

## Shareholder Update: February 2010

Welcome to the first edition of Starpharma's Shareholder Update for 2010.

This issue provides an update on events including:

- A second partnership with Eli Lilly, this time to enhance human pharmaceuticals;
- A capital raising of \$15.6m from institutional investors, taking cash at 31 December 2009 to \$24.3m;
- VivaGel® as a treatment for Bacterial Vaginosis to enter human trials; and
- The recent signing of an agrochemicals agreement and partnership.

### Eli Lilly in drug delivery collaboration for human pharmaceuticals

Earlier this month Starpharma signed a new agreement with Eli Lilly and Company (NYSE: LLY) under which Starpharma's dendrimer drug delivery technology will be applied to enhance compounds in Lilly's human pharmaceutical portfolio.

Eli Lilly is a leading innovation-driven corporation developing a growing portfolio of pharmaceutical products by applying the latest research from its own worldwide laboratories and from collaborations with eminent scientific organisations. In 2009 the Company reported a total net sales figure of \$21.8 billion, making it one of the major pharmaceutical companies in the world.

Starpharma's dendrimers have shown significant commercial applicability in the area of drug delivery and optimisation. The Company has a growing list of pharmaceutical companies that are actively exploring the use of Starpharma's proprietary dendrimer technology to enhance and improve their pharmaceutical products.

Under the terms of this agreement, Lilly will fund a collaborative research and development program with the aim of creating

improved drugs incorporating Starpharma's proprietary delivery technology, to be commercialised by Lilly.

The agreement relates to the delivery of certain human pharmaceuticals, and is separate and additional to the contract signed in May 2009 in which it was agreed that Starpharma and Elanco (Lilly's animal health division) would work together to develop new animal health products with enhanced properties. The Elanco collaboration continues in its own right.



### Starpharma's drug delivery technologies at a glance

Starpharma has previously announced two other drug delivery commercial agreements. The first with Stiefel Laboratories (a GSK Company) is for dermal applications, and the second with Elanco, the animal health division of Eli Lilly for animal pharmaceuticals.

The Company also has a number of earlier stage, unannounced drug delivery collaborations.

Laboratory testing has shown that by conjugating to Starpharma's dendrimers, drugs improve their features which include:

- Improved efficacy of drugs;
- Extension of drug half-life;
- Reduced toxicity of drugs;
- Enhanced permeability and retention of drugs in the body; and
- Improved solubility of the drug.

Figure A. Diagrammatic representation of dendrimer scaffold conjugated to multiple copies of a drug



## A message from the CEO

In 2010 Starpharma's management team remains focused on maintaining and building the momentum of the previous 12 months, where a number of key milestones were achieved and the Company's share price rose steadily.



These milestones included advancing the development program for VivaGel® as a stand-alone product and condom-coating for the prevention of sexually transmitted infections. VivaGel® will be entering clinical trials for the first time as a treatment in 2010 (see Bacterial Vaginosis story on page 3).

Starpharma continues to support a parallel path towards commercialisation through its internal development activities and an active and strong partnering program. This strategy continues to benefit the company through the receipt of ongoing partnering revenues while it continues to develop the lead VivaGel® products. The Company enters 2010 with a strong shareholder base and cash position, with \$22.7m of equity raised last calendar year.

A number of new Australian and international institutions invested in the Company in 2009, and a large number of investors also increased their shareholding through the Company's Share Purchase Plan. Several existing institutional investors increased their shareholding throughout the year and in November, Orbis, a highly regarded Investment Fund Manager, took a 7.69% stake in Starpharma.

Orbis also has holdings in a number of other leading biotechnology companies including ChemGenex, Pharmaxis, and Acrux.

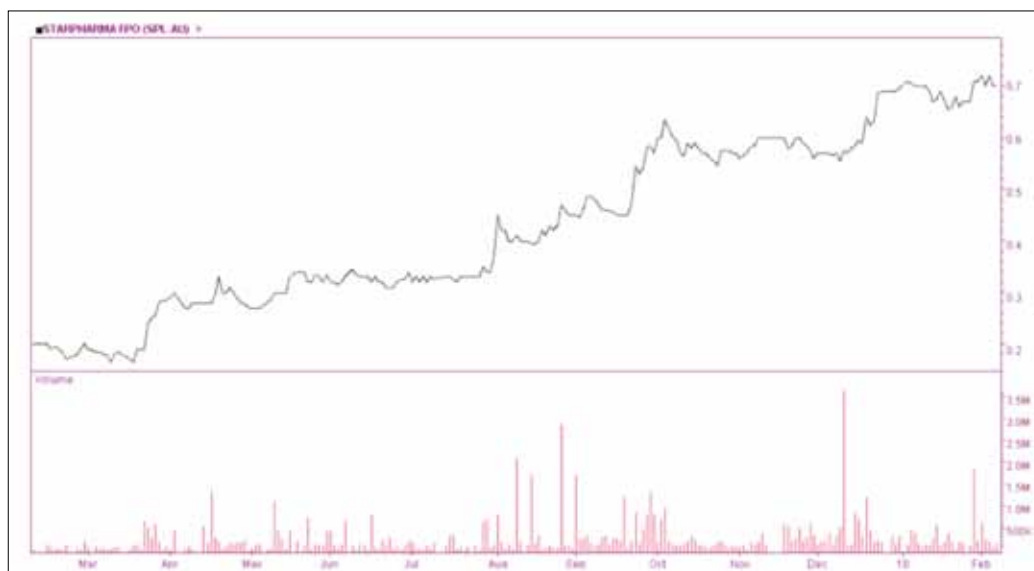
Starpharma recorded an operating and investing cash outflow of \$2.1m for the half-year to 31 December 2009, with revenue continuing to flow from our commercial partners, including SSL International, Siemens Healthcare and Elanco.

