

Biotechnology

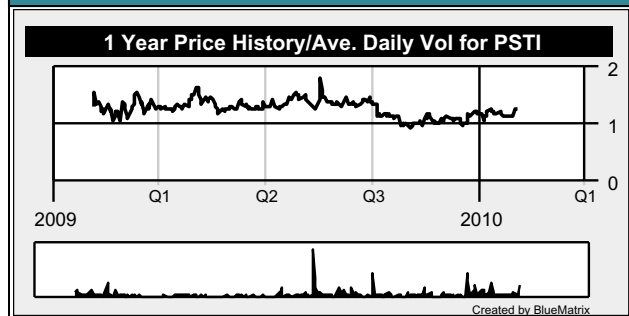
Pluristem Therapeutics, Inc. | PSTI - \$1.20 - NASDAQ | Buy

Initiation of Coverage

Stock Data	
52 Week Low - High	\$0.82 - \$1.85
Shares Out. (mil)	18.50
Mkt. Cap.(mil)	\$22.2
3-Mo. Avg. Vol.	125,828
12-Mo.Price Target	\$2.00
Cash (mil)	\$2.3
Tot. Debt (mil)	NM
Est. 3Yr. EPS Growth	NA

EPS (\$)			
Yr Jun	2009	—2010E—	—2011E—
	Actual	Curr	Curr
1Q	(0.29)A	(0.11)A	—
2Q	(0.09)A	(0.15)E	—
3Q	(0.17)A	(0.09)E	—
4Q	(0.12)A	(0.10)E	—
YEAR	(0.63)A	(0.40)E	(0.53)E
P/E	NM	NM	NM

Revenue (\$ millions)			
Yr Jun	2009	—2010E—	—2011E—
	Actual	Curr	Curr
1Q	—	—	—
2Q	—	—	—
3Q	—	—	—
4Q	—	—	—
YEAR	—	0.0E	0.0E



Pluristem: Profits That Could Stem From Cells

- We initiate coverage of Pluristem Therapeutics with a BUY rating and \$2/share price target.** Pluristem is engaged in developing stem cells for unmet clinical needs. The company is currently engaged in a Phase 1 clinical study of PLX-PAD to treat chronic limb ischemia. We are bullish on PSTI shares for 3 reasons.
- Reason # 1** – PSTI's first drug, PLX-PAD, has potential as a treatment for chronic limb ischemia (CLI, a severe form of peripheral artery disease), which is currently in a pair of Phase 1 clinical studies. CLI can result in limb amputation. Currently, there is not a good non-surgical treatment for CLI, and we believe that PSTI's treatment could be promising. Phase 1 clinical studies of PLX-PAD are underway. Preliminary results (to be clear, on only 3 patients) are showing progress, and a Phase 2 clinical study could begin later this year.
- Reason # 2** – PSTI's approach does not rely on systematic delivery. Past "issues" with stem cell therapeutics have been caused, at least in part, with reliance on systematic delivery. Pluristem has demonstrated (preclinically) that its PLX-PAD treatment can be effective when dosed locally (intramuscularly): this reduces risk both with regards tumorigenicity and activity, in our opinion.
- Reason # 3** – Significant upside. Development of stem cells as potential drugs has been ongoing for years, with many hiccups along the way. We believe that translation of stem cell technology to a useful therapeutic is simply an issue of time, and that PSTI could benefit from years of accumulated experience paid for by other companies.
- Catalysts upcoming.** Pluristem expects to have final Phase 1 data on PLX-PAD (to treat CLI) in the first half of 2010, and to start a Phase 2 clinical study in the second half of 2010. We believe that both of these events could be meaningful price catalysts
- Price target \$2/share.** Our target price is a composite of: 1) \$1.50/share for PLX-PAD [assuming \$0.16 in 2015 EPS subject to a 20X P/E discounted at 20%], 2) \$0.50/share for technology. See valuation.

INVESTMENT THESIS

We initiate coverage of Pluristem Therapeutics with a BUY rating and a 12-month price target of \$2/share: ~75% above current trading. Pluristem Therapeutics is an early stage biotech company focusing on discovery and development of stem cell technology. Stem cells are naturally produced cells that have the potential to form into different types of tissue and, as such, offer the possibility of treating diseases caused by cellular degradation.

