

Speculative

Analyst
Tanushree Jain 612 8224 2849

Authorisation
TS Lim 612 8224 2810

Starpharma (SPL)

SPA agreement with FDA for Phase III R-BV Trials

Recommendation
Buy (unchanged)
Price
\$0.575
Valuation
\$1.07 (unchanged)
Risk
Speculative

GICS Sector
Pharmaceuticals & Biotechnology

Expected Return

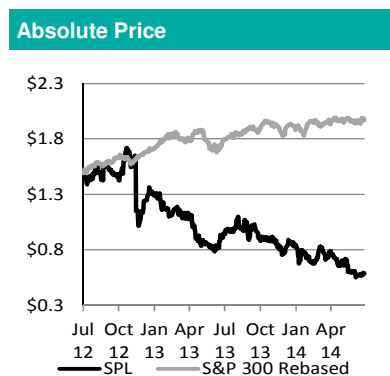
Capital growth	86.1%
Dividend yield	0.0%
Total expected return	86.1%

Company Data & Ratios

Enterprise value	\$136.2m
Market cap	\$163.9m
Issued capital	285.1m
Free float	100%
Avg. daily val. (52wk)	\$289,770
12 month price range	\$0.535- \$1.11

Price Performance

	(1m)	(3m)	(12m)
Price (A\$)	0.60	0.75	0.91
Absolute (%)	-2.50	-22.00	-35.36
Rel market (%)	-3.02	-23.37	-49.28



SOURCE: IRESS

SPL obtains SPA agreement with the FDA for R-BV trials

Starpharma announced today that it has reached agreement with the FDA under a Special Protocol Assessment (SPA) on the design and planned analyses for the two Phase III trials for VivaGel for prevention of recurrent Bacterial Vaginosis (R-BV). The company will run two Phase III trials in parallel with ~600 patients each across sites in North America, Europe and Asia. The primary endpoint of the trials will be rate of recurrence of BV during 16 week treatment period as measured by Amsel's criteria in women treated with VivaGel vs. women treated with placebo.

SPA and its significance for SPL

The SPA is a binding written agreement between the FDA and SPL that the design, endpoints and statistical analysis approach of the Phase III R-BV trials are acceptable and adequately address all the objectives in support of a regulatory submission for the drug's approval. This implies that as long as SPL's Phase III R-BV trials follow the agreed upon protocol to the letter and data from the trial supports the safety and efficacy of the product, results from the trial can form the basis for VivaGel's NDA filing for approval and will be sufficient to support FDA's review and approval decision. **We note** that having an SPA does not guarantee that VivaGel will get approved, but it does reduce some regulatory uncertainty in terms of what the agency requires in order to potentially approve VivaGel. This is a positive tick for the company as far as we are concerned.

Maintain Buy rating and Valuation of \$1.07

We value SPL using a risk-weighted DCF at \$1.07/sh. We retain our Buy recommendation based on the near term VCC related royalties, results from docetaxel trial which could be a game changer and strong cash position of \$27.8m which should fund it through FY15. Key catalysts for a re-rating include a) launch of VivaGel Coated Condom (VCC) in Japan this quarter, b) additional regulatory approvals for VCC, c) Top-line results from dendrimer-docetaxel Phase I trial in CY1H15, d) licensing deal for BV symptomatic relief in FY16 and e) results from Phase III R-BV trials in CY2H15.

Earnings Forecast

Year end 30th June	2012A	2013A	2014E	2015E	2016E
Revenue (A\$m)	2.4	9.5	6.3	4.8	16.9
EBITDA (A\$m)	-14.4	-5.8	-11.2	-12.0	2.6
NPAT (adjusted) (A\$m)	-13.7	-5.2	-11.3	-12.5	1.4
EPS (adjusted) (cps)	-5.10	-1.85	-3.93	-4.35	0.50
EPS growth (%)	N/A	N/A	N/A	N/A	NM
PER (x)	N/A	N/A	N/A	N/A	115.8
EV/EBITDA (x)	-9.5	-23.7	-12.2	-11.3	51.8
Dividend (cps)	0.0	0.0	0.0	0.0	0.0
Yield (%)	0.0%	0.0%	0.0%	0.0%	0.0%
Franking (%)	N/A	N/A	N/A	N/A	N/A
ROE (%)	-28.1%	-11.4%	-31.6%	-52.7%	5.6%

NOTE: REVENUE INCLUDES GRANTS AND R&D TAX INCENTIVES. FY16 REVENUE NUMBER INCLUDES POTENTIAL UPFRONT FROM DOCETAXEL AND VIVAGEL SYMPTOMATIC RELIEF DEALS. SOURCE: BELL POTTER SECURITIES ESTIMATES

SPA agreement with FDA on R-BV Trials

Starpharma announced today that it has reached agreement with the FDA under a Special Protocol Assessment (SPA) on the design and planned analyses for the two Phase III trials for VivaGel for prevention of recurrent Bacterial Vaginosis (R-BV).

Having an SPA does not guarantee that VivaGel will get approved, but it does reduce some regulatory uncertainty in terms of what the agency requires for demonstrating the safety and efficacy of VivaGel for R-BV in order to potentially approve it.

An SPA provides companies with the ground rules on how to conduct the clinical trials and also establishes FDA acceptable endpoints.

While having an SPA is not mandatory for approval, in our view it's appealing from a risk reduction point of view for SPL. Since there is no other approved treatment for prevention of R-BV, the SPA will be helpful and valuable because it lays down a definitive path for SPL to follow.

Ultimately, it is the data from the Phase III trials on efficacy and safety which will decide whether the drug gets approved or not. However, what the SPA implies is that as long as SPL's Phase III R-BV trials follow the agreed upon protocol to the letter, results from the trial can form the basis for VivaGel's NDA filing for approval and will be sufficient to support FDA's review and approval decision.

From our perspective, it is a positive tick for the company, gives us comfort around what FDA wants to see to potentially approve VivaGel for R-BV, with the focus now on execution by SPL's team.

