

17 November 2010

Bionomics

Year End	Revenue (A\$m)	PBT* (A\$m)	EPS* (c)	DPS (c)	P/E (x)	Yield (%)
06/09	4.3	(6.2)	(2.5)	0.0	N/A	N/A
06/10	3.4	(7.4)	(2.5)	0.0	N/A	N/A
06/11e	3.8	(6.5)	(2.0)	0.0	N/A	N/A
06/12e	3.8	(6.7)	(2.1)	0.0	N/A	N/A

Note: *PBT and EPS are normalised, excluding goodwill amortisation and exceptional items; revenue is adjusted to exclude interest income, per IFRS. Excludes commercialisation revenue.

Investment summary: Fund sparks bid interest

Start-up Australia Ventures has put up for sale its 28% interest in Bionomics in the hope of attracting a trade buyer that would use it as a means to acquire control of the company. If a sale takes place to a single investor, the acquirer would be obliged to make an offer for the remaining shares. The move therefore introduces bid speculation into the shares. It may also affect Bionomics's own business development efforts.

VC fund seeks trade buyer for 28% stake

Bionomics's largest investor, Start-up Australia Ventures, has disclosed it is seeking a trade buyer for its 27.8% shareholding in the knowledge that a successful acquirer would have to mount a cash offer for the remaining shares. The tender process closes on 31 March 2011 – timed because of the availability of interim data from at least one of the two Phase II trials of BNC105 and the Phase Ib studies of BNC210.

Tender process will be independent of Bionomics

The tender process will inevitably drive the investment case in the short term, but will be conducted entirely independently of Bionomics. There is no guarantee that it will be successful and, even if it is, that an adequate offer would subsequently be made. The process could affect Bionomics's own licensing efforts, either positively or negatively, over the next four months. Bionomics intends to continue to execute its development and commercial strategy as planned, during the period.

Presentation of BNC210 at US Neuroscience conference

Meanwhile, Bionomics has presented more preclinical data on its anxiolytic compound BNC210 at the US Society for Neuroscience conference. The company is seeking to maintain a high profile, as it seeks to attract potential licensing partners.

Valuation: A\$175m based on risk-adjusted NPV

We maintain our A\$175m valuation of Bionomics based on a risk-adjusted net present value of the two key programmes. This is derived from our assessment of the potential economic reward and timelines associated with the successful development of BNC105 and BNC210.

Price 33c
Market Cap A\$104m

Share price graph



Share details

Code BNO/BMICY
Listing ASX/NASDAQ
Sector Biotech
Shares in issue 318.1m

Price

52 week High 41c Low 25c

Balance Sheet as at 30 June 2010

Debt/Equity (%) N/A
NAV per share (c) 7.8
Net cash (A\$m) 9.3

Business

Bionomics is an Australian biotech company focused on developing small molecule products for cancer, anxiety, epilepsy and multiple sclerosis. Its lead programmes are a VDA (BNC105) and an anxiolytic/anti-depressant compound (BNC210).

Valuation

	2010	2011e	2012e
P/E relative	N/A	N/A	N/A
P/CF	N/A	N/A	N/A
EV/Sales	N/A	N/A	N/A
ROE	N/A	N/A	N/A

Revenues by geography

	UK	Europe	US	Other
0%		75%	5%	20%

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Bionomics is a research client of Edison Investment Research Limited

Investment summary: VC fund seeks buyer for stake

Company description: CNS/cancer focus

Bionomics is an Australian biotech company focused on the development of products for cancer and CNS conditions. The company has two compounds in clinical trials: BNC105 (Phase II, mesothelioma and renal cell carcinoma) and BNC210 (Phase I, anxiety, and a development partnership with Merck Serono for Kv1.3 inhibitors). Bionomics has three technologies: Angene, an angiogenesis target and drug discovery platform; MultiCore, a proprietary, diversity orientated chemistry platform for the discovery of small molecule drugs; and ionX, a set of novel technologies for the identification of drugs targeting ion channels for CNS disease.

