

Starpharma advances agrochemical program with improved performance of major product

- Starpharma's Priostar[®] dendrimer found to improve the effectiveness of agrochemicals including glyphosate, the most commonly used herbicide globally
- Starpharma's internal development program is focused on the improvement of several existing agrochemicals
- New patent filing to extend coverage to 2029

Melbourne, Australia; 12 July 2011 – Starpharma Holdings Limited (ASX:SPL, OTCQX:SPHRY) today announced encouraging results from studies applying its Priostar[®] dendrimer technology to the improvement of globally significant agrochemicals.

Starpharma's studies have demonstrated a number of improvements in these preliminary studies including the ability to increase the effectiveness of agrochemicals such as glyphosate, the most commonly used herbicide globally (also known by the trade name Roundup[®]) with annual sales in excess of US\$5bn.

In the past year Starpharma's internal agrochemical program has explored a number of key off-patent agrochemical agents in combination with the company's proprietary dendrimer technology. In addition to glyphosate, these include the major insecticide imidacloprid (annual sales of US\$1bn) and the herbicide trifluralin (annual sales of US\$300m)¹.

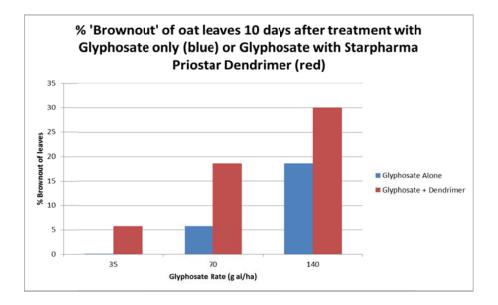
"We are very pleased to report the company's progress in the agrochemical program. The selection of commercially-significant lead candidates by Starpharma gives us a clear focus for future work." said Starpharma CEO Dr Jackie Fairley.

Based on initial studies, Starpharma's Priostar[®] dendrimers are well placed to capture several opportunities in the US\$40bn global agrochemical sector as the market continues to seek new technologies to improve efficiency and enhance performance.

Key results arising from the studies found that Starpharma's Priostar[®] dendrimers offered benefits including:

- solubility enhancement for more concentrated formulations;
- improved herbicidal activity as measured by brownout; and
- modification of soil penetration properties.

As illustrated below, the addition of Starpharma's patented dendrimers to the glyphosate solution showed an increase in the brownout, or rate of vegetation dying off. This suggests that the dendrimer was significantly increasing the activity of the glyphosate.



Fertilisers and agrochemicals – and their application – represent a significant cost for farmers. More effective chemical formulations could reduce the expense of a crop treatment cycle and the need for reapplication, potentially improving the environmental profile of such products.

These trends are reflected in the United Nations Food and Agriculture Organization's report *"World agriculture: towards 2030/2050"* which determined that much of future food production growth will come from higher productivity. The report also identifies the promise of biotechnology as a means of achieving this goal.

"Starpharma's internal agrochemicals program focuses on reformulating known generic agents with its proprietary dendrimers to improve their performance. This offers the potential for reduced frequency and amount of application, with the potential to reduce the chemicals' environmental impact." Dr Fairley concluded.

Key patents have already been allowed or granted by the US and other patent offices for broad protection of Priostar[®] dendrimer technology, relevant to both agrochemical and industrial applications. Additionally Starpharma has filed for protection for specific agrochemical applications, which if granted would provide patent coverage to 2029.

Starpharma's agrochemicals program has been assisted by funding under the Victorian Government's STIUP program announced in March 2011. Starpharma also has partnered programs with a growing number of leading agrochemical companies.

^{1.} Trifluralin is also marketed under the brand name Treflan™, and was initially developed by Lilly (Dow Agrosciences).

Imidacloprid is also marketed under Confidor[®] and was initially developed by Bayer.

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 licence arrangements with partners including Siemens and Merck KGaA.

The Company's lead pharmaceutical development product is VivaGel[®] (SPL7013 Gel), a vaginal microbicide designed to prevent the transmission of STIs, including HIV, genital herpes and bacterial vaginosis. Starpharma has a licence agreement with Durex[®] condom manufacturer Reckitt Benckiser to develop a VivaGel[®]-coated condom, and a licence agreement with Okamoto Industries Inc in relation to the VivaGel[®]-coated condom for the Japanese market. Okamoto is the market leader for condoms sold in Japan, the world's second largest condom market.

Starpharma also has agreements in place with Lilly, Elanco, Stiefel Laboratories (a GSK Company), and Siemens Healthcare as well as many research collaborations with some of the world's leading organisations in the fields of pharmaceuticals, drug delivery, cosmetics and agrochemicals.

Dendrimer: 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 Securities Exchange (ASX). The Bank of New York Mellon is the depositary bank. Starpharma's ADRs are listed on International OTCQX, a premium market tier in the U.S. for international exchange-listed companies, operated by OTC Markets Group Inc. (<u>www.otcmarkets.com</u>).

FOR FURTHER INFORMATION		
Media: Buchan Consulting Rebecca Wilson Mob: +61 417 382 391 rwilson@bcg.com.au	Starpharma: Dr Jackie Fairley Chief Executive Officer +61 3 8532 2704	Ben Rogers Company Secretary +61 3 8532 2702 <u>ben.rogers@starpharma.com</u>

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.