KEY INVESTMENT POINTS

We highlight 3 reasons why we are bullish on PSTI shares.

Reason #1 – Stem cells have great promise

Stem cells have the potential to form into any tissue. Much time and effort has been dedicated to developing stem cell therapies. Pluristem is in an enviable position, in that it can build upon the experiences (and money spent) of other companies. We believe that the state of stem cell therapeutics is such that an approved product in the next few years seems inevitable, and that Pluristem stands to benefit from this. Pluristem is currently engaged in a Phase 1 clinical study of PLX-PAD to treat peripheral artery disease. Results, admittedly from a small subset of patients, have been encouraging and, specifically, "...demonstrated a trend towards efficacy with a reduction in their Rutherford Category, a measure of the severity of their limb ischemia". We expect that the company could begin a Phase 2 clinical study of PLX-PAD by the end of 2010.

Reason #2 – PSTI's approach does not rely on systematic delivery

Past "issues" with stem cell therapeutics have been caused, at least in part, by reliance on systematic delivery. Pluristem has demonstrated (preclinically) that its PLX-PAD treatment can be effective when dosed locally (intramuscularly): this reduces risk both with regards tumorigenicity and activity, in our opinion.

Reason #3 – Significant upside

We believe that the next 12 months will be positive for PSTI's share price. This motivates our \$2 price target. Our price target is based on a composite of \$1.50/share for projected earnings for fiscal 2015 of \$0.16 (subject to a 20X P/E multiple, discounted to early 2011 at 20%), together with a valuation of \$0.50/share for the company's technology.

Key risks to our investment thesis include negative regulatory outcomes, an inability to continue manufacturing product, or a general downturn in market conditions. A full discussion of risks is included in the Risks section.

Near term price catalysts

Near term price catalysts for PSTI are presented in Table 1.

Table 1: Near term price catalysts for PSTI.

Event	Timing
PLX-PAD Phase 1 data	Q1 2010
Initiation of Phase 2 PLX-PAD study	H2 2010
Initiation of next Phase 1 clinical study	H2 2010

Source: Roth Capital Partners LLC Research

About stem cells

Despite the myriad of different cell types in the body (>200), every cell has its genesis in a single fertilized egg. Stem cells are formed early in human development, and have the ability to develop into any type of cell: stem cells are often referred to as undifferentiated.

The lack of specificity of stem cells is such that, theoretically, they can grow to any type of tissue—this has the potential to produce new tissues to supplant damaged ones. Stem cells have been touted as treatments for many diseases, for example, Parkinson's disease (PD). PD is characterized by dysfunction in dopamine production, and could be theoretically treated by taking these unspecialized stem cells, growing them into new dopamine neurons, and then implanting them in a Parkinsonian brain.

Legal status

Stem cells harvested from embryos appear to have the most potential to treat disease. In the US, this caused some controversy about the ethics of harvesting stem cells, and President Bush banned use of federal research funding for embryonic stem cell work. In 2009, President Obama lifted this ban.

Adult stem cells (from, for example, bone marrow) do exist, and have been demonstrated to have some ability to form different types of tissue. The applicability of adult stem cells has not been found to be as broad-reaching as embryonic stem cells.

Pluristem's approach

Pluristem is all about developing stem cells as a means to treat disease. Pluristem's approach is different from other stem cell companies in that it uses stem cells derived from human placentas. After child birth, placentas are typically treated as medical waste and disposed of. In essence, PSTI takes these placentas that would otherwise be discarded and "recycles" them to produce potential therapies for disease. Use of placental stem cells circumvents some potential ethical issues associated with embryonic stem cell use.

COMPANY PROFILE

OVERVIEW

Pluristem is an Israeli company, and is incorporated in Nevada. From 2003 to 2006 the company focused on developing cell therapeutics. In 2006, the company changed its focus to develop stem cell therapies.

The company’s pipeline, shown graphically in Figure 1, consists of:

PLX-PAD to treat critical limb ischemia (CLI, an “end stage” form of peripheral artery disease), currently in a pair of Phase 1 clinical studies in Germany and the US.

