



## ASX ANNOUNCEMENT

### Starpharma's dendrimer a potential viral conjunctivitis treatment

**Melbourne, Australia; Monday 13 May 2013** – Starpharma Holdings Ltd (ASX:SPL; OTCQX:SPHRY) today announced that the Company's clinical-stage dendrimer SPL7013 has shown potent antiviral effect against adenovirus, the agent responsible for the majority of viral conjunctivitis cases. Based on feedback from potential partners and clinicians this opportunity is being advanced in parallel with further commercial discussions.

Adenovirus is the most common cause of viral conjunctivitis, a condition for which there is no known cure. Based on the results of various pre-clinical studies already undertaken by Starpharma, the company believes SPL7013 (the active in VivaGel<sup>®</sup>) has the potential to be a first-in-class anti-viral agent for viral conjunctivitis.

"The results of our studies assessing SPL7013 against adenovirus are very positive and further broaden the potential commercial applications of this dendrimer which also has potent activity against the HIV, HPV and Herpes (HSV) viruses," said Starpharma chief executive officer Dr Jackie Fairley.

"Furthermore, feedback from potential partners and clinicians on this opportunity has been very encouraging. Viral conjunctivitis can be a serious and painful condition, and today clinicians are without antiviral therapeutic options."

SPL7013 has been found to be effective across a range of relevant adenovirus strains, at levels of efficacy that support the development of a therapeutic product targeting viral conjunctivitis. Starpharma has undertaken some initial formulation work for this product, as well as other activities to support the next round of interactions with potential commercial partners.

The bacterial conjunctivitis market is estimated to be in excess of a billion dollars annually. However there is currently no antiviral therapy available for viral conjunctivitis. It has been estimated that a global market of US\$700m exists for effective viral conjunctivitis treatments.<sup>1</sup>

"The attractiveness of this product opportunity is significantly enhanced by the advanced stage of development of SPL7013 as VivaGel<sup>®</sup> for other indications," Dr Fairley added. "We have already compiled a very extensive NDA data package around the pharmacology, toxicology and manufacture of VivaGel<sup>®</sup> which would minimise incremental costs, expedite the development path for this product and increase its appeal to commercial partners."

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<sup>1</sup> Roth Capital Partners, 2012

Adenovirus conjunctivitis is highly contagious, painful, and can lead to serious complications including damage to vision. It is responsible for a significant proportion of all infectious conjunctivitis<sup>2</sup>.

Starpharma also continues to advance VivaGel<sup>®</sup> for bacterial vaginosis applications, following positive Phase 2 results last month. Planning is now underway for the Phase 3 clinical trials for the prevention of recurrence indication of VivaGel<sup>®</sup> and the opportunity for symptomatic relief continues to be actively explored. The patented antimicrobial dendrimer has also been licensed to Ansell and Okamoto Industries as a condom coating and is currently under regulatory review in this product format.

## ABOUT STARPHARMA

Starpharma Holdings Limited (ASX:SPL, OTCQX:SPHRY), located in Melbourne Australia, is an ASX 300 company and is a world leader in the development of dendrimer products for pharmaceutical, life science and other applications.

Starpharma's underlying technology is built around dendrimers – a type of synthetic nanoscale polymer that is highly regular in size and structure and well suited to pharmaceutical uses. Starpharma has three core development programs: VivaGel<sup>®</sup> portfolio, drug delivery, and agrochemicals with the Company developing a number of products internally and others via commercial partnerships.

Starpharma's lead product is VivaGel<sup>®</sup> (SPL7013 Gel), a gel-based formulation of a proprietary dendrimer. VivaGel<sup>®</sup> is under clinical development for the treatment and prevention of bacterial vaginosis (BV) and also as a vaginal microbicide to prevent the transmission of sexually transmitted infections including HIV and genital herpes. Starpharma has also signed separate licence agreements with Ansell Limited (ASX:ANN) and Okamoto Industries Inc (Tokyo Stock Exchange) to market a value-added, VivaGel<sup>®</sup>-coated condom. Ansell manufactures and sells leading condom brands worldwide, including Lifestyles<sup>®</sup>, ZERO<sup>®</sup> and SKYN<sup>®</sup>. Okamoto is the market leader for condoms sold in Japan, the world's second largest condom market.

In the wider pharmaceutical and life science fields, Starpharma has both partnered and internal programs in Drug Delivery. Drug Delivery partners include GSK, Lilly and AstraZeneca. In its internal program Starpharma has announced significant tumour-targeting results in its docetaxel (Taxotere<sup>®</sup>) program, with animal studies showing its dendrimer-enhanced version of docetaxel to have significantly superior anti-cancer effects across a range of important cancer types including breast, prostate, lung and ovarian tumour, when compared to Taxotere<sup>®</sup> (docetaxel).

In agrochemicals Starpharma has a series of partnerships with leading industry players including Nufarm (ASX:NUF) and Makhteshim Agan as well as internal programs including an enhanced version of glyphosate (the active ingredient in Roundup<sup>®</sup>).

## FOR FURTHER INFORMATION

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## Forward Looking Statements

<sup>2</sup> Abelson and Shapiro, Review of Ophthalmology, 2010

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 authorities' requirements regarding any one or more product candidates nor can there be any assurance that such product candidates will be approved by any 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 trial results, including additional analysis of existing data, and new 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 document 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.