Biosensors Limited

VW Investments

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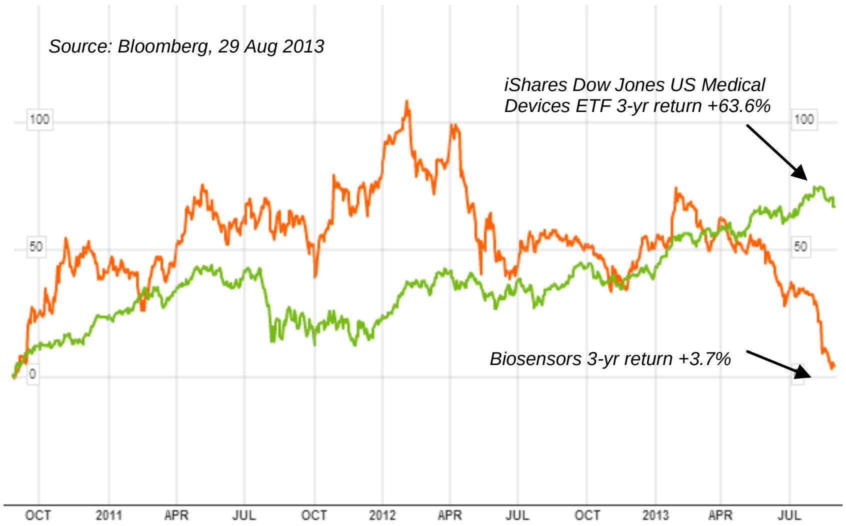


Ticker	B21
Exchange	Singapore Stock Exchange
Industry & Sector	Manufacturing, Medical Technology
Market Capitalization	S$ 1,430,106,882
52-wk Price Range	S$ 0.82 – S$1.42
Recent Price	S$ 0.835 (28/08/2013)
Net Asset Value	S$ 0.922 (30/06/2013) (FX rate: 1.25)
Current P/E	12.3x
Projected 2014 P/E	10.1x
Indicative Dividend Yield	3.00%
Benchmark	iShares US Medical Devices ETF
Listed Peers	Medtronic, Boston Scientific, St. Jude Medical, Abbott Lab

Recommendation

BUY

Pros

- Patented BioMatrix NeoFlex and BioFreedom rolling out in phases
- Consistent operating cash flow
- Timely adjustments to inventory
- Company shares buy-back program and first-ever dividend yield of 3%

Cons

- Focused on brand building instead of R&D, licensing revenue may further decrease
- Acquisition trail may be costly to shareholders
- Significant off-balance sheet contractual obligations