What is an SPA?

A Special Protocol Assessment (SPA) is a written agreement between a trial's sponsor (in this case, SPL) and the FDA regarding the design, endpoints and statistical analysis approach of a Phase 3 clinical trial, results from which could potentially support approval of a New Drug Application (NDA).

SPAs provide no guarantee of approval but are intended to help the drug sponsor and regulators put together a binding agreement of how a clinical study should be conducted. It is FDA's way of definitively clarifying to a sponsor that *'what they are proposing to do will produce the answers which FDA thinks is necessary from the point of getting approval for the drug'*.

Applying for an SPA rather than going directly into a Phase III trial means additional time for sponsor companies. Under the rules of the Prescription Drug User Fee Act (PDUFA), the FDA has 45 calendar days to respond to an SPA request. However, if there are issues the trial protocol may need to be amended and re-submitted which would then have a new 45 day review clock. In contrast, after an IND submission if the sponsor does not get any comments from the FDA for 30 days, they assume FDA is ok with the protocol and initiate the trial. Of course there is a risk that the FDA may come back much later with issues, which implies SPA is a much more definitive nod from the FDA.

The question thus arises for sponsors whether in their particular instance the additional time is worth it given the potential benefit the SPA will provide.

The process of obtaining an SPA is also a rigorous process. Some companies may employ consultants, lawyers for it which increases cost. Depending on how clean the application is i.e. how robust the pre-submission work is, the SPA can be granted within 45 days to a few months. We understand SPL obtained the SPA agreement within 45 days which is impressive.

Not all companies who ask for an SPA reach agreement with the FDA. In one of the ASCO 2014 meeting publications, authors evaluated 10 years of SPA submissions to the Office of Hematology and Oncology products. There were 532 SPAs submitted during the 10-year period examined. These included 344 original submissions and 188 resubmissions. Agreement was reached only on a minority ~25% of the applications (132 of 532) submitted to the FDA.

Additional time needs to be considered seriously given that the more time the drug takes to get to the market, the less of its patent life it will spend on the market.

Do companies find the SPA agreement useful?

We tracked the number of assessments done by FDA under SPA annually since 2001 (See Table below). We can assume that if companies did not think the SPAs were useful, they would not be requesting the FDA for it. They seemed to be gaining popularity year on year between 2001- 2007. From 2008 there has been a drop in requests which we attribute to companies being increasingly required to justify the time versus benefit of going down the SPA route to their investors and analysts and also due to the fact that it is not easy to get SPA agreement from the FDA as evident from statistics from the ASCO paper mentioned above.

Table 1 - Annual requests for Special Protocol Assessments to the FDA

Year	Number of Special Protocol Assessments evaluated by FDA
2013	220
2012	288
2011	313
2010	309
2009	336
2008	354
2007	459
2006	406
2005	396
2004	346
2003	293
2002	248
2001	125

SOURCE: FDA, BELL POTTER SECURITIES

In which instances can SPA's be really helpful?

Generally not all companies need to go down the SPA route. However, there are certain instances in which we believe SPAs will be particularly helpful:

- If the drug in question is the sponsor company's first drug in late-stage development
- If the drug is first-in-class
- If there is no other drug approved for the indication implying no defined approval pathway
- If the drug is targeting an orphan drug indication with no previously approved treatment

In summary, we believe that if there are significant uncertainties around the development program, no defined regulatory pathway or uncharted territory, having an SPA will be extremely valuable and helpful. We also think that if there is any room for interpretation for a final result, then having an SPA will significantly reduce that subjectivity risk. Having an SPA is almost like having an insurance product; ***it is beneficial if you need it.***

Why we think having an SPA agreement is good for SPL?

In our view, SPL having a SPA agreement with the FDA for its Phase III R-BV trials is good from a risk reduction point of view. There is no other approved treatment for prevention of R-BV. Hence, the SPA agreement will be helpful and valuable because it lays down a definitive path for SPL to follow. It not only provides SPL with ground rules on how to conduct the clinical trials but also establishes FDA acceptable endpoints.

We believe that there is room for interpretation around what a preventative treatment may be required to demonstrate in terms of efficacy and safety. Hence, we are more comfortable now, with the SPA grant, that the trial is designed to produce data which will demonstrate safety and efficacy as the FDA deems as necessary for VivaGel to ultimately obtain marketing approval.

Two areas which we believe had room for interpretation were:

- **VivaGel product for BV is a continuous use product:** This means that the treatment is effective only as long as the patient is using VivaGel. The BV symptoms reappear once the product usage is stopped. There is room for interpretation therefore whether the treatment should be considered preventative if during follow up period after cessation of treatment, symptoms reappear. Having the SPA, means that the FDA views the rate of recurrence of BV in both the VivaGel group and the placebo group at the end of treatment i.e. week 16 as acceptable endpoint for demonstration of efficacy.
- **Safety bar for chronic use product may be higher:** For prevention of recurrence, VivaGel will be required to be used continuously vs. a short term course required for acute treatment. Thus, there exists a risk that the safety bar set for VivaGel may be higher. We do not have any precedence given that there is currently no approved treatment for Prevention of BV. Hence, it is unclear to us at this point whether the safety thresholds for a chronic use BV product (i.e. designed to be used continuously) may be more stringent from the regulatory point of view. The SPA agreement likely defines the safety parameters which reduces the uncertainty around this.

In summary, from our perspective, the SPA agreement is a positive tick for the company, gives us comfort around what FDA wants to see to potentially approve VivaGel for R-BV, with our focus now on execution by SPL's team.

Path Forward – Phase III BV Prevention of Recurrence Trials

Following the SPA agreement, SPL will initiate two Phase III trials in parallel with ~600 patients each across sites in North America, Europe and Asia. Quintiles, one of the leading Contract Research Organisations (CRO) have been engaged to conduct the trials. We expect enrolment in the trials to start shortly.

The design of both the Phase III trials will be identical. We understand that the design for the Phase III R-BV trials is very similar to the Phase II R-BV trial and has the nod from both the FDA and the EMA.