The company was founded in 1999 and has 34 employees. It is based in Thebarton, a suburb of Adelaide, with a subsidiary in Illkirch, near Strasbourg, France. Bionomics has raised A\$75m in equity funding to date and completed two acquisitions: Neurofit Preclinical Research, a French CRO specialising in neurology (€1.25m in cash and shares), and Iliad Chemicals, a Melbourne-based chemistry firm (40.9m shares, with potential milestone payment of a further 13.6m shares). Bionomics is listed on the ASX and has Level 1 ADR on NASDAQ (ticker BMICY).

Valuation: A\$175m based on risked NPV

We maintain our A\$175m valuation of Bionomics based on a risk-adjusted net present value of the two key programmes. This is derived from our assessment of the potential economic reward and timelines associated with the successful development of BNC105 and BNC210. The valuation largely excludes the value of milestones (including those potentially receivable from Merck Serono in relation to the Kv1.3 programme) from potential licensing agreements for BNC105 and BNC210.

Sensitivities

Bionomics's investment case will in the short term be determined by the outcome of Start-up Australia Ventures' efforts to find a trade buyer for its 27.8% stake, since if this is successful, it would trigger an offer for the company. There is no guarantee that the tender process will find a single trade buyer and, even if it does, that an adequate offer for the remaining shares is made subsequently. The process could also be disruptive to Bionomics's own efforts to attract licensing partners for BNC105 and/or BNC210 and may also effectively prevent it from engaging in strategic transactions involving its equity. A potential trade sale may offer a poorer return to shareholders than could be achieved through structured licensing transactions.

Operationally, Bionomics is subject to the risks typically associated with biotech drug development, including the possibility of unfavourable outcomes in clinical trials, success of competitors and commercial decisions by partners and potential partners. In addition, we consider BNC105 to contribute the bulk of the valuation.

Financials

Bionomics generates revenue from licence fees from Merck Serono and payments for contract research services from Neurofit. Cash at 30 June was A\$12.6m (net cash A\$9.3m), which given projected R&D expenditures would fall to c A\$6.3m at 30 June 2011. Bionomics is funded for the next two years.

Investment update: Fund move could spur bid interest

Bionomics's largest individual shareholder, Start-up Australia Ventures, has put up for sale its entire 27.8% equity interest via a tender process. This process (for which it has retained a corporate finance boutique) is designed to attract a trade buyer (ie a pharmaceutical or larger biotech company) that would use the shareholding as a means to acquire control of Bionomics. An acquiring party for such a large stake would be obliged under Australian law to make a cash or cash equivalent offer for the remaining shares. The move therefore has introduced an element of bid speculation into Bionomics's share price. It may also affect the company's licensing efforts (either positively or negatively) and will constrain its ability to undertake any strategic transactions involving use of equity, at least for the next four months. The tender process will occur entirely independently of Bionomics, but its outcome will drive the investment case in the short term. It could trigger a significant appreciation in the share price.

The tender process closes on 31 March 2011 (although may be extended) and is so timed presumably to reflect the likely availability of interim data from the two Phase II trials of BNC105 and the Phase Ib studies of BNC210. There is, however, no guarantee that the tender will be successful (ie attract an offer that is acceptable to Start-up Australia) and, even if it is, that the acquiring party makes an adequate subsequent offer for the remaining shares. Any such offer also may represent a poorer economic return in comparison with that which could be obtained by Bionomics through traditional licensing arrangements. Bionomics intends to continue to execute its development and commercial strategy as planned during this period.

BNC105's profile is enhanced by failure of competitor

Start-up Australia's move coincided with a significant development in the competitive landscape for the vascular disrupting agent class, with the discontinuation by Novartis of development of vadimezan/ASA404, following that drug's failure in the second of two Phase III studies in NSCLC. This creates a development opportunity for BNC105 in the larger cancer indications, including possibly one or more of the big four solid tumours (lung, breast, colon and prostate), that a potential partner could pursue.