Figure 1: Pluristem Therapeutics pipeline

	2010A/E		2011E		2012E		2013E		2014E		2015E	
	1HEA	2HE	1HE	2HE	1HE	2HE	1HE	2HE	1HE	2HE	1HE	2HE
PLX-PAD (CLI)	Phase 1	Phase 2			Phase 3			BLA		Market		

Source: PSTI Company Reports and Roth Capital Partners LLC Research

Additionally, PSTI is engaged in preclinical studies to apply its stem cell technology to treat inflammatory bowel disease, stroke, and multiple sclerosis: the company expects to begin a second clinical program in 2010, but has not decided on a specific indication.

Stem Cell Therapeutics Could Be New Paradigm In Treating Disease

Stem cells can, in theory, replace nearly any type of tissue in the body. Specific diseases that could benefit from stem cell therapies include cardiovascular disease, neurologic diseases (such as stroke, Alzheimer’s and Parkinson’s disease), liver disease, and spinal cord injury.

...But what will the FDA say?

Stem cell transplantation (to treat disorders involving bone marrow dysfunction) has been used since 1968. The FDA has not, however, approved a discrete stem cell therapeutic. Stem cell clinical studies have been carried out: for example, Osiris (OSIR) is performing clinical studies using stem cells derived from bone marrow (preliminary results on a Phase 3 study to treat graft versus host disease did not show a difference between treatment and placebo arms in the primary measure), StemCells (STEM) is engaged in Phase 1 clinical studies using neural stem cells (STEM did experience a “hiccup” when a patient died in a Phase 1 study to treat Batten’s disease), and Aastrom Biosciences (ASTM) is pursuing clinical studies using autologous stem cells derived from patients themselves. The first clinical study using embryonic stem cells (sponsored by Geron, GERN, to treat spinal cord injury) began in January 2009 (this study was subsequently placed on clinical hold by the FDA).

The path to FDA acceptance of a stem cell therapeutic is unclear, and this adds risk to any investment in stem cell technology. The FDA is permitting clinical trials of stem cell therapeutics to proceed. We do not believe that it would be medically ethical for the FDA to place patients at potentially mortal risk if it did not believe that a path to approval of these agents will be present in a timely manner.

What Pluristem is doing

Pluristem is using stem cells derived from human placentas to treat disease. After child birth placentas are, typically, considered medical waste and are disposed of accordingly. PSTI is able to process the placenta to extract stem cells using its proprietary "Plurix three-dimensional bioreactor system". Currently, this system is able to extract sufficient cells from a single placenta to treat 30 patients. We would expect that as this process is refined that the company will be able to increase its efficiency, and extract more stem cells (and treating more patients) per placenta.

PLX-PAD: Pluristem's first clinical program

Phase 1 clinical studies of Pluristem's first therapy, PLX-PAD (to treat chronic limb ischemia, CLI) are underway in both Europe and the US. A larger Phase 2 study could begin by the end of 2010.

Chronic limb ischemia (CLI)

CLI is a severe form of peripheral arterial disease (PAD, a vascular dysfunction caused by restricted blood vessels). Left unchecked, CLI can result in limb amputation. Current treatments for CLI require some type of direct physical intervention: for example, surgery or placement of a balloon or stent, to keep blood flowing correctly.

Prevalence

Estimates of the extent of CLI vary. Data from Inter-Society Consensus for the Management of Peripheral Arterial Disease (TASC II)¹ suggest an incidence of CLI in the US and Europe of 500 to 1,000 per 1 million population. In the US, this suggests a range between 150,000 and 300,000. A subsequent report² suggested that 1% of Americans aged 50 and above could suffer from CLI. Based on current census data showing the population of Americans over 50 to be 50 million, this extrapolates to a patient population of 500,000. We note that CLI is a disease of aging, and we expect that the incidence of CLI could increase as the average age of Americans increases. Despite the uncertainty in prevalence, with only direct physical interventions currently available, we believe that a biologic treatment would be of value.

PLX-PAD for the treatment of CLI

Preclinical data

PLX-PAD derives its biological effect by stimulating blood flow. More specifically, a paper published by PSTI suggests that this biological activity is derived from cytokine (immunological cells that provide tissue healing) release.³ Using contact Doppler laser measurements, the company was able to show (statistically significant) increases in blood perfusion above placebo of 20 to 30%. Further, the company was able to show substantial increase in capillary density, an important marker in vascularization.