Intrinsic Value

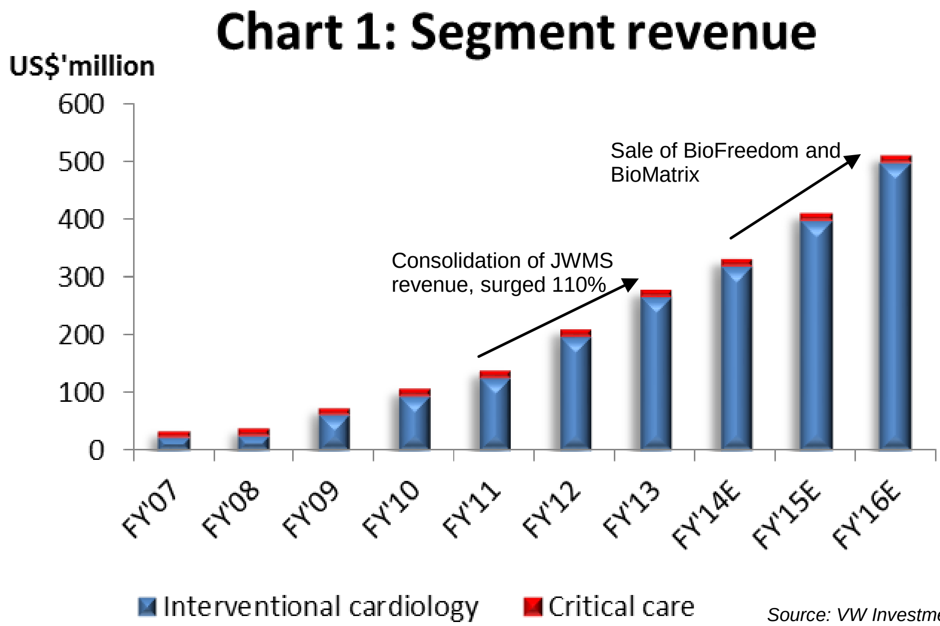
S$ 1.025

Based on Free Cash Flow Equity
Upside potential: 23%

1. Business Summary

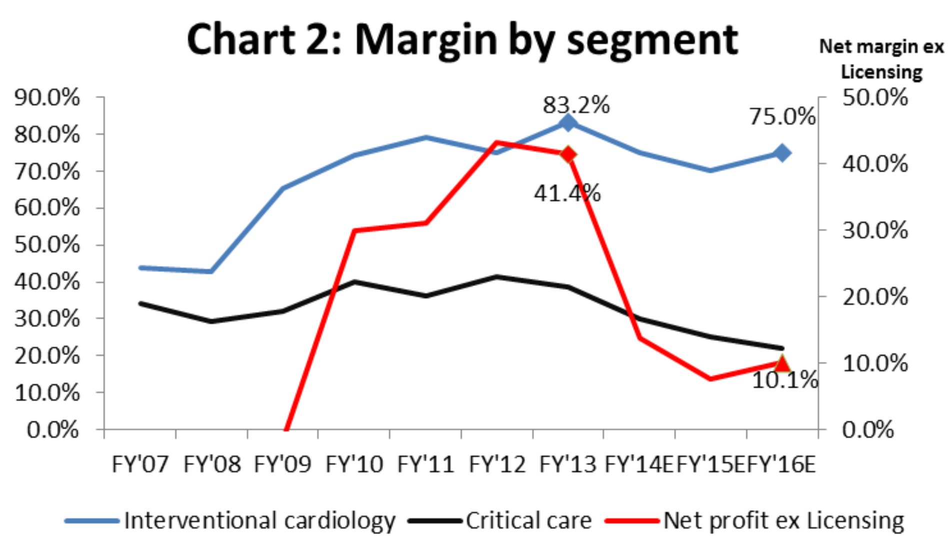
Biosensors International Group Ltd develops, manufactures and distributes medical devices used in cardiology: interventional and critical care. The group currently commercializes Drug-eluting stents (DES), Drug-coated stents (DCS), Bare metal stents and Balloon dilatation catheters under its interventional cardiology division; while the critical care division commercializes vascular catheters, pressure monitoring kits and blood pressure transducers for use in open heart surgery and critical care areas of a hospital. In addition, the Group collects licensing and royalty revenue for its proprietary DES and other intellectual properties. Headquartered in Singapore, Biosensors main areas of growth are EMEA and Asia Pacific. In Japan, the company partners with Terumo to market Noburi DES, which uses Biosensors' patented drug Biolimus A9.

