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In this edition...
Selecting ten stocks (out of more than 100) that are expected to post great returns over a twelve month period is an ambitious undertaking in the world of biotech.
Setbacks can appear unexpectedly and without warning, causing share prices to plummet.
Assuming things do go to plan, we expect our list of ten picks for 2011 to offer good returns, although some stocks may peak earlier in the year, enabling investors to lock in some profits and pick up stocks that have yet to run.
This year's selection includes Pharmaxis, which could do well if and when Bronchitol gains European approval, and Somnomed, a stock in the sleep medicine area which recently broke into profitability.
The Editors
Companies Covered: ACL, BTA, BNO, CUV, PYC, PXS, SHC, SOM, SRX, SPL

	Bioshares Portfolio
Year 1 (May '01 - May '02)	21.2%
Year 2 (May '02 - May '03)	-9.4%
Year 3 (May '03 - May '04)	70.0%
Year 4 (May '04 - May '05)	-16.3%
Year 5 (May '05 - May '06)	77.8%
Year 6 (May '06 - May '07)	17.3%
Year 7 (May '07 - May '08)	-36%
Year 8 (May '08 - May '09)	-7.3%
Year 9 (May '09 - May '10)	49.2%
Year 10 (May '10 - Current)	32.0%
Cumulative Gain	**284%**
Av Annual Gain (9 yrs)	**18.5%**

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Bioshares

14 January 2011
Edition 392

Delivering independent investment research to investors on Australian biotech, pharma and healthcare companies.

The Bioshares Top 10 Picks for 2011

As measured by commercial deals, it was a stunning year for the Australian biotech sector in 2010. In the year ahead, positive sentiment and interest in the sector is set to continue and improve as biotech companies move through pivotal phases of their commercialisation pathways.

For investors looking at this sector, one point that must always be considered is that of locking in profits when times are good. The biotech sector is generally sentiment driven. This means that stocks generally become overbought at some period during the upswing, and are also oversold when sentiment turns sour. As a general rule when stocks double, investors should consider locking in some profits.

With this in mind, we take a look at our top 10 sector picks for 2011, with a focus on stocks that are due to move through major inflection points in 2011 or companies that expect to see strong operational growth. The investment mindset is to be on the lookout for stocks that will become the high achievers of 2011, in the way that Mesoblast and Acrux were in 2010.

The following 10 stocks have been selected from the **Bioshares Model Portfolio**, noting that **Somnomed** has been placed in the portfolio this week.

Alchemia (ACL: 73 cents)
(Share price change in 2010: -13%)

In what seems like an interminable wait, Alchemia is expected to shortly receive approval from the FDA for its generic fondaparinux (fonda) product, a synthetic heparin drug. Once approved, the generic drug will be sold by **Dr Reddy's** into the US market.

We expect the product to gain rapid penetration of the market, taking in excess of 40% market share. Our expectation is that Alchemia should enjoy a profit share of between $36-$50 million a year from the US market.

Approval of fonda may also trigger a crystalisation of value in the company's Phase III cancer drug program, called HA-Irinotecan, which will begin once fonda approval is received. And this domino effect may continue; if Alchemia can show HA-Irinotecan works (i.e. incorporating the cancer drug irinotecan in hyaluronic acid), then there is the potential to use the platform with many other existing cancer drugs to improve targeting and effect on tumour tissue.

Correction – Bioshares 391
On the front page of Bioshares 391, the Biotech Sector KPIs table incorrectly showed capital raised for 2011 as being $763 million. The correct figure was $554 million, as totalled on the table on page 3.

Summary – Bioshares Top 10 Picks for 2011

Company	Code	CMP	Cap'n ($M)	Investment Thesis
Alchemia	ACL	$0.73	$140	Fondparinux approval expected shortly
Bionomics	BNO	$0.34	$108	Drivers from interim data from multiple clinical trials
Biota Holdings	BTA	$1.28	$231	Potential early traction for Inavir in Japan
Clinuvel Pharmaceuticals	CUV	$2.14	$65	EU regualtory approval submission
Pharmaxis	PXS	$3.00	$678	European approval and launch of Bronchitol in Europe
Phylogica	PYC	$0.077	$22	Expects to sign three more library access deals in 2011
Sunshine Heart	SHC	$0.035	$35	Completion and positive results from feasability trial
Somnomed	SOM	$0.94	$38	Strong growth in unit sales to be maintained for FY2011
Starpharma Holdings	SPL	$0.84	$202	Platform technology base to continue to yield new partnerships, launch of condom microbicide product
Sirtex Medical	SRX	$6.12	$341	Shipping from Singapore facility to commence 2011 H1, return to strong sales growth

The wait has been lengthy for Alchemia and its shareholders, spanning almost a decade. That long wait may be rewarded with a considerable share price improvement upon fonda approval.

