

# Universal Biosensors

## Initiating Coverage



Wilson HTM  
INVESTMENT GROUP

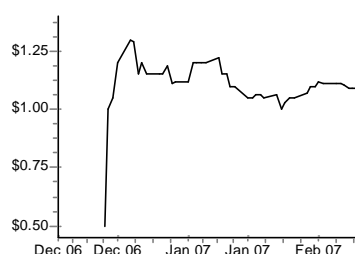
12 February 2007

\$1.09

BUY

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### Price Performance



### Security/Capital Details

ASX Code	UBI
Market Cap	\$140 M
Issued Shares	128.1 M
Avg Mth T'over	0.36 M
12 Mth High – Low	\$1.45-\$0.81

### Key Data/Ratios – FY 2006

EBITDA / Sales	N/A
EBIT / Sales	N/A
Net Debt / Equity	-79.7%
Interest Cover	x
ROE	-39.7%
EPS Growth	
PEG Ratio	x
NTA / Share	\$ 0.25
DCF	\$ 1.74
12 Mth Price Target	\$ 2.03

BUY: Total return +10% or more over a 12 month period

HOLD: Total return expected to be between +10% to -10% over a 12-month period

SELL: Total return expected to be -10% or more over a 12 month period

TOTAL RETURN OR TSR = capital growth in share price + expected dividend yield in that period

### Recommendation

We initiate coverage of UBI with a BUY recommendation and valuation of 174 cps. We believe there is more than an even chance of LifeScan exercising its rights to market the glucose test strip UBI is developing. If LifeScan exercises this right our valuation increases to 220 cps. We believe UBI's technology allows for Point of Care (PoC) test strips to be manufactured more economically than those currently on the market and deliver a more accurate result. If LifeScan decides to market the glucose test we expect the company to begin generating revenues in calendar 2008. Regulatory approval is expected in Q4-07 or Q1-08.

### Key Points

- We initiate coverage of UBI with a BUY recommendation and valuation of 174 cps. We believe there is more than an even chance of LifeScan exercising its rights to market the glucose test strip UBI is developing. If LifeScan exercises this right our valuation increases to 220 cps.
- The three most advanced products in the company's pipeline are test strips for the determination of glucose levels in diabetics, monitoring of warfarin levels in patients on chronic doses of this blood-thinner, and determination of C-reactive protein for assistance in the diagnosis and management of certain inflammatory diseases.
- We believe UBI's technology allows for Point of Care (PoC) test strips to be manufactured more economically than those currently on the market and deliver a more accurate result. These advantages are expected to allow UBI to take advantage of structural changes we expect to occur in the diagnostic industry.
- These changes are being driven by increased understanding of the need for more frequent testing and monitoring of chronic conditions. As such we expect PoC tests that are accurate, reliable and cost effective to be in great demand.
- Proceeds from the IPO and placement (which raised \$22M) are to be spent on acquisition, commissioning and validation of manufacturing equipment, funding of further R&D (mainly the Prothrombin time test and C-reactive protein test), and corporate overheads for the next two years.
- If LifeScan decides to market the glucose test we expect the company to begin generating revenues in calendar 2008.
- As LifeScan owns 14% of UBI and invested in the IPO/placement we believe there is a more than even chance they will decide to market the glucose test once UBI has validated their manufacturing equipment and received marketing approval from EU regulatory authorities. Regulatory approval is expected in Q4-07 or Q1-08.
- Management have an impressive track record in commercialising technologies, and we believe this plays a large role in mitigating the risks facing this company.

Year to Dec	NPAT (Rep) \$M	EPS (Norm) c	EPS Growth %	PER x	P/CF x	EV/EBITDA x	DPS c	Div Yld %	Franking %
2005a	-0.2						0.0		0
2006e	-6.5	-10.2		-10.6	-16.0	-20.2	0.0	0.0	0
2007e	-7.7	-6.0	41.0	-18.1	-25.8	-20.2	0.0	0.0	0
2008e	2.2	1.7	128.5	63.4	27.9	32.9	0.0	0.0	0

## Universal Biosensors (UBI)

### What Does UBI do?

UBI is a specialist medical diagnostics company focussed on the development, manufacture and commercialisation of a range of point-of-care (PoC) diagnostic tests.

The tests comprise a novel disposable diagnostic test strip and a reusable meter. The most advanced product is a glucose test strip for which the company may enter into a commercialisation agreement with LifeScan (100% owned by Johnson & Johnson). UBI is also developing strips for prothrombin time test (monitoring of warfarin levels) and for the determination of levels of C-reactive protein for assistance in the diagnosis and management of certain inflammatory diseases and possibly as a critical marker of cardiovascular risk.

### IPO

UBI raised \$22M via an IPO in Australia and a placement in the US. A total of 44M shares at 50 cps were on issue at the IPO as shown in Table 1.

**Table 1: Capital Raised**

Amount raised in Australian IPO	\$18M
Amount raised in US placement	\$4M
Total amount raised	\$22M
Number of IPO shares	36M
Number of placement shares	8M
Total number of new shares issued	44M
Total number of shares on issue after IPO and Placement	127,999,976
Market capitalisation on listing at 50 cps	\$64M

Source: UBI

All shares issued in the IPO and placement rank equally. As UBI is incorporated in the State of Delaware in the US, shareholders will receive a holding statement for CHESS Depository Interests (CDI's) in UBI.

The capital structure pre and post the IPO and placement is shown in Table 2.

**Table 2: Capital Structure**

Securities	Pre IPO and Placement	Pre IPO and Placement (%)	Post IPO and Placement	Post IPO and Placement (%)
<b>Existing shares</b>	83,999,976	95.6%	83,999,976	63.7%
<b>Existing options</b>	3,911,123	4.4%	3,911,123	3.0%
<b>New shares in IPO</b>			36,000,000	27.3%
<b>New shares in placement</b>			8,000,000	6.1%
<b>Total number of securities</b>	87,991,099	100%	131,911,099	100%

Source: UBI

LifeScan subscribed for 5.15M shares in the US placement, resulting in a post IPO holding of 14%.

