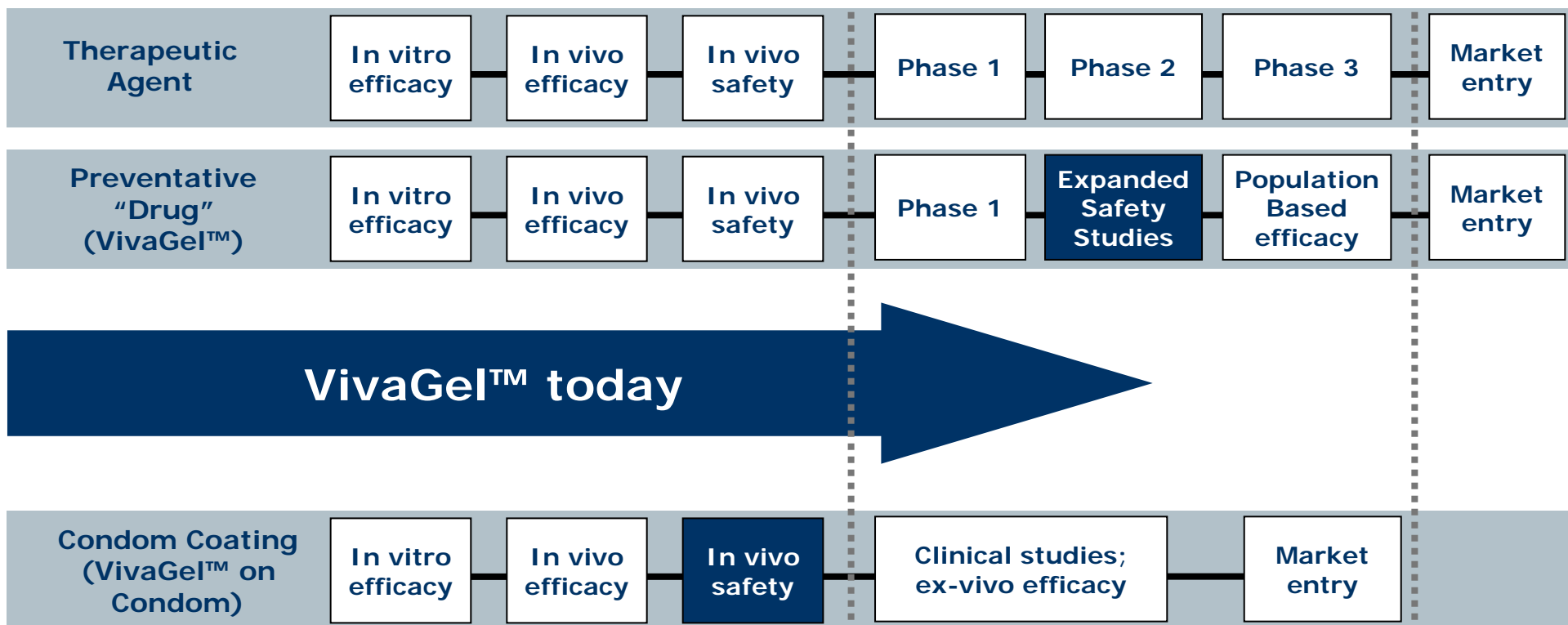
VivaGel™ - Clinical Trial Status

Study	No. Participants	Site(s)	IND Application	Status
Safety, tolerability and pharmacokinetic study of escalating doses of VivaGel in healthy women when administered vaginally, once daily for 7 days	37	Adelaide, Australia	Prevention of HIV	Complete
Safety and acceptability study of VivaGel when administered to the penis of healthy male volunteers once daily for 7 days	37	Melbourne, Australia	Prevention of HIV	Complete
Expanded safety and tolerability study of VivaGel in healthy young, sexually abstinent women when administered twice daily for 14 days	60	San Francisco, USA and Kisumu, Kenya	Prevention of genital herpes	Ongoing
Expanded safety and acceptability study of VivaGel in healthy young, sexually active women when administered twice daily for 14 days	40	Tampa, USA and San Juan, Puerto Rico	Prevention of HIV	Commencement 2Q/Q3 2007



VivaGel™ - Development stage and plan

PRODUCT TYPE





VivaGel™ – Development and Commercial Strategy

VivaGel™

- One of the most advanced 2nd generation microbicides for HIV
- First in class for HSV-2
- Significant non-dilutive NIH support; strong ongoing support for microbicides
- Broad application; chronic-use product
- Partnering/commercial strategies likely to differ between developed (OTC/Pharma) markets and developing (NGO/Govt.) countries

Status: Expanded Safety human trials in US, Australia and Kenya Discussion with various partners