Bioshares recommendation:
Take profits on fonda approval (short term)
Speculative Buy Class A (long term)

Biota Holdings ($1.28)

(Share price change in 2010: -59%)

Biota Holdings saw its share price peak in late October 2009 at $3.47 in the midst of a global flu pandemic fear and the announcement by **GlaxoSmithKline** that it was going to triple its production capacity of Relenza to 190 million treatment courses. Biota receives a 7% royalty from Relenza sales (10% in Australia and New Zealand).

Its share price fell to and remained at around 90 cents in the second half of last year. The market has been disappointed in the drop off in Relenza royalties and the inability to complete a licensing deal for the next generation flu drug, Inavir, by mid 2010, which was the original expectation of the company.

Inavir is a long acting flu drug that needs to be taken only once. The drug was launched into the Japanese market in late 2010.

The reality is that first the company needs to see what sort of inroads Inavir can make into the Relenza/Tamiflu market in Japan. This will dictate the demand to commercialise the drug outside of Japan, where further clinical testing is required.

We estimate Biota will receive around a 4% royalty from product sales in Japan. However it has a 50% ownership outside of Japan. Its Japanese partner, **Daiichi Sankyo**, believes it can sell four million courses by the end of March this year, which we calculate should generate sales of around $200 million. Inavir is priced at a 30% premium to the other flu drugs. We have previously estimated the seasonal market for flu drugs at $375 million a year.

Inavir is a potential game changer for Biota. The other game changer for the company may be its rhinovirus program, with the company investing $25 million into a Phase IIb trial. Biota Holdings is capitalised at $231 million. It had $105 million in cash at the end of June, 2010.

The company will receive Relenza royalties out to 2014 in major regions outside of Japan, and in Japan up to 2019. Royalties from Inavir sales in Japan will be reported and paid quarterly. There is a very long patent life on Inavir extending out to 2027.

Bioshares recommendation: **Speculative Buy Class A**

Bionomics (BNO: 34 cents)

(Share price change in 2010: -17%)

There are a few major forks in the road ahead for Bionomics in the first six months of 2011. Bionomics is expecting clinical trial results from both of its clinical stage compounds. Its major shareholder, Start-up Australia, has also initiated a tender sale process for its stake, which would trigger a sale of the company if its proceeds.

Bionomics has the leading vascular disrupting agent in development, called BNC105. The drug works by breaking up tumours from the inside by selectively destroying tumour blood vessels. Interim results from a 152 patient Phase I/II study (in the USA) in people with kidney cancer are expected to be released in the first quarter of 2011. This interim data will look at the safety aspect of dosing BNC105 with another cancer drug Afinitor. Some interim efficacy data, such vascular disruption as measured by biomarkers in the blood stream and images of tumour destruction, will be received.

Once the maximum tolerated dose is determined, the trial will expand into a Phase II trial to compare Afinitor against a combination of Afinitor with the maximum tolerated dose of BNC105. The end point will be the improvement in progression-free survival at six months. This data is not expected until 2012.

By mid 2011, Bionomics also expects to receive interim data from its Phase II trial of BN105 (in Australia) in 60 patients with mesothelioma. This is a very difficult cancer to treat but one worth trying, particularly given the highly vascularised nature of the lung. Final results should be out in 2012.

The company is also anticipating results in the first quarter of 2011 from two Phase Ib studies (in Europe) with its alternative anxiety/depression treatment drug candidate, BNC210. The program is seeking to deliver the next, improved version of Valium or Prozac. The first trial will investigate how effective BNC210 is in reducing induced panic-like symptoms. The second trial will investigate what effect BNC210 has on memory and its sedation effects compared to an existing drug, Lorazepam, which is closely related to Valium.

Bionomics is capitalised at $108 million and had $12.6 million in cash at the end of June last year.