### Value Proposition and Valuation

UBI has developed a new cost effective method of manufacturing strips that can be used in the PoC setting. Not only can test strips be manufactured far more economically, but they also allow for product expansion into other tests such as a prothrombin time test and a C-reactive protein test. There are thus two broad value propositions:



1. lower cost of manufacture: PoC test strips are in many cases a commodity. A major point of differentiation therefore is cost of goods, and we believe UBI has a significant advantage in this regard.
2. expansion into additional markets: lower cost of goods and a greater degree of accuracy and precision should allow UBI to expand PoC testing into other diagnostic arenas currently dominated by testing in pathology laboratories.

Over and above these value propositions there are also a number of structural changes occurring in the diagnostic industry which should increase demand for UBI's products. These include:

- Most PT tests are conducted in pathology laboratories and it appears there is growing support for the use of PoC PT test on a more frequent basis than is currently the norm. The US Centres for Medicare and Medicaid Services has observed that monthly testing (the current norm) is inadequate for the majority of patients on chronic warfarin therapy, and have indicated that they consider weekly testing to be more appropriate. As such a more cost effective PoC test such as that being developed by UBI would probably be in strong demand.
- The US FDA has cleared certain C-reactive protein tests for use as an aid in the identification and assessment of individuals at risk of cardiovascular disease. UBI believes there is a significant future market opportunity with respect to atherosclerosis, a cardiovascular disease, that is now understood to have a significant inflammatory component in addition to the build-up of fatty deposits on the inside walls of arteries.
- A worldwide study (JUPITER: Justification for the Use of statins in Primary prevention: an Intervention Trial Evaluating Rosuvastatin) is currently underway to evaluate the effectiveness of statin therapy on the reduction of major cardiovascular events among individuals with average or normal cholesterol levels and elevated C-reactive protein levels. This study is expected to report its findings in late 2007 – early 2008. A positive outcome would probably pave the way for increased need for a cost effective PoC C-reactive protein test for this market.

### Valuation

Based on a probability adjusted DCF valuation methodology we arrive at a valuation of 174 cps. This increases to 220 cps if LifeScan decides to market the glucose testing product. We expect a decision to be made once UBI has successfully commissioned its manufacturing equipment and received EU regulatory approval for its glucose product. Therefore such a decision could be expected in 2H-2007.

If LifeScan decides not to market the glucose diagnostic strip, our valuation decreases to 88 cps. The share is currently trading at 109 cps, so we initiate coverage with a BUY recommendation.

### Point-Of-Care Tests in Development

UBI has three major PoC tests under development:

3. Blood glucose test
4. Prothrombin time test
5. C-reactive protein test

A summary of the tests under development is shown in Table 1.

**Table 1: Development Pipeline Summary**

## Point-of-care Tests in Development

Point-of-care Test	Stage of Development	Test Description
C-reactive Protein Test	Over the last two years, the Universal Biosensors Group has developed a working <b>prototype</b> of a C-reactive protein test.	An immunoassay blood test which detects and quantifies the level of C-reactive protein in the body. C-reactive protein may be used to assist in the diagnosis and management of certain inflammatory conditions and may be used as a critical marker of cardiovascular risk including coronary heart disease.
Prothrombin Time Test	Over the last two years, the Universal Biosensors Group has developed a working <b>prototype</b> of a prothrombin time test.	A blood test widely used for monitoring the therapeutic range of the long-term anticoagulant, warfarin. Warfarin is a blood thinning medication commonly administered to patients with certain types of irregular heartbeats, patients who have had heart valve replacement surgery or people at risk of a stroke or cardiac event.
Blood Glucose Test	Since April 2002, Universal Biosensors has been undertaking contracted product development of a blood glucose test for LifeScan. <b>LifeScan has the rights to commercialisation of the blood glucose test.</b>	A blood glucose self-monitoring test for diabetics.
Future Potential Tests	The patented technology platform used in the existing Universal Biosensors point-of-care tests has the potential to be adapted for use in tests for a range of other conditions.	Universal Biosensors intends to extend its range of point-of-care tests and develop further improvements to its existing tests, including an expanded range of immunoassay tests.

Source: UBI

**Development Timeline**

The development timeline is shown in Figure 1.

**Figure 1: Development Timeline**

	1H-07	2H-07	1H-08	2H-08
<b>Glucose test strip</b>		Complete installation and validation of equipment		
		Submit EU marketing application		
			Approval to market test	
		Agreement with LifeScan to market test		
<b>Prothrombin time test</b>				Complete product development
<b>C-reactive protein test</b>	Complete prototype development			
				Complete product development

Source: UBI and WHTM



## Novel Technologies

The key differentiator of UBI's technology is the design of the electrochemical cell wherein well characterised biomarkers are detected and quantified in blood. The novel configuration of the electrodes in the cell allows for test strips to deliver greater accuracy and more economical manufacturing with commercially available materials.

The novel electrochemical cell design also allows for proprietary signal processing in test meters. UBI will manufacture test strips, but manufacture of meters will be out-sourced.

## Intellectual Property

UBI has a licence agreement with Lifescan (a division of Johnson & Johnson), pursuant to which Lifescan has granted to UBI a licence to an extensive suite of patents. UBI has the right to use those patents in all fields of use other than the field of diagnosis, management and monitoring of diabetes and the measurement of glucose in humans.

UBI also owns certain key patents together with associated enabling project and industry specific know-how.

The senior scientists in UBI are inventors of most of the patents and as such have been associated with development of the technology since the start, some 14 years ago. There are approximately 30 patent families covering the technology. These patents include areas of:

- Electrode design and configuration
- Signal processing
- Meter design
- Meter/strip connectivity
- Measurement of reaction rates
- Methods of filling electrochemical cells
- Measurement of a range of analytes

While Lifescan has marketing rights for the diabetes and glucose markets, it must be emphasised that UBI has rights to market PoC tests for all other indications.