In each trial, patients with recurrent BV (3 or more episodes of BV in the last 12 months), will be treated with oral antibiotic metronidazole for 7 days and then screened to ensure that they are free of acute BV. Women will be then randomised to receive either 1% VivaGel or Placebo gel, every second day at bedtime for 16 weeks, followed by a 12 week follow-up period.

The primary endpoint of the trial will be rate of recurrence of BV by or at the completion of 16 week treatment period, as measured by Amsel's criteria. The first 3 criteria's below are stipulated by the FDA as the Amsel's criteria for BV diagnosis.

The four Amsel's criteria are:

- Presence of white to grey homogeneous discharge,

- Whiff test indicating fishy odour with addition of potassium hydroxide,
- Presence of clue cells $\geq 20\%$ of total epithelial cells and
- Vaginal pH greater than 4.5.

We note that in the Phase II R-BV trial, at week 16 (EOT) when R-BV was assessed using FDA stipulated Amsel criteria of BV diagnosis, the rate of recurrence of BV was only 12% in the 1% VivaGel arm vs. 28% for placebo, and the result was close to statistical significance with $p=0.0588$. This difference represented a 56% relative risk reduction in R-BV with 1% VivaGel vs. placebo. This is encouraging as the criteria used for diagnosis was regulator specified and we are optimistic that higher number of patients could potentially recreate the Phase II results but with statistical significance.

Valuation

We value SPL at A\$1.07/sh

We value SPL using a risk-weighted DCF sum-of parts model. Our valuation is the sum of NPVs of individual assets based on the different indications targeted by Starpharma's VivaGel, internal lead drug delivery programme dendrimer-docetaxel and internal lead agrochemicals programme dendrimer-glyphosate. We also include the marketed diagnostics/laboratory reagents asset which is a marginal ongoing revenue stream for SPL. Each of the individual DCF models use risk-adjusted revenue numbers based on the probability of success in the clinical trials for each indication. The probability of success we attribute to each indication varies according to the development phase for each.

Our DCF valuation model is based on a WACC of 16.0%. **We assume a terminal growth rate of 1% to arrive at our base case valuation of A\$1.07/sh.**

Table 2 - Summary of Valuation

Forecasts	Base case
Enterprise Value from DCF (AUDm)	284.5
Add: Cash at end FY14E (AUDm)	23.4
Less: Debt at end FY14E (AUDm)	0.1
Equity Value (AUDm)	307.8
Total diluted shares at end FY14E (million)	288.3
Value per share (AUD)	\$1.07
Current Share price (AUD)	\$0.58
Expected Capital Growth	86.1%

SOURCE: BELL POTTER SECURITIES ESTIMATES

Table 3 - Valuation Sensitivity Analysis to WACC and Terminal Growth Rate

		WACC				
		15.00%	16.0%	17.00%	18.0%	19.00%
Terminal Growth	-0.5%	\$1.16	\$1.05	\$0.95	\$0.87	\$0.80
	0.0%	\$1.17	\$1.06	\$0.96	\$0.87	\$0.80
	0.5%	\$1.18	\$1.06	\$0.96	\$0.88	\$0.80
	1.0%	\$1.18	\$1.07	\$0.97	\$0.88	\$0.81
	1.5%	\$1.19	\$1.07	\$0.97	\$0.89	\$0.81
	2.0%	\$1.20	\$1.08	\$0.98	\$0.89	\$0.81
	2.5%	\$1.21	\$1.09	\$0.99	\$0.89	\$0.82

SOURCE: BELL POTTER SECURITIES ESTIMATES

At a WACC of 16%, for every 0.5% change in terminal growth rate, our base case valuation changes minimally by ~A\$0.01. We also established that at a terminal growth rate of 1%, every 1% change in WACC, caused an A\$0.08-A\$0.12 change in our valuation.

Table 4 - SPL- Probability-Weighted Sum-of-parts Valuation Summary

Asset	Stage	First Fiscal Year of sales (Est.)	Peak Market share	Peak Sales Global (US\$m)	Probability of success	Probability adjusted NPV (A\$m)	Value per share (A\$)	% Mix
VivaGel BV Symptomatic Relief	Regulatory Submission planned	2016 (Ex-US)	15.0%	\$56	80.0%	\$35	\$0.12	11.2%
VivaGel BV Prevention of Recurrence	Phase III enrolment to commence	2017	25.0%	\$647	38.0%	\$129	\$0.45	41.8%
VivaGel Coated Condom - Okamoto	Regulatory approval received	2015 (Japan)	10.0%	\$21	100.0%	\$6	\$0.02	2.0%
VivaGel Coated Condom - Ansell	Awaiting first regulatory approval	2015 (Ex-US), 2016 (US)	10.0%	\$374	80.0%	\$89	\$0.31	29.0%
Dendrimer-Docetaxel (first solid tumour)	Phase I	2020	15.0%	\$506	15.0%	\$44	\$0.15	14.1%
Dendrimer-Glyphosate	Field Trials ongoing	2016	10.0%	\$763	15.0%	\$12	\$0.04	4.0%
Diagnostics/Laboratory Reagents	On-market	NA	NA	NA	NA	\$5	\$0.02	1.5%
Other Pipeline/Non-allocated	NA	NA	NA	NA	NA	(\$35)	-\$0.12	-11.3%
Cash (EOY 2014E)	NA	NA	NA	NA	NA	\$23	\$0.08	7.6%
Debt (EOY 2014E)	NA	NA	NA	NA	NA	-\$0.1	\$0.00	\$0.00
Equity Value						\$308	\$1.07	100.0%

GLOBAL PEAK SALES ARE PRE-RISK ADJUSTMENT AND ROYALTIES. BV = BACTERIAL VAGINOSIS

PEAK SALES FOR COATED CONDOM FOR OKAMOTO AND ANSELL ARE NOT GLOBAL; THEY ARE BASED ON REGIONS UNDER AGREEMENT WITH THEM. PEAK SALES FOR VIVAGEL SYMPTOMATIC RELIEF IS FOR EX-US MARKETS ONLY.