Bioshares recommendation: **Speculative Buy Class A**

Clinuvel Pharmaceuticals (CUV: $2.14)

(Share price change in 2010: -23%)

One stock that has been largely overlooked by the market is Clinuvel Pharmaceuticals. Clinuvel has developed a depot injection, called Scenesse, that increases the melanin density of the skin for a two month period. Clinuvel listed on the ASX in 2001. Last year the company gained reimbursement for its product in Italy at a price of €32,250 for one year's treatment. The product is now being sold in Italy and the company expects to file its drug for wider regulatory approval by the third quarter of 2011.

The product is being target at people with severe sun intolerance conditions such as EPP (erythropoietic protoporphyria), which may be worth around $50 million. This is an orphan drug condition. However there is the potential to widen the application to other groups, such immuno-compromised patients who have undergone an organ transplant and are taking a regime of immune suppression drugs. Potentially the treatment would be used to prevent the formation of skin cancers which is common in this subset of patients. This market is estimated to be worth between $140-$200 million a year.

An even larger potential market is the treatment of non-segmental vitiligo, which is a discoloration of areas of the skin. This market is estimated at around $400 million a year.

The challenge for Clinuvel is that it needs to establish the markets it is seeking to enter. An attractive feature of the product is that it seeks to address an unmet clinical need. The company has a very driven team that is determined to get this product to market and to make it a commercial success.

Over the last 18 months the company has conducted very positive dialogue with European and US regulators, where the need for such a therapy has been acknowledged, the safety profile has been considered and should be accepted with existing data, and awareness amongst patient groups has been extremely well communicated.

Clinuvel is capitalised at $65 million and had $24 million cash at the end of September 2010.

Bioshares recommendation: **Speculative Buy Class A**

Phylogica (PYC: 7.7 cents)

(Share price change in 2010: -53%)

Phylogica could deliver strong returns in 2011 if it secures a further three collaborative research partnerships with pharmaceutical companies. By the end of the year, Phylogica could be in a cash-neutral position from operations.

Phylogica has developed libraries of drug-like peptides sourced from ancient bacteria. Its business model is to sign on drug companies that pay fees to access its libraries and then pay additional licence fees should they opt to develop one or more selected peptides further. A typical first step is the Phylogica library (or sub-libraries) is run through a set of screens. All screening is done by Phylogica at its premises in Perth. Royalty income becomes possible if a candidate eventually enters the market.

Revenues under these deals can see typical milestone payments of $1-$1.5 million on election to develop a screening program discovery candidate, US$1 million on the completion of toxicology studies, US$1 million on the completion of pre-clinical studies and $2 million when a Phase I program is commenced .

Towards the end of 2010, Phylogica struck a deal with **Pfizer**, with Pfizer seeking to discover peptide-based vaccines. The deal is written as a fee-based access arrangement that could progress to a license arrangement if a candidate is selected for further development. Phylogica stands to receive an upfront payment of US$500,000.

In August 2010 Phylogica signed on **MedImmune**, the biologics unit of **AstraZeneca**, in a deal whereby MedImmune will be seeking novel antimicrobial peptides, specifically to combat *pseudomonas aureginosa* infection. As of November, Phylogica had received $US1.125 million in payments with another US$375,000 expected in January.

In December 2009, **Roche** formed a collaboration with Phylogica to discover cell-penetrating peptides. This has progressed to the point where several cell-penetrating peptides have been discovered. Intracellular targets have been tractable by synthetic small molecule drugs, but not always with an optimal side effect profile. The logic of this discovery process is to discover peptides that could potentially be linked or joined to other active peptides or larger protein drug structures with high specificity to intracellular drug targets, and a minimized side effect profile.

Phylogica expects to conclude three more deals in 2011, based on discussions in play up to this time.

The appeal of the Phylogica business model is that as a platform technology play it has the ability to write many licensing deals, and of those may only need one or two clinical successes generate healthy long term revenues.

However, what is more likely to occur before those cash flows transpire is that Phylogica is acquired by one of its pharmaceutical partners which is looking to secure the IP around a promising candidate and to extinguish its royalty obligations, as well as fur-

ther leverage the potential of the Phylogica library through direct ownership.