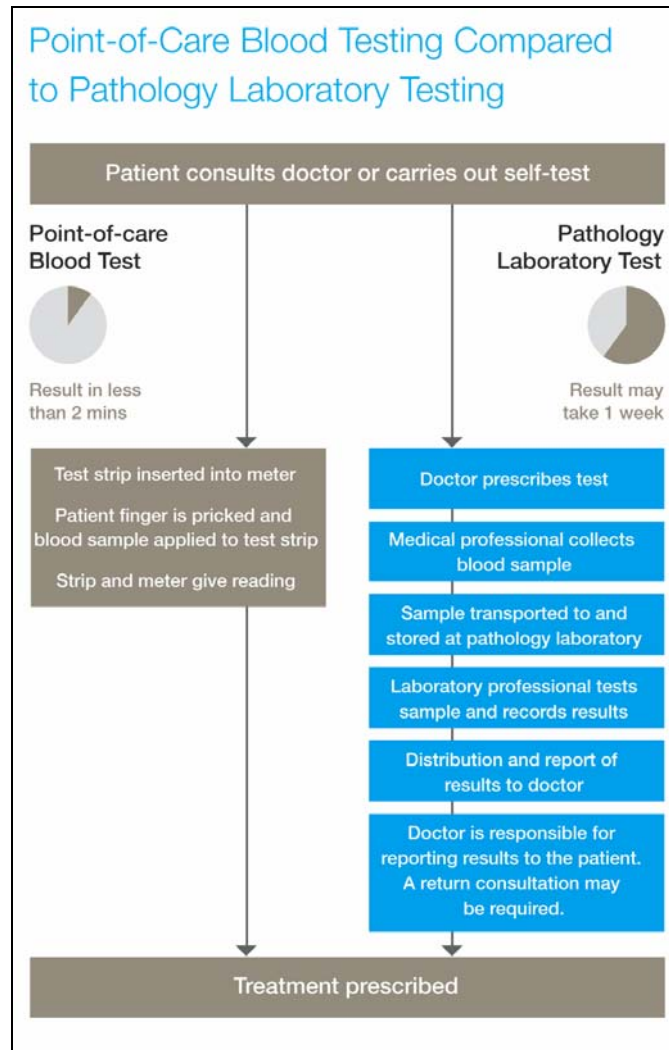
## PoC Markets

PoC testing takes place on a "real-time" basis, and is typically performed near or at the site of the patient, allowing for a clinical decision to be made in a short space of time. Such decisions could include injecting insulin, or increasing glucose intake. The key issue is to generate an accurate and quick result so that appropriate treatment can be implemented as soon as possible.

A comparison between PoC testing and pathology laboratory testing is shown in Figure 2.



Figure 2: PoC and Pathology Laboratory Comparison



Source: UBI



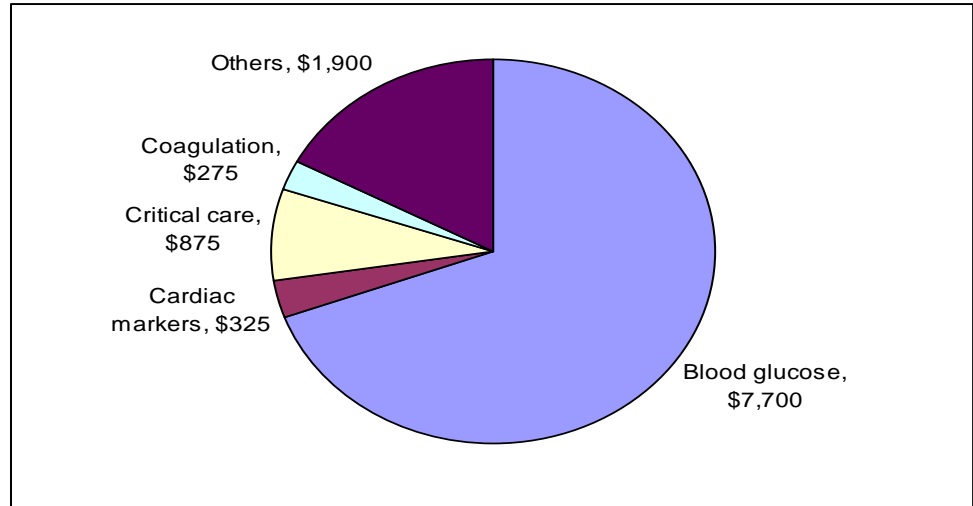


The two major categories of users for PoC tests are:

- Healthcare professionals who require a result in doctor's offices, hospitals, emergency admissions area or operating theatre.
- Patients who self test, e.g. diabetics

The PoC market was worth some US\$11B in 2005, compared with US\$6.8B in 2003. The largest market is the blood glucose market as shown in Figure 3.

**Figure 3: PoC Market (US\$M)**



Source: UBI and WHTM

The PoC *in vitro* market is estimated to grow to US\$16B in 2010, and recent growth can be attributed to significant increases in blood glucose self-monitoring and in certain professional test segments including critical care and cardiac markers.

### UBI's Products

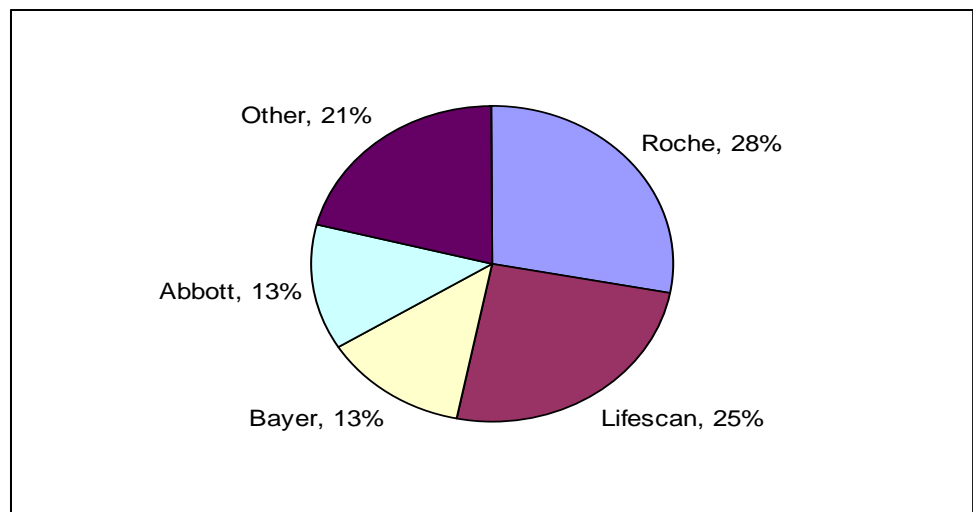
#### Blood Glucose Test

This test is targeted at the diabetes market. The prevalence of diabetes is estimated at 21M in the US.