Pluristem has published preclinical mouse data on PLX-PAD.^{4,5} Highlights of these papers demonstrated that, in ~90 mice, no significant pathologic changes were observed. PLX-PAD, unlike some stem cell therapies, is administered via intra-muscular injection. In the above reports, it was noted (based on measurement of murine versus human DNA) that there was no migration of the intra-muscularly implanted stem cells. By contrast, PLX-PAD cells administered intra-venously did show substantial cell migration, which can be a potential issue in terms of tumorigenicity.

Clinical data

In July 2009, PSTI dosed the first patient in a Phase 1 clinical study of PLX-PAD to treat CLI in Germany. In September 2009, the company announced that it had dosed the first patient in a companion study in the US. Note, these are separate trials that are similar. A comparison of the 2 studies is presented in Table 2: there are slight differences in primary endpoints. Also, the American study will incorporate 2 treatments, whereas the European study is limited to a single treatment. A total of 27 patients are expected to be enrolled in the 2 studies.

Table 2: Comparison of German and US-based Phase 1 clinical studies of PLX-PAD.

	Germany	USA
Condition	Peripheral arterial disease	Peripheral arterial disease
	Peripheral vascular disease	Peripheral vascular disease
	Critical limb ischemia	Critical limb ischemia
Dosing	Single treatment (multiple injections) IM	Single/double treatment (multiple injections)
	Low, intermed, high doses	IM Low, high doses
Primary endpoint	Safety, ECG findings after 3 months Immunological reaction	Incidence of amputation, rehospitalization, and death after Immunological reaction
	Secondary endpoint	Tumorigenesis after 24 months
Est. Primary data	Q4 2010	Q22010

Source: Roth Capital Partners LLC Research

In January 2010, Pluristem released interim data on its Phase 1 clinical program. The company announced that a third of the required patients (9) had been dosed. Of the 9 patients dosed, 3 had had their 3 month follow up. Of these patients, there was “a trend towards efficacy with a reduction in their Rutherford Category, a measure of the severity of their limb ischemia”. Importantly, there were no significant adverse events. Assuming that results of these studies continue to be positive, the company expects to initiate a double-blind, placebo-controlled, Phase 2 clinical study in the second half of 2010.

Odds of success

Data on PLX-PAD, while encouraging, are early. Further, stem cell therapies (outside of transplants) are a new area for the FDA. Based on preclinical and interim clinical data, we believe that odds of PLX-PAD gaining approval in calendar 2014 are 20%. As the therapy progresses through clinical study we will update our estimate accordingly.

Competing potential product

Aastrom Biosciences is engaged in a Phase 2 clinical study using stem cells to treat CLI. This is a more advanced program than is PSTI's, and the company expects to report interim data in H1 2010. ASTM's approach to stem cells is different from PSTI's in that it uses stem cells derived from the patient's own bone marrow. Mechanistically, this adds an uncomfortable step, in that the bone marrow needs to be extracted from the patient, and then sent to Aastrom's facility in which the progenitor cells are overexpressed, and then shipped back to the physician who will administer the treatment. We believe that Pluristem's approach is advantageous in terms of time and patient discomfort. Nevertheless, if the Aastrom product is approved first it will add competition.

Path forward

Assuming success in PSTI's current Phase 1 clinical studies, the company expects to begin a Phase 2 clinical study (double-blind, placebo-controlled) in the second half of 2010. In a best case scenario, we believe that PLX-PAD could be launched in the second half of calendar 2014 (note, PSTI's fiscal year ends in June).

Figure 2: Estimated Pluristem Therapeutics pipeline.

	2010A/E		2011E		2012E		2013E		2014E		2015E	
	1HEA	2HE	1HE	2HE	1HE	2HE	1HE	2HE	1HE	2HE	1HE	2HE
PLX-PAD (CL)	Phase 1	Phase 2			Phase 3			BLA			Market	

Source: PSTI Company Reports and Roth Capital Partners LLC Research

INTELLECTUAL PROPERTY

Pluristem has an issued patent covering the manufacture of its stem cells (US patent 6,911,201, filed in 1999), as well as several pending applications, both US and foreign, covering specific diseases.

BUSINESS OUTLOOK

PSTI's current clinical pipeline consists of PLX-PAD (to treat CLI). We believe that in a best case scenario, PLX-PAD could be on the market in mid-2014. A Phase 1 clinical study of PLX-PAD (to treat CLI) began in July 2009: results could be released in the first half of 2010. PLX-PAD is Pluristem's only clinical candidate and, we believe, represents the majority of its value.