VDAs are a potential new class of anticancer drug that are expected to be used in conjunction with classical or targeted chemotherapy to achieve a greater anti-tumour effect. The drugs act by shutting down blood vessels that supply tumours, thereby starving them of oxygen and nutrients. Interest in the mechanism reflects the potential to target existing as well as newly formed vasculature supplying tumours, which contrasts with anti-angiogenic agents such as Avastin (bevacizumab, Roche), which can only inhibit the growth and formation of new blood vessels.

BNC105 via tubulin polymerisation inhibition, a mechanism common to all the other VDAs except ASA404 (whose mechanism was not defined). It has shown effectiveness in animal models of head and neck, brain, prostate, breast, colon and lung cancers, including as a single agent. This suggests it may have a direct cytotoxic effect, which also has not been seen with other comparable VDAs. This dual mechanism could mean that it potentiates the effectiveness of existing anticancer therapy (radiation treatment, cytotoxic chemotherapy and biological agents). Bionomics's R&D activities are summarised in Exhibit 1 and the VDA competitive space in Exhibit 2 (overleaf).

Exhibit 1: R&D pipeline summary

Programme	Indication	Notes
BNC105	metastatic renal cell carcinoma/ mesothelioma/ (Phase II)	152-pt Phase II study in combination with everolimus in second-line mRCC and as monotherapy in pts progressing on everolimus. Primary endpoint: six month PFS; secondary endpoints: response rate for BNC105/everolimus combination; PFS with BNC105 alone; AEs of everolimus and BNC105 in combination or sequential regimen, OS and correlation of PFS with biomarkers. Interim results expected end 2010, with final trial data readout in 2012. 60-pt Phase II study as monotherapy in mesothelioma unresponsive to pemetrexed + cisplatin. Primary endpoint is response rate (modified RECIST) and secondary endpoints are: PFS; six-month PFS; time to treatment failure; OS; symptom control, quality of life and lung function. An interim analysis based on the first 24 patients enrolled (results due H111). Strong interim data may allow resizing study to provide pivotal data. Final results expected in 2012. Phase I data presented at ASCO 2010 ; preclinical data presented at AACR 2010 .
BNC210	Anxiety/(Phase Ib)	22-pt Phase Ib anxiety challenge (two-way crossover of a single 2,000mg dose or placebo on separate occasions with CCK). The primary endpoint is panic symptom scale. Secondary endpoints include: STAI (Spielberger State-Trait Anxiety Inventory), e-VAS (emotional-Visual Analogue Scale); mood as measured by ARCI 49 (Addiction Research Center Inventory) and heart rate. The study will also record blood pressure, serum cortisol and adrenocorticotropic hormone (ACTH) levels. 24-pt Phase I (EEG) study (four-way crossover study of 300mg 2,000mg of BNC210, 2mg of lorazepam or placebo). Primary endpoint is attention measured by the critical flicker fusion threshold and multiple choice reaction time. Secondary endpoints are: psychomotor speed (digit symbol substitution test), quantitative wake EEG, visuo-motor coordination (peak saccadic velocity), memory (perceptual priming test), mood (e-VAS and ARCI 49) and sleepiness (Karolinska sleepiness scale). The study will also measure biomarkers (ACTH and cortisol levels). Phase Ia (SAD, MAD and PK/food effects) studies completed. Results from a Phase Ia study of BNC210 were presented at the ECNP; preclinical data at
Kv1.3 inhibitors	Multiple sclerosis/other autoimmune conditions/ preclinical	Partnership with Merck Serono (Merck KGaA) . Up to US\$47m per compound based on successful development and commercialisation plus undisclosed royalties. Collaboration renewed in May 2010. Merck Serono will fund all development activities, including clinical development. Efficacy has been shown in animal models of inflammatory disorders such as Delayed Type Hypersensitivity (DTH) and Experimental Autoimmune Encephalomyelitis (EAE), a model of multiple sclerosis.
BN069	Angiogenesis/ preclinical	Programme to develop small molecule inhibitors for novel target (p73 RhoGAP) for inhibiting angiogenic processes. BNO69 is over-expressed in endothelial cells. Xenograft models treated with BNO69 gene-silencing molecules showed a >75% reduction in size vs untreated tumours in experiments conducted over 31 days.
GABA _A agonists	Epilepsy/discovery	Discovery programme utilising Biomedics's ionX platform incorporating gene mutations observed in patients with epilepsy.