2010 is set to be another exciting year for Starpharma as we build on recent milestones achieved by the Company. We remain focused on advancing our lead product VivaGel® and working with SSL International to continue the development of the VivaGel®-coated condom. We are also delighted to begin working with our new partner Eli Lilly in the area of human pharmaceuticals, as well as progressing our dendrimer collaboration with a prominent multi-billion dollar US based agricultural chemicals company.

Thank-you to our shareholders for your continued support. We look forward to keeping you up to date with exciting new Company developments as the year progresses.

**Jackie Fairley, CEO Starpharma**

Figure B. Starpharma's steadily rising share price and strong trading volumes



## Clinical testing to commence for Bacterial Vaginosis

Starpharma will pursue clinical testing of VivaGel® for Bacterial Vaginosis (BV), the most common vaginal infection worldwide, following the completion of an institutional share placement in November 2009.

The funding will enable the Company to commence trials of VivaGel® as a BV treatment in 2010, through to the completion of Phase 3 clinical trials with the aim of licensing the product to a major marketing partner. The BV clinical trial program will complement the VivaGel® program under development for the prevention of sexually transmitted infections, which continues to progress as both a stand-alone product and a condom-coating.

Dr Jackie Fairley CEO of Starpharma said: "The Bacterial Vaginosis program is an exciting extension to the development program of VivaGel® and presents significant opportunities for licensing royalties to be received by the Company."



## VivaGel® as a treatment for Bacterial Vaginosis



More than 21 million women in the US alone have BV, which has been associated with increased risk of HIV and other STIs, and has also been linked to pre-term births.

Whilst there are antibiotic treatments currently on the market, there are significant disadvantages associated with many of these including:

- Low cure rates – often less than 50% rate of effectiveness and a high rate of recurrence;
- Adverse effects of treatment presenting such as gastrointestinal side effects and adverse reactions with alcohol; and
- Incompatibility with condoms.

Preliminary findings from clinical trials conducted by Starpharma suggest that VivaGel® treatment tended to restore the normal balance of bacteria in women who had asymptomatic BV at the time of enrolment in the trial. VivaGel® as a treatment for BV represents a significant development for Starpharma, with the current global market for topical BV treatments alone estimated at approximately US\$300-\$350m.

For more information on Bacterial Vaginosis visit the US Department of Health and Human Services Centers for Disease Control and Prevention website at:  
<http://www.cdc.gov/STD/BV/STDFact-Bacterial-Vaginosis.htm>

## Starpharma's DNT signs new agrochemicals deal

In November 2009, Starpharma announced the signing of a research and collaboration agreement between its wholly owned US subsidiary DNT Inc and a prominent multi-billion dollar US based agricultural chemicals company. The terms of the agreement prevent Starpharma from disclosing the name of the company.

At the centre of the collaboration is DNT's Priostar® dendrimer technology to enhance the performance of existing pesticides, with a global market valued at US\$35.8 billion. Based on the same basic dendrimer technology that Starpharma applies to various other uses, Priostar® is an industrial version already commercially available.

The agreement is relevant to specific classes of pesticides allowing Starpharma to explore further opportunities for the commercialisation of its dendrimer technology in the agricultural chemicals sector.



### About Starpharma

Starpharma Holdings Limited (ASX: SPL, OTCQX:SPHRY) is a world leader in the development of dendrimer technology for pharmaceutical, life-science and other applications. SPL has two operating companies, Starpharma Pty Ltd in Melbourne, Australia and DNT, Inc in the USA. Products based on SPL's dendrimer technology are already on the market in the form of diagnostic elements and laboratory reagents through license arrangements with partners including Siemens and Merck KgA.

The Company's lead pharmaceutical development product is VivaGel® (SPL7013 Gel), a vaginal microbicide designed to prevent the transmission of STIs (sexually transmitted infections), including HIV and genital herpes. In September 2008 Starpharma signed a full license agreement with SSL International plc (LSE: SSL) to develop a VivaGel®-coated condom. SSL manufactures and sells Durex® condoms, the market-leading condom brand worldwide.

Starpharma also has commercial agreements in place with Eli Lilly and Co, Elanco, Stiefel Laboratories (a GSK Company), and Unilever as well many research collaborations with some of the world's leading organisations.

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