2. Financial Analysis



Source: VW Investments, 27 Aug 2013

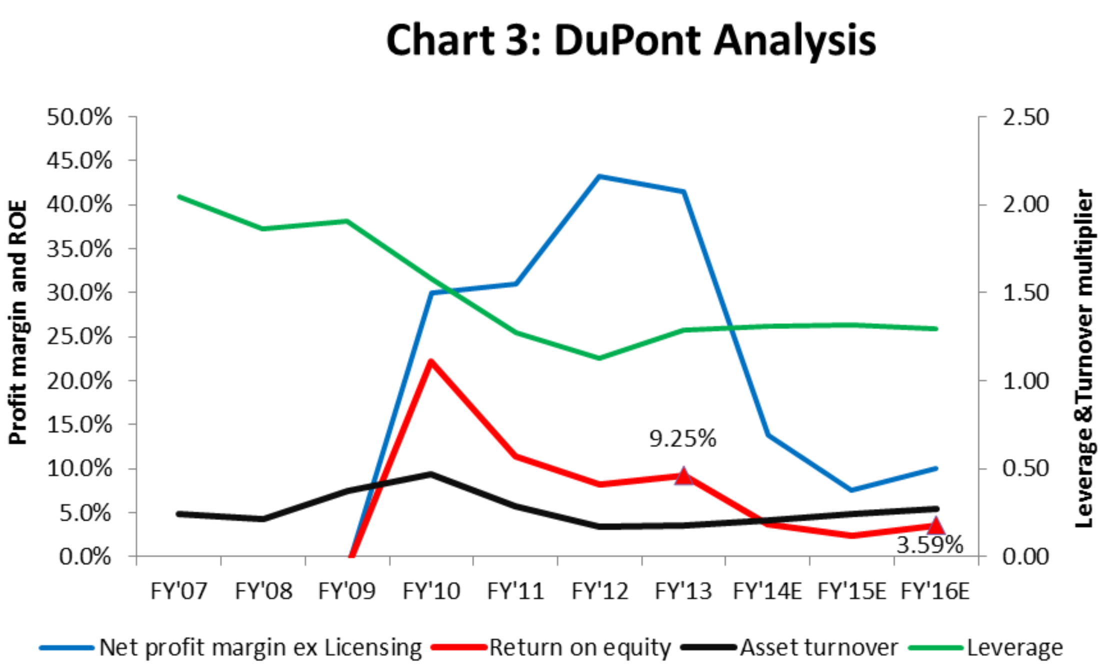
With CE Mark approval, Biosensors is able to market both BioFreedom and BioMatrix NeoFlex in Europe. According to its management, full commercialization is anticipated in 2014. Hence, exhibited in Chart 1 above, interventional cardiology revenue is likely to continue its upward trajectory for the coming years. The recent surge in revenue of 110% between FY11 and FY13 was attributable to consolidation of JWMS with parent Biosensors. Acquisition of Spectrum Dynamics is a done deal, more mergers and acquisitions are expected as the company transforms itself to a one-stop cardiology medical platform provider. As of writing, Biosensors does not market its stents in the US. Should FDA approval be obtained, it would significantly boost revenue growth, albeit taking up a small market share in the intensely competitive US market.



Source: VW Investments

Critical care division showed a declining trend in profit margin while interventional cardiology held up well through FY13. Licensing and royalties revenue experienced a sharp drop in from $80m to $57m. Results for 1Q2014 confirmed the structural weakness of this revenue-generating unit. Unless the management innovates by investing in R&D, licensing and royalties will continue its descent. Hopes on the reversal rest on the new R&D and Innovation Hub in Singapore (expected to be completed by late 2014), and commitment to fund $25.7m of clinical studies by a research institute.

Demand for Excel DES is credited for the strong performance in interventional cardiology in FY13. Initially, Biosensors ventured into China through a joint-partnership with JWMS. In FY12, Biosensors acquired the remaining shares of the latter and embarked on inventory adjustments, accelerating the obsolescence of some of its product lines. With increased competition in stent technology, particularly in Asia Pacific, profit margin for interventional cardiology is likely to decrease. In projecting growth over the next 3 fiscal years, we applied a stricter growth rate to JWMS, from the company's projected annual growth rate of 18% to 13%. Accordingly, the difference in present value is treated as goodwill impairment in the following 3 years.