SOURCE: BELL POTTER SECURITIES ESTIMATES

Table 5 - Deal Assumptions for SPL

Asset	Indication	Stage at Licensing	Licensee	Fiscal Year Timing of deal (Est.)	Total Deal Value in USDm (upfront plus milestones)	Upfront (USDm)	Developmental & regulatory Milestones (USDm)	Commercial Milestones (USDm)	Royalty Rate (%)
VivaGel	BV Symptomatic Relief (EX-US)	Registration (pre-launch)	TBC	2016	25	1.5	NA	23.5	20.0%
VivaGel	BV Prevention of Recurrence	Phase III complete	TBC	2017	200	5	35	160	25.0%
VivaGel	Coated Condom (Japan)	Pre Regulatory Approval	Okamoto	2011	0	NA	NA	NA	12.0%
VivaGel	Coated Condom (Ex-Japan)	Pre Regulatory Approval	Ansell	2012	0	NA	NA	NA	12.0%
Dendrimer-Docetaxel	First Solid tumour	Phase I complete	TBC	2016	200	10	90	100	12.0%
Dendrimer-Glyphosate	Crop protection	Pre Regulatory Submission	TBC	2H15/1H16	0	NA	NA	NA	5.0%

NOTE: OUR DENDRIMER-DOCETAXEL DEAL ASSUMPTIONS ARE CONSERVATIVE REFLECTING ITS EARLY STAGE. IT COULD POTENTIALLY HAVE ADDITIONAL VALUE FOR EACH ADDITIONAL INDICATION THAT THE LICENSEE PURSUES. WE DO NOT INCLUDE COMMERCIAL MILESTONES IN OUR MODEL AT THIS STAGE.

ROYALTIES ARE LIKELY TO BE TIERED FOR EACH DEAL. WE ASSUME FLAT RATE AT MID POINT OF RANGE FOR NOW.

SOURCE: BELL POTTER SECURITIES ESTIMATES

Upside Risk to our valuation

We have not modelled SPL's potential revenue flow from its partnerships with Nufarm (agrochemicals), Gowan Company (agrochemicals), Makhteshim Agan (agrochemicals), Astra Zeneca (drug-delivery), Eli Lilly (drug delivery), Elanco (drug delivery), GSK (drug delivery) and from its multiple undisclosed partnerships both in drug delivery and agrochemicals. These partnerships becoming substantial in future and converting to a commercial licensing deal with financial terms would lead to an upside to our estimates.

At this stage, we do not value VivaGel's opportunity in Viral Conjunctivitis and SPL's second internal candidate from drug-delivery Dendrimer-Oxaliplatin, given the early nature of these programmes. These programmes moving ahead into the clinic would be a potential upside to our estimates.

Also, we note that docetaxel (Taxotere) made by Sanofi Aventis is currently approved for multiple indications including breast cancer, head and neck cancer, gastric cancer, prostate cancer and non-small cell lung cancer (NSCLC). SPL has previously reported results from animal studies of dendrimer-docetaxel, which demonstrated that dendrimer-docetaxel has superior efficacy to docetaxel alone across a wide range of tumours namely prostate, lung, ovarian and breast. SPL's closest competitor BIND Therapeutics, which has an improved docetaxel formulation in development, is pursuing NSCLC and prostate cancer indications. At this stage for SPL, we model dendrimer-docetaxel's opportunity for the first solid tumour indication the company may pursue. However, depending on the results from the Phase I trial, which is recruiting patients with various solid tumours, SPL or a potential licensee, may decide to pursue more than one indication in parallel. This could considerably increase the market opportunity for this asset. **We envisage that expanded indications for dendrimer-docetaxel will lead to material upgrades in our numbers.** We will revisit our assumptions on the basis of the Phase I dendrimer-docetaxel trial results.

Starpharma Holdings Ltd. (SPL)

COMPANY DESCRIPTION

Starpharma is a Melbourne-based platform company commercialising the science of nanoscale polymers called dendrimers. Its proprietary dendrimer technology is versatile with wide applicability across multiple sectors including pharmaceuticals, agrochemicals and industrial applications. Starpharma's lead product is VivaGel which is being developed as an anti-microbial coating for Ansell and Okamoto condoms offering protection against Sexually Transmitted Infections, as well as a topical microbicide to prevent the recurrence of the common vaginal infection in women, Bacterial Vaginosis (BV). SPL is also working on improved formulations of leading cancer drugs as well as agrochemicals both internally and with external partners. Substantial shareholders include Allan Gray, M&G, Acorn Capital and Dow Chemical Company. Their combined holdings represent ~41.8%.

INVESTMENT STRATEGY

We believe that investor sentiment is returning to the stock with the first marketing approval received for the VivaGel Coated Condom (VCC) in Japan. We expect multiple catalysts to play out over the next 3 -12 months which could further de-risk the platform technology and demonstrate its commercial viability. **The key inflection point for the stock, in our view, will be results from the Phase I dendrimer-docetaxel trial.** We expect interim data from the trial in CY2H14, with top-line data from the trial in CY1H15. We maintain our Buy recommendation on SPL, based on the company getting its first product from the VivaGel portfolio on the market and near-term revenues ensuing from it, results from the Phase I docetaxel trial and a strong cash position of \$27.8m which should fund it through FY15.

