



FIRST BERLIN

Equity Research

BUY

PLURISTEM THERAPEUTICS, INC.

ISRAEL /
LIFE SCIENCES

COMPREHENSIVE UPDATE

PRICE TARGET: **\$3.20**
PREVIOUS CLOSE: **\$1.35**
RETURN POTENTIAL: **137.0%**

18 MARCH 2009





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PLURISTEM THERAPEUTICS, INC.

ISRAEL / LIFE SCIENCES

Primary exchange: NASDAQ

Secondary exchange: Frankfurt

Bloomberg symbol: PSTI US / PJTA GR

ISIN: US72940R1023

RATING:	Buy
PRICE TARGET:	\$3.20
RETURN POTENTIAL:	137.0%
RISK RATING:	High

FDA CLEARANCE FOR PLX-PAD A KEY MILESTONE

Pluristem has made good progress in its attempt to begin clinical trials on its lead products using mesenchymal stem cells (MSCs). First human trials of PLX-PAD will begin in Europe and the US during H1 2009. The company recently raised \$2.8m via capital increases and received a \$1.6m grant from the Israeli government to finance pipeline development. We maintain our Buy rating, but lower our price target to \$3.20 from \$5.50 to take the current difficult capital market environment into account.

FDA IND-clearance for lead product The company's lead product, PLX-PAD for peripheral artery disease, received FDA clearance on 2 March to begin Phase I trials in the US; we expect trials to start within the next few months. We also think a positive answer from European regulatory authorities is imminent. Further, we expect Pluristem's second core product, PLX-IBD for inflammatory bowel disease, to start clinical trials in H1 2010.

Financing secured for pipeline development Since September 2008, Pluristem has successfully raised funds amounting to some \$2.8m on the capital market and received a grant from the Office of Israel's Chief Scientist (OCS) of \$1.6m. Pluristem anticipates a further grant in the range of \$1.5m–2.0m from the OCS this year. Considering the lack of funding available for small biotech companies in the current market environment, we consider these significant achievements that show the quality of the company's pipeline. Additionally, Pluristem has filed an application to form a multidisciplinary consortium that includes thirteen companies and research centers in Germany, France, Switzerland and Israel to support additional clinical trials via grant applications totalling approx. \$13 million. These grant applications are supported by the Seventh Framework Programme for Research and Technological Development, the EU's main instrument for funding research. Based on funds available, the company will be able to finance operations until approx. year-end 2009.

Low valuation justifies Buy rating Our positive opinion of the company's technology and its pipeline remains unchanged. However, the stock has been hit in recent months by weak sentiment in the biotech industry, with early-stage companies showing the largest declines. As a result, we lower our target price to \$3.20 (\$5.50). We expect positive news flow from its lead products over the coming months to add value to Pluristem and boost the share price. We rate Pluristem as a Buy.

FINANCIAL HISTORY & PROJECTIONS

	2004/05	2005/06	2006/07	2007/08	2008/09E	2009/10E
Revenue (\$m)	0.00	0.00	0.00	0.00	0.00	0.00
Y-o-y growth	na	na	na	na	na	na
EBITDA (\$m)	-2.63	-2.29	-8.18	-10.31	-7.58	-9.17
EBITDA margin	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
EBIT (\$m)	-2.66	-2.33	-8.24	-10.43	-7.70	-9.30
EBIT margin	na	na	na	na	na	na
Net income (\$m)	-2.10	-2.44	-8.43	-10.50	-7.76	-9.35
EPS (diluted) (\$)	-0.05	-0.04	-0.03	-1.52	-0.62	-0.75
P/E (x)	na	na	na	na	na	na
DPS (\$)	0.00	0.00	0.00	0.00	0.00	0.00
Yield	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
FCF (\$m)	-1.84	-2.10	-3.44	-5.38	-4.33	-5.91
Net gearing	-0.7%	-2.1%	-0.8%	-0.3%	-0.6%	-0.6%
Liquid assets (\$m)	1.89	2.37	5.41	1.51	3.20	3.29

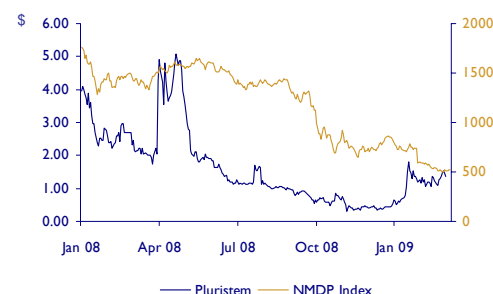
COMPANY PROFILE

Pluristem is a biotech company focused on the research and development of allogenic therapeutic products using mesenchymal stem cells (MSCs) from the placenta for the treatment of degenerative, ischemic and autoimmune diseases. Pluristem is based in Haifa, Israel, and has 30 employees.

TRADING DATA

Closing price (17.03.09)	\$1.35
Shares outstanding	12.50m
Market capitalisation	\$16.88m
52-week range	\$0.26/5.99
Average volume (six months)	78,884

STOCK OVERVIEW



COMPANY DATA (as of 31 December 2008)

Liquid assets	\$2.19m
Current assets	\$2.89m
Intangible assets	\$0.00m
Total assets	\$4.38m
Current liabilities	\$0.85m
Shareholders' equity	\$3.33m

SHAREHOLDERS

Free float	70.0%
Bangor Holdings Ltd	8.4%
Capela Overseas Ltd	4.6%
Merina Overseas	4.0%
Alpha Capital	3.4%
Directors and Officers	3.4%
Others	6.2%



INVESTMENT CASE

STEM CELL SPACE IS GAINING MOMENTUM

Over 2008, we saw a stronger impulse in the stem cell arena as an increasing number of leading pharmaceutical and large cap biotech companies entered the regenerative medicine and stem cell field and are more willing to make large investments in the sector. In November 2008, Genzyme invested \$130m as an up-front payment to Osiris for the rights of two lead stem cell products, Prochymal and Chondrogen. A further \$1.25 billion is possible under the deal in milestone payments if certain targets are achieved.

ATTRACTIVE EARLY-STAGE R&D PIPELINE

Pluristem has two lead programmes using mesenchymal stem cells (MSCs) in advanced pre-clinical development with a combined market potential of up to \$6 billion. Academic studies also support its products' potential to address further indications such as bone marrow transplantation, stroke, Parkinson's disease, multiple sclerosis, and musculoskeletal disorders, which represent a combined market opportunity of almost \$22 billion. The company is successfully exploring some of these indications in early-stage pre-clinical studies.