Type 1 diabetes affects some 5%-10% of this population, and develops when the body is unable to produce insulin. To survive, patients need frequent injections of insulin. The balance of the insulin is made up of type 2, which is associated with older age, a family history of diabetes, impaired glucose metabolism and physical inactivity.

The blood glucose market is the largest segment of the PoC market as shown in Figure 3 above. Major participants and competitors in this market and their estimated market shares are shown in Figure 4.

**Figure 4: Glucose PoC Market Share**



Source: UBI and WHTM

Diabetics typically test themselves 1-8 times per day, and it is estimated there are approximately 21M people in the US with diabetes, of which 6.2M are undiagnosed.



## **Prothrombin Time Test**

Prothrombin time tests (PT tests) are widely used to monitor the therapeutic range of a long-term anti-coagulant such as warfarin. Typically, warfarin is used to treat those at risk of developing blood clots, and include those suffering from atrial fibrillation (an abnormal heart rhythm) and patients with mechanical heart valves.

The safety and effectiveness of warfarin is highly dependant on dosage being within a narrow therapeutic range. Too much warfarin and may lead to uncontrolled bleeding, too little and it is ineffective in preventing the development of clots.

Approximately 17M prescriptions for warfarin were written in the US last year, and worldwide sales of PoC PT tests are estimated to have reached only US\$125M globally over the same time period.

Most PT tests are conducted in pathology laboratories and it appears there is growing support for the use of PoC PT test on a more frequent basis than is currently the norm. The US Centres for Medicare and Medicaid Services has observed that monthly testing (the current norm) is inadequate for the majority of patients on chronic warfarin therapy, and have indicated that they consider weekly testing to be more appropriate.

## **Immunoassay Test for C-Reactive Protein**

Immunoassay tests use an antibody-antigen reaction to detect and quantify a specific substance in blood or bodily fluid. Typically substances tested for in blood include hormones, proteins and enzymes, and results are used to diagnose or aid in diagnosing a wide range of conditions.

UBI is concentrating on the development of a PoC test to measure the amount of C-reactive protein in blood. C-reactive protein is an established biomarker that is routinely used in pathology laboratories as an indicator of inflammatory conditions. Rather than being undertaken in a pathology laboratory, UBI's PoC test could be undertaken in a doctor's setting, and the results interpreted by healthcare professionals.

The company estimates that the worldwide market for both laboratory based and PoC tests was approximately US\$300M in 2005, and is forecast by the company to grow to around US\$420M in 2010.

The US FDA has cleared certain C-reactive protein tests for use as an aid in the identification and assessment of individuals at risk of cardiovascular disease. UBI believes there is a significant future market opportunity with respect to atherosclerosis, a cardiovascular disease, that is now understood to have a significant inflammatory component in addition to the build-up of fatty deposits on the inside walls of arteries.

Atherosclerosis is the leading cause of death in the developed world, and UBI management believe that C-reactive protein may in the future be utilised in the active management of atherosclerosis when used in conjunction with statins. Statins are a major drug class used to lower cholesterol, and have recently been observed to have an anti-inflammatory effect.

A worldwide study (JUPITER: Justification for the Use of statins in Primary prevention: an Intervention Trial Evaluating Rosuvastatin) is currently underway to evaluate the effectiveness of statin therapy on the reduction of major cardiovascular events among individuals with average or normal cholesterol levels and elevated C-reactive protein levels. This study is expected to report its findings in late 2007 – early 2008.

## **Management**

### **Chairman – Andrew Denver Principals Founder**

Andrew Denver is a substantial shareholder of UBI and was appointed as a Director of the company in December 2002. Between 2002 and 2005 he was President of Pall Asia, a subsidiary of Pall Corporation. Andrew joined Pall in 2002 with the acquisition by Pall Corporation of US Filter's Filtration and Separations business, where he was President. Previous experience includes senior roles at Memtec Limited and Baxter Healthcare Corporation. He is also a foundation member of The Principals Fund Management group.



**CEO- Mark Morrisson**

Mark Morrisson brings extensive diagnostic marketing and product development experience to UBI having been responsible Vice President of Marketing for North America and then for Europe, Middle East and Africa for AGEN. He was also a member of AGEN's global management executive team. Other responsibilities at AGEN included new business development, development of strategic partnerships, licensing and contracts, and leading sales and marketing and distributor management efforts.

**Non-Executive Directors****Dr Colin Adam**

A metallurgist by training, he has extensive experience managing a number of high-tech companies, including Pratt & Whitney Aircraft, Deputy Director of the CSIRO and he is a foundation member of The Principals Fund Management group and a substantial shareholder of UBI.

**Denis Hanley**

Denis Hanley is an accountant and company director with more than 35 experience in the management of technology-based growth businesses. Denis spent 14 years with Baxter International Inc., a global medical products and services company. His career at Baxter included a number of international assignments including its Chicago headquarters, and his last position was managing director of Baxter's Australian operations. In 1983, Denis was founding chief executive officer and, in 1986, executive chairman of the Australian-based separations technology company Memtec Ltd. Under his leadership, Memtec grew into a NYSE-listed global operating filtration and separations business with 1700 employees. Since the sale of Memtec to US Filter in 1997, Denis has been a successful angel investor, assisting the commercialisation of several Australian technologies. Denis is non-executive chairman of Pharmaxis Ltd, CathRx Ltd and Lochard Ltd, a founder of The Principals Fund Management, and a substantial shareholder of UBI.

**Andrew Jane**

Andrew trained as a physicist, and has been with CM Capital Investments since 2003. Previous experience includes leading AGEN Biomedical's biosensor and instrumentation program. As director of business development and licensing at Lake Technology, Andy worked closely with Lake's strategic partner, Dolby Laboratories in San Francisco, and was responsible for a significant number of global licensing deals during his 4 years there. The rapid growth of the company was recognised by Dolby, which acquired Lake in 2004.