KEY RISKS

We see the following key stock specific risks to our investment thesis on Starpharma:

- **Clinical risk:** There is a risk that SPL's clinical trials primarily the Phase III R-BV trials and the Phase I dendrimer-docetaxel trial may fail to demonstrate meaningful safety and efficacy. This may jeopardise the potential for the company to license the products and/or pursue further clinical development.
- **Technology risk:** SPL is a platform company, with its entire pipeline based on its proprietary dendrimer technology. Any setback clinically or commercially is likely to put the viability of the company's technology at risk.
- **Regulatory risk:** Any further delay in receiving marketing approval for VivaGel coated condom or delay in its launch will negatively impact our revenue forecasts. This risk also extends to other pipeline products in terms of getting regulatory agreement to conduct clinical trials and marketing approval for launch in various markets.
- **Partnering risk:** The basic premise behind our investment thesis for SPL is that all its major products get licensed at attractive terms with the partner being responsible for all commercialisation and any further development as required. If SPL fails to secure partnerships at attractive terms, our forecasts will be negatively impacted. Furthermore, if any of SPL's existing collaborations should be terminated, it is likely to shake the markets confidence in SPL's technology and its commercial viability.
- **Commercial risk:** The VivaGel coated condom sales and revenue from partnerships with Okamoto and Ansell could fail to meet our expectations due to poor commercialization effort, delays in launch, unfavourable experience of consumers with the product, better performance of a competing product etc.
- **Funding risk:** Delays in partnering of products may impact SPL's funding position. Increase in costs of trials beyond what we currently estimate may require SPL to raise additional capital before it can become financially self-sustainable.

SPL has \$27.81m cash at the end of FY3Q14 and has burned ~\$0.7m/month on average over the last twelve months