PLX-PAD – A PROMISING TREATMENT POISED TO START PHASE I TRIALS

We expect PLX-PAD to begin two Phase I trials in the US and Europe over the coming months. Pluristem has filed investigational new drug (IND) applications with the registration authorities. On 2 March 2009, the US Food and Drug Administration cleared the way for US trials. We regard the news as highly promising. Further, we expect Pluristem to receive clearance for European trials in the coming weeks. We view the pre-clinical data from ischemic mice positively. PLX-PAD was able to restore blood flow to the affected limbs of mice and significantly increase the number of new capillaries supplying the ischemic area. We see a high medical need for the treatment of PAD and CLI.

PLX-IBD – A NEW COMER WITH AN ATTRACTIVE PROFILE

Pluristem decided to switch development priorities from PLX-BMT to PLX-IBD as the inflammatory bowel disease (IBD) indication offers a better marketing profile (lower potential competition) and the product would have a lower development risk. The proof of concept study on rats showed that PLX can achieve an anti-inflammatory effect comparable to the current gold standard treatment 5-ASA. We therefore expect an improved side effect profile in clinical trials. The company expects to complete safety studies in animal models for intravenous (IV) administration by approximately year end, enabling a potential IND filing and initiation of clinical trials in H1 2010.

FUNDS TO FINANCE OPERATIONS UNTIL YEAR END

Pluristem recently raised \$2.8m by means of two capital increases and received a \$1.6m grant from the Office of Israel's Chief Scientist (OCS). The company currently has \$3.0m in cash, and can potentially receive a further \$1.5m–2.0m grant from OCS later this year. We believe Pluristem has sufficient funds to run operations until the end of 2009 and take PLX-PAD into Phase I clinical trials. The company is also applying for further grants in the EU, which could provide the company with further funding of some \$1.5m, thus expanding its financing basis in a non-dilutive manner. In addition, we expect the company to raise capital by some \$6.0m this year in order to secure funding for 2010.



SWOT ANALYSIS

STRENGTHS

- An experienced management team: Zami Aberman, CEO, joined Pluristem in 2005 and changed the company's strategy to therapeutic development in order to leverage Pluristem's key technology platform. He has held CEO and Chairman positions in Israel, the US, Europe, Japan and South Korea, mostly in the high-tech field. Yaky Yanay, CFO, has several years of management experience of public companies in the financial sector. Frida Grynspan, Vice President of R&D, has strong expertise in bringing stem cell therapies into clinical trials, such as at Gamida Cell Ltd.
- Pluristem has a leading technology that emerged from Israel's world-class research centers. The company's unique proprietary Plurix 3D Bioreactor, capable of imitating the bone marrow environment, achieves the cost-effective expansion of mesenchymal stem cells (MSCs) taken from the placenta with a significantly superior qualitative/quantitative performance compared with current 2D methods.
- As shown in pre-clinical studies, MSCs are immunoprivileged and immunosuppressive. Moreover, some initial small academic clinical trials (e.g. Le Blanc et al.) show that MSCs may produce a reduced level of rejection and faster engraftment through the allogenic stem cell transplantation of haematopoietic stem cells.
- The company's pioneering approach of using MSCs from the placenta has, in our view, a number of biological (e.g. easier to obtain) and financial (such as lower cost, etc.) advantages compared with other sources, such as bone marrow, fat tissue and umbilical cord blood.

WEAKNESSES

- Pluristem's R&D pipeline is still at an early stage, although the FDA recently approved Phase I trials for the company's lead product. Nevertheless, it will take several years before the product is approved and the company generates first revenues. However, we expect the company to capitalise on some programmes and indications in the near term through development and out-licensing deals.
- Weak financial position: cash and an expected grant from the OCS in Israel will only suffice to fund operations until the end of 2009. Assuming Pluristem receives grants from Europe, the company could finance operations into Q1 2010.
- Pluristem's market cap is low, currently approx. \$16m, making it difficult to attract institutional investors.

OPPORTUNITIES

- Pluristem's valuation is in our view attractive at its current market cap of \$15.8m. Mesoblast and StemCell Inc., the most comparable US companies based on development stage and profile, have market caps of \$77.4m and 126.7m respectively.
- The company's progress in initial clinical trials on humans may create significant shareholder value. Pluristem's technology has the potential for broad application if validated in human trials. Furthermore, the successful validation of the company's platform in early human trials could attract larger biotechnology and pharmaceutical companies seeking entry into the area of cell-based therapeutics, or to complement their existing pipelines.
- The company intends to out-license or seek partnerships for specific applications of its technology (e.g. stroke indication), or to selected geographic regions, which would generate additional value.

THREATS

- Programmes under development may progress slower than expected or may, in clinical trials on humans, fail to repeat the strong performance shown during pre-clinical development (laboratory and animal models).
- Stem cell therapeutic research is a very dynamic field; therefore, any unexpected breakthrough from competitors would significantly impact Pluristem's potential revenues.



ATTRACTIVE PIPELINE TO ENTER HUMAN STUDIES

Pluristem has several programmes in advanced pre-clinical development which use allogenic MSCs expanded in the 3D Bioreactor, so called PLacental eXpanded (PLX) cells. Several studies have demonstrated that PLX cells are immunoprivileged and also immunosuppressive, as they have prevented the proliferation of pro-inflammatory cells and down/up regulated pro-/anti-inflammatory cytokines. The company's lead product is PLX-PAD to treat critical limb ischemia (CLI), the end stage of peripheral artery disease (PAD). The second leading product is PLX-IBD targeting inflammatory bowel diseases (IBD) such as Crohn's disease. Pluristem has switched priorities from PLX-BMT to PLX-IBD, due to the more attractive market potential of IBD (we expect increasing competition levels in the BMT market, triggering price pressure) as well as the current difficulty in ensuring good quality levels of bone marrow cells (this could affect the performance PLX-BMT, which is co-administrated).

Product pipeline and market potential

Product	Pre-clinical	IND filing	Phase I	Phase II	Phase III	Market size
PLX-PAD peripheral artery disease incl. critical limb ischemia (CLI)	→	→				\$4bn
PLX-IBD inflammatory bowel disease	→					\$2bn
PLX-STROKE	→					\$4bn
PLX-MS multiple sclerosis	→					\$5bn
PLX-BMT adjuvant bone marrow transplantation (on Hold for strategic reasons)	→					\$2bn
Other disorders	→					\$11bn

Table I

Source: Pluristem, First Berlin Research

PLX-PAD TO BEGIN CLINICAL TRIALS – FDA APPROVAL RECEIVED

PLX-PAD is Pluristem's lead drug candidate for peripheral artery disease (PAD) and critical limb ischemia (CLI). We expect PLX-PAD to begin two Phase I trials in the US and Europe on up to 30 patients in the coming months. Communication with the regulatory authorities in the US and Europe has been positive so far. Moreover, the recent FDA clearance to initiate Phase I trials is an important milestone in company's history; we also consider it highly unlikely that European regulatory agencies delay or reject the move to begin human trials after the US approval.