**Charles Kiefel**

Charles is a Fellow of the Institute of Chartered Accountants in Australia and a Fellow of the Australian Institute of Company Directors. Charles has more than 20 years experience in finance, investment banking and the investment sector in London with Lazard Bros, New York with Lazard Freres, Sydney with Ord Minnett, and Melbourne with ANZ Investment Bank. Charles is Chairman of the Military Superannuation Board and serves on the Advisory Boards of two of Australia's largest private equity funds, Pacific Equity Fund and CHAMP II Fund. He is a Director of Business Development for two major US money managers: Turner Investment Partners and LSV Asset Management. Charles is also a non executive director of Pharmaxis Ltd. He is a foundation member of the Principals Funds Management group and a substantial Shareholder of the Company.

**Dr Elizabeth (Jane) Wilson**

Dr Wilson is a professional company director with a background in medicine and finance. Dr Wilson is the current Chairman of IMBcom (commercialisation company of the Institute for Molecular Bioscience), and Immediate Past President of the Australian institute of Company Directors. – Queensland Division. She is also a director of CathRx Ltd, UQ Holdings Ltd and the National Archives Advisory Council.

## Key Management

### Chief Scientist – Dr Alastair Hodges

Alastair is Chief Scientist of the Universal Biosensors Group and has been working in the field of electrochemical sensors for the last 12 years. Alastair has a BSc (Hons) in chemistry and gained a PhD in electrochemistry from the University of Melbourne in 1987

Alastair worked as a research scientist in the Defence Science and Technology Organisation and the CSIRO in the fields of electrochemistry and transport processes until 1995, when he joined Memtec Limited to work on sensor technologies. From 1999 to 2001 Alastair led a team that worked in the US on the development of glucose sensor technology.

Alastair has published thirteen papers in refereed journals, is the primary inventor on issued patents in 24 families and has pending patent applications in a further 10 families.

### Vice-President of Operations – Garry Chambers

Garry spent the first part of his 20 year career in technology at the Royal Aircraft establishment (UK) in R&D Flight Systems before migrating into the medical field when he joined Chelsea Instruments (UK). Garry subsequently joined Medisense (UK), one of the first biotechnology companies to produce mass market biosensors. After 5 years at Medisense, Garry moved to Australia to join Memtec Limited to work on sensor technologies. From 1991 to 2001 Garry was part of a core team based in the US, developing technology for glucose sensors and sensor manufacturing. Along with Dr Hodges and Dr Chatelier he returned to Australia in 2001 to co-found the Universal Biosensors Group.

Garry is an inventor on 13 patents issued and pending.

## Use of Funds

Funds raised in the IPO are expected to be used as shown in Table 2.

**Table 2: Use of Funds**

Proposed Use of Funds	(\$000)
Acquisition, commissioning and validation of manufacturing equipment	7,581
Product research, development and validation.	7,844
Fit out of new manufacturing facilities	2,408
General corporate expenses (salaries, rent etc.)	11,175
Patents, regulatory and clinical affairs	541
Offer costs	1,964
Total	30,932

## Risks

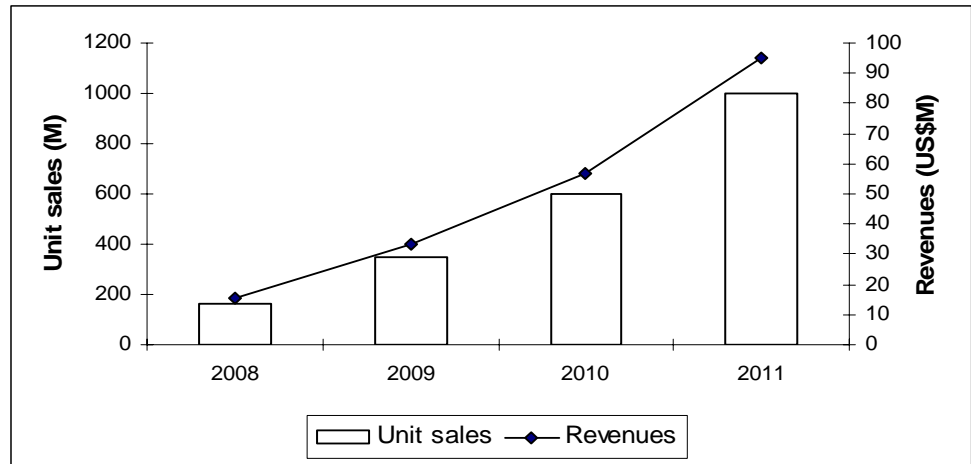
There is still a significant degree of risk in developing the CRP and PT tests, as well as the risk of not obtaining regulatory approval for these products. While LifeScan has the rights to commercialise the glucose blood test, there is no guarantee that LifeScan will want to commercialise the test. There is also a risk that the JUPITER trial will not be successful.

## Forecasts and Valuation

Forecast unit sales and revenues for each product are shown in Figures 5-7.