A development at Phylogica in 2010 worth noting is that the company has brought on board a new CFO and VP-Corporate Development with experience both in biotech investment markets and in the biotech industry itself. Nick Woolf was formerly the Chief Business Officer of **Oxford Biomedica** and head of European Biotech Equity Research at **ABN Amro**. Woolf is an able communicator and presenter of the company's business model and ambitions.

Bioshares recommendation: **Speculative Buy Class B**

Pharmaxis (PXS: $3.00)

(Share price change in 2010: 10%)

Pharmaxis is verging on a significant step forward as a fully-integrated pharmaceutical company as it awaits news of European approval of Bronchitol as a treatment for cystic fibrosis. Bronchitol will be the subject of an oral hearing with European Medicines Agency in Q1 2011. Pharmaxis also expects to submit a New Drug Application for Bronchitol with the US FDA in Q1 2011 .

Bronchitol is a formulation of mannitol that is administered by inhalation. The mannitol powder stimulates the lungs to remove mucous that gathers in the lungs of people living with cystic fibrosis.

Pharmaxis has conducted two Phase III trials of Bronchitol, CF301 and CF302, with a component evaluating longer term use over 18 months included in the first trial (CF301).

Pooled data from the 26 week components of the two studies showed that patients who were treated with Bronchitol achieved a statistically significant average improvement of lung function from baseline of 7.3%.

In a sub-group of patients who were also taking Pulmozyme (marketed by Roche), use of Bronchitol improved lung function by 5.3%. For patients not on Pulmozyme therapy, the improvement in lung function was 9.4% from base line.

A recent related event that may work in Bronchitol's favour was the recent Phase III (TIGER-2) failure of Inspire Pharmaceuticals' denufosol, an ion channel modulator that corrects a defect in ion transport. In this the second of two Phase III trials conducted over 48 weeks in 466 patients, there was no statistically significant difference between placebo and denufosol for three endpoints of rate of change in lung function, change from baseline for FEV (forced expiratory volume), and time to first pulmonary exacerbation.

These results were in contrast to the first Phase III trial (TIGER-1) which showed that denufosol achieved a statistically significant 45 ml difference in FEV between treatment groups at week 24.

Pharmaxis experienced a setback with its second Phase III trial not achieving statistical significance on its primary endpoint of absolute change in FEV from baseline. However, if the baseline is adjusted to back to the date the trial commenced (i.e. when lung function measurements were first made), the CF302 trial recorded a statistically significant difference of 71 ml improvement over the control arm, a result that is closer to the 93 ml difference between the treatment arm and the control arm in the CF301 study.

While Bronchitol's foremost benefit may be that it can improve lung hygiene for CF patients and contribute to extending the life span of CF sufferers, the fact that it does not need to be delivered through a nebulizer, as doesPulmozyme, will make it more attractive to patients because it is portable and takes much less time to administer.

If Bronchitol achieves a rapid market uptake in Germany and the UK, the two markets Pharmaxis expects sales to first commence, then confidence in the company's ability to follow through in other European countries and possibly in the US will increase.

Bioshares recommendation: **Speculative Buy Class A**

Sirtex Medical (SRX: $6.12)

(Share price change in 2010: -20%)

Sirtex Medical continues to sit below the radar of investors. The company is covered by only a few analysts and a long running legal dispute, now resolved, made the company unattractive for many years.

The company sells a radiation therapy (SirSpheres) for the treatment of liver cancer, post surgery. Small beads irradiated with Ytrium-90 are inserted into the artery that feeds the liver. The beads selectively lodge in tumours and the radiation then destroys the tumour.

Sirtex Medical posted sales of $64.3 million in FY2010, from dose sales of 4,171, and a net profit of $16 million. At September 30, 2010 the company retained cash of $44 million.

The company uses two facilities to manufacture its SirSpheres product, including the Australian nuclear facility at Lucas Heights near Sydney and a fully-owned facility in Wilmington, Massachusetts. A third facility in Singapore is expected to be operational in the first half of 2011.