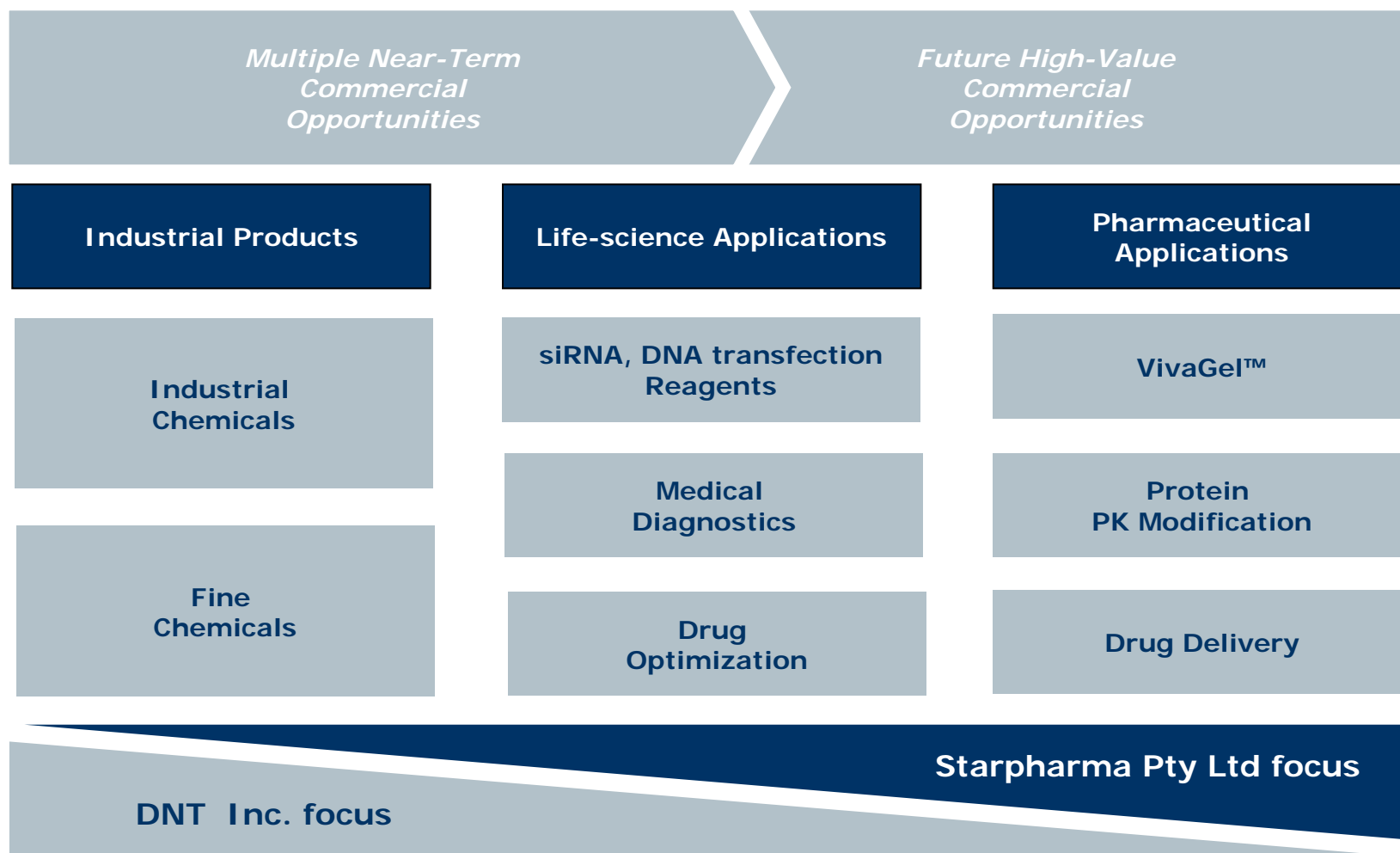
VivaGel™ Condom Coating opportunity

- Common spermicidal coating in premium condoms is nonoxynol-9 (N-9)
- Recent studies show that N-9 (a detergent) can result in a significant increase in the rate of infection by HIV
- Likely less onerous regulatory path for VivaGel™ as a condom coating - offering a line-extension with shorter path to market.

Status: In discussions with several potential international and regional commercial partners wishing to replace N-9 with a VivaGel™ coating for their premium condoms



Portfolio: Overview of Opportunities





Portfolio: siRNA Delivery – PrioFect™

Concept: Overcome the principle obstacle to the development of RNAi-based drugs ... delivery

“RNAi-based therapies have so far failed to take off because of the difficulty of getting the therapeutic molecules into target cells”

Merck buys Sirna Therapeutics

By Bioperform Web Watch
Posted 10/31/2006 11:01:00 AM

The Associated Press reports that Merck & Co. has agreed to pay \$1.1 billion to buy Sirna Therapeutics Inc. Merck's \$13-per-share offer for the San

Commercial opportunities for PrioFect™:

1. Research reagent market (\$200 million)

- Licensed globally to EMD Biosciences
- Agreement includes royalties and milestones
- First products to market in 2007

2. In vivo Applications

- Rights retained, significant interest
- Opportunity for multiple deals

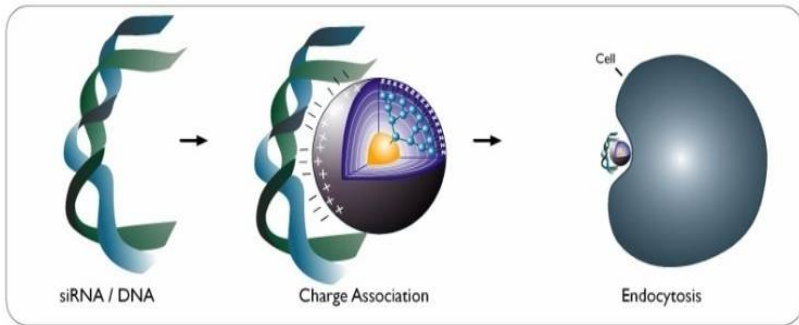


EMD Biosciences, Inc. is part of the Performance and Life Science Chemicals (PLS) division of Merck KGaA, Darmstadt, Germany. EMD markets brands including Calbiochem®, Novabiochem®, and Novagen®.