Source: Edison Investment Research

Exhibit 2: Vascular disrupting agents: competitive landscape

Product/Company	Indication/stage	Notes
Ombrabulin/ AVE8062/ Sanofi-Aventis	Soft tissue sarcoma (Phase II/III)	300-pt Phase II/III study in advanced-stage soft tissue sarcoma after failure of anthracycline and ifosfamide (filing expected in 2011). 85-pt Phase I study in combination with platinum-taxane doublet in advanced solid tumours (results: April 2011). Two Phase II proof-of-concept trials in preparation for first line NSCLC and second line ovarian cancer (expected to start in 2011). Other Phase I dose-escalation, PK and safety studies.
Zybrestat (fosbretabulin/ combreastatin/ CA4P) OXIGENE	Thyroid cancer (Phase II/III)/liver cancer/NSCLC (Phase I/II)	180-pt Phase II/III (FACT) study with carboplatin/ paclitaxel in anaplastic thyroid cancer (results: early 2011). 63-pt Phase I/II study in primary or secondary liver cancer (results: due September 2010). 60-pt Phase II (FALCON) study with carboplatin, paclitaxel and bevacicimab in chemotherapy-naïve NSCLC (results: H210). Planned investigator-sponsored 36-pt Phase I study in AML and MDS.
BNC105/Biomedics	mRCC/mesothelioma/(Phase II)	152-pt Phase II study in combination with everolimus in second-line mRCC and BNC105 alone in pts progressing on everolimus. 60-pt Phase II study in mesothelioma unresponsive to pemetrexed + cisplatin.
Plinabulin/NPI-2358/ Nereus	NSCLC (Phase II)	180-pt Phase I/II study (ADVANCE) in combination with docetaxel in advanced NSCLC (results: November 2010).
Azixa (MPC-6827) Myrexis/EpiCept	GBM (Phase I/II)	68-pt Phase I/II study in recurrent glioblastoma multiforme (results: Jan 2011). 30-pt Phase I/II in combination with carboplatin in recurrent/relapsed GBM (results: Aug 2010).
CYT997/ YM Biosciences	GBM (Phase II)	35-pt Phase II study in combination with carboplatin and etoposide in relapsed GBM (Phase I results: mid 2010/Phase II 2011).
corlibulin EpiCept	N/A	33-pt Phase I in advanced cancer completed. Phase Ib with other chemotherapy planned.
Vadimezan/ASA404 (DMXAA)/ Antisoma	SCLC (Phase II)	Investigator-sponsored 57-pt Phase II study in small cell lung cancer (results: March 2012). Phase III studies in first and second-line non-small cell lung cancer both failed interim analyses.
ABT-751/E-7010/ NCI	Neuroblastoma (Phase II)	88-pt NCI-sponsored Phase II study in refractory neuroblastoma (results: Jan 2012). Phase II studies in NSCLC in combination with taxotere and refractory haematological malignancies terminated. Prior development discontinued by Abbott.

Source: Edison Investment Research

Competing programmes in mRCC and mesothelioma are profiled in Exhibits 3 and 4.