Table 6 - Financial summary

Starpharma (SPL)						Share price (A\$)					\$0.575																																																																																																																																																						
As at 14 July 2014						Market cap (A\$m)					163.9																																																																																																																																																						
Profit and Loss																																																																																																																																																																	
Y/e June 30 (A\$m)	2012A	2013A	2014E	2015E	2016E	Y/e June 30	2012A	2013A	2014E	2015E	2016E																																																																																																																																																						
Revenue*	2.4	9.5	6.3	4.8	16.9	Net profit (A\$m)	-13.7	-5.2	-11.3	-12.5	1.4																																																																																																																																																						
EBITDA	-14.4	-5.8	-11.2	-12.0	2.6	EPS (c)	-5.1	-1.8	-3.9	-4.4	0.5																																																																																																																																																						
Depreciation & Amortisation	-1.1	-1.1	-1.1	-1.1	-1.1	EPS growth (%)	N/A	N/A	N/A	N/A	NM																																																																																																																																																						
EBIT	-15.5	-6.8	-12.2	-13.1	1.5	P/E ratio (x)	N/A	N/A	N/A	N/A	115.8																																																																																																																																																						
Net interest & Other Income/(Expense)	1.9	1.6	0.9	0.6	0.5	CFPS (c)	-3.7	-3.5	-3.6	-3.1	2.1																																																																																																																																																						
Pre-tax profit (loss)	-13.7	-5.2	-11.3	-12.5	2.0	Price/CF (x)	-15.8	-16.6	-15.8	-18.5	27.0																																																																																																																																																						
Tax	0.0	0.0	0.0	0.0	0.6	DPS (c)	0.0	0.0	0.0	0.0	0.0																																																																																																																																																						
NPAT (adjusted)	-13.7	-5.2	-11.3	-12.5	1.4	Yield (%)	0.0%	0.0%	0.0%	0.0%	0.0%																																																																																																																																																						
Less minority interests	0.0	0.0	0.0	0.0	0.0	Franking (%)	N/A	N/A	N/A	N/A	N/A																																																																																																																																																						
Net profit (loss) to shareholders	-13.7	-5.2	-11.3	-12.5	1.4	EV/EBITDA	-9.5	-23.7	-12.2	-11.3	51.8																																																																																																																																																						
Reported net profit (loss) to shareholders	-13.7	-5.2	-11.3	-12.5	1.4	EV/EBIT	-8.8	-20.0	-11.1	-10.4	89.5																																																																																																																																																						
* Including grants and R&D tax incentive. FY16 Revenue number includes potential upfront from docetaxel & VivaGel symptomatic relief deals																																																																																																																																																																	
Cashflow																																																																																																																																																																	
Y/e June 30 (A\$m)	2012A	2013A	2014E	2015E	2016E	<table border="1"> <tr> <td>Share price now</td> <td>\$0.575</td> </tr> <tr> <td>Valuation:</td> <td>\$1.07</td> </tr> <tr> <td>Premium (discount) to price</td> <td>86.1%</td> </tr> <tr> <td>Recommendation:</td> <td>Buy</td> </tr> <tr> <td>Risk Rating</td> <td>Speculative</td> </tr> </table>						Share price now	\$0.575	Valuation:	\$1.07	Premium (discount) to price	86.1%	Recommendation:	Buy	Risk Rating	Speculative																																																																																																																																												
Share price now	\$0.575																																																																																																																																																																
Valuation:	\$1.07																																																																																																																																																																
Premium (discount) to price	86.1%																																																																																																																																																																
Recommendation:	Buy																																																																																																																																																																
Risk Rating	Speculative																																																																																																																																																																
Reported NPAT plus discontinued ops.	-13.7	-5.2	-11.3	-12.5	1.4																																																																																																																																																												
Non-cash items	1.4	1.9	1.9	1.5	1.5																																																																																																																																																												
Working capital	2.4	-6.4	-1.0	2.1	3.2																																																																																																																																																												
Other operating cash flow	0.0	0.0	0.0	0.0	0.0																																																																																																																																																												
Operating cashflow	-9.8	-9.8	-10.4	-9.0	6.1																																																																																																																																																												
Capex	-0.1	-0.2	-0.3	-0.5	-0.6																																																																																																																																																												
Investments	0.0	0.0	0.0	0.0	0.0																																																																																																																																																												
Other investing cash flow	0.0	0.0	0.0	0.0	0.0																																																																																																																																																												
Investing cashflow	-0.1	-0.2	-0.3	-0.5	-0.6																																																																																																																																																												
Change in borrowings	-0.1	-0.1	0.0	0.0	0.0	<table border="1"> <tr> <td colspan="6">Profitability ratios</td> </tr> <tr> <td>Y/e June 30</td> <td>2012A</td> <td>2013A</td> <td>2014E</td> <td>2015E</td> <td>2016E</td> </tr> <tr> <td>EBITDA/revenue (%)</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>15.6%</td> </tr> <tr> <td>EBIT/revenue (%)</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>9.0%</td> </tr> <tr> <td>Return on assets (%)</td> <td>-25.2%</td> <td>-10.8%</td> <td>-29.0%</td> <td>-46.5%</td> <td>5.0%</td> </tr> <tr> <td>Return on equity (%)</td> <td>-28.1%</td> <td>-11.4%</td> <td>-31.6%</td> <td>-52.7%</td> <td>5.6%</td> </tr> <tr> <td>Return on funds empl'd (%)</td> <td>-28.0%</td> <td>-11.4%</td> <td>-31.5%</td> <td>-52.6%</td> <td>5.6%</td> </tr> <tr> <td>Dividend cover (x)</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>Effective tax rate (%)</td> <td>0.0%</td> <td>0.0%</td> <td>0.0%</td> <td>0.0%</td> <td>30.0%</td> </tr> </table>						Profitability ratios						Y/e June 30	2012A	2013A	2014E	2015E	2016E	EBITDA/revenue (%)	N/A	N/A	N/A	N/A	15.6%	EBIT/revenue (%)	N/A	N/A	N/A	N/A	9.0%	Return on assets (%)	-25.2%	-10.8%	-29.0%	-46.5%	5.0%	Return on equity (%)	-28.1%	-11.4%	-31.6%	-52.7%	5.6%	Return on funds empl'd (%)	-28.0%	-11.4%	-31.5%	-52.6%	5.6%	Dividend cover (x)	N/A	N/A	N/A	N/A	N/A	Effective tax rate (%)	0.0%	0.0%	0.0%	0.0%	30.0%																																																																																																
Profitability ratios																																																																																																																																																																	
Y/e June 30	2012A	2013A	2014E	2015E	2016E																																																																																																																																																												
EBITDA/revenue (%)	N/A	N/A	N/A	N/A	15.6%																																																																																																																																																												
EBIT/revenue (%)	N/A	N/A	N/A	N/A	9.0%																																																																																																																																																												
Return on assets (%)	-25.2%	-10.8%	-29.0%	-46.5%	5.0%																																																																																																																																																												
Return on equity (%)	-28.1%	-11.4%	-31.6%	-52.7%	5.6%																																																																																																																																																												
Return on funds empl'd (%)	-28.0%	-11.4%	-31.5%	-52.6%	5.6%																																																																																																																																																												
Dividend cover (x)	N/A	N/A	N/A	N/A	N/A																																																																																																																																																												
Effective tax rate (%)	0.0%	0.0%	0.0%	0.0%	30.0%																																																																																																																																																												
Equity issued	33.7	0.9	0.2	0.0	0.0																																																																																																																																																												
Dividends paid	0.0	0.0	0.0	0.0	0.0																																																																																																																																																												