Sirtex is aiming to grow sales of SirSpheres in several ways. It is aiming to grow sales in existing and new territories of the product under its approved use as a later stage or salvage therapy treatment in secondary liver cancer; by establishing it as an earlier stage treatment for secondary liver cancer; by establishing it as a treatment for primary liver cancer; and by expanding its use over the longer term into other cancer indications, such as kidney cancer

Sirtex is currently sponsoring two major studies of SirSpheres used in conjunction with chemotherapy. The SIRFLOX study is a 450 patient study evaluating SirSpheres in conjunction with FOLFOX chemotherapy as a first line treatment for patients with inoperable liver cancer or with liver cancer that has originated

from the bowel. The goal of the FOXFIRE study (490 patients) is to compare SirSpheres combined with chemotherapy to see if it is superior to chemotherapy alone. Two other major studies in treating primary liver cancer are also under way in 375 and 360 patents respectively.

Sirtex plans to conduct a study (RESIRT) in patients with kidney cancer to establish the feasibility and safety of the therapy in that disease. Between 15 and 24 patients would be enrolled in this exploratory study.

Sirtex is unusual amongst Australian medical product companies in that it wholly owns, manufactures and markets its product globally. The company is also debt free.

One of the investment attractions with Sirtex is that it is a very tightly held stock. Sirtex is a stock held by the **Hunter Hall** investment group, with a 31% stake. Founder Dr Bruce Gray owns 26.38% (down from 29%). **Platypus Asset Management** has increased its stake in 2010 and now holds 10.65%.

The aim of the company is to grow sales at a rate in excess of 30% a year. The introduction of capacity from the Singapore facility could make available an annual dose output of nearly 5,000 units.

Bioshares recommendation: **Buy**

Somnomed (SOM: $0.94)

(Share price change in 2010: 14%)

Somnomed has been quietly gaining momentum as it matures into a profit generating medical product company with significant growth opportunities in global markets.

Somnomed markets a mandibular splint (a dental appliance) to treat mild-to-moderate sleep apnea, bruxism and snoring. The device is customised for each patient, with qualified dental surgeons fitting the device.

The company generated sales of $10.7 million in FY2010, up 38% from the previous year. Volume sales were 19,583 units, up 56% from the previous year. The US accounted for 68% of sales in FY2010, with Europe and Australia each accounting for 16%. Somnomed recorded a profit of $800,000 in FY2010.

The company listed in 2004 and had a rocky history until the current CEO Ralf Barschow, an experienced dental products executive, was appointed in July 2007. For the last twelve months or so the stock has traded around the $1 level, following four years of stagnation around the $0.45-$0.50 range (adjusted for 20:1 share consolidation in November 2009).

The investment driver for Somnomed is the same driver that has sustained growth in Resmed sales for more than a decade, which is a condition prevalent in 20% of the population but is very poorly served. Moderate sleep apnea is prevalent in 13% of the population and severe sleep apnea in 7% of the population according to a 2002 study. Somnomed is a beneficiary in a market in which complementary approaches can be applied to treat sleep apnea. Other approaches include CPAP devices, surgery and implants.

Somnomed expects to sell 28,000 sleep apnea units in FY2011, and 2000 units of its bruxism product. Total unit sales for the September quarter, 2010 were 5,160.

What makes Somnomed's sleep apnea treatment interesting from a revenue point of view is that it is nurturing a new channel to sell the device, with dental surgeries being a major focus, in addition to sleep physicians and sleep labs.

Dental practitioners have a history of strong commercial focus and should the product find favour with them as a valuable source of revenue then the opportunity for a major growth on product sales could occur. Somnomed has established a dental sleep professionals program to support dentists seeking to specialize in fitting Somnodent appliances. Dentists must qualify through an oral sleep medicine program before they can become an affiliated dental sleep professional.

By developing and maintaining a distinct connection to the dental sleep profession, Somnomed is opening up a revenue base that is not subject to competitors from the CPAP device space, such as Resmed and Respironics.

Although many different mandibular splints exist, the SomnoDent product appears to have jumped ahead of the pack, based on a superior design and the use of patient friendly flex materials that is used in the bite zone.

Recently Somnomed signed an exclusive agreement with **Zephyr Sleep Technologies** for MATRx, a product that is based on remote controlled mandibular technology. This technology will be made available to sleep labs and other testing centres to allow technicians to measure and control placement of the device.

We are factoring in a possible capital raising by Somnomed in the near term, to access funds to secure and expand market opportunities, and possibly to bring on board institutional investors onto the register.

Bioshares recommendation: **Buy**

Starpharma Holdings (SPL: $0.84)

(Share price change in 2010: 20%)

Starpharma is carving up and carving out in as many ways as possible product and application opportunities from its dendrimer chemistry platform. Dendrimers are synthetic, branch like chemical structures that can be engineered very precisely. The addition of smaller functional groups on the periphery or even with the greater structure is what makes the chemistry so versatile.

