

Starpharma's dendrimer SPL7013 found to have potential application for arthritis

Melbourne, Australia; 14 April 2008: Starpharma Holdings Ltd (ASX:SPL, OTCQX) has filed a patent application for the use of SPL7013, the active ingredient in VivaGel[®], to inhibit hyaluronidase activity in the treatment or prevention of a number of diseases.

The inhibitory activity was discovered during studies on the contraceptive activity of SPL7013, in which effects on hyaluronidase were examined due to the enzyme's involvement in the fertilization process.

The inhibitory action of SPL7013 has potential application in the treatment of diseases and conditions associated with excess activity of the enzyme hyaluronidase, such as rheumatoid arthritis and osteoarthritis, as well as a dermatological agent.

Hyaluronidase breaks down a macromolecule called hyaluronic acid, which is widely distributed in the body. The functions of hyaluronic acid include its lubrication and cushioning of joints and retention of moisture in skin.

By inhibiting the enzyme that breaks down hyaluronic acid, SPL7013 would be expected to extend and enhance the therapeutic effect of hyaluronic acid products marketed for the treatment of rheumatoid arthritis and osteoarthritis. The potency of SPL7013 as an inhibitor is equivalent to the most potent inhibitors reported in the literature, including those patented by major pharmaceutical companies.

An inhibitor of hyaluronidase may also have potential as a cosmetic treatment to improve the aesthetic appearance of skin.

With VivaGel[®] already in clinical development under IND as a topical microbicide for the prevention of HIV infection and genital herpes, Starpharma has an extensive clinical and non-clinical dossier for the topical use of SPL7013.

CEO, Dr Jackie Fairley said "The results of recent studies on the mechanism of the contraceptive action of SPL7013 have two benefits - additional commercial opportunities related to the inhibition of hyaluronidase that Starpharma will explore both internally and with interested third parties, and importantly, support for Starpharma's plans to advance to a Phase 2 study for the contraceptive effect of VivaGel[®] in women.

About the effect of SPL7013 on hyaluronidase

The inhibitory effect of SPL7013 on hyaluronidase activity was discovered from studies on the contraceptive mechanism of VivaGel[®]. To fertilize an egg, sperm must penetrate the egg, a process that depends on the release of two enzymes, hyaluronidase and acrosin, which help create a passage for the sperm through the outer layers of the egg. SPL7013 was found to inhibit both of these enzymes, as well as to have other effects that could impart contraceptive activity.

About Starpharma

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.

The Company's lead pharmaceutical development product is VivaGel[®] (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.

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.

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