Exhibit 3: Metastatic renal cell carcinoma (mRCC) profile

Description	Metastasised form of kidney cancer arising in the lining of the proximal convoluted tubules. Patients are usually diagnosed with non-metastatic RCC and undergo nephrectomy before disease usually becomes metastatic after a period of time (several years). Incidence is 210,000 cases/year worldwide (55,000 cases/year in the US and 63,000 in the EU). RCC accounts for c 90% of all kidney cancers. Five year survival rate in metastatic disease <2%.
Current treatments	Standard treatment for mRCC is immunotherapy (IL-2 or IFN-alpha) in combination with a TKI. Two TKIs: Sutent (sunitinib, Pfizer) and Nexavar (sorafenib, Bayer) and two mTOR inhibitors: Afinitor (everolimus, Novartis) and Torisel (temsirolimus, Pfizer) are currently approved. Afinitor is the only drug indicated for second line use. Avastin (bevacizumab, Roche) is approved in combination with IFN-alpha.
Competitive landscape	
Axitinib/Pfizer	650-pt Phase III study for second line therapy (results: Sept 2010). 447-pt Phase III study vs sorafenib (results: April 2011).
Tivozanib (AV-951)/AVEO/Kirin	500-pt Phase III study (TIVO-1) vs sorafenib (results: Dec 2011). 272-pt Phase II study (results due: August 2010).
Anyara (nap-tumomab)/Active Biotech	524-pt Phase II/III study (results: February 2011). Interim data show median survival of 26.2 months (c 2x expected)
Aflibercept/Sanofi-Aventis	ECOG-sponsored 120-pt Phase II study (results: April 2016).
Foretinib/GSK1363089	71-pt Phase II study (results due: June 2010).
XL880/GSK/Exelixis	
TKI258/Novartis	81-pt Phase I/II study (results due: June 2010).
AMG 102/Amgen	61-pt Phase II study (results due: August 2010).
AGS-003/Argos	50-pt Phase I/II study in combination with sunitinib (results: Feb 2011).
IMA901/Immatics	Phase III planned, based on positive results in 68-pt Phase II study (published at ASCO 2010).
Regorafenib/Bayer	41-pt Phase II study (results: December 2010).
Ramucirumab/Lilly	39-pt Phase II study (results: December 2010).
AMG386/Amgen	80-pt Phase II study after cytokine failure in combination with sunitinib (results: May 2015).
Revlimid (lenalidomide)/Celgene	68-pt Phase I/II study (results: October 2012).

Source: Edison Investment Research

Exhibit 4: Mesothelioma profile

Description	Cancer of the mesothelium (the membrane that forms the lining of several body cavities). Most commonly affects the pleura (the outer lining of the lungs and internal chest wall). Usually diagnosed at a late stage of the disease (life expectancy is only 6-12 months from diagnosis). Caused by prior exposure to asbestos. Incidence is 2,200 new cases/year in the US and c 5,000 cases/year in Europe.
Current treatments	Surgery and radiotherapy are used but are usually as a palliative treatment. Alimta (pemetrexed, Lilly) is approved in combination with cisplatin, based on a study in 456 pts which showed median survival of 12.8m vs 9m for cisplatin alone. Raltitrexed (Tomudex, Hospira) is approved in some markets in combination with cisplatin, based on a 2006 study which showed an overall response rate of 23.6% vs 13.6% for cisplatin alone; p=0.056). Raltitrexed/cisplatin showed a median OS of 11.4 vs 8.8 months (p=0.0483) and PFS of 5.3 vs 4.0 months (p=0.058). No other drugs are indicated for first or second line use.
Competitive landscape	
Zolinza (vorinostat)/Merck & Co	600-pt Phase III study in second line setting (results: Sept 2011). Filing due in 2012.
Onconase (ranpirinase)/Alfacell	300-pt Phase III showed a significant improvement in survival in pts who failed one prior chemotherapy regimen, a pre-defined sub-group, but not in all patients. FDA confirms additional study requirement. Updated survival data presented at ASCO 2010.
NGR-hTNF /MolMed	390-pt Phase III trial (NGR015) of NGR-hTNF plus best investigator's choice (BIC) versus placebo plus BIC (BIC includes supportive care alone or combined with one chemotherapeutic agent [either doxorubicin, gemcitabine, or vinorelbine]). Results of 57-pt Phase II study presented at ASCO 2010.
MORAb-009/Eisai	86-pt Phase II study (results: December 2011).
Recentin (cedirininib)/AstraZeneca	NCI-sponsored 116-pt Phase I/II study of pemetrexed/cisplatin ± cediranib (results: March 2011); 50-pt academic sponsored study.
CBP501/CanBas	72-pt Phase I/II study of CBP501 + pemetrexed + cisplatin (results: December 2010).
Milataxel/Taxolog	90-pt Phase II study underway.
belinostat/TopoTarget/Spectrum	37-pt Phase II completed (no results published). 100-pt Phase I study (results: October 2010).
Afinitor (everolimus)/Novartis	39-pt Phase II study in pts with Merlin/NF2 loss as biomarker of sensitivity (results: December 2011).
Trovax/Oxford BioMedica	Investigator-sponsored open-label Phase I/II study of TroVax (MVA gene therapy for 5T4 tumour antigen) in combination with first-line chemotherapy (pemetrexed/cisplatin).
AMG102/Amgen	55-pt Phase II study in combination pemetrexed/cisplatin (results: October 2012).
Various	Investigator-sponsored studies with single agent and combinations of bortezomib, oxaliplatin, bevacizumab, imatinib and gemcitabine.