Other financing cash flow	0.0	0.0	0.0	0.0	0.0																																																																																																																																																												
Financing cashflow	33.7	0.8	0.2	0.0	0.0																																																																																																																																																												
Net change in cash	23.8	-9.1	-10.5	-9.4	5.5	<table border="1"> <tr> <td colspan="6">Liquidity and leverage ratios</td> </tr> <tr> <td>Y/e June 30</td> <td>2012A</td> <td>2013A</td> <td>2014E</td> <td>2015E</td> <td>2016E</td> </tr> <tr> <td>Net cash (debt) (A\$m)</td> <td>42.7</td> <td>33.7</td> <td>23.3</td> <td>14.0</td> <td>19.6</td> </tr> <tr> <td>Net debt/equity (%)</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>Net interest cover (x)</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>Current ratio (x)</td> <td>8.3</td> <td>16.0</td> <td>9.8</td> <td>6.1</td> <td>6.9</td> </tr> </table>						Liquidity and leverage ratios						Y/e June 30	2012A	2013A	2014E	2015E	2016E	Net cash (debt) (A\$m)	42.7	33.7	23.3	14.0	19.6	Net debt/equity (%)	N/A	N/A	N/A	N/A	N/A	Net interest cover (x)	N/A	N/A	N/A	N/A	N/A	Current ratio (x)	8.3	16.0	9.8	6.1	6.9																																																																																																																		
Liquidity and leverage ratios																																																																																																																																																																	
Y/e June 30	2012A	2013A	2014E	2015E	2016E																																																																																																																																																												
Net cash (debt) (A\$m)	42.7	33.7	23.3	14.0	19.6																																																																																																																																																												
Net debt/equity (%)	N/A	N/A	N/A	N/A	N/A																																																																																																																																																												
Net interest cover (x)	N/A	N/A	N/A	N/A	N/A																																																																																																																																																												
Current ratio (x)	8.3	16.0	9.8	6.1	6.9																																																																																																																																																												
Cash at end of period*	42.8	33.8	23.4	14.0	19.6																																																																																																																																																												
* Includes effect of exchange rate fluctuations on cash balance																																																																																																																																																																	
Free cash flow	-9.9	-10.0	-10.8	-9.4	5.5							<table border="1"> <tr> <td colspan="6">Interims</td> </tr> <tr> <td>Y/e June 30 (A\$m)</td> <td>1H13A</td> <td>2H13A</td> <td>1H14A</td> <td>2H14E</td> <td>1H15E</td> </tr> <tr> <td>Revenue*</td> <td>7.2</td> <td>2.3</td> <td>2.8</td> <td>3.5</td> <td>2.0</td> </tr> <tr> <td>EBITDA</td> <td>-2.2</td> <td>-3.5</td> <td>-5.6</td> <td>-5.6</td> <td>-5.8</td> </tr> <tr> <td>Depreciation & Amortisation</td> <td>-0.5</td> <td>-0.5</td> <td>-0.5</td> <td>-0.5</td> <td>-0.5</td> </tr> <tr> <td>EBIT</td> <td>-2.7</td> <td>-4.1</td> <td>-6.1</td> <td>-6.1</td> <td>-6.4</td> </tr> <tr> <td>Net interest & Other Income (Expense)</td> <td>0.9</td> <td>0.7</td> <td>0.6</td> <td>0.4</td> <td>0.3</td> </tr> <tr> <td>Pre-tax profit</td> <td>-1.8</td> <td>-3.4</td> <td>-5.6</td> <td>-5.7</td> <td>-6.1</td> </tr> <tr> <td>Tax</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> </tr> <tr> <td>NPAT (adjusted)</td> <td>-1.8</td> <td>-3.4</td> <td>-5.6</td> <td>-5.7</td> <td>-6.1</td> </tr> <tr> <td>Less minority interests</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> </tr> <tr> <td>Net profit to shareholders</td> <td>-1.8</td> <td>-3.4</td> <td>-5.6</td> <td>-5.7</td> <td>-6.1</td> </tr> <tr> <td colspan="12">*Includes R&D Tax incentive</td> </tr> <tr> <td>Total assets</td> <td>54.3</td> <td>48.6</td> <td>39.0</td> <td>26.9</td> <td>28.8</td> </tr> <tr> <td>Payables</td> <td>4.5</td> <td>1.7</td> <td>2.4</td> <td>2.4</td> <td>2.4</td> </tr> <tr> <td>Debt</td> <td>0.1</td> <td>0.1</td> <td>0.1</td> <td>0.0</td> <td>0.0</td> </tr> <tr> <td>Provisions</td> <td>0.6</td> <td>0.7</td> <td>0.7</td> <td>0.7</td> <td>0.7</td> </tr> <tr> <td>Other liabilities</td> <td>0.4</td> <td>0.1</td> <td>0.1</td> <td>0.1</td> <td>0.1</td> </tr> <tr> <td>Total liabilities</td> <td>5.6</td> <td>2.6</td> <td>3.2</td> <td>3.2</td> <td>3.1</td> </tr> <tr> <td>Shareholders' equity</td> <td>48.7</td> <td>46.0</td> <td>35.8</td> <td>23.8</td> <td>25.7</td> </tr> <tr> <td>Minorities</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> </tr> <tr> <td>Total shareholders funds</td> <td>48.7</td> <td>46.0</td> <td>35.8</td> <td>23.8</td> <td>25.7</td> </tr> <tr> <td>Total funds employed</td> <td>54.3</td> <td>48.6</td> <td>39.0</td> <td>26.9</td> <td>28.8</td> </tr> <tr> <td>W/A shares on issue</td> <td>267.7</td> <td>283.3</td> <td>287.6</td> <td>288.0</td> <td>288.1</td> </tr> </table>						Interims						Y/e June 30 (A\$m)	1H13A	2H13A	1H14A	2H14E	1H15E	Revenue*	7.2	2.3	2.8	3.5	2.0	EBITDA	-2.2	-3.5	-5.6	-5.6	-5.8	Depreciation & Amortisation	-0.5	-0.5	-0.5	-0.5	-0.5	EBIT	-2.7	-4.1	-6.1	-6.1	-6.4	Net interest & Other Income (Expense)	0.9	0.7	0.6	0.4	0.3	Pre-tax profit	-1.8	-3.4	-5.6	-5.7	-6.1	Tax	0.0	0.0	0.0	0.0	0.0	NPAT (adjusted)	-1.8	-3.4	-5.6	-5.7	-6.1	Less minority interests	0.0	0.0	0.0	0.0	0.0	Net profit to shareholders	-1.8	-3.4	-5.6	-5.7	-6.1	*Includes R&D Tax incentive												Total assets	54.3	48.6	39.0	26.9	28.8	Payables	4.5	1.7	2.4	2.4	2.4	Debt	0.1	0.1	0.1	0.0	0.0	Provisions	0.6	0.7	0.7	0.7	0.7	Other liabilities	0.4	0.1	0.1	0.1	0.1	Total liabilities	5.6	2.6	3.2	3.2	3.1	Shareholders' equity	48.7	46.0	35.8	23.8	25.7	Minorities	0.0	0.0	0.0	0.0	0.0	Total shareholders funds	48.7	46.0	35.8	23.8	25.7	Total funds employed	54.3	48.6	39.0	26.9	28.8
Interims																																																																																																																																																																	
Y/e June 30 (A\$m)	1H13A	2H13A	1H14A	2H14E	1H15E																																																																																																																																																												
Revenue*	7.2	2.3	2.8	3.5	2.0																																																																																																																																																												
EBITDA	-2.2	-3.5	-5.6	-5.6	-5.8																																																																																																																																																												
Depreciation & Amortisation	-0.5	-0.5	-0.5	-0.5	-0.5																																																																																																																																																												
EBIT	-2.7	-4.1	-6.1	-6.1	-6.4																																																																																																																																																												
Net interest & Other Income (Expense)	0.9	0.7	0.6	0.4	0.3																																																																																																																																																												
Pre-tax profit	-1.8	-3.4	-5.6	-5.7	-6.1																																																																																																																																																												
Tax	0.0	0.0	0.0	0.0	0.0																																																																																																																																																												
NPAT (adjusted)	-1.8	-3.4	-5.6	-5.7	-6.1																																																																																																																																																												
Less minority interests	0.0	0.0	0.0	0.0	0.0																																																																																																																																																												
Net profit to shareholders	-1.8	-3.4	-5.6	-5.7	-6.1																																																																																																																																																												
*Includes R&D Tax incentive																																																																																																																																																																	
Total assets	54.3	48.6	39.0	26.9	28.8																																																																																																																																																												
Payables	4.5	1.7	2.4	2.4	2.4																																																																																																																																																												
Debt	0.1	0.1	0.1	0.0	0.0																																																																																																																																																												
Provisions	0.6	0.7	0.7	0.7	0.7																																																																																																																																																												
Other liabilities	0.4	0.1	0.1	0.1	0.1																																																																																																																																																												
Total liabilities	5.6	2.6	3.2	3.2	3.1																																																																																																																																																												
Shareholders' equity	48.7	46.0	35.8	23.8	25.7																																																																																																																																																												
Minorities	0.0	0.0	0.0	0.0	0.0																																																																																																																																																												
Total shareholders funds	48.7	46.0	35.8	23.8	25.7																																																																																																																																																												
Total funds employed	54.3	48.6	39.0	26.9	28.8																																																																																																																																																												
W/A shares on issue	267.7	283.3	287.6	288.0	288.1																																																																																																																																																												