PLX-PAD Estimates

Our assumption for potential patient population for a drug to treat CLI in the US is 200,000. This figure is based on data from Inter-Society Consensus for the Management of Peripheral Arterial Disease together with US Census data. We note that CLI is a disease of aging, and we expect that the incidence of CLI should increase as the average age of Americans increases.

Our assumptions for PLX-PAD in the US are as follows:

- We assume that odds of approval are 20%, and that the drug will be launched in Q3 of calendar 2014 (Q1 of fiscal 2015 for PSTI).
- We assume a patient size of 200,000 the US in 2014, increasing by 5% annually.
- We assume maximum market penetration of 45%, achieved logarithmically in 5 years.
- We assume pricing of \$30,000 per patient, increasing at 10% annually.
- We assume that revenue in Europe is 50% of that in the US.
- We assume that PSTI partners PLX-PAD and receives a 25% net royalty on sales.

Application of these assumptions is presented in Table 3.

Table 3: Revenue assumptions for PLX-PAD.

	FY2015	FY2016	FY2017	FY2018	FY2019
Potential patients (US)	200,000	210,000	220,500	231,525	243,101
% Penetration	15	25	35	40	45
Risk adj (20%) annual treatments	6,000	10,500	15,435	18,522	21,879
Cost/treatment	30,000	33,000	36,300	39,930	43,923
Total US revenue (\$000)	180,000	346,500	560,291	739,583	960,996
Total EU revenue (\$000)	90,000	173,250	280,145	369,792	480,498
Total revenue (\$000)	270,000	519,750	840,436	1,109,375	1,441,494
Royalty (25%) to PSTI	67,500	129,938	210,109	277,344	360,374

Source: Roth Capital Partners LLC

VALUATION

Our 12 month price target for PSTI shares is \$2/share. Our valuation is based on:

- 1) \$1.50/share for PLX-PAD. Currently the most tangible of PSTI's products, our estimate of the potential for PLX-PAD to treat CLI translates into project 2015 EPS of \$0.16. The \$1.50/share figure is derived by taking this EPS estimate and applying a 20X P/E, and subjecting to a 20% annual discount rate. Table 4 shows current and projected P/E ratios of currently profitable biotech companies. Table 5 depicts a matrix showing various price scenarios for PSTI shares based on assumption of \$0.16 of EPS from PLX-PAD in 2015.

Table 4: P/E ratios of profitable biotech company's.

Ticker	Company	MC (\$ millions)	P/E	Forward P/E
ALXN	Alexion	4,030	56.1	36.4
AMGN	Amgen	57,620	12.4	10.4
BIIB	Biogen Idec	15,340	17.8	12.1
CELG	Celgene	26,570	72.1	22.0
CEPH	Cephalon	4,860	18.0	10.4
GENZ	Genzyme	14,230	30.6	15.7
GILD	Gilead	4,280	18.4	12.9
	Average	18,133	32.2	17.1
	Median	14,230	18.4	12.9

Source: Roth Capital Partners LLC Research

Table 5: Possible price scenarios for PSTI shares based on estimated 2015 EPS of \$0.16.

		Discount Rate (%)				
		15	20	25	30	35
P/E Multiple	15	1.36	1.15	0.98	0.83	0.72
	20	1.82	1.53	1.30	1.11	0.96
	25	2.27	1.91	1.63	1.39	1.19
	30	2.72	2.30	1.95	1.67	1.43

Source: Roth Capital Partners LLC Research.

- 2) \$0.50/share for technology value. This 50 cent figure (which represents ~\$10 million of market cap) is somewhat arbitrary, however, we believe that given the stage and technologic potential of stem cell therapies that is it reasonable.

Factors that would impede the stock from reaching our target price include negative results in upcoming clinical trials, delays in submissions to the FDA, failure to receive approvals from the FDA, increased competition, lessened confidence in the company's pipeline, financing risk, changes in government regulation, and an adverse change in general market conditions. We further point out that any estimate of earnings 4 years in the future, for a therapy that has yet to complete a clinical study, is bound to have a high degree of uncertainty.