Both trials have been conceived for late-stage patients who have not responded to traditional medication or surgical interventions and whose limbs must therefore be amputated. Assuming normal conditions, we expect both Phase I trials to begin during H1 2009. Beyond safety assessment, the studies will also measure some efficacy parameters such as hemodynamic assessment, and wound and pain assessment.

On 13 January 2009, Pluristem filed an investigational new drug (IND) application with the US



Food and Drug Administration (FDA) and was granted permission on 2 March to initiate clinical trials. Over the coming months, the company will begin Phase I dose ranging safety studies on critical limb ischemia (CLI) in two US centers. Up to 12 subjects are planned for the study, split into two groups. Both groups will receive doses containing 600m cells, with the second group receiving an additional 600m cells after one week.

On 16 December 2008, the company filed an Investigational Medicinal Product Dossier (IMPD) with the German Clinical Trials Regulatory Agency “Paul Ehrlich Institut” for the treatment of CLI. We expect clearance in the coming weeks. Upon clearance, the company will carry out Phase I trials at two sites in Berlin, the Charité University Hospital and the Franziskus Hospital. We note that both centers are well recognised in Europe with outstanding expertise in stem cell research and PAD. The study plans to enrol up to 18 patients split into three groups with three to six patients on each cohort. The patients will receive doses of 150m, 300m and 600m cells.

We see a high medical need for the treatment of PAD and CLI. PAD refers to plaque build-up on the wall of arteries in the pelvis and legs (atherosclerosis), leading to the obstruction of normal blood flow or arterial narrowing. Plaque will grow, become brittle and rupture, triggering the formation of a blood clot. This clot formation may cause pain, changes of skin colour, ulcers, etc. The severe form of PAD obstruction is also known as critical limb ischemia (CLI), characterised by the severe decline of blood flow.

According to Datamonitor, PAD affects some 20m people in the US, Europe and Japan and the market is estimated at around \$4 billion. There are currently no pharmacological treatment options for PAD or CLI; most medications will address prevention and symptomatic pain relief, without disease modification. In its early stages, when patients have painful cramping of the leg muscles while walking (intermittent claudication), doctors will prescribe antiplatelets and statins, such as first line treatment Cilostazol (Pletal) to lower plaque formation. Beyond medication, given a total loss of circulation in CLI, doctors would perform surgery to free the artery (e.g. endovascular procedure, angioplasty, etc), or a bypass graft in the most severe cases. If treatment comes too late, gangrene can lead to the loss of a limb, as amputation is a doctor’s last option to save the patient’s life.

In September last year, PLX-PAD delivered very encouraging data from pre-clinical efficacy trials on 110 ischemic mice. Up to 30 days after injecting the stem cells, the product showed significant blood flow restoration to the affected limbs of the mice and considerably increased the number of new capillaries supplying the ischemic area. The results suggest the product can trigger angiogenesis. There was good improvement in limb functionality after treatment and a large decline of oxidative stress and endothelial inflammation.

In addition, first trials of PLX-PAD on mice suggest that the product can potentially also improve the wound healing process. The company expects to learn more from the first human studies and potentially initiate a separate Phase II efficacy study for the wound healing process on PAD patients. We regard this as an interesting opportunity to generate an additional indication without requiring further preclinical or Phase I safety data. Wound healing is an



attractive market with an estimated value higher than \$10bn. We have not included this indication in our model as the area has not been explored concretely enough to generate conclusive data.

PLX-IBD THE COMPANY'S SECOND CORE PROJECT

Pluristem demonstrated efficacy in animal models (mice and rats) of PLX for autoimmune diseases such as inflammatory bowel disease (IBD), including Morbus Crohn. The proof of concept study on rats with colitis induced by injection of TNBS showed that PLX can achieve an anti-inflammatory effect comparable to the gold standard (5-ASA). The company anticipates completing safety studies in animal models for intravenous (IV) administration by approximately year end, enabling a potential filing in H1 2010.

IBD affects some four million people worldwide and the market size is estimated at over \$2 billion. IBD is a group of inflammatory conditions of the large intestine and small intestine. The major types of IBD are Crohn's disease and ulcerative colitis. This disease causes a range of gastrointestinal symptoms, including diarrhoea, rectal bleeding and abdominal pain resulting in weight loss as well as other extra intestinal manifestations such as skin and eye disorders. While ulcerative colitis is restricted to the colon and primarily affects the mucosa, Crohn's disease can affect all regions of the gastrointestinal tract. The disease extends across the full thickness of the intestinal wall causing either strictures resulting in obstruction or fistulas, in which adjacent tissue becomes interconnected.

As IBD is chronic, its onset is typically before 30 years of age, patients generally require lifelong treatment. IBD is characterised by flare-ups separated by periods of remission. Therefore, maintaining a remission is the goal for IBD patients. Aminosaliclates, compounds that contain 5-aminosalicylic acid (5-ASA), and steroids are currently the basis of IBD therapeutics targeting mild to moderate stages of the disease. If these drugs do not achieve remission, physicians may prescribe immunosuppressions such as prednisone, infliximab (Remicade), azathioprine (Imuran), methotrexate, or 6-mercaptopurineto, to control the symptoms. Severe cases may require surgery, such as bowel resection, strictureplasty or a temporary or permanent colostomy or ileostomy.



PLX-BMT ON HOLD / WAITING FOR MORE FAVOURABLE WINDS

PLX-BMT is an adjuvant product intended to be applied in conjunction with the transplantation of haematopoietic stem cells from umbilical cord blood (UCB) in order to improve the engraftment process, enhance the growth of UCB cells and reduce the risk of rejection (graft versus host disease). While pre-clinical results have been very promising, the company decided to place the project on hold in favour of projects with a better risk/reward profile. Transplantation of UCB stem cells is increasingly becoming a widespread procedure for patients with blood disorders. While current prices for products targeting this disease are attractive, there are an increasing number of players entering the field, which may put pressure on prices. In addition, there is high development risk. It is vital to ensure the quality of the UCB stem cells as PLX-BMT is designed to be co-administered intravenously with cord blood. Therefore, the company must gain access to a cord blood bank, for example via cooperation, in order to control the supply of quality-assured UCB stem cells. Clinical trials could fail due to poor quality cells.