SOURCE: BELL POTTER SECURITIES ESTIMATES

Recommendation structure

Buy: Expect >15% total return on a 12 month view. For stocks regarded as 'Speculative' a return of >30% is expected.

Hold: Expect total return between -5% and 15% on a 12 month view

Sell: Expect <-5% total return on a 12 month view

Speculative Investments are either start-up enterprises with nil or only prospective operations or recently commenced operations with only forecast cash flows, or companies that have commenced operations or have been in operation for some time but have only forecast cash flows and/or a stressed balance sheet.

Such investments may carry an exceptionally high level of capital risk and volatility of returns.

Bell Potter Securities Limited
ACN 25 006 390 7721

Level 38, Aurora Place
88 Phillip Street, Sydney 2000

Telephone +61 2 9255 7200
www.bellpotter.com.au

Research Team

Staff Member	Title/Sector	Phone	@bellpotter.com.au
TS Lim	Head of Research	612 8224 2810	tslim
Industrials			
Sam Haddad	Industrials	612 8224 2819	shaddad
John O'Shea	Industrials	613 9235 1633	joshea
Chris Savage	Industrials	612 8224 2835	csavage
Jonathan Snape	Industrials	613 9235 1601	jsnape
Sam Byrnes	Industrials	612 8224 2886	sbyrnes
Bryson Calwell	Industrials Associate	613 9235 1853	bcalwell
John Hester	Healthcare	612 8224 2871	jhester
Tanushree Jain	Healthcare/Biotech	612 8224 2849	tnjain
Financials			
TS Lim	Banks/Regionals	612 8224 2810	tslim
Lafitani Sotiriou	Diversified	613 9235 1668	lsotiriou
Resources			
Di Brookman	Oil & Gas	612 8224 2859	dbrookman
Stuart Howe	Resources	613 9235 1782	showe
Fred Truong	Resources	613 9235 1629	fruong
Bernard Lai	Gold	613 9235 1731	blai
Quantitative			
Tim Piper	Research Assistant	612 8224 2825	tpiper
Fixed Income			
Damien Williamson	Fixed Income	613 9235 1958	dwilliamson
Barry Ziegler	Fixed Income	613 9235 1848	bziegler

The following may affect your legal rights. Important Disclaimer:

This document is a private communication to clients and is not intended for public circulation or for the use of any third party, without the prior approval of Bell Potter Securities Limited. In the USA and the UK this research is only for institutional investors. It is not for release, publication or distribution in whole or in part to any persons in the two specified countries. In Hong Kong this research is being distributed by Bell Potter Securities (HK) Limited which is licensed and regulated by the Securities and Futures Commission, Hong Kong. This is general investment advice only and does not constitute personal advice to any person. Because this document has been prepared without consideration of any specific client's financial situation, particular needs and investment objectives ('relevant personal circumstances'), a Bell Potter Securities Limited investment adviser (or the financial services licensee, or the representative of such licensee, who has provided you with this report by arrangement with Bell Potter Securities Limited) should be made aware of your relevant personal circumstances and consulted before any investment decision is made on the basis of this document. While this document is based on information from sources which are considered reliable, Bell Potter Securities Limited has not verified independently the information contained in the document and Bell Potter Securities Limited and its directors, employees and consultants do not represent, warrant or guarantee, expressly or impliedly, that the information contained in this document is complete or accurate. Nor does Bell Potter Securities Limited accept any responsibility for updating any advice, views opinions, or recommendations contained in this document or for correcting any error or omission which may become apparent after the document has been issued. Except insofar as liability under any statute cannot be excluded. Bell Potter Limited and its directors, employees and consultants do not accept any liability (whether arising in contract, in tort or negligence or otherwise) for any error or omission in this document or for any resulting loss or damage (whether direct, indirect, consequential or otherwise) suffered by the recipient of this document or any other person.

Disclosure of interest:

Bell Potter Securities Limited, its employees, consultants and its associates within the meaning of Chapter 7 of the Corporations Law may receive commissions, underwriting and management fees from transactions involving securities referred to in this document (which its representatives may directly share) and may from time to time hold interests in the securities referred to in this document.

Disclosure: Bell Potter Securities acted as lead manager in the October 2011 placement and SPP and received fees for that service.

Biotechnology Risk Warning:

The stocks of biotechnology companies without strong revenue streams from product sales or ongoing service revenue should always be regarded as speculative in character. Since most biotechnology companies fit this description, the speculative designation also applies to the entire sector. The fact that the intellectual property base of a typical biotechnology company lies in science not generally regarded as accessible to the layman adds further to the riskiness with which biotechnology investments ought to be regarded. **Stocks with 'Speculative' designation are prone to high volatility in share price movements.** Clinical and regulatory risks are inherent in biotechnology stocks. Biotechnology developers usually seek US FDA approval for their technology which is a long and arduous three phase process to prove the safety, effectiveness and appropriate application or use of the developed drug and even after approval a drug can be the subject of an FDA investigation of subsequently discovered possible links between the drug and other diseases not previously diagnosed. Furthermore, the Australian exchange listed biotechnology sector is subject to influence by the global biotechnology sector, particularly that in the USA. Consequently, Australian exchange listed biotechnology stocks can experience sharp movements, both upwards and downwards, in both valuations and share prices, as a result of a re-rating of the sector both globally and in the USA, in particular. Investors are advised to be cognisant of these risks before buying such a stock including **Starpharma. For a list of risks specific to Starpharma please refer to Page 8 of this note.**

ANALYST CERTIFICATION:

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers and were prepared in an independent manner and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.