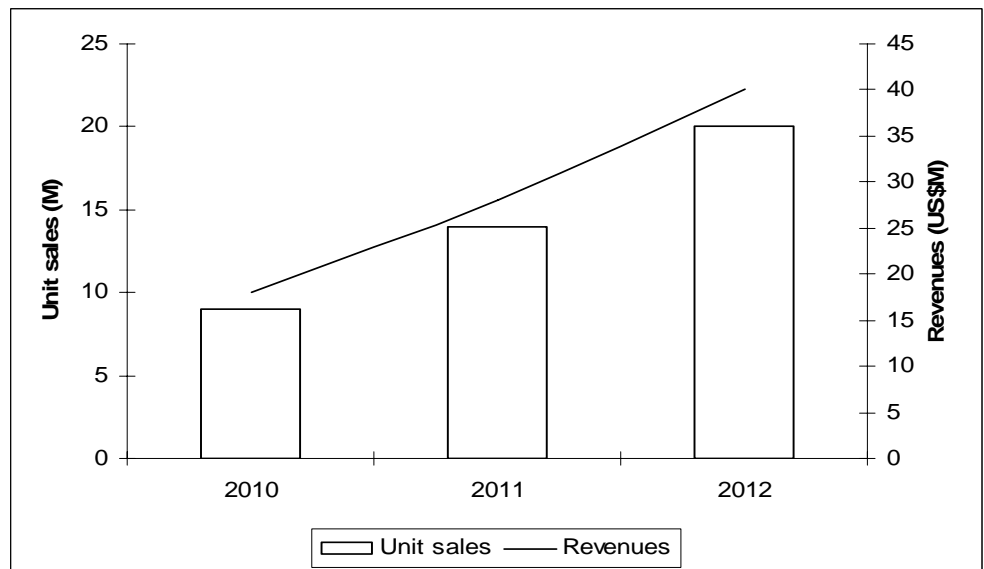


Figure 5: Glucose Test Strip Forecasts



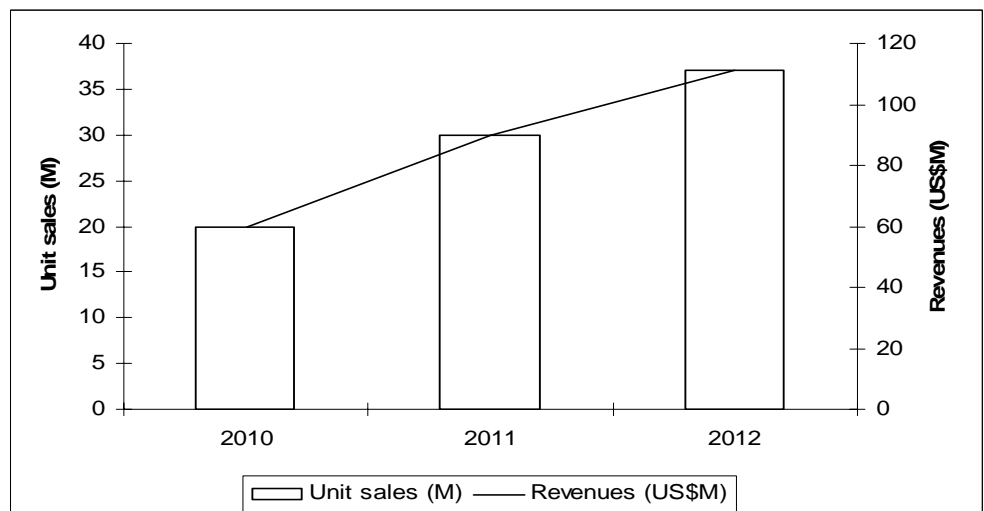
Source: WHTM

Figure 6: PT Test Strip Forecasts



Source: WHTM

Figure 7: CRP Test Strip Forecasts



Source: WHTM



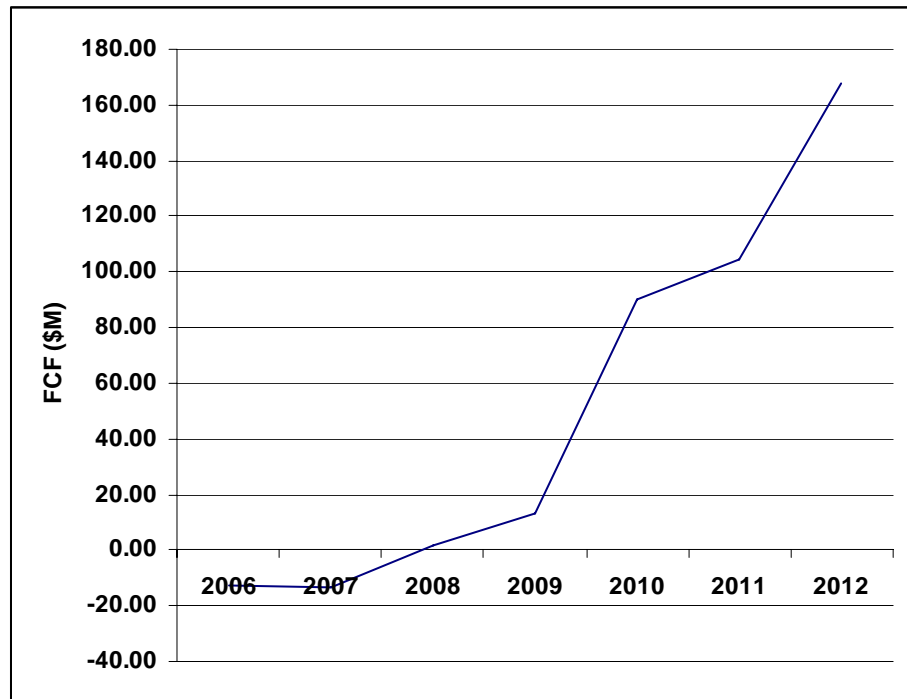
The income statement and cash flows that arise from these forecasts are shown in Table 3 and Figure 8 respectively.

**Table 3: Forecast Income Statement**

(\$M)	2006	2007	2008	2009	2010
Revenues	0.00	0.00	20.27	44.33	180.00
Gross profit	0.00	0.00	10.13	22.17	136.80
R&D	2.00	2.13	0.67	1.07	1.07
SG&A	3.55	4.11	5.70	6.27	6.53
EBITDA	-5.55	-6.25	3.77	14.83	129.20
D&A	0.85	1.49	1.57	1.50	1.41
EBIT	-6.40	-7.73	2.20	13.33	127.79
Accumulated losses/profits	-6.40	-14.13	-11.93	1.40	129.19
Tax	0.00	0.00	0.00	0.42	38.76
NPAT	-6.40	-14.13	-11.93	0.98	90.44

Source: WHTM

**Figure 8: Forecast Cash Flows**



Source: WHTM

All the above forecasts assume a 100% probability of all three products reaching the market.

There are three broad scenarios under which one can value UBI. For each of the scenarios we use a PE and DCF method, as shown in Table 4.