Between 40,000 and 50,000 bone marrow transplants (BMTs) per year are currently carried out worldwide – the majority of which are allogenic. Pluristem believes the number of transplants could triple if PLX-BMT manages to improve the procedure in terms of compatibility or engraftment. At present, UCB stem cells are mostly applied as an alternative therapy to BMT, especially for children. Around two-thirds of these patients suffer from leukaemia or other blood diseases. Other cases involve congenital disturbances or collapse of the bone marrow. After these patients undergo high-dose chemotherapy and radiation treatment, the tumour cells and all fast-growing tissue is destroyed, including bone marrow. It is essential that the bone marrow is replaced, as it produces platelets, and red and white blood cells, which are essential for life.

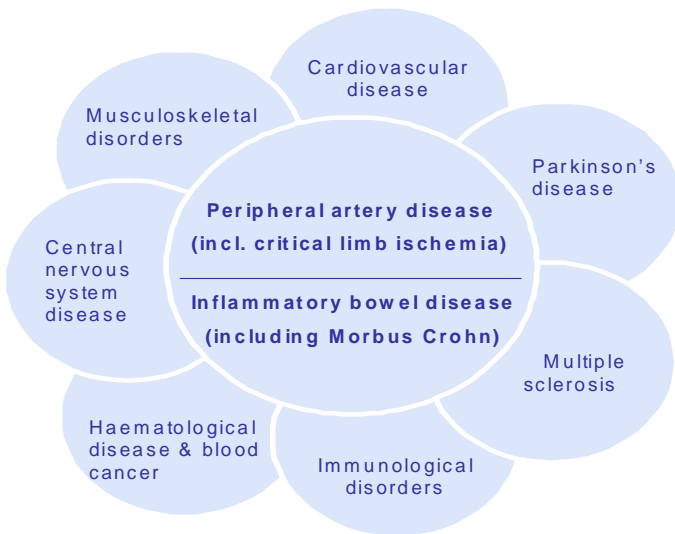


POTENTIAL USE OF PLX IN A RANGE OF DISEASES

An initial pre-clinical investigation into the use of PLX for central nervous system (CNS) disorders was successful. Pluristem reported a statistically significant improvement in the functional and anatomical endpoints (e.g. improvement in beam walking, neurological severity score and reduction of infarct size) of ischemic rats compared to control. These first results suggest that PLX can be used to treat ischemic stroke, a disease that annually affects some two million people worldwide, representing a market potential worth around \$4 billion.

In addition, PLX delivered positive pre-clinical data in mice models for multiple sclerosis (MS), achieving statistical significance for reducing functional deficiencies in rats with the disorder. MS is an autoimmune disease which affects more than 2.5m people worldwide annually, representing a market for potential disease modifying agents of approx. \$5.4 billion. We expect further indications will follow (e.g. Parkinson’s).

Pluristem’s therapeutic potential



Graph 1

Source: Pluristem, First Berlin Research



STEM CELL RESEARCH GAINING MOMENTUM

Over 2008 we saw stronger impulses in the stem cell arena with an increasing number of leading pharmaceutical and large cap biotech companies entering the regenerative medicine and stem cell field. In following are a number of deals that show the activity in the sector. Large pharmaceutical companies are entering this increasingly attractive market and are more willing to make sizeable investments.

- In September 2007, Novartis' and Roche' Venture Capital units helped to bankroll funding for the Spanish stem cell company Cellerix, raising \$32m.
- In June 2008, Pfizer invested \$3m in the early stage company EyeCyte to develop new stem cell-based treatments for endovascular and degenerative retinal (eye) disease.
- In July 2008, GSK signed a \$25m plus deal with the Harvard Stem Cell Institute to fund research in stem cell science.
- In November 2008, Pfizer decided to invest \$100m in stem cell research, creating facilities in the US and UK, including hiring 70 scientists to staff the labs.
- In November 2008, Genzyme paid \$130m as an up-front payment (and up to a further \$1.25 billion in milestone payments) for the rights of two lead stem cell products: Prochymal and Chondrogen.
- In February 2009, Sanofi-Aventis established a regenerative medicine and stem cell alliance with the Salk Institute for Biological Studies in La Jolla-California (US) for an undisclosed amount.

In addition, the recently elected US President Obama has stated his willingness to push stem cell research (possibly including the controversial embryonic stem cells) by providing federal funding to the sector. As a result, we expect higher activity levels in the stem cell sector, which will benefit stem cell players such as Pluristem.

FINANCIAL POSITION

SECURED FUNDING TO FINANCE PIPELINE THROUGH 2009

Pluristem recently raised \$2.8m by means of two capital increases carried out in September and December 2008. We note that management contributed \$150,000 in the form of a salary reduction to the \$750,000 December capital increase. We believe this shows the confidence of management in the company's prospects. Considering the lack of funding available for small biotechs in current market conditions, we regard the capital measures as significant achievements, proving the quality of the company's pipeline.



Furthermore, Pluristem received a \$1.6m grant from the Office of Israel's Chief Scientist (OCS). This grant is intended to cover the development costs of the PLX products for the year ending in February 2009. The company plans to apply for a further grant of \$1.5m–2.0m in March this year to fund the Phase I trial of PLX-PAD and the pre-clinical studies of PLX-IBD. Pluristem currently has \$3.0m in cash, which, added to \$1.5m–2.0m the company would receive on approval of the OCS grant, are sufficient funds to run operations until year end of 2009. We assume that the company can maintain its current low burn rate of just under \$0.4m per month. In addition, the company has formed a multidisciplinary consortium consisting of 13 companies and research centers in Germany, France, Switzerland and Israel to raise some \$13m as support for clinical trials. This could potentially provide the company with an additional \$1.5m, thus expanding its financing basis in a non-dilutive manner. In addition the company plans to increase capital by some \$6.0m during 2009 in order to secure funding for 2010, which we factor into our model.

Looking forward, as we do not expect Pluristem to achieve profitability in the near term, we continue to project that the company will raise an additional \$15m–20m to fund operations (mainly research and development projects) until the end of calendar year 2011. We believe this is achievable as the company has thus far successfully raised cash on the capital markets despite the challenging conditions, and both its leading drug candidates are developing well. We project \$15m in new funds in our balance sheet and cash flow forecasts. We believe that the licensing of the lead drug candidate PLX-PAD could be achieved by 2011, adding new funds into the financing equation; a double-digit US million dollar deal volume should be achievable, bringing an up-front payment in the single-digit US million dollar range, similar to the Cellerix deal.

PROFIT AND LOSS: 6M 2008/09 RESULTS AND BEYOND

The company published six-month 2008/09 results (as of 31 Dec 2008) slightly ahead of our expectations. Pluristem had no revenues and R&D expenses amounted to \$2.6m, which was however lowered through a \$1.3m participation of the OCS grant. This explains a large portion of the \$3.0m operating loss and the \$3.1m net loss. The six-month results also showed a lower cost structure, to a large extent triggered by the higher OCS grant. In addition, Pluristem lowered stock-based compensation to \$1.0m in 6M 2008/09, from \$3.0m in 2007/08). As a result, we fine tune our projections going forward accordingly.