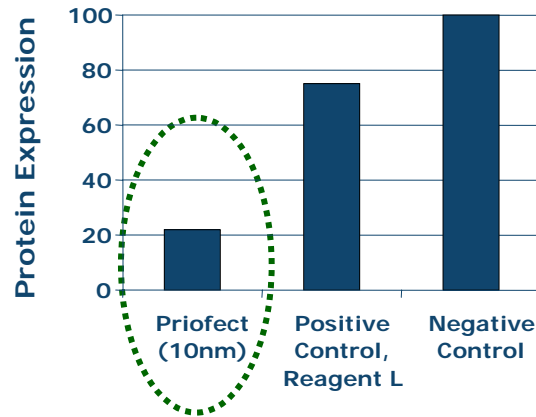
Merck KGaA, Darmstadt, Germany is a global pharmaceutical and chemical company with sales of EUR 6.3 billion in 2006.

Concept: Overcome the principle obstacle to the development of RNAi-based drugs ... delivery

Technology



Inhibiting Protein Expression



Significance

Potential for

- ♦ Cell specific targeting
- ♦ Enhanced residence time
- ♦ Protection from nucleases
- ♦ Reduced off-target effects

Opportunity for multiple deals

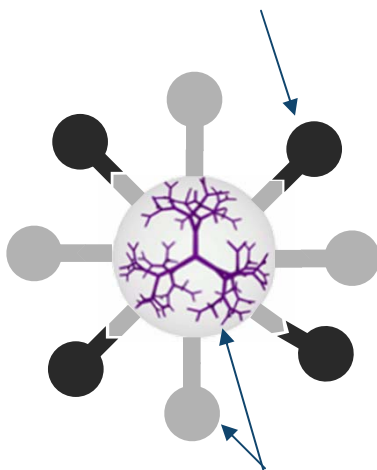
Significant interest from potential pharmaceutical partners

Precise size control:
allows optimization according to cell type

Concept: increase half life of drugs by attaching to dendrimer

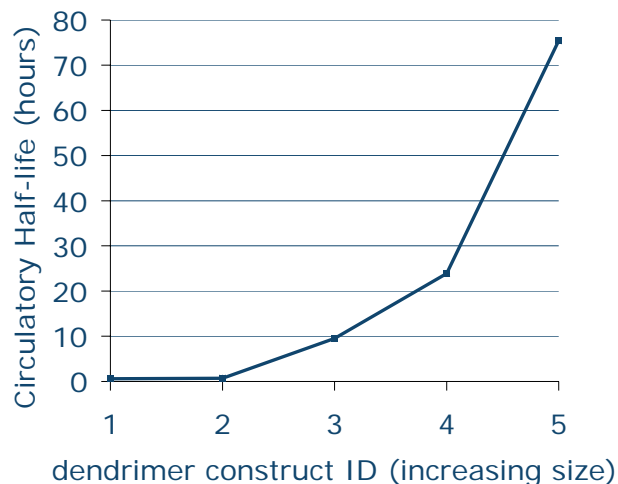
Technology

**Payload Drug
(e.g. methotrexate)**



**Dendrimer
construct**

Extending Drug Half Life



Significance

Potential for

- ♦ less frequent dosing
- ♦ Reduced cost of therapy
- ♦ Improved compliance

Especially valuable for protein therapeutics

- ♦ Very short half life
- ♦ Expensive compounds, therefore want to reduce amount needed

