

# Starpharma's SPL7013 inhibits clinically relevant strains of HPV (Human Papillomavirus) which cause genital warts and cervical cancer

## Potential to expand VivaGel<sup>®</sup> applications

**Melbourne, Australia; 21 April 2008**: Starpharma Holdings Ltd (ASX:SPL, OTCQX:SPHRY) today announced that recent studies have shown that SPL7013, the active ingredient in its topical microbicide VivaGel<sup>®</sup>, inhibits clinically-relevant strains of the human papillomavirus (HPV) in laboratory tests.

Starpharma CEO, Dr Jackie Fairley said: "These are exciting results which have positive implications for VivaGel<sup>®</sup>, and which merit further investigation. In the light of these, it is possible that VivaGel<sup>®</sup> has potential for reducing the risk of Genital HPV infection, the most common sexually transmitted infection in the United States."

In the US alone, 6.2 million people are newly infected with HPV each year.

Studies conducted in the laboratories of Professor Ian Frazer (University of Queensland, Australia) and Dr John Schiller (National Cancer Institute, USA) have demonstrated that SPL7013 is a potent inhibitor of several HPV strains *in vitro*. In these tests SPL7013 has demonstrated activity against HPV strains responsible for genital / cutaneous warts (HPV-5, -6) and cancer-causing HPV strains (HPV-16 & -45). Testing of other clinically relevant HPV strains is ongoing.

An interesting finding of the recent study is that SPL7013 showed potent inhibition of HPV-45, one of the strains commonly associated with cervical cancer which is not covered by existing HPV vaccines.

Typically HPV infects the skin and mucous membranes of the penis, vulva, anus and the linings of the vagina, cervix, and rectum. A subset of HPV strains can lead to precancerous lesions that often progress to invasive cancer. HPV infection is a factor in the development of the majority of cases of cervical cancer.

VivaGel<sup>®</sup> is a vaginal microbicide currently under clinical development for the prevention of transmission of HIV and genital herpes (HSV-2). This HPV testing was undertaken as part of Starpharma's strategy to explore the potential of VivaGel<sup>®</sup> in other sexually transmitted infections.

#### About Starpharma

The Company's lead pharmaceutical development product is VivaGel<sup>®</sup> (SPL7013 Gel), a vaginal microbicide designed to prevent the transmission of STIs, including HIV and genital herpes.

In the wider pharmaceutical field Starpharma has specific programs in the areas of Drug Delivery and Drug Optimisation technologies (using dendrimers to control where and when drugs go when introduced to the body) and Targeted Diagnostics (using dendrimers as a scaffold to which both location-signalling and targeting groups are added to allow location of specific cell type, such as cancer cells). More broadly the company is exploring dendrimer opportunities in materials science with applications as diverse as adhesives, lubricants and water remediation.

Starpharma Holdings Limited (ASX:SPL, OTCQX:SPHRY) is a world leader in the development of dendrimer nanotechnology for pharmaceutical, life-science and other applications. SPL is principally composed of two operating companies, Starpharma Pty Ltd in Melbourne, Australia and Dendritic Nanotechnologies, Inc in Michigan, USA. Products based on SPL's dendrimer technology are already on the market in the form of diagnostic elements and laboratory reagents.

SPL has a comprehensive IP portfolio that comprises more than 224 patents/applications issued and pending across 56 patent families - a unique level of IP concentration among nanotechnology companies.

**Dendrimers:** A type of precisely-defined, branched nanoparticle. Dendrimers have applications in the medical, electronics, chemicals and materials industries.

American Depositary Receipts (ADRs): Starpharma's ADRs trade under the code SPHRY (CUSIP number 855563102). Each Starpharma ADR is equivalent to 10 ordinary shares of Starpharma as traded on the Australian Stock Exchange. The Bank of New York Mellon is the depositary bank. Starpharma's ADRs are listed on International OTCQX (<u>www.otcqx.com</u>), a premium market tier in the U.S. for international exchange-listed companies, operated by Pink Sheets, LLC.

#### **Forward Looking Statements**

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 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.

### For further information:

Media Buchan Consulting		Starpharma www.starpharma.com	
Rebecca Wilson	Ellie Papathanasiou	Dr Jackie Fairley	Ben Rogers
Tel: +61 2 9237 2800 Mob: +61 417 382 391 <u>rwilson@bcg.com.au</u>	Tel: +61 2 9237 2800 epapathanasiou@bcg.com.au	Chief Executive Officer +61 3 8532 2704	Company Secretary +61 3 8532 2702 <u>ben.rogers@starpharma.com</u>