For 2008/09, we lower our operating loss projections to \$7.7m (\$9.1m) and net loss to \$7.8m (\$8.9m), as the company has lowered its operating cost basis (general and administrative as well as R&D). The R&D costs were reduced due to financing from the OCS grant. For 2009/10, we forecast a slightly higher full-year operating loss than previously expected of \$9.3m (\$9.2m), mainly due to the initiation of Phase I trials of PLX-IBD.



VALUATION APPROACH

I. SUM-OF-THE-PARTS VALUATION

We derive Pluristem's fair value based on a sum-of-the-parts methodology, using a risk-adjusted NPV model for each product line. We believe this is the most comprehensive method to value Pluristem as it reflects the implicit risk-adjusted value of every programme under development. In our forecasting process, we adjust our sales estimates and the resulting cash flows with success probabilities to obtain risk-adjusted expected values.

Using First Berlin methodology, which takes company-specific risk factors into account, we derive a cost of equity of 15.0% for Pluristem. As the company has no debt, we estimate a WACC of 15.0%, which we use to discount the projected cash flows. Including our projected net cash of \$2.4m by the end of full-year 2008/09 (30 June 2009), we value Pluristem at \$40.0m. The company currently has 12.5m shares outstanding, implying a new fair value per share of \$3.20 (\$5.50).

Using our ten-factor risk analysis, we determine a High risk rating for Pluristem. The main risk factors we identify are development risk, financing risk, regulatory risk and commercialisation risk, including reimbursement.

Sum-of-the-parts model

	Risk-adjusted value (\$'000)	% of total	Risk-adjusted peak sales (\$m)	Status	Probability of success
PLX-PAD peripheral artery disease	19,200	51%	220	IND cleared, starting Phase I	18%
PLX-IBD inflammatory bowel disease	6,200	16%	120	Late preclinical	5%
PLX-BMT and stroke, multiple sclerosis, others	7,200	19%	> 600	Preclinical	3%
Bioreactor technology platform	5,000	13%			
EV group	37,600	100%			
+ Net cash / - net debt	2,400				
Shareholder value	40,000				
Diluted number of shares (m)	12,500				
Fair value per share (\$)	3.20				
Current share price (\$)	1.23				
upside	160%				
First Berlin assumptions					
Peak sales	<i>Sales potential achieved within five years of market launch at retail selling prices</i>				
Terminal value	<i>Salvage value, at approx. 0.4x - 0.6x sales from last forecasted year</i>				
WACC	15.0%				

Table 2

Source: First Berlin

Our sum-of-the-parts model shows that \$19.2m or 51% of the company's value can be attributed to its lead drug candidate PLX-PAD. We believe our estimated value for this drug candidate is appropriate, compared with prices (in-/out-licensing products) paid in the industry. We recall that in 2007, Spanish peer Cellerix out-licensed US rights for its Phase II-III drug candidate Cx401 to specialty pharma company Axcan. The transaction volume was some \$40m (upfront and milestone payments) in addition to scaled royalties based on sales. Considering that European rights for the product are still unlicensed (a similar deal could be achieved in Europe), we consider our valuation of PLX-PAD – to initiate Phase I



trials in H1 2009 – appropriate. Moreover, in November 2008, Osiris licensed Phase II drug candidates Prochymal and Chondrogen to Genzyme for an upfront payment of \$130m plus potential significant milestone and royalty payments that can amount up to \$1.25bn. In our view, these deals underscore the tremendous value added to a drug candidate when the drug advances past the development stage.

II. PEER GROUP COMPARISON

As is often the case with small-cap biotech companies, there are almost no listed firms truly comparable to Pluristem relating to strategy, technology, programme depth (including development stage), indications and risk profile. However, we identify a broad peer group consisting of 10 companies, five of which are US, Canadian and Australian peers active in the stem cell therapeutic field. The remaining five are US and Canadian biotech companies which develop immunotherapy and biologic products.

The difficulty here is that Pluristem, similar to some of its peers, is at an early development stage. As a result, we take the enterprise value (EV) as a rough absolute valuation, and examine this figure in comparison to the strength of the underlying technology, as well as the depth and size of the pipeline. We choose to quantify Pluristem's pipeline strength by estimating the development head start of its peers, measured by the number of years Pluristem would need to catch up with its peers. On average, Pluristem is 2.1 years behind our chosen stem cell peers and 4.2 years behind the immunotherapy peers. We use these figures to discount the respective EVs (to be interpreted as future EVs) to the present, using an estimated WACC of 15% and adjusted by our calculated average 65% probability of the company achieving the development stage of its peers.

Peer group comparison

Companies	Share price (\$)	Market cap (\$m)	Net cash / debt (\$m)	EV (\$m)	IND filed or close to filing	Phase I	Phase II	Phase III	Total Indications	Head start (years)	PV of EV (\$m)
Stem cell biotech											
Osiris Therapeutics (US)	18.94	602.5	-5.5	608.1	1	1	1	2	8	4.0	
Cytori Therapeutics (US)	3.22	94.2	12.9	81.3	1	1	0	0	2	2.5	
Aastrom Biosciences (US)	0.44	63.9	15.3	48.5	1	1	1	1	4	3.0	
Mesoblast (AU)	0.64	77.4	8.0	69.4	2	0	2	0	4	0.5	
StemCells, Inc. (US)	1.56	126.7	16.2	110.5	0	1	0	0	1	0.5	
Median stem cell biotech		94.2		81.3						2.1	39.4
Immunotherapy & biologics											
Cell Genesys (US)	0.26	22.6	-44.0	66.6	1	1	0	1	5	5.0	
Dendreon Corp (US)	3.42	331.5	100.0	231.5	4	1	0	1	7	5.0	
Antigenics (US)	0.38	25.2	-69.6	94.8	0	2	0	1	5	4.0	
IDM Pharma (US)	1.77	44.7	18.0	26.7	0	1	3	1	5	4.0	
Methylgene (CN)	0.32	11.6	28.0	-16.4	4	0	1	0	13	3.0	
Median immunotherapy and biologics		25.2		66.6						4.2	24.1
Pluristem fair value (PV of EV1)	3.34	41.8	2.4	39.4	1	1			2		
Pluristem fair value (PV of EV2)	2.12	26.5	2.4	24.1	1	1			2		
Assumptions											
WACC		15%									
Probability of success into Ph. II-III		65%									

Table 3

Source: Bloomberg, First Berlin

Based on the median discounted EVs of our peer sub-groups, we calculate a peer group valuation range of \$24.1m to \$39.4m. Assuming a valuation in line with its peers, metrics



imply a valuation for Pluristem of \$2.12-\$3.34 per share. We note that \$3.34 is derived from the stem cell companies, the group to which Pluristem belongs. Therefore, we believe our peer group analysis confirms our stock valuation of \$3.20 per share produced by our sum-of-the parts valuation model.