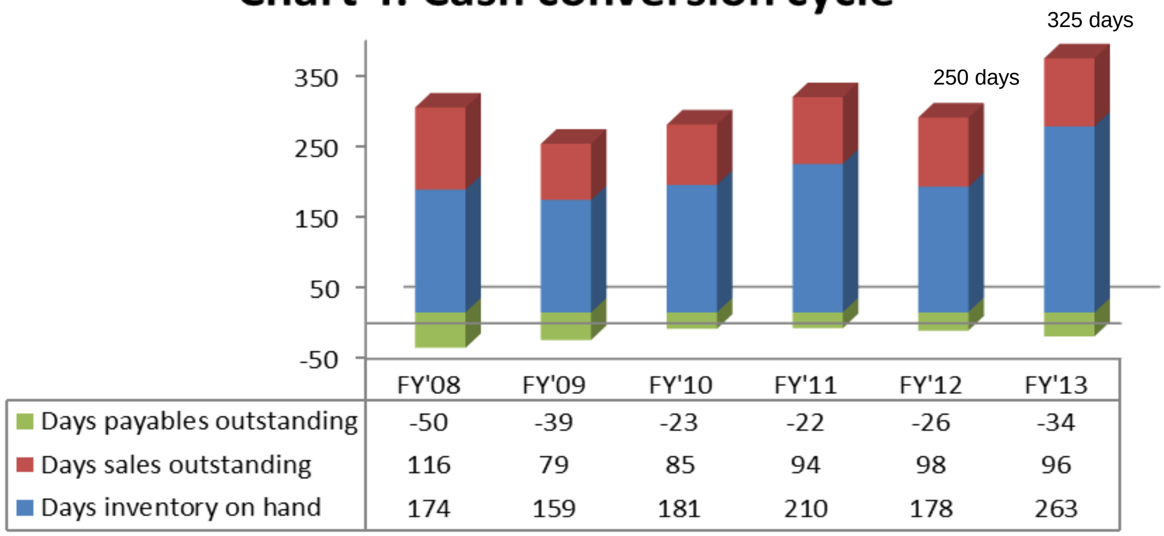


Source: Annual reports, VW Investments

DuPont analysis of ROE shows that the main laggard is net income margin. However, a continuation of company shares buyback (beginning 1Q2014) should nicely prop up ROE via increase in leverage, mitigating the drag on ROE by net income margin and expanding asset turnover. In 1Q2014, cash balance per share stands at US$0.31/diluted share (S$0.39/share). Although this measurement is subjected to significant fluctuation, Biosensors has US$500 million of untapped credit facility in issuing Med-Term Notes.

Biosensors bought back 0.7% of the total issued shares in Q1 at an average price of S$1.15. The recent correction in share price, from S$1.04 to S$0.84, would likely urge more shares buyback. Further, declared dividend of US$0.02 is a first for the company, and an indication of the management keeping an eye on ROE while engaging in M&A. Dividend yield is 3% at the current share price of S$0.835.

Chart 4: Cash conversion cycle



	FY'08	FY'09	FY'10	FY'11	FY'12	FY'13
Days payables outstanding	-50	-39	-23	-22	-26	-34
Days sales outstanding	116	79	85	94	98	96
Days inventory on hand	174	159	181	210	178	263

Source: Annual reports, VW Investments

Cash conversion cycle increased in FY13 due to inventory turnover. With a focus on inventory adjustment, inventory turnover should normalize in the range of 2-2.5. In the interim, we will see inventory obsolescence with impairment charge put through P&L in FY'14E. The years ahead should bode well for Biosensors' cash collection cycle, moving into the more efficient range of between 180 and 220 days, from the current 325 days.

3. Valuations

We derive cost of equity at 11.58% using CAPM: risk-free rate at 2.7% (10-year SGS Bond), industry beta 1.07 (Reuters) and equity risk premium of 8.3%.

We discount FCFF using weighted average cost of capital 9.96%. FCFE and residual income valuation are discounted at cost of equity. Terminal values for both FCFF and FCFE are found using H-model, assuming 5 years to long-term growth of 2% and short-term growth of 13%, in line with JWMS projected growth rate.

Of the 3 absolute valuation methodologies, we are more comfortable in the valuation derived using discounted cash flow, as residual income relies heavily on accounting data when intangible assets including goodwill weigh as much as 48% of total assets. Of the 2 DCF models, we prefer free cash flow to equity as it measures the amount of cash available to common shareholders. Of particular mention is that Biosensors may issue additional US$500 million debt as long as it does not breach its debt covenants.

Table 1: Absolute Valuation

	FY'14E	FY'15E	FY'16E	Terminal value	Intrinsic value
Free cash flow to firm	US$0.05	-US$0.02	US$0.06	US$0.85	US$ 0.88
Free cash flow to equity	0.01	-0.01	0.06	0.82	0.82
Residual income	-0.03	-0.04	-0.03	Book value: 0.72	0.56

Source: VW Investments

Valuing Biosensors using free cash flow to equity gave an intrinsic value of US$0.82. Assuming US$-SG$ stabilizes at 1.25, the company should trade at S$1.025. At the current price, investors may pick up the stock at 23% discount to its intrinsic value. In the worst case scenario, as with residual income model forecast, the company may destroy value in the next 3 years and could still possibly trade at US$0.56x1.25 = S$0.70. Downside risk is 16%, with an upside reward of 23%.