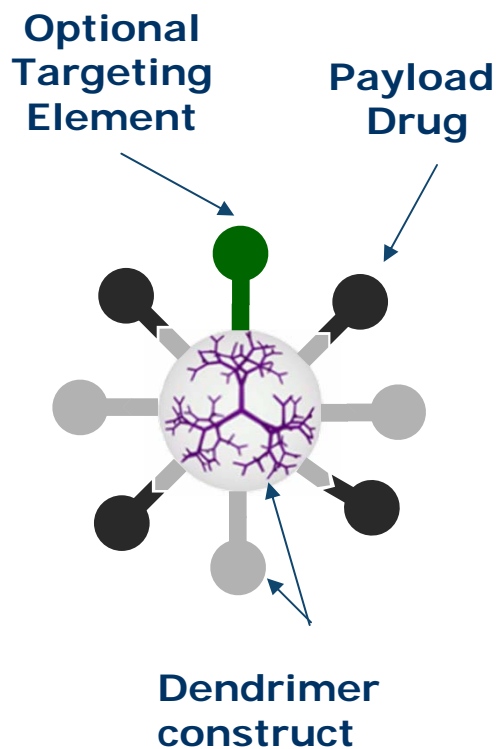
Opportunity for multiple deals

Significant interest from potential pharmaceutical partners

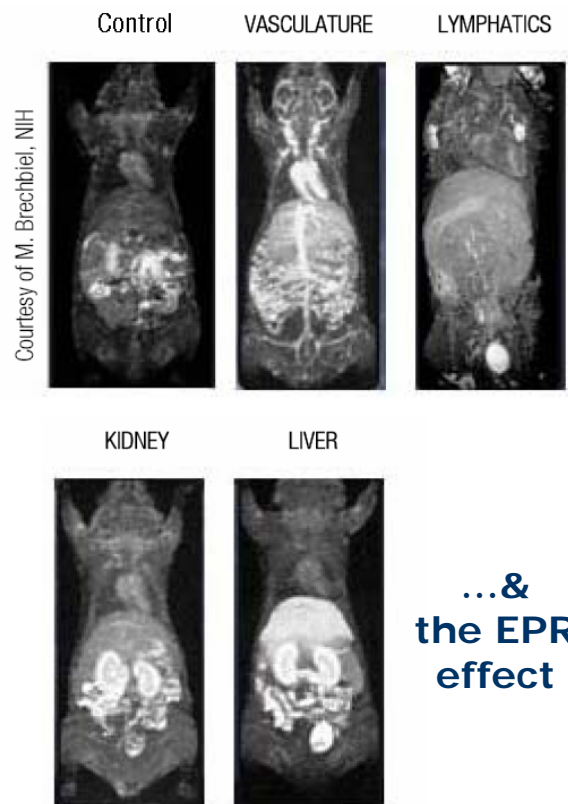
The global protein therapeutics market was valued at US\$57 billion in 2005.

Concept: Attach drugs to dendrimers to control and modify distribution

Technology



Dendrimers can be Targeted



Significance

Potential for

- ♦ Improved efficacy of drugs
- ♦ Reduced off-target effects
- ♦ Product lifecycle management
- ♦ Improved solubility of drugs
- ♦ Drug "rescue"

Proof of concept in cancer model

Opportunity for multiple deals

Also offers imaging opportunity

Dendrimers are concentrated in solid tumours via the EPR (enhanced permeability & retention effect)

Portfolio: Other Early Commercial Opportunities*

Sector	Discussions with...	Application
Research Reagents	Major Reagent manufacturers	Enhanced fluorescent dye performance
	Major Reagent manufacturers	Other Laboratory reagents
Oil	"Top 5" US Oil Company	Lubricant additives
Plastics	Large Automotive Components Manufacturer	Plastics additive
Manufacturing	Major Technology Company	Dental resins
	Multiple avenues of exploration	Adhesives
	"Top 5" European electronics manufacturer	Printed circuit board manufacturing
Pharmaceutical	Global Healthcare Company	Solubilisation
Cosmetics	Cosmetic Company	Solubilisation
Resources	Water quality specialists	Water filtering/ remediation

*Further detail in Supplementary Information section

Partnerships and Collaborators

Industry Collaborators



DADE BEHRING



Johnson & Johnson Research
PTY. LIMITED



Research/ University Collaborators

JOHNS HOPKINS
UNIVERSITY



CALTECH



UTMB The University of Texas Medical Branch





Key Management

Dr Jackie Fairley, CEO

- Over 15 years international business development and general management experience in pharmaceuticals and biotechnology
- Former senior roles with CSL and Faulding (Mayne Pharma)

Dr Paul Barrett, VP Business Development

- Significant experience in marketing and business development in Australia and UK
- Competitive intelligence expertise

Dr David Owen, VP Research

- Extensive experience in medicinal chemistry and biochemistry
- Managing teams focussed on commercially directed drug discovery

Dr Jeremy Paul, VP Development & Reg. Affairs

- Integral role to advancement of VivaGel clinical program
- Extensive NIH liaison, regulatory and product development experience

Dr Robert Berry, President, DNT Inc.

- Founder of four technology companies and consortia
- Previously President and CEO of CMU Research Corporation

Ben Rogers, Company Secretary & CFO

- Extensive experience in finance, corporate governance and HR management
- Member of Starpharma's start-up/IPO management team

Nigel Baade, Financial Controller

- CPA qualified accountant
- Experience in the pharmaceutical and biotechnology industries.



Key Investment Highlights

VivaGel™: A Unique Lead Product

- Compelling competitive advantages
- Clinical candidate with Significant support from NIH (>US\$20M)
- First in class for genital herpes

Significant Commercial Opportunity

- HIV and genital herpes at epidemic proportions (Genital herpes: US 22% adults & Europe 15-20%)
- Strong consumer awareness and government demand

Diversified Pipeline of Opportunities

- Near term commercial opportunities eg. siRNA and life science applications balance risk & timeframes of pharmaceutical applications
- Versatile technology with significant commercial potential

Increasing US Profile

- ~20% of stock held in US; Dow the largest SH
- US subsidiary with marketed products and extensive commercial relationships
- ex CEO/Chairman Dow Corning joined the SPL Board

Starpharma represents a significant value proposition for investors



Starpharma Holdings Limited

ASX: SPL

OTCQX: SPHRY

Dr Jackie Fairley, CEO

+613 85322704

Further information:

www.starpharma.com

info@starpharma.com

SPL	US\$M
Market Capitalisation	~60
NIH Support	>26
Cash on Hand (Mar 07)	10.7





Supplementary Information



Starpharma: 06/07 Highlights

Acquisition of DNT

SPL acquires US company DNT
Dow becomes SPL's largest holder
Integration of SPL and DNT complete

Richard Hazelton appointment

Retired Dow Corning Chairman/CEO appointed to SPL Board

VivaGel™ clinical trial progress

Expanded safety trial in men completed;
Expanded safety trial initiated in United States (UCSF) and Kenya