We note that recent transactions in the industry underscore our conservative valuation. For example, on 19 February 2008, Abbott announced it had taken a \$5m stake in Mesoblast subsidiary Angioblast, valuing the IND-stage subsidiary at more than \$127m. Similarly, Roche acquired the IND-stage Canadian antibodies company Arius Research on July 2008 for CAD \$191m (\$153m).

RECOMMENDATION

Based on the valuation analysis from our sum-of-the-parts model, and confirmed by our peer group analysis, we reduce the price target for Pluristem to \$3.20 (\$5.50). Most of the price target reduction can be explained with the dilution caused by capital increases. The number of shares outstanding almost doubled from 6.9m (by 30 June 2008) to currently 12.5m. However, we believe the company will add significant value to the pipeline over the coming months as the lead drug candidate PLX-PAD received FDA clearance to start Phase I clinical trials. We consider this a very important milestone for the company, which we believe will attract the attention of investors and the broader stem cell community. As a result, we see significant upside potential to the current low share price and therefore reiterate our Buy rating.



INCOME STATEMENT ANALYSIS

All figures in \$'000	2004/05	2005/06	2006/07	2007/08	2008/09E	2009/10E	2010/11E
Revenues	0	0	0	0	0	0	0
Cost of goods sold	0	0	0	0	0	0	0
Gross profit	0	0	0	0	0	0	0
R&D expenses	-1,787	-1,299	-2,549	-4,393	-3,700	-5,200	-5,304
General and administrative expenses	-874	-1,033	-3,726	-6,036	-4,000	-4,100	-4,715
Know-how write-off	0	0	-1,963	0	0	0	0
Operating income (EBIT)	-2,661	-2,332	-8,238	-10,429	-7,700	-9,300	-10,019
Net financial result	563	-107	-191	-69	-62	-50	-45
Income before taxes & minority interests	-2,098	-2,440	-8,429	-10,498	-7,762	-9,350	-10,064
Net income / loss	-2,098	-2,440	-8,429	-10,498	-7,762	-9,350	-8,051
EPS US\$	-0.05	-0.04	-0.03	-1.63	-0.78	-0.75	-0.64
Diluted EPS US\$	-0.05	-0.04	-0.03	-1.52	-0.62	-0.75	-0.64
EBITDA	-2,627	-2,290	-8,181	-10,310	-7,575	-9,169	-9,882



BALANCE SHEET ANALYSIS

All figures in \$'000	2004/05	2005/06	2006/07	2007/08	2008/09E	2009/10E	2010/11E
Assets							
Current assets, total	2,099	2,538	6,053	2,107	3,812	3,924	2,136
Cash and cash equivalents	1,889	2,374	1,653	323	2,397	2,292	483
Marketable securities	0	0	3,758	1,185	800	1,000	1,000
Prepaid expenses	61	62	60	350	354	357	364
Other account receivables	148	101	582	249	261	275	288
Non-current assets, total	522	887	673	1,477	1,658	1,851	2,011
Property, plant and equipment	249	255	468	1,149	1,321	1,506	1,657
Long-term restricted deposits	27	29	125	201	203	205	207
Severance pay funds	28	57	81	127	133	140	147
Deferred issuance expenses	217	547	0	0	0	0	0
Total assets	2,620	3,425	6,727	3,584	5,469	5,775	4,147
Shareholders' equity & debt							
Current liabilities, total	451	734	733	1,072	1,066	1,080	1,185
Trade payables	185	285	365	622	602	602	692
Other current liabilities	90	285	211	296	302	308	314
Accruals	176	164	157	154	162	170	178
Long-term liabilities, total	366	3,335	97	183	187	178	196
Long-term debt	331	3,258	0	36	25	0	0
Accrued severance pay	35	77	97	147	162	178	196
Shareholders' equity, total	1,803	-644	5,897	2,329	4,217	4,517	2,766
Share capital	1	1	10	0*	0	0	0
Capital reserve	6,452	6,444	21,436	28,345	31,995	35,645	38,945
Capital to be issued	0	0	0	0	6,000	12,000	15,000
Other comprehensive loss	0	0	-30	0	0	0	0
Loss carryforward / retained earnings	-4,649	-7,089	-15,518	-26,016	-33,778	-43,128	-51,179
Total shareholders' equity & debt	2,620	3,425	6,727	3,584	5,469	5,775	4,147
* Share capital in 2007/08 shows the effect of a 1 for 200 reverse split performed on 26 November 2007							
Ratios							
Current ratio (x)	4.65	3.46	8.26	1.97	3.58	3.63	1.80
Quick ratio (x)	4.33	3.32	2.34	0.63	2.58	2.45	0.72
Equity ratio (as %)	68.8%	-18.8%	87.7%	65.0%	77.1%	78.2%	66.7%
Net debt	-1,197	1,333	-4,890	-696	-2,408	-2,520	-613
Capital employed (CE)	266	85	773	1,180	1,376	1,563	1,628
Return on equity (ROE)	-194.3%	-421.0%	-320.9%	-255.2%	-237.2%	-214.1%	-221.1%
Return on capital employed (ROCE)	-1230.1%	-1330.2%	-1920.3%	-1068.1%	-602.6%	-633.0%	-627.9%
Return on net assets (RONA)	-969.9%	-1391.5%	-1964.9%	-1075.1%	-607.5%	-636.4%	-504.5%



CASH FLOW ANALYSIS

All figures in \$'000	2004/05	2005/06	2006/07	2007/08	2008/09E	2009/10E	2010/11E
Net income	-2,098	-2,440	-8,429	-10,498	-7,762	-9,350	-8,051
Depreciation and amortisation	34	43	56	129	125	131	137
Investment in working capital	-70	188	-379	350	-21	0	87
Others (provisions, stock-based compensation, interest, etc.)	342	160	5,599	5,482	3,500	3,500	3,150
Operating cash flow	-1,792	-2,049	-3,152	-4,537	-4,159	-5,719	-4,676
CAPEX	-46	-50	-286	-840	-168	-191	-157
Free cash flow	-1,837	-2,099	-3,438	-5,377	-4,327	-5,911	-4,834
Financial cash flow	3,058	2,584	6,475	1,474	6,015	6,006	3,025
Change in cash	1,221	485	3,037	-3,903	1,689	95	-1,809
Cash, start of the year	669	1,889	2,374	5,411	1,508	3,197	3,292
Cash, end of the year	1,889	2,374	5,411	1,508	3,197	3,292	1,483
Y-o-y growth							
Operating cash flow	-18.5%	-14.4%	-53.8%	-43.9%	-8.3%	37.5%	-18.2%
Free cash flow	-12.1%	-14.2%	-63.8%	-56.4%	19.5%	-36.6%	18.2%
Financial cash flow	69.9%	-15.5%	150.6%	-77.2%	308.2%	-0.2%	-49.6%