Valuation of Biosensors is more compelling when put alongside its more established peers. Medtronic (NYSE: MDT), Boston Scientific (NYSE:BSX), St Jude Medical (NYSE: STJ) and Abbott Lab (NYSE:ABT) are dominant players in the medical technology sector.

Table 2: Price Multiples

	Biosensors	Boston Scientific	Medtronic	St. Jude	Abbott Lab
P/E	12.3	26.7	15.2	24.5	13.6
P/B	0.9	2.2	2.9	3.9	2.4
P/FCF	13.9	15.5	17.3	25.3	20.4
P/S	3.6	2.1	3.2	2.7	2.5

Source: VW Investments, Thomson Reuters, Bloomberg, Capital IQ, 27 Aug 2013

Based on price multiples shown above in Table 2, Biosensors is extremely cheap at 12.3x P/E and 0.9x P/B. While P/S appears relatively more expensive than its peers, Biosensors again led the pack at only 13.9x P/free cash flow.

Table 3: Relative Valuation

Per share	Biosensors
Earnings	0.05
Book value	0.73
Free cash flow	0.05
Sales	0.19

Average	Fair value	Weighting (%)	Relative Value
20.0	US$1.09	15	US$1.09
2.8	2.08	15	
19.6	0.95	60	
2.6	0.49	10	

Source: VW Investments, 27 Aug 2013

Aggregating its peers to find the average, we find a fair value for Biosensors based on each metric. Next, we assign a weighting for each metric to derive a final relative value for Biosensors. We prefer to underweight sales component (10%) because of the company's business strategy in acquiring other companies. Consolidation of newly acquired companies may inflate revenue, disguising the true margin of each newly acquired product line. We skew towards free cash flow (60%) for the simple fact that organic available cash is what investors like to see. Thus, market valuation of Biosensors should be US$1.09 x 1.25= S$1.36. At the current price of $0.835, it represents a steep discount of 63%, the price Biosensors should command in the marketplace.

4. Risks

i) Working capital requirement

Inventory obsolescence is one of the key financial risks in medical technology industry. With its latest CE Mark approvals for BioMatrix NeoFlex and BioFreedom, bare metal stents are further pushed down the pecking order. DCS sale is likely to be pressured further with continuing innovation of new DES products.

Despite a boost in cash position from the sale of debt, payables turnover remains sluggish. It is highly likely that Biosensors will issue another Med-Term debt by FY'17, to pump up its working capital, and for the retirement of senior debts.

ii) Significant off-balance sheet contractual obligation

In FY13 annual report, Biosensors has commitments to fund clinical trials to the tune of US$25.7m, and a contractual obligation to invest US$51.5m over the next 2 years so as to earn land use rights for the new R&D Innovation Hub in Singapore. Meanwhile, Biosensors pays reduced tax rate for qualifications under High Tech enterprise and pioneer activities. These credits may expire in the coming year if R&D activity does not step up.

Company-sponsored defined benefit pension fund is persistently underfunded despite having raised capital through equity and debt in the past 4 years. It is a question of either too conservative an estimate by the actuarial team or poor investment return by the investment team.

iii) Focused on inorganic growth, horizontal expansion

In order for it to transform into a medical platform company, Biosensors intends to go aggressive on acquisition. Evidences include increased marketing expenses on brand building and lower year on year spending on R&D as a proportion of product revenue. To be fair, R&D spending as a proportion of revenue edged 0.7% higher in FY13 to 10.7%, but pale in comparison against its FY09 level of 28%. We are not certain if Biosensors is destructing shareholders value in its horizontal acquisition, as the goal may lead to an increased tendency of overvaluing target companies in order to accelerate revenue growth.

iv) Expanded board

Compensation to key management personnel spiked to US$12.7 million, from US$7.4 million, despite a reduction in board members from 11 to 10. Furthermore, share price over the last fiscal year has slumped 13.3%, from S$1.505 on Mar 30, 2012 to S$1.305 on Mar 28, 2013. We are concerned if the remuneration committee is looking after shareholders equity.