Further NIH/MTN support

Additional funding granted for development of VivaGel™
Trial to commence shortly

siRNA deal with EMD Biosciences

Worldwide exclusive license and supply agreement for PrioFect™

Launch on OTCQX

SPL appointed to international OTCQX - new premium market for ADRs

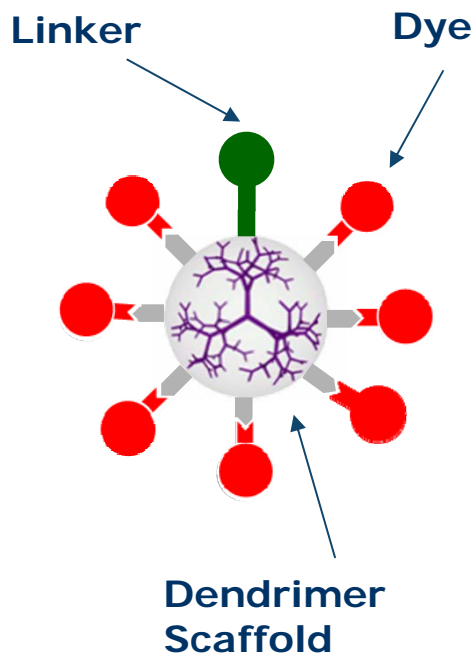
New commercial opportunity for Priostar™

DNT's Priostar™ shown to improve performance of fluorescent laboratory reagents

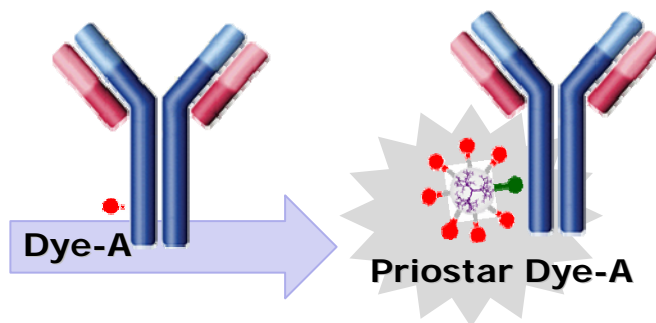
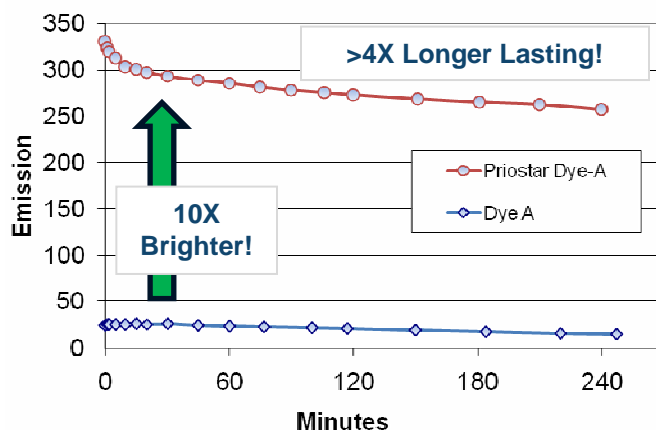
Portfolio: Fluorescent Reagents

Concept: Attach fluorescent dyes on dendrimers to enhance biomolecular signal

Technology



Enhanced, Stabilized Signal



Significance

- Potential for
- ♦ Fluorescence Microscopy
 - ♦ Microarrays
 - ♦ Antibody based kits (ELISA)
 - ♦ In vitro Diagnostics

In evaluation with leading fluorescent dye and linking reagent suppliers

Opportunity for multiple deals

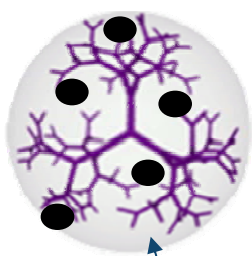
Fluorescent Dye Research Reagent Market > \$100 M

Fluorescent Dye *in vitro* Diagnostic Market > \$2B

Concept: Use dendrimers to enhance solubility, stability, processing

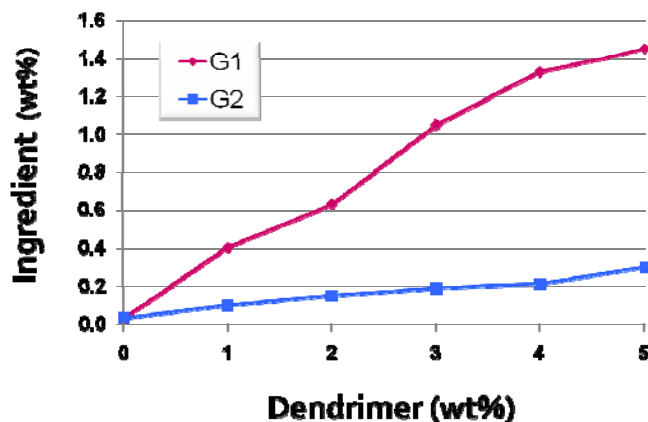
Technology

● Poorly Soluble Ingredient



Dendrimer Scaffold

Low % = Improve Solubility



Low generation dendrimers have big impact on solubility enhancement.