MANAGEMENT

Zami Aberman, President & CEO: Mr. Aberman has been with Pluristem since September 2005, he has held Chief Executive and Chairman positions in Israel, the USA, Europe, Japan and Korea. 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. In 1992, Mr. Aberman was awarded the Rothschild Prize for excellence in his field from the President of the State of Israel. Mr. Aberman holds a B.Sc. in Mechanical Engineering from Ben Gurion University in Israel.

Yaky Yanay, VP Finance & CFO: 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. 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 since 1993. Mr. Yanay holds a bachelor's degree with honor in business administration and accounting from the College of Management Studies in Rishon Le Zion, Israel and is a Certified Public Accountant in Israel.

William R. Prather RPh, MD, Senior VP Corporate Development: Dr. Prather is a Registered Pharmacist as well as a Board Certified Internist and Geriatrician. Dr. Prather received his B.S. in Pharmacy and M.D. from the University of Missouri. He was also Fellow in Geriatric Medicine at Harvard University. Dr. Prather co-founded Panacos, Inc., and has been on the Boards of several public and private companies, including Boston Biomedica Inc. (a public medical diagnostics company), PriMed (a private medical device company), MdBio (a Maryland healthcare venture firm).

Frida Grynspan, PhD, VP Research & Development: Dr. Grynspan earned her Ph.D. in Chemistry/Biochemistry from the University of Illinois, Chicago, was a post-doctoral fellow at Harvard Medical School/McLean Hospital. Prior to joining Pluristem, Dr. Grynspan has served as Senior Scientist at Intelligene Ltd., a developer of 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.

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VALUATION

Our model of PSTI provides for a 12 month price target of \$2/share. Our valuation is based on:

- 1) \$1.50/share for PLX-PAD. Currently the most tangible of PSTI's products, our estimate of the potential for PLX-PAD to treat CLI translates into project 2015 EPS of \$0.16. The \$1.50/share figure is derived by taking this EPS estimate and applying a 20X P/E, and subjecting to a 20% annual discount rate. Table 4 shows current and projected P/E ratios of currently profitable biotech companies. Table 5 depicts a matrix showing various price scenarios for PSTI shares based on assumption of \$0.16 of EPS from PLX-PAD in 2015.
- 2) \$0.50/share for technology value. This 50 cent figure is somewhat arbitrary, however, we believe that given the stage and technologic potential of stem cell therapies that is it reasonable

RISKS

- Negative results of ongoing and upcoming clinical trials of PLX-PAD (and future drug candidates)
- Delays in submitting approvals to the FDA
- Failure to receive new approvals from the FDA
- Lack of financing
- Changes in laws and regulations that could have and adverse effect in the company's business
- Competition and pricing pressures
- Partnering risks
- Slower than anticipated sales growth
- Manufacturing and product supply issues
- Reimbursement issues
- Negative outcome of patent litigation disputes
- Any disruption of management
- Shareholder lawsuits
- Stock volatility common with early stage biotech concerns
- Currency fluctuation
- Geopolitical risk, the company carries out most of its operations in Israel, a country that has been subject to issues with terrorism

COMPANY DESCRIPTION

Pluristem Therapeutics, Inc. is a biopharmaceutical company engages in the development and commercialization of novel Stem cell therapeutics. Its lead product candidate, PLX-PAD, is a placental-based stem cell therapeutic to treat chronic limb ischemia. Phase 1 clinical studies of PLX-PAD are underway, and the company expects to have results in the first half of 2009.

PSTI is incorporated in Nevada, though it carries out the bulk of its operations in Israel.

MENTIONED COMPANIES

Pluristem Therapeutics Inc.
 2009 Through 2016 Income Statements
 (\$in thousands except per share data)
 June year end