Source: Edison Investment Research

BNC210 – anxiety model and EEG studies

Meanwhile, Bionomics has just [presented](#) some new preclinical data at on BNC210 at the US Society for Neuroscience conference. These data show that BNC210 can reverse anxiety (in the rat elevated maze model) induced by agonism/antagonism of three neurotransmitter systems (5-HT_{1B}), glutamate (mGluR2) and cholecystokinin (CCK_B), a model for panic disorder. Published studies already suggest BNC105 could be effective for acute and chronic anxiety (generalised anxiety disorder), including with co-morbid depression (it may also have potential in depression).

The new data should help Bionomics maintain the profile of the drug with potential licensing partners. This is important given the impending results of the Phase Ib studies (both of which have completed dosing) in early 2011. Bionomics is hoping to establish efficacy in the CCK challenge model, while showing a lack of sedation or memory impairment. If successful, this would give BNC210 a competitive profile in a therapeutic area which is largely served by generic products.

Bionomics believes BNC105 could offer advantages (in comparison with currently available therapies) in terms of speed of onset of action, the absence of sedative, memory or motor impairment and risk of habituation. The Phase Ib studies should also confirm 300mg of BNC210 (taken with food) as an effective dose for the next stage of development. Competing programmes for anxiety are profiled in Exhibit 5.

Exhibit 5: Competing developments in anxiety

Class	Company	Mechanism	Notes
Lu AA21004	Lundbeck/ Takeda	5-HT ₃ antagonist, 5-HT _{1a} agonist and 5-HT enhancer	457-pt Phase III and 300-pt Phase II in relapse prevention (completed, no results yet). Three Phase III studies completed for depression; two did not reach significance, a third trial showed mixed results.
AZD2327	AstraZeneca	Selective, high affinity enkephalinergic agonist	80-pt Phase II study in anxious major depressive disorder (results due: Feb 2010).
GSK561679	GSK	CRFR1 antagonist	150-pt Phase II study in women with PTSD (results: Dec 2012). Failed a 150-pt Phase II study in depression (details). CRF1 antagonist.
ABIO 08/01	Abiogen	N/A	Phase II studies (no details disclosed).
ADX71149	Addex/J&J	mGluR2 PAM	Planned Phase II studies in Q111. Phase I studies included an anxiety challenge model.
orvepitant	GSK	NK1 antagonist	In Phase II for depression. Possible Phase II for anxiety.
AZD7268	AstraZeneca	enkephalinergic receptor modulator	231-pt Phase II study in major depression completed (no results published yet). Anxiety considered a second indication.
AZD 2327	AstraZeneca	Enkephalinergic modulator	80-pt Phase II study in anxious major depressive disorder (results due: Feb 2010).
ABT 436	Abbott	N/A	Phase I study completed.