Significance

Potential for

- ◆ Increasing ingredient loading
- ◆ Stabilize ingredient
- ◆ Improved processing
- ◆ Allowing new ingredients OR
- ◆ Combination Ingredients

In evaluation with leading cosmetic ingredient suppliers

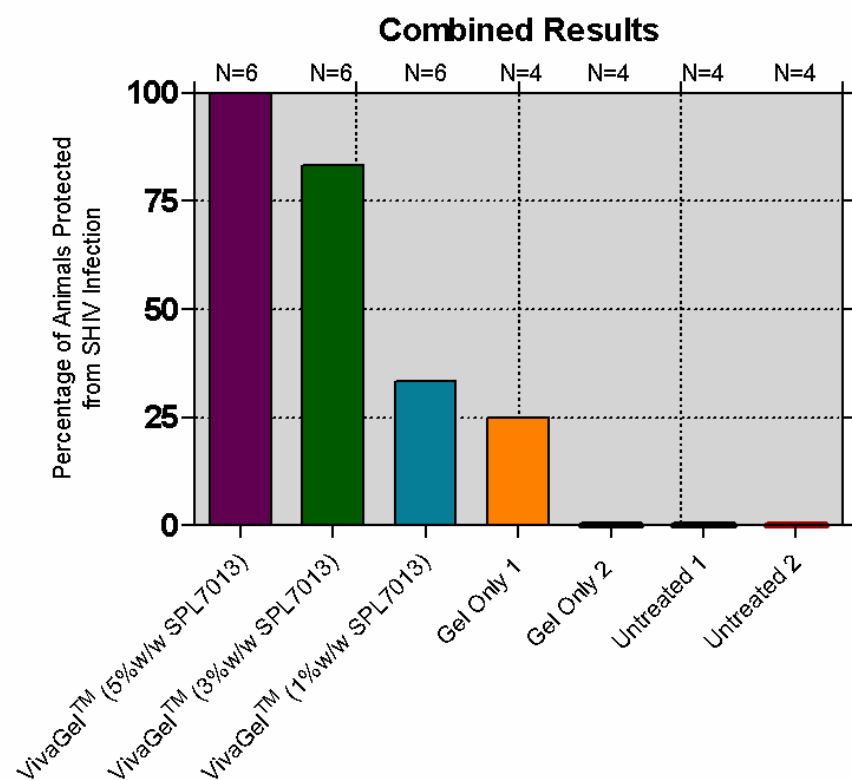
Opportunity for multiple deals

High Value-Low Volume Opportunity

US demand for cosmetic and toiletry chemicals is forecast to rise 5.4 percent per year to \$7.6 billion in 2010

VivaGel™: Animal Efficacy results

SHIV/HIV Protection



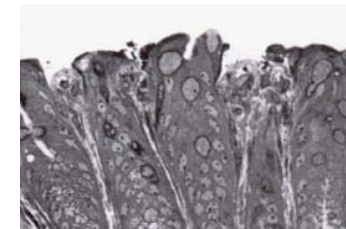
AIDS Research & Human Retroviruses, 21, pp207-213, 2005.

Advantage: VivaGel™ is **NOT** a surfactant

Surfactants damage epithelial cells **INCREASING** the chance of HIV transmission. VivaGel is **NOT** a surfactant and has been found not to damage epithelial cells in human trials. This is not true of all microbicides.



Normal



After surfactant

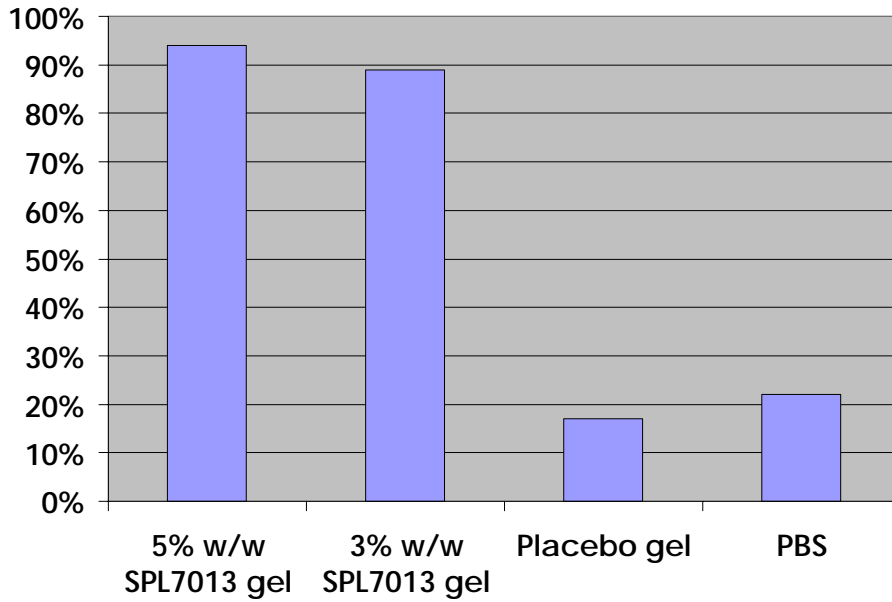
Contraception 1998;57:341-348



VivaGel™: Animal Efficacy results (continued)

HSV Protection

VivaGel™: animals protected from HSV-2



Approximately 45 million Americans (26% of women and 18% of men) are infected with HSV-2, the causative agent of genital herpes.

Epidemiology of HSV in Developed Countries, HERPES, 11 Supplement 1, 2004

“Women in the United States also need HIV prevention tools like microbicides. AIDS is now the number 1 cause of death among African-American women between the ages of 25 and 34.”