There is additional concern if Biosensors are overweighting China as 3 elected non-independent directors sitting on the board have strong affiliation to Shandong Weigao, which Biosensors acquired stakes in gaining full control of JWMS.

v) Investment risks

Biosensors is lightly traded on Singapore Stock Exchange Mainboard, with daily volume of less than 2,500 lots on average. Valuation of the company is in USD and it is subjected to significant fluctuation in the FX market. For example, if SGD strengthens 5% from 1.25 rate, the downside risk to our calculated intrinsic value is 20%, with upside potential of 16%. Then, it would not make sense to take such a risky position.

5. Key Assumptions

We grew interventional revenue by 20% from FY13 to FY14, and by 25% for each of the subsequent year. When the new R&D Innovation hub is ready, we expect greater innovation in the coming years, which would boost revenue growth in this segment. As for critical care segment, revenue growth is forecasted to increase at a tepid 2% each year, with focus mainly on interventional cardiology. Profit margin for critical care products is likely to be squeezed with increased competition. Licensing revenue will probably remain weak, with a slump of 15% this year followed by 12% and 8% the years after.

We adjusted the assumptions made by the management pertaining to JWMS. The management forecasted growth of 18% in the next 5 years, terminal growth of 2% and discount rate of 11%. While we are comfortable with terminal growth and discount rate used, we are in disagreement that JWMS will continue to expand at a high double-digit, considering smaller players are nibbling away JWMS and Shandong Weigao (subsidiary) market share in mainland China. Accordingly, we record straight-line impairment charge for the difference over 3 years.

On the balance sheet, the path of transformation will entail consolidating newly acquired companies. In addition, with some of the clinical studies near completion, capitalization of development cost will increase. PPE is forecasted to increase 18% this year and 15% in each of the following 2 years. Acquisition dollar is estimated to be approximately S$50 million per year for the next 3 years.

We are hopeful that the inventory adjustment will make the cash conversion cycle more efficient. Hence, we projected inventory, receivables, and payables turnover to be 2.5x, 5x and 12x respectively. If the forecasts materialize, cash conversion cycle would decrease from the current 325 days to 189 days. The drastic increase in efficiency is not considered aggressive, as the management will rollout sales of its CE Mark products in phases in Europe.

6. Technical Analysis

Long-term trend line does not look too optimistic for Biosensors. Taking the high volume bar established in Sept 2010, the medical device company has plunged below the S$0.865 support level on the back of disappointing 1Q results. The plunge accelerated when announcements of insiders and substantial shareholders losing faith in the company with either market sales or exercise of options. At the same time, supporting the stock price is the company shares buy-back program.

Relative Strength Index as an indicator seems to forecast well the share price action of Biosensors. Looking at the long-dated chart, there is a very high chance Biosensors would retrace once it breaches the 80% level (signifying overbought). Conversely, as soon as Biosensors touches 20% level (signifying oversold), there would be upward price action on the counter. At the current level 23%, it is nearing a trading buy call.

Recent days saw STI retreating on Fed’s tapering talk as well as Syria crisis. Biosensors, however, is standing firm above $0.80. The resilience may yield should the Middle East crisis persist, as another key piece of geographical revenue growth comes from EMEA region.

Exhibit 1: Long-dated price movement

Source: POEMS NextView, 28 Aug 2013

Exhibit 2: Short-dated price movement

Source: POEMS NextView, 29 Aug 2013

Fibonacci retracement tool suggests a next line of support at $0.765 (61.8%). Based on technical analysis, it could go both ways; higher if we look at RSI for rebound, lower if we look at downtrend channel, support breach and Fibonacci retracement.

In the near-term, the target price for Biosensors is probably $0.93, the recent gap down pocket. For traders, cut-loss price set at psychological $0.80 seems reasonable. We would not bet on shorting this counter as the company may be buying back more shares than it bought

7. Disclosures

We have initiated long position in Biosensors International Group. Further, we intend to accumulate shareholdings in the next 5 trading days.

8. Important Disclaimer

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