Areas of application include in human and veterinary medicine, including drug delivery, for use in diagnostics, in water purification, in inks and coatings, in lab reagents, in cosmetics and with agricultural chemicals.

A feature of the Starpharma business model that makes it somewhat more attractive to investors is that has a low cash burn despite maintaining interests in many different programs. The company's net cash outflow (before new capital) was $2.9 million in FY2009 and $3.9 million in FY2010. Partners either pay Starpharma to complete work on their behalf or conduct development work at their own expense.

Starpharma has a drug delivery collaboration with **Eli Lilly**, with Eli Lilly's animal health division **Elanco**, with **Stiefel Laboratories** (part of **GlaxoSmithKline**), and also with an undisclosed partner. It also has an agricultural chemical collaboration with an undisclosed partner.

Starpharma is developing Vivagel initially as a microbicide for women to prevent the transmission of HIV and HSV.

A further product concept developed for Vivagel is for the treatment of bacterial vaginosis. Bacterial vaginosis is a common infection, affecting approximately one-third of the female adult population. The current treatment regime is the administration of antibiotics, however, high rates of recurrence are associated with antibiotic use. Starpharma commenced a dose ranging Phase II trial in 2010 in 132 patients. Two Phase III trials (200 patients in each trial) that would aim to establish the effectiveness of Vivagel in preventing recurrence of the infection, are also planned. Vivagel, used to suppress bacterial pathogens associated with vaginosis, may also be in conjunction with acute antibiotic treatment to break the recurring cycle.

However, the more interesting application from a revenue perspective is the application of Vivagel as a condom coating, the objective being the inactivation of HIV, HSV and HPV. Starpharma partnered with **SSL** to develop a condom coated with Vivagel in September 2008. In 2010, SSL was acquired by the consumer products group **Reckitt Benckiser** for £2.5 billion, with the acquisition posited by some analysts as an early strike on the forthcoming Vivagel coated condoms.

Starpharma anticipates receiving upwards of $100 in license income and royalty payments from this product line, with in excess of $30 million of revenue a year if product inclusion is high in the SSL condom range. The market launch is expected this year.

Bioshares recommendation: **Speculative Buy Class A**

Sunshine Heart (SHC: 3.5 cents)

(Share price change in 2010: -5%)

It will be a crucial year ahead for Sunshine Heart. The company has development the C-Pulse device, which wraps around the aorta and improves blood flow from the heart throughout the body. In November the company had implanted 16 patients with the device in a 20 patient feasibility trial. The objective is that positive results from that trial will place the company in a position to co-list the company on the Nasdaq and raise sufficient funds, around $40 million, to bring its product to market.

The results so far, based on results from surgeons, cardiologists and patients, is that the device works very well. The company has made a major advance by implanting the device through a minimally invasive procedure. Further improvements are occurring in reducing the size of the unit. However, the main drawback on the current system is that it is not fully implantable with wires protruding through the skin from the device to the driver unit. This is source of infection for patients, which occurs in around 25% of patients, similar to LVAD (heart pump) systems. The company has plans to develop a fully implantable system.

Sunshine Heart is seeking to ride on the success and share market interest from another heart pump device company, Heartware International, which is now capitalized at $1.3 billion. Sunshine Heart is capitalised at only $35 million. It recently completed capital raisings to bring in an additional $13.2 million of funding (before costs).

A pivotal study for the company will involve somewhere between 250-300 patients. If the feasibility study can deliver some clear positive results, then the company will be well placed to finance the final stage of commercialization of its product.

Following the feasibility study, the company may also become an attractive acquisition target for a larger medical device group that would be prepared to complete the commercialisation of the first system and also develop a fully implantable system.

Whilst the C-Pulse system does not deliver the level of improvement to that of an LVAD system, there is a larger potential market to address in Class III heart failure patients. The LVAD system is designed largely to treat the more serious Class IV heart failure patients. The major advantages of the C-Pulse system over the LVADs is that it does not come in contact with the blood stream, and it can be disconnected at any time without causing any harm to the patient.