“The Microbicide Development Act,” in the Senate of the United States, 2005

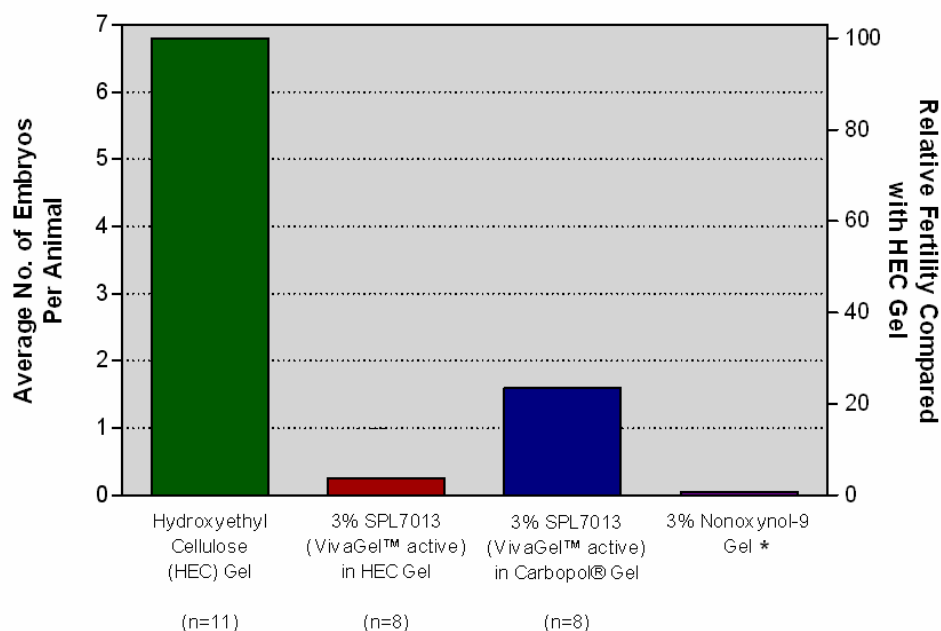


VivaGel™ : Potent Contraceptive Activity in Rabbits

- Recent study has shown that SPL7013, the active ingredient in its VivaGel™, exhibits a potent contraceptive effect in rabbits
- Independent study undertaken at Johns Hopkins University under an NIH grant
- Fertility was reduced by more than 75% by SPL7013 in a VivaGel™ formulation and 95% in a HEC gel compared with an inactive gel
- If contraceptive activity is confirmed in humans it would allow for development with contraception as an additional claim
- Findings relevant to both the stand-alone gel and condom coating opportunities

VivaGel™'s active ingredient is a potent contraceptive in animals

Average No. of Embryos Conceived Per Animal Following Application of Vaginal Gels, and % Relative Fertility in Active Gel-Treated Rabbits Compared with HEC Control



* N-9 figure based on published historical data, Castle et al, Contraception 1998;58:51-60, and Zeitlin et al, Sexually Transmitted Diseases, 2001;28:417-23

VivaGel™ : Significant Advantages Over Competitors

	Competitor Category	Key Disadvantages	VivaGel™ Advantages
HSV-2	VivaGel™ is the only microbicide being developed to prevent genital herpes		
	Surfactants/Detergents	<ul style="list-style-type: none"> Ulceration possible Potential increased risk of infection 	<ul style="list-style-type: none"> No surfactant properties Non-irritant Does not increase infection risk
HIV	Sulphated Carbohydrates	<ul style="list-style-type: none"> Not active against clinical HIV strains 	<ul style="list-style-type: none"> Highly active against all HIV strains tested
	Reverse Transcript Inhibitors and other anti-viral drugs	<ul style="list-style-type: none"> Drug resistance is an issue Primary mode of action requires infection process to have begun Not active against HIV 	<ul style="list-style-type: none"> Very high barrier to development of viral resistance
	Sulphated Polymers	<ul style="list-style-type: none"> High cost of synthesis Poor characterisation of the drug substance likely to present regulatory issues 	<ul style="list-style-type: none"> Excellent drug characteristics <ul style="list-style-type: none"> Low manufacturing costs Stable, well defined entity
	Acidity Control Agents	<ul style="list-style-type: none"> Is acidity control sufficient protection as mono-therapy? 	<ul style="list-style-type: none"> Potent activity against HIV and HSV-2 in animal models Non-irritant
VivaGel™ has significant competitive advantages			

Pipeline: Commercialisation Strategy

Category	Product/ Application	Approach	Projected / actual Income type	Stage
"In house" Pharmaceutical Development	VivaGel™	Late stage partnering deal to retain value	Milestones Royalties	Clinical
	Other Drugs, e.g cancer therapeutic	Preclinical out-license	Milestones Royalties	Pre-clinical
	Condom Coating	Co-development	Milestones Royalties	Pre-clinical (device)
Enabling technologies for pharmaceutical development	Drug Delivery	Repeatedly partner across companies and disease areas	Milestones Royalties	Preclinical
	Protein PK modification			
	Therapeutic siRNA delivery - PrioFect™			
	Cardiac-diagnostic Stratus CS®	Dade Behring	Royalties	Marketed
Sale or licence of dendrimers to pharmaceutical laboratories	PrioFect™	EMD Merck	Milestones Royalties	Pre-market
	STARBURST®, Priostar™	Sigma Aldrich	Royalties	Marketed
	SuperFect®	Qiagen	Royalties	Marketed
Enabling technologies for wider industry sectors	Priostar™	Repeated co-development then license (automotive, materials, electronics etc)	Royalties	Pre-market