**Table 4: Probability adjusted valuations**

		PE multiple 20x	Discount rate 15%
Product	Probability of Reaching Market	PE valuation (\$ per share)	DCF valuation (\$ per share)
Glucose	100%	7.38	4.87
PT	100%		
CRP	100%		
Glucose	65%	2.04	<b>1.74</b>
PT	65%		
CRP	20%		
Glucose	0%	0.97	0.88
PT	65%		
CRP	20%		

Source: WHTM

The probability of reaching the market for glucose assumes only a minor technical and regulatory risk. Most of the risk revolves around whether or not LifeScan decides to commercialise the product or not. We believe the odds favour LifeScan taking the product to market given LifeScan's decreasing market share in Europe, and our belief that this has been caused by more accurate products being marketed by competitors. We believe UBI's product will redress this problem and give LifeScan a cost advantage.

We would only expect LifeScan to make a final decision from mid-2007, once UBI has:

- Validated its new production facilities
- Received EU regulatory approval for the glucose product.

Our base case valuation is therefore 174 cps, which would increase to 220 cps (100% probability of the product reaching the market) if LifeScan agrees to market the product.

### Comparative Valuations and Competitors

UBI listed at a market capitalisation of \$64M, with cash resources of approximately \$31M, valuing its technology at \$33M. The major international and domestic comparators in the sector are shown in Table 5.

**Table 5: Comparative Valuations**

Company	Market Capitalisation
Roche	US\$158.6B
Johnson & Johnson	US\$190.2B
Abbott	US\$80.2B
Bayer	US\$44.2B
Agenix (AGX)	A\$27.6M
Ambri	A\$11.8M
Panbio	A\$25M

Source: WHTM



While there are a number of companies attempting to develop non-invasive glucose testing systems, it appears that industry consensus is that the most reliable and cost effective systems will rely on testing of whole blood – i.e. a test strip and meter. This is because whole blood gives accurate and extremely timely results allowing for remedial action to be taken immediately (e.g. insulin injection, additional food etc.)

### **News-Flow and Valuation Drivers**

Major news events expected to drive the share price over the next 12-months are:

- Installation and validation of new manufacturing equipment: – Q2-Q3-2007
- Submission of EU marketing application for glucose test: - Q3-Q4-07
- Marketing approval for glucose test in Europe: - Q4-07-Q1-08
- Agreement by Johnson & Johnson to market the glucose test: - 2H-2007
- Results of the JUPITER study, which is evaluation the effectiveness of statin therapy on the reduction of major cardiovascular events among individuals with average or normal cholesterol; levels and elevated C-reactive protein levels (late 2007-early 2008).

### **Conclusion**

UBI is developing a range of PoC tests for which we believe there will be strong demand. LifeScan owns the rights to commercialise the glucose test strip, and we expect LifeScan to make a decision whether to take up these rights or not after UBI has validated its new manufacturing equipment and received EU approval to market the product.

We expect increasing demand for PoC tests due to structural changes in the diagnostic industry. These changes are being driven by increased understanding of the need for more frequent testing and monitoring of chronic conditions. As such we expect PoC tests that are accurate, reliable and cost effective to be in great demand.

While there is a risk that LifeScan decides not to commercialise the glucose test, it must be emphasised that UBI has a pipeline of products under development. In the absence of LifeScan taking up its rights we value the share at 88 cents. We believe there is more than an even chance of LifeScan exercising its marketing rights as the company not only has a 14% stake in UBI, but also invested in the IPO.

Using a 65% probability of LifeScan exercising its marketing rights we arrive at a DCF valuation of 174 cps. This increases to 220 cps if LifeScan decides to market the glucose test strip. If LifeScan decides not to market the product our valuation decreases to 88 cps.

Assuming all products reach the market our valuation increases to \$4.87 on a DCF basis.



## Universal Biosensors (UBI : \$1.09)

### INVESTMENT FUNDAMENTALS

Yr Ending Dec	2004A	2005A	2006E	2007E	2008E
EPS Reported (c)			-10.1	-6.0	1.7
<b>EPS Normalised (c)</b>			<b>-10.2</b>	<b>-6.0</b>	<b>1.7</b>
EPS Growth (%)	N/A	N/A	N/A	41.0%	128.5%
<b>PER Normalised (x)</b>			<b>-10.6</b>	<b>-18.1</b>	<b>63.4</b>
DPS (c)	0.0	0.0	0.0	0.0	0.0
Payout (%)			<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
Yield (%)			0.0%	0.0%	0.0%
Franking (%)	0%	0%	0%	0%	0%

### VALUATION DATA

Yr Ending Dec	2004A	2005A	2006E	2007E	2008E
EV / EBITA (x)	0.0		-17.5	-16.3	56.3
EV / EBITDA (x)	0.0		-20.2	-20.2	32.9
CFPS (c)			-6.8	-4.2	3.9
<b>Price / CF</b>			<b>-16.0</b>	<b>-25.8</b>	<b>27.9</b>
Book Value / Share (\$)			0.3	0.2	0.2
<b>Price / Book (x)</b>			<b>4.3</b>	<b>5.7</b>	<b>5.2</b>

### PROFIT & LOSS (\$m)

Yr Ending Dec	2004A	2005A	2006E	2007E	2008E
Sales Revenue	0.0	0.0	0.0	0.0	20.3
EBITDA	0.0	0.1	-5.6	-6.2	3.8
Depreciation	0.3	0.3	0.9	1.5	1.6
<b>EBITA</b>	<b>-0.3</b>	<b>-0.2</b>	<b>-6.5</b>	<b>-7.7</b>	<b>2.2</b>
Amortisation	0.0	0.0	0.0	0.0	0.0
<b>EBIT</b>	<b>-0.3</b>	<b>-0.2</b>	<b>-6.5</b>	<b>-7.7</b>	<b>2.2</b>
Net Interest Expense	0.0	0.0	0.0	0.0	0.0
<b>Pre-tax Profit</b>	<b>-0.3</b>	<b>-0.2</b>	<b>-6.4</b>	<b>-7.7</b>	<b>2.2</b>
Tax	0.0	0.0	0.1	0.0	0.0
Tax rate (%)	0.0%	0.0%	-1.1%	0.0%	0.0%
Minorities / pref divs	0.0	0.0	0.0	0.0	0.0
Equity accounted NPAT	0.0	0.0	0.0	0.0	0.0
<b>Net Profit</b>	<b>-0.3</b>	<b>-0.2</b>	<b>-6.5</b>	<b>-7.7</b>	<b>2.2</b>
Abn's / Extraord's	0.0	0.0	0.0	0.0	0.0
Reported Net Profit	-0.3	-0.2	-6.5	-7.7	2.2
Revenue Growth (%)	N/A	N/A	N/A	N/A	N/A
EBIT Growth (%)	N/A	43.9%	-	-19.2%	128.5%
NPAT Growth (%)	N/A	42.0%	-	-19.5%	128.5%