	June FY09A	Sept Q110A	Dec Q210E	Mar Q310E	June Q410E	June FY10E	June FY11E	June FY12E	June FY13E	June FY14E	June FY15E	June FY16E
Revenues:												
PLX-PAD royalty	-	-	-	-	-	-	-	-	-	-	56,250	108,281
Other revenues	-	-	-	-	-	-	-	-	-	-	-	-
Total revenues	-	-	-	-	-	-	-	-	-	-	56,250	108,281
Costs & expenses												
Cost of goods sold						-					7,000	12,994
Research & development	4,792	1,356	1,500	1,500	1,750	6,106	10,000	15,000	20,000	25,000	28,000	30,000
Less participation of Office of the Chief Scientist	(1,651)	(489)				(489)						
R&D expenses, net	3,141	867	1,500	1,500	1,750	5,617	10,000	15,000	20,000	25,000	28,000	30,000
General & administrative	3,417	770	800	800	900	3,270	4,000	6,000	8,000	10,000	15,000	20,000
Total expenses	6,558	1,637	2,300	2,300	2,650	8,887	14,000	21,000	28,000	35,000	50,000	62,994
Financial income, net	(78)	20	25	25	25	95	100	100	100	100	100	100
Net income (loss)	(6,636)	(1,617)	(2,275)	(2,275)	(2,625)	(8,792)	(13,900)	(20,900)	(27,900)	(34,900)	6,350	45,388
Earnings per share	(0.63)	(0.11)	(0.15)	(0.09)	(0.10)	(0.40)	(0.53)	(0.77)	(0.93)	(1.13)	0.16	0.83
Basic and diluted shares	10,603	14,523	15,000	25,000	25,500	21,833	26,000	27,000	30,000	31,000	40,000	55,000

Source: PSTI company reports and Roth Capital Partners LLC estimates

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Pluristem Therapeutics Inc.

Balance sheet

(\$ in thousands except per share data)

June year end

	<u>6/30/08A</u>	<u>6/30/09A</u>	<u>9/30/09A</u>
Assets			
Current assets:			
Cash and equivalents	323	2,339	2,141
Marketable securities	1,185	-	-
Prepaid expenses	350	100	129
Acct receivable from Office of Chief Scientist	119	383	207
Other accts receivable	130	113	120
Total current assets	2,107	2,935	2,597
Long term deposits and restricted deposits	201	171	171
Severance pay fund	127	154	186
Property and equipment, net	1,149	1,203	1,254
Total assets	3,584	4,463	4,208
Liabilities			
Current liabilities			
Trade payables	622	487	489
Accrued expenses	154	81	77
Other accts payable	296	272	323
Total current liabilities	1,072	840	889
Long term obligation	36	23	-
Accrued severance pay	147	206	248
Total liabilities	1,255	1,069	1,137
Stockholders' equity			
Common stock, \$0.000001 par	-	-	-
Additional paid in capital	28,345	36,046	37,340
Accumulated deficit	(26,016)	(32,652)	(34,269)
Total shareholders' equity	2,329	3,394	3,071
Total liabilities and shareholders' equity	2,294	4,463	4,208

Source: PSTI company reports and Roth Capital Partners LLC estimates

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Pluristem Therapeutics Inc.

Statement of cash flow

(\$ in thousands except per share data)

June year end

	<u>6/30/08A</u>	<u>6/30/09A</u>	<u>9/30/09A</u>
Operating activities			
Net income (loss)	(10,498)	(6,636)	(2,242)
Adjustments to reconcile net income to net cash provided by operating activities			
Depreciation	129	173	42
Impairment of property and equipment	47	5	
Stock based comp to employees and directors	4,204	1,957	520
Stock based comp to non-employee consultants	561	149	23
Stock based comp to service providers	275	133	49
Changes in:			
Accounts receivable, net	336	(247)	(41)
Prepaid expenses	(308)	250	(43)
Trade payables	237	(54)	(118)
Other accts payable and accrued expenses	74	(96)	(62)
Amortization of discount and changes in accrued interest from marketable securities	(1)	(3)	(3)
Loss from sale of investments of available-for-sale marketable securities	31	75	75
Impairment and realized loss on available-for-sale marketable securities	372		
Accrued severance pay, net	4	32	(5)
Net cash provided (used in) operating activities	(4,537)	(4,262)	(1,805)
Cash flows from investing activities			
Purchase of property and equipment	(840)	(313)	(183)
Proceeds of sale of property and equipment	3	-	
Investments in LT deposits	(85)	(8)	(2)
Repayment of LT restricted deposits	6	38	25
Purchase of avail for sale marketable securities	2,201	1,113	1,113
Net cash provided (used in) investing activities	1,285	830	953
Cash flows from financing activities			
Proceeds from issuance of common stock	2,246	5,462	2,510
Receipts on account of shares	(368)	-	
Receipt of LT loan	49	-	
Proceeds from repayment of LT loan	(5)	(14)	(3)
Repayment of LT loan			
Net cash provided (used in) Financing activities	1,922	5,448	2,507
Net change in cash and equivalents	(1,330)	2,016	1,655
Cash and cash equivalents at beginning of period	1,653	323	232
Cash and cash equivalents at end of period	323	2,339	1,978