Bioshares recommendation: **Speculative Buy Class B**

Bioshares

Bioshares Model Portfolio (14 January 2011)

Company	Price (current)	Price added to portfolio	Date added
Somnomed	$0.94	$0.94	January 2010
Phylogica	$0.077	$0.053	September 2010
Sunshine Heart	$0.035	$0.036	June 2010
Biota Holdings	$1.28	$1.09	May 2010
Tissue Therapies	$0.70	$0.21	January 2010
QRxPharma	$1.42	$0.25	December 2008
Hexima	$0.37	$0.60	October 2008
Atcor Medical	$0.10	$0.10	October 2008
Impedimed	$0.77	$0.70	August 2008
Patrys	$0.10	$0.50	December 2007
Bionomics	$0.34	$0.42	December 2007
Cogstate	$0.24	$0.13	November 2007
Sirtex Medical	$5.85	$3.90	October 2007
Clinuvel Pharmaceuticals	$2.14	$6.60	September 2007
Starpharma Holdings	$0.82	$0.37	August 2007
Pharmaxis	$3.00	$3.15	August 2007
Universal Biosensors	$1.54	$1.23	June 2007
Acrux	$3.50	$0.83	November 2004
Alchemia	$0.73	$0.67	May 2004

Portfolio Changes – 14 January 2011

IN:
Somnomed has been added to the portfolio at 94 cents – See page 5

OUT:
Circadian Technologies has been removed from the portfolio, with the stock having more investment drivers in the longer term, rather than the short term.

2010 Bioshares Top Six Stocks Results

Company	Share price (20 Dec 2009)	Share Price (31 dec 2010)	Change
Mid Caps			
Acrux	$2.10	$3.54	69%
Starpharma Holdings	$0.64	$0.84	31%
Mesoblast	$1.36	$4.67	243%
Chemgenex Pharmaceuticals	$0.96	$0.46	-52%
Achemia	$0.62	$0.63	2%
		Av	**59%**
Small Caps			
Atcor Medical	$0.20	$0.09	-54%
Patrys	$0.14	$0.10	-26%
Biodiem	$0.17	$0.15	-9%
Cogstate	$0.32	$0.24	-24%
BioMD	$0.06	$0.03	-52%
		Av	**-33.0%**
		Overall Average	**12.9%**

Performance of 2010 Bioshares Top 10 Stock Picks

2010 was certainly a year when the larger biotechs fared better in the Bioshares Top 10 Stock Picks. The top five mid cap stocks delivered an average gain of 59% for the year, largely due to Mesoblast and also Acrux and Starpharma.

The top five small caps all recorded falls in their share prices over the year, perhaps highlighting the ongoing effect of the difficult fund raising environment that continues post the Global Financial Crisis. Our top five picks for the year delivered an average 33% loss.

Overall the average gain for the top 10 picks was only 12.9% for the year.

Bioshares

How Bioshares Rates Stocks

For the purpose of valuation, *Bioshares* divides biotech stocks into two categories. The first group are stocks with existing positive cash flows or close to producing positive cash flows. The second group are stocks without near term positive cash flows, history of losses, or at early stages of commercialisation. In this second group, which are essentially speculative propositions, *Bioshares* grades them according to relative risk within that group, to better reflect the very large spread of risk within those stocks. For both groups, the rating "**Take Profits**" means that investors may re-weight their holding by selling between 25%-75% of a stock.

Group A

Stocks with existing positive cash flows or close to producing positive cash flows.

Buy	CMP is 20% < Fair Value
Accumulate	CMP is 10% < Fair Value
Hold	Value = CMP
Lighten	CMP is 10% > Fair Value
Sell	CMP is 20% > Fair Value

(CMP–Current Market Price)

Group B

Stocks without near term positive cash flows, history of losses, or at early stages commercialisation.

Speculative Buy – Class A
These stocks will have more than one technology, product or investment in development, with perhaps those same technologies offering multiple opportunities. These features, coupled to the presence of alliances, partnerships and scientific advisory boards, indicate the stock is relative less risky than other biotech stocks.

Speculative Buy – Class B
These stocks may have more than one product or opportunity, and may even be close to market. However, they are likely to be lacking in several key areas. For example, their cash position is weak, or management or board may need strengthening.

Speculative Buy – Class C
These stocks generally have one product in development and lack many external validation features.

Speculative Hold – Class A or B or C

Sell

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