Pipeline: Drug Delivery & PK Modification of Protein Therapeutics

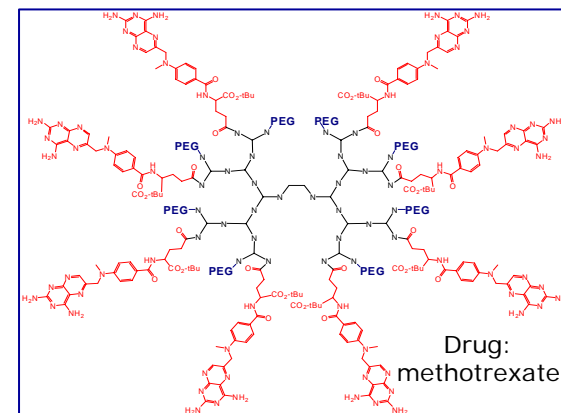
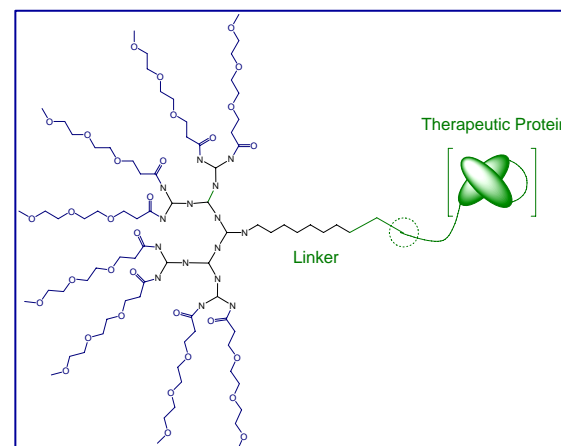
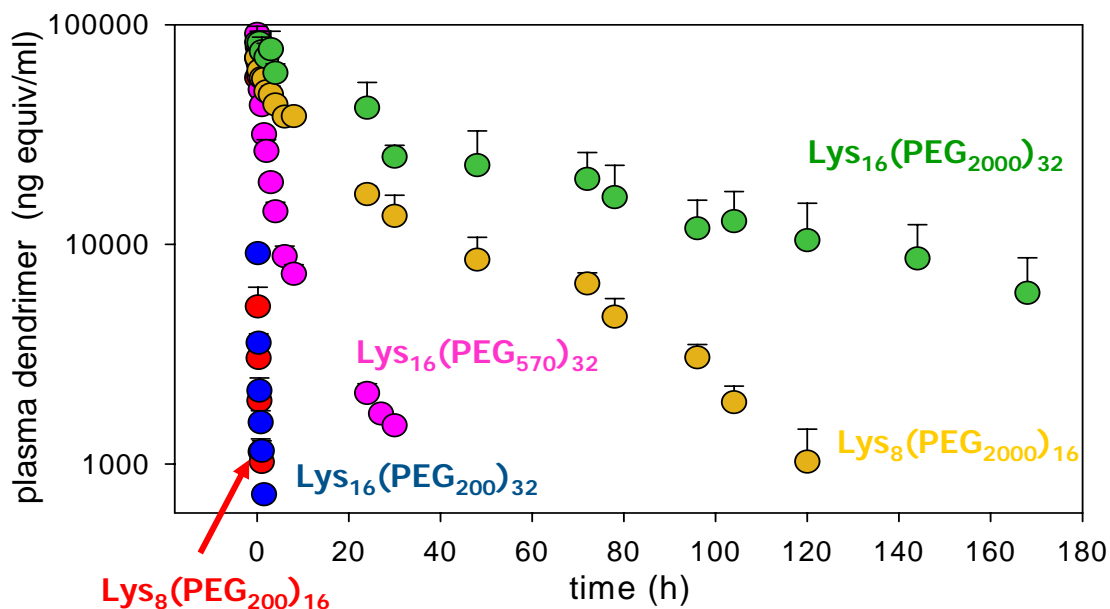
Starpharma's dendrimers can be designed to optimize the Pharmacokinetics (PK) of:

- Small molecule drugs
- Therapeutic proteins
- Peptides

Plasma residence time increases with dendrimer size, but:

PEG MW alone not the main determinant of $t_{1/2}$

Plasma concentration-time profile in male SD rats for PEGylated poly-L-lysine dendrimers





RNAi therapeutics

Company	Clinical Development	Pre-clinical development
Acuity	Ph II AMD & DME	anti-inflammatories & anti-infectives
Alnylam	Ph 1 2006 (RSV)	pandemic flu, spinal cord injury, Parkinson's, cystic fibrosis, hypercholesterolemia, neuropathic pain
Sirna	Ph II AMD (w/ Allergan)	Asthma, RSV, Huntington's, viral hepatitis, diabetes, oncology, dermatology

Mainstream Pharmas are partnering up:

- Novartis/Alnylam (flu)
- Merck/Alnylam (AMD & spinal cord injury)
- GSK/Sirna (respiratory diseases)
- Abbott/Dharmacon (oncology)

or acquiring:

- Merck/Sirna

For RNAi therapeutics, the ultimate goal is targeted delivery. The leaders have RNA expertise but delivery vehicles to provide the targeting capability are underdeveloped and in strong demand.