APPENDIX

I) MANAGEMENT TEAM

Zami Aberman, CEO, joined Pluristem in 2005 and changed the company's strategy to therapeutic development in order to leverage Pluristem's key technology platform. He has held CEO and chairman positions in Israel, the US, Europe, Japan and South Korea, and has 20 years of experience in marketing and management mostly in the high-tech field. Mr Aberman serves as the Chairman of Rose Hitech Ltd., a private investment company; and has served in the past as the Chairman of VLScom Ltd., a private company specialising in video compression for HDTV and video over IP and as a Director of Ori Software Ltd., a company involved in data management. Prior to that, he served as the President and CEO of Elbit Vision Systems, which supplies inspection systems for the microelectronic industry. Mr Aberman has served as President and CEO of Netect Ltd., specialising in the field of internet security software and was the co-founder, President and CEO of Associative Computing Ltd., which developed an associative parallel processor for real-time video processing. He has also served as Chairman of Display Inspection Systems Inc., specialising in laser-based inspection machines and as President and CEO of Robomatix Technologies Ltd.

Yaky Yanay, CFO, has several years of management experience of public companies in the financial sector. Prior to joining Pluristem, Mr Yanay was the Chief Financial Officer of Elbit Vision System Ltd., a company engaged in automatic optical inspection. He has extensive experience in the financing and management of technology companies. He played a major role in planning and executing a turn-around plan for Elbit Vision System, including the completion of three acquisitions and the raising of more than \$20 million, resulting in a tripling of the company's revenues and attaining profitability. Mr Yanay began his financial career at Ernst & Young Israel in 1999, where he served as a manager of audit groups for the technology sector. He joined Ernst & Young's financial team after serving in the Israeli Ministry of Foreign Affairs from 1993.

Frida Grynspan was recently appointed Vice President of Research and Development. Dr Grynspan earned her Ph.D in Chemistry/Biochemistry from the University of Illinois in Chicago and her post-doctoral degree from Harvard Medical School/McLean Hospital. Prior to joining Pluristem, Dr Grynspan served as the VP of R&D at Gamida Cell, Ltd. where she was instrumental in bringing the company's first cell therapy product to a multinational multicenter Phase III clinical trial and helping develop its pipeline in haematological and cardiovascular indications. Previously, Dr Grynspan served as a Senior Scientist at Intelligene, Ltd. developing molecular biology-diagnostic and therapeutic tools, and as an Instructor and Biochemist at Harvard Medical School. Dr Grynspan has extensive experience in the fields of biochemistry, cell biology and molecular biology and has authored numerous scientific papers in the fields of autoimmune and degenerative diseases.



II) INTRODUCTION TO STEM CELLS

DISTINGUISHING DIFFERENT TYPES OF STEM CELLS

Stem cell therapy, a novel approach for treating diseases, generally consists of giving living cells (i.e. injected or transplanted) to patients, which will then act as classical drugs. Generally, there are two types of stem cell collection and transplants: 1) 'autologous', where the patient's own stem cells are used, and 2) 'allogenic', where cells are sourced from a genetically compatible donor. The higher the compatibility, which in the case of autologous transplants is 100%, the lower the risk of severe complications, such as graft versus host disease and death. However, allogenic products, from a commercial perspective, are more attractive.

All cells and tissue in the human body originate from stem cells, which are capable of continuously propagating and differentiating into various kinds of cells or tissues. MSCs are very different to totipotent embryonic stem cells (taken from living embryos and can develop into any cell in the body), which have been the focus of media and public criticism due to moral and ethical concerns.

MSCs can be isolated from several sources such as bone marrow, adipose, skin, cord blood, placenta, retina, etc. and are multipotent cells, meaning that under the right stimuli they have the potential to differentiate (so called plasticity) into various types of tissue such as muscle, bone, cartilage, fat, tendon, etc. (Herzog et al. 2003; Horwitz et al. 2005). As such, MSCs can offer a cure for disorders in which defective or missing cells could be replaced via stem cell transplantation. MSCs have shown to be regenerative cells that promote tissue repair in the body by modulating immune responses and protecting damaged tissue; they can even migrate to inflammation sites to influence inflammation processes and the immune system (Aggarwal et al. 2005).

In addition there are a second type of adult stem cells, known as haematopoietic, which in general cohabit with MSCs and are related to blood preservation, as they can, in particular, develop into various cell types found in the blood such as red blood cells, lymphocytes, leucocytes, etc. There is already a lot of research in progress worldwide on adult stem cells, evidenced by thousands of scientific articles published in leading journals and magazines. However, despite the significant scientific strides, adult stem cell research is still in its infancy.

CLASSIFICATION OF STEM CELLS

Stem cells represent the beginning of life. All cells and tissues of the human body originate from these cells, which are capable of continuously propagating and differentiating into various kinds of cells or tissues. They can be classified into broad categories based on their ability of differentiation:

- 1) **Totipotent stem cells** are only found in early embryos (1-3 days) and are capable of forming a complete organism.
- 2) **Pluripotent stem cells** exist in the undifferentiated inner-cell mass of the blastocyst (5-



14 days) and can form any of the more than 200 different cell types found in the body. Pluripotent stem cells derive from frozen embryos and are bred in a laboratory. The embryos normally will not survive when stem cells are taken out, which has ethical implications. Pluripotent stem cells can potentially carry an increased risk of cancer due to their very early stage of differentiation. The extraction of, and research with, these embryonic stem cells is forbidden in Germany.

3) **Multipotent stem cells** derive from foetal tissue, umbilical-cord blood, placenta blood and adult stem cells. These can only differentiate into a limited number of cell types, limiting their ability to differentiate more than pluripotent stem cells. Multipotent stem cells are already differentiated to some degree but can still form a number of tissues, which has proved to be successful in cell-based therapies. Therefore, one cell type develops into blood cells, another into muscle, bone or connective tissue. Bone marrow or peripheral blood stem cells contain adult stem cells which give rise only to white and red blood cells.

4) **Unipotent stem cells** can only form one class of tissue.