### PROFITABILITY RATIOS

Yr Ending Dec	2004A	2005A	2006E	2007E	2008E
<b>EBIT / Sales (%)</b>					<b>10.9%</b>
ROA (%)	N/A	N/A	-126.8%	-61.9%	13.6%
<b>ROE (%)</b>	<b>N/A</b>	<b>N/A</b>	<b>-39.7%</b>	<b>-27.1%</b>	<b>8.6%</b>
ROFE (%)	N/A	N/A	-196.1%	-87.1%	20.2%

### INTERIMS (\$m)

Half Yr	Jun 05	Dec 05	Jun 06	Dec 06	Jun 07
Yr Ending Dec	1H A	2H A	1H A	2H E	1H E
Sales Revenue	0.0	0.0	0.0	0.0	0.0
EBIT	0.0	-0.2	-1.2	-5.3	-3.9
<b>Net Profit</b>	<b>0.0</b>	<b>-0.2</b>	<b>-1.2</b>	<b>-5.3</b>	<b>-3.9</b>
EBIT / Sales (%)					

### BALANCE SHEET (\$m)

Yr Ending Dec	2004A	2005A	2006E	2007E	2008E
Cash	0.0	0.0	26.0	13.4	16.1
Receivables	0.0	0.0	0.0	0.0	1.0
Inventories	0.0	0.0	0.0	0.0	2.0
Other	0.0	0.0	0.0	0.0	0.0
<b>Current Assets</b>	<b>0.0</b>	<b>0.0</b>	<b>26.0</b>	<b>13.4</b>	<b>19.1</b>
Net PPE	0.0	0.0	8.0	13.8	14.5
Investments	0.0	0.0	0.0	0.0	0.0
Intangibles	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	2.2	1.0	0.2
<b>Non-current Assets</b>	<b>0.0</b>	<b>0.0</b>	<b>10.2</b>	<b>14.7</b>	<b>14.7</b>
<b>Total Assets</b>	<b>0.0</b>	<b>0.0</b>	<b>36.2</b>	<b>28.1</b>	<b>33.8</b>
Current Payables	0.0	0.0	3.6	3.6	4.2
Current Debt	0.0	0.0	0.0	0.0	0.0
Non-Current Debt	0.0	0.0	0.0	0.0	0.0
Provisions	0.0	0.0	0.0	0.0	2.9
Other	0.0	0.0	0.0	0.0	0.0
<b>Total Liabilities</b>	<b>0.0</b>	<b>0.0</b>	<b>3.6</b>	<b>3.6</b>	<b>7.1</b>
Equity	0.0	0.0	38.7	38.7	38.7
Reserves	0.0	0.0	1.1	0.8	0.7
Retained Profits	0.0	0.0	-7.2	-15.0	-12.8
Minorities	0.0	0.0	0.0	0.0	0.0
<b>Total Equity</b>	<b>0.0</b>	<b>0.0</b>	<b>32.6</b>	<b>24.5</b>	<b>26.7</b>
<b>Total Funds Employed</b>	<b>0.0</b>	<b>0.0</b>	<b>6.6</b>	<b>11.1</b>	<b>10.6</b>

### LIQUIDITY & LEVERAGE RATIOS

Yr Ending Dec	2004A	2005A	2006E	2007E	2008E
Net Debt (Cash) (\$m)	0.0	0.0	-26.0	-13.4	-16.1
<b>Net Debt / Equity (%)</b>			<b>-79.7%</b>	<b>-54.6%</b>	<b>-60.3%</b>
Interest Cover (x)					
<b>Debt / CashFlow (x)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

### CASHFLOW (\$m)

Yr Ending Dec	2004A	2005A	2006E	2007E	2008E
EBIT	-0.3	-0.2	-6.5	-7.7	2.2
Dep'n and Amort'n	0.3	0.3	0.9	1.5	1.6
Net Int Rec'd (Paid)	0.0	0.0	0.0	0.0	0.0
Tax Paid	0.0	0.0	0.0	0.0	0.0
Dec / (Inc) W'kg Cap	0.0	0.0	0.0	0.0	0.0
Other	0.3	0.2	1.3	0.8	1.2
<b>Operating Cash Flow</b>	<b>0.3</b>	<b>0.3</b>	<b>-4.4</b>	<b>-5.4</b>	<b>5.0</b>
Capital Expenditure	-0.3	-0.3	-7.2	-7.2	-2.3
Asset Sales	0.0	0.0	0.0	0.0	0.0
Investments	0.0	0.0	0.0	0.0	0.0
Other Inv. Flows	0.0	0.0	0.0	0.0	0.0
<b>Investing Cash Flow</b>	<b>-0.3</b>	<b>-0.3</b>	<b>-7.2</b>	<b>-7.2</b>	<b>-2.3</b>
Equity Raised	0.0	0.0	35.1	0.0	0.0
Inc / (Dec) in Loans	0.0	0.0	0.0	0.0	0.0
Dividends Paid	0.0	0.0	0.0	0.0	0.0
Other Fin. Flows	0.0	0.0	-2.0	0.0	0.0
<b>Financing Cash Flow</b>	<b>0.0</b>	<b>0.0</b>	<b>33.1</b>	<b>0.0</b>	<b>0.0</b>
<b>Net Cash Flow</b>	<b>0.0</b>	<b>0.1</b>	<b>21.6</b>	<b>-12.6</b>	<b>2.7</b>

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