Source: Edison Investment Research

BNC210 has shown effectiveness in various animal models (including the light-dark box and marble burying), without evidence of dependence¹ or sedation.² It has also shown activity in the rat model of depression, following both acute treatment and daily dosing for 14 days.³ Other animal studies involving diazepam alone and in a CCK-induced anxious state and is effective in reversing CCK-induced anxiety.⁴

¹ Abrupt cessation of treatment in rats dosed repeatedly with BNC210 for a period of 14 days at 0, 10, 30 and 100mg/kg/day did not produce changes in rat body temperature, weight gain or food consumption for the duration of the post-treatment period (five days).

² BNC210 has not shown any evidence of sedation at up to 1,000mg/kg.

³ BNC210 exhibits antidepressant activity in the rat forced swim test comparable to imipramine (active control).

⁴ BNC210 is effective in reversing CCK-induced anxiety at doses ≥ 5 mg/kg without sedation. Diazepam was effective at 1mg/kg but was sedative at 3mg/kg. [ECNP](#).

Valuation

We are maintaining our A\$175m valuation of Bionomics based on a risk-adjusted net present value of the two key programmes. This is derived from our assessment of the probabilities of success and potential economic rewards (in terms of upfront payments, milestones and royalties) and peak sales and timelines associated with the successful development. Details are shown in Exhibit 6.

Exhibit 6: Edison valuation model inputs

Note: Valuation uses net cash as of 30 June 2010.

Product	Indication	Status	Probability of success	Est launch	Est peak market	Potential market value	Est maximum royalty	Est peak sales
BNC105	mesothelioma	Phase II	30%	2013	25%	\$750m	18%	\$278m
BNC105	mRCC	Phase II	30%	2013	10%	\$1,500m	18%	\$281m
BNC105	other solid tumours	Phase I	15%	2014	5%	\$5,000m	18%	\$468m
BNC210	anxiety	Phase I	15%	2014	5%	\$5,000m	12%	\$487m
Kv-1.3	MS/other autoimmune	Preclinical	5%	2015	5%	\$10,000m	12%	\$900m

Source: Edison Investment Research

Sensitivities

Bionomics's investment case will in the short term be determined by the outcome of Start-up Australia Ventures' efforts to find a trade buyer for its 27.8% stake, since if this is successful, it would trigger an offer for the company. There is no guarantee that the invitation to tender will be successful and, even if it is, that an adequate offer for the remaining shares would be made subsequently. The process could also affect, either positively or negatively, Bionomics's own efforts to attract licensing partners for BNC105 and/or BNC210 and will constrain its ability to engage in strategic transactions involving the use of equity, at least for the next four months. A potential trade sale may also offer a poorer return to shareholders than could be achieved through structured licensing transactions.

Operationally, Bionomics is subject to the risks associated with biotech companies, including the possibility of unfavourable outcomes in clinical trials, success of competitors and commercial decisions by partners and potential partners. In addition, we consider BNC105 to contribute the bulk of the valuation.

Financials

Results for the financial year to 30 June 2010 show cash of A\$12.6m (net cash: A\$9.3m).

Bionomics generates revenue from licence fees and payments from Merck Serono as well contract research services from Neurofit. Projected R&D expenditures suggest that cash at 30 June 2011 would be c A\$6.3m (more if, as is expected, a milestone is received in this period). This suggests Bionomics is funded at least for the next two years. Our financial model is shown in Exhibit 7.

Exhibit 7: Financial results and forecasts

Note: Under Australian accounting standards, interest income is treated as a revenue item. For international comparability, we have adjusted financial forecasts to exclude this and include grant income, per IFRS. Interest income is shown separately in the P&L (reported pre-tax profit is equivalent to that shown by the company). No assumption of potential licensing deals is anticipated in the model.