III) BACKGROUND INFORMATION ON PLURISTEM

EVOLVING FROM A TECHNOLOGY TO A DRUG DEVELOPING COMPANY

Pluristem Therapeutics, Inc. is a regenerative, cell-therapy company focused on the production and commercialisation of cell therapy products for the treatment of an array of degenerative, malignant, and other tissue-related disorders. The company's primary production process uses mesenchymal stem cells (MSCs) harvested and cultivated from the placenta through Pluristem's proprietary PluriX 3D Bioreactor (the Bioreactor) technology. Based in Haifa, Israel, Pluristem has a staff of 30, the majority of which function in a research and development capacity. Pluristem has experienced staff with extensive professional backgrounds in the biological and health care sciences.

The company was incorporated in the US in May 2001 with an original business model of developing and streamlining artificial intelligence software. In May 2003 Pluristem restructured itself to focus on the biotechnology industry, specifically in the realm of stem cell production technology. The company decided to further develop the 3D Bioreactor system and purchased patents for the Plurix Bioreactor technology from the Technion-Israel Institute of Technology and the Weizmann Institute of Science in May 2007. After realising the huge competitive advantage emerging from its unique PluriX 3D Bioreactor system, the company abandoned initial plans to market the technology, choosing instead to capture its full potential, generating value with the technology in-house by developing cell therapy treatments for a wide range of life threatening diseases.

PLURIX 3D – A UNIQUE SYSTEM TO EXPAND STEM CELLS

We see the Bioreactor as a core asset from Pluristem. This innovative system abandons the standard, two-dimensional cell culture techniques in favour of a three-dimensional stromal cell culture that creates an artificial physiological environment, giving MSCs the ability to grow



free of exogenous biological and pharmacological products (e.g. fibroblast growth factor -2, leukaemia inhibitory factor, etc.), which are required to expand cell cultures in the more typical two-dimensional process. This eliminates the risk of genetic instability and allows safer expansions of stem cells without the inclusion of artificial barbiturates.

Pluristem's Bioreactor system mimics the conditions in human bone marrow, where stem cells maintain their original form, meaning that they regenerate and multiply geometrically without differentiating into more complex or specialised cells. This is in our view an outstanding achievement, considering that MSCs have a predisposition to differentiate once they are out of their natural bone marrow environment. The size and scale of the Bioreactor is considerably larger than bone marrow tissue, thus allowing stem cell growth to be greatly expanded to dimensions suitable for commercialisation. The company has achieved stem cell expansion to unprecedented levels (as much as 10,000-fold), paving the way for the therapeutic use of MSCs.

Most expansion methods currently being used deliver a significantly inferior performance to Pluristem's Bioreactor. Aastrom's Replicell System for example, which uses a 2D bioreactor – a closed system to multiply stem cells through the addition of a medium with nutrients in the form of a therapy kit – claims to increase the volume of stem cells by 100-200 times in 12 days. The system is currently in a Phase III study in the US and CE-certificated in Europe. In addition, several academic institutions and scientists (Moezzi et al. Elsevier 2005; Denning-Kendall et al. Stem cells 2003) as well as other biotech companies are multiplying stem cells through more primitive methods; by adding growth factors called cytokines (e.g. Cell-Genix-Germany CE-certified for research; Gamida-Israel-Phase I study).

ALLOGENIC MSCS PROVIDE A COMPELLING BUSINESS MODEL

Pluristem's technology platform is based on allogenic mesenchymal stem cells (MSCs) taken from the placenta. While most research on MSCs has been focused on bone marrow, several in-vitro studies show that the characteristics of MSCs from both sources are comparable. We see the placenta as an attractive source. Here, MSCs are in contact with two hosts, the mother and the baby, suggesting lower immunogenicity, which would not lead to the mother's rejection of the baby's cells. In the placenta, stem cells are also available in higher quantities and are more suited to clinical applications, thus making them good candidates for use in tissue repair.

A large number of studies have shown the ability of MSCs to repair tissue, which has been classically explained with their plasticity. However, recent studies suggest that MSCs frequently provided functional improvements without any evidence of engraftment or differentiation. These studies explain the mechanism of action with the secretion of a large number of cytokines and chemokines (Dr Prockop, Tulane Center for Gene Therapy). In addition, a growing body of evidence indicates that MSCs are immunoprivileged, meaning that they are not rejected by the patient's immune system and can therefore be used without any HLA matching (compatibility based on HLA, which are antigens on cells that strongly influence human allotransplantation and transfusions in patients). These properties pave the way for



their highly attractive allogenic use. We believe that, following initial success in the sector, pharmaceutical companies will be more attracted to allogenic products, which enable a business model similar to classical drugs.

PLX cells are mesenchymal-like stromal cells derived from full term placentas and expanded in Pluristem's unique 3 Dimensional (3D) PluriX™ Bioreactor System. This system provides a 3D microenvironment that enables the large scale growth of these cells. PLX cells are stable adhesive cells that can be expanded in vitro without showing signs of phenotypic or karyotypic changes.

Pluristem's data suggests that PLX cells possess a wide range of therapeutic potentials. The immunophenotypic profile presented by PLX cells escape allo-recognition and reduce the T cell response, suggesting that they have the potential to modulate the immune response. Pluristem's data suggests that PLX cells induce a selective immunomodulatory response where the modulatory effect of PLX cells do not require cell-to-cell interaction and can also be observed following the separation of PLX cells from lymphocytes by a membrane which enables the passage of soluble molecules.

Thus, PLX cells appear to provide a cellular therapeutic modality that, by supplying the necessary environment, allows a host tissue to repair itself. In vitro data demonstrating the anti-inflammatory and immunomodulatory properties of PLX and in vivo biodistribution studies revealing the rapid clearance of PLX from the injection site strongly suggest that the mechanism of action of PLX cells is via paracrine secretion.

**FIRST BERLIN RECOMMENDATION & PRICE TARGET HISTORY**

Report No.:	Date of publication	Previous day closing price	Rating	Price target	Interim high	% change to high
Initial Report	2 June 2008	\$1.88	Buy	\$5.50	€2.03	8.0%
2	Today	\$1.35	Buy	\$3.20	-	-

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STRONG BUY: Expected return greater than 50% and a high level of confidence in management's financial guidance

BUY: Expected return greater than 25%

ADD: Expected return between 0% and 25%

REDUCE: Expected negative return between 0% and -15%

SELL: Expected negative return greater than -15%

Our risk ratings are Low, Medium, High and Speculative and are determined by ten factors: corporate governance, quality of earnings, management strength, balance sheet and financing risk, competitive position, standard of financial disclosure, regulatory and political uncertainty, company size, free float and other company specific risks. These risk factors are incorporated into our valuation models and are therefore reflected in our price targets. Our models are available upon request to First Berlin clients.

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