Source: PSTI company reports and Roth Capital Partners LLC estimates

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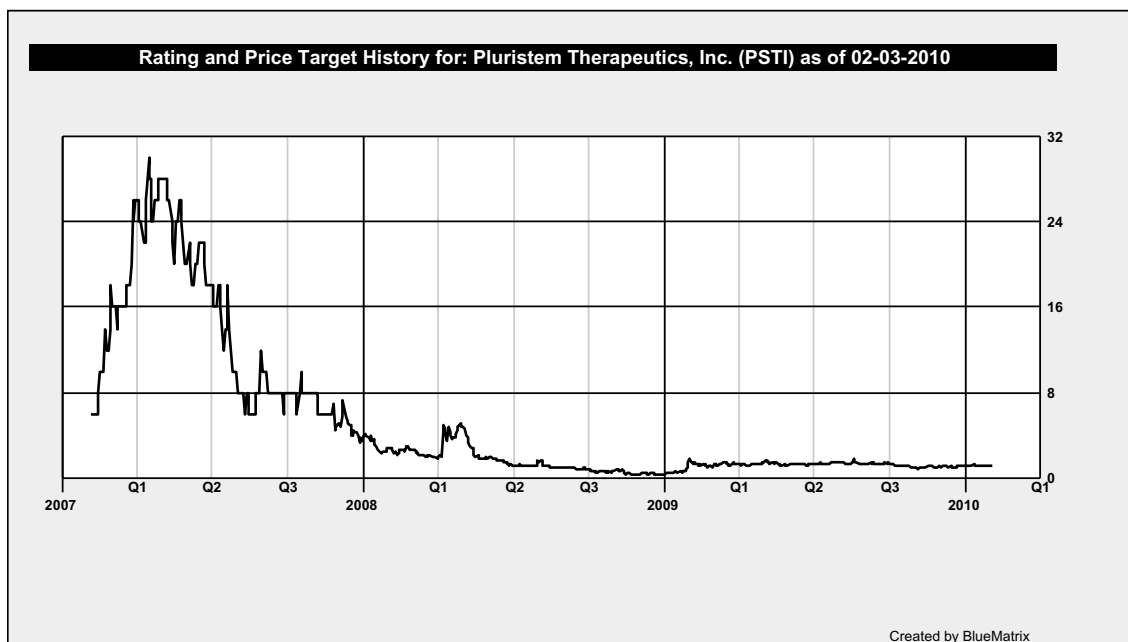
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Disclosures:

Within the last twelve months, ROTH has received compensation for investment banking services from Pluristem Therapeutics, Inc.

Within the last twelve months, ROTH has managed or co-managed a public offering for Pluristem Therapeutics, Inc.



Each box on the Rating and Price Target History chart above represents a date on which an analyst made a change to a rating or price target, except for the first box, which may only represent the first note written during the past three years. **Distribution Ratings/IB Services** shows the number of companies in each rating category from which Roth or an affiliate received compensation for investment banking services in the past 12 month.

Distribution of IB Services Firmwide

Rating	Count	Percent	IB Serv./Past 12 Mos. as of 02/05/10	
			Count	Percent
BUY [B]	167	72.9	25	15.0
HOLD [H]	58	25.3	0	0
SELL [S]	4	1.7	0	0
NOT RATED [NR]	0	0.0	0	0

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Ratings System Definitions - ROTH employs a rating system based on the following:

Buy: A security, which at the time the rating is instituted and or reiterated, indicates an expectation of a total return of at least 10% over the next 12 months.

Hold: A security, which at the time the rating is instituted and or reiterated, indicates an expectation of a total return between negative 10% and 10% over the next 12 months.

Sell: A security, which at the time the rating is instituted and or reiterated, indicates an expectation that the price will depreciate by more than 10% over the next 12 months.

Not Rated: A security which at the time the rating is instituted and or reiterated, indicates that we have no opinion or expectations as to the price of the security over the next 12 months.

Not Covered (NC): ROTH does not publish research or have an opinion about this security.

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