Year end 30 June	A\$ '000s	2008	2009	2010	2011e	2012e
		IFRS	IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS						
Revenue		6,513	4,321	3,396	3,840	3,840
Cost of sales		(213)	(338)	0	0	0
Gross profit		6,300	3,983	3,396	3,840	3,840
EBITDA		(4,058)	(5,628)	(7,163)	(6,083)	(6,084)
Operating profit (before GW and except.)		(4,661)	(6,159)	(7,644)	(6,613)	(6,613)
Intangible amortisation		(479)	(502)	(474)	(500)	(499)
Exceptionals		0	0	0	0	0
Share-based payments		(258)	(242)	(336)	(242)	(241)
Operating profit		(5,398)	(6,903)	(8,454)	(7,355)	(7,353)
Net interest		(313)	4	240	150	(50)
Profit before tax (norm)		(4,975)	(6,156)	(7,404)	(6,463)	(6,663)
Profit before tax (FRS 3)		(5,712)	(6,899)	(8,214)	(7,205)	(7,403)
Tax		359	37	0	0	0
Profit after tax (norm)		(4,616)	(6,119)	(7,404)	(6,463)	(6,663)
Profit after tax (FRS 3)		(5,353)	(6,862)	(8,214)	(7,205)	(7,403)
Average number of shares outstanding (m)		225.3	243.0	300.8	318.1	318.1
EPS - normalised (c)		(2.0)	(2.5)	(2.5)	(2.0)	(2.1)
EPS - FRS 3 (c)		(2.4)	(2.8)	(2.7)	(2.3)	(2.3)
Dividend per share (c)		0.0	0.0	0.0	0.0	0.0
Gross margin (%)		96.7	92.2	100.0	100.0	100.0
EBITDA margin (%)		N/A	N/A	N/A	N/A	N/A
Operating margin (before GW and except.) (%)		N/A	N/A	N/A	N/A	N/A
BALANCE SHEET						
Fixed assets		19,457	18,837	17,618	16,695	15,667
Intangible assets		10,839	10,458	9,711	9,211	8,712
Tangible assets		8,618	8,379	7,908	7,484	6,955
Investments		0	0	0	0	0
Current assets		8,856	5,888	13,896	7,621	1,487
Stocks		79	122	113	128	128
Debtors		2,315	775	847	958	958
Cash		6,280	4,757	12,612	6,302	168
Other		182	232	324	232	232
Current liabilities		(3,051)	(2,791)	(3,236)	(3,465)	(3,465)
Creditors		(2,109)	(1,626)	(2,008)	(2,300)	(2,300)
Other current liabilities		(241)	(109)	(70)	(109)	(109)
Short-term borrowings		(572)	(529)	(627)	(529)	(529)
Long-term liabilities		(3,955)	(3,850)	(3,343)	(3,078)	(3,078)
Long-term borrowings		(3,536)	(3,165)	(2,692)	(2,392)	(2,392)
Other long-term liabilities		(50)	(50)	(50)	(50)	(50)
Net assets		21,307	18,083	24,936	17,773	10,611
CASH FLOW						
Operating cash flow		(6,512)	(4,986)	(7,100)	(5,955)	(6,084)
Net interest		569	287	468	150	(50)
Tax		0	0	0	0	0
Capex		(386)	(107)	(43)	(107)	0
Payment of deferred consideration		0	0	0	0	0
Capitalisation of development costs		0	0	0	0	0
Expenditure on intangibles		0	(4)	(3)	0	0
Acquisitions/disposals		0	0	0	0	0
Financing		103	3,739	14,944	0	0
Dividends		0	0	0	0	0
Net cash flow		(6,226)	(1,070)	8,266	(5,912)	(6,134)
Opening net debt/(cash)		(8,401)	(2,173)	(1,063)	(9,293)	(3,381)
HP finance leases initiated		0	0	0	0	0
Other		(4)	(39)	(37)	0	0
Closing net debt/(cash)		(2,172)	(1,063)	(9,293)	(3,381)	2,753

Source: Edison Investment Research, Bionomics accounts

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