Macquarie Research **Equities**





INDIA

Indian pharmaceuticals

6 March 2009

Stocks under coverage

Stock	Code	Reco	CP (Rs)	TP (Rs) U	Jpside	
Sun	SUNP IN	OP	996	1510	52%	
Dr Reddy	DRRD IN	OP	374	612	64%	
Cipla	CIPLA IN	UP	202	150	-26%	
Source: Macquarie Research, March 2009						

Big pharma - generic push

Event

 Pfizer (PFE US US\$12.50, Not rated), recently announced a deal with Aurobindo Pharma (ARBP IN, Rs159.15, Not rated) to acquire rights to 39 oral and 12 injectable off-patent drugs that the Indian company would manufacture and that Pfizer's generic arm would market in the US and Europe.

Impact

- Alliances and/or acquisitions in recent times (ie, Daiichi Sankyo (4568 JP, ¥1,604, OP, TP: ¥3,900) with an Indian firm, Sanofi (SNYNF US, US\$52.35, Not rated)-Zentiva, GSK (GSK US, US\$28.91, Not rated)-Aspen and Pfizer-Aurobindo) support the notion that innovator and generic companies can work together and be better-prepared to face challenges to their existing business models going forward.
- According to IMS, in the next four years US\$109bn worth of branded drugs face the threat of generic competition. Although this provides a strong market opportunity for generic players to capitalise on in the medium term, the number of new molecules launched by the innovator companies is on the decline, and that could put pressure on their long-term growth potential. Generics are forecast to have a CAGR of ~ 9% for the next five years vs low single-digit growth for innovative products.
- Because of the dominant positions of Indian players in the global generic space, they could be ideal partners or possible acquisition targets, in our view.
 Key competitive advantages include an established generic business, low-cost manufacturing, access to fast-growing emerging markets and strong and low-cost R&D capabilities.
- As more innovative players evolve this hybrid model, we believe the competition may intensify further. While many promoters could be reluctant to cash out completely at this stage, alliances work out to be alternative arrangements in the medium term. However, we believe that, given the competitive intensity in the industry, being vertically integrated provides an edge.
- Although the European (GSK, Sanofi, Novartis) and US (Pfizer) large-caps are already active in building generic capabilities in one way or another, we believe Japanese firms may also be active players in pursuing a generic strategy.
- Because the Japanese domestic market seems set to go through a phase of rapid pursuit of generics, many Japanese pharma players with substantial cash might look to play the generic opportunity globally while defending their domestic positions. Daiichi Sankyo, through its acquisition of an Indian firm, already made the first move in June last year.

Outlook

• We expect alliances, collaborations or acquisitions of generic players by big pharma names to gain further momentum as they look at alternative strategies for growth. It is a unique business model for sustainable growth to effectively manage opportunities and play to each other's strength across the full pharmaceutical life-cycle.

Analysts

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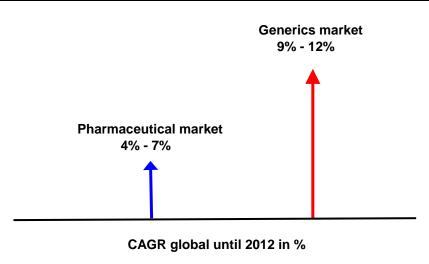
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Analysis

Pfizer recently announced a deal with Aurobindo Pharma to acquire the rights to 39 oral and 12 injectable off-patent drugs. Pfizer estimates that the deal with Aurobindo could boost its revenue by US\$200m by 2013. Although currently, the deal is for EU and the US, further alliances for other geographic regions cannot be ruled out. The deal includes 39 pills that will be sold in the US, 20 of which will also be sold across Europe, and 12 injectable antibiotic medicines. Pfizer will handle the marketing after licensing each product from Aurobindo, which will handle all the steps to get approval to make generic versions, as well as to manufacture them.

• Alliances and/or acquisitions in recent times support the notion that innovator and generic companies could work together and be better-prepared to face challenges to their existing business models going forward. According to IMS, in the next four years, US\$109bn worth of branded drugs face the threat of generic competition. Although this provides a strong market opportunity for generic players to capitalise on in the medium term, the number of new molecules launched by the innovator companies is on the decline, and that could put pressure on their long-term growth potential. Generics are forecast to have a CAGR of ~ 9% for the next five years vs low single-digit growth for innovative products.

Fig 1 Growth in pharmaceutical market



Source: Stada presentation, Macquarie Research, March 2009

Recent deals point towards the evolving hybrid model

Sanofi–Zentiva: Sanofi acquired Zentiva, which makes and sells generic drugs in central and eastern Europe, to establish a foothold in these emerging markets at a value of US\$2.6bn. The buyout will not only beef up Sanofi's generics capability, but also help it to capture a bigger share of emerging markets, which are growing much faster than the mature markets. Because many of these emerging markets are branded as generic in nature, a generic platform also helps them to build a solid platform for the launch of their patent-protected innovative products.

GSK–Aspen: GSK has entered into a strategic alliance with Aspen (a South African generic firm). Onco Therapies (JV of India-based Strides and Aspen) will license intellectual property and supply finished pharmaceutical products to GSK, which will then market the drugs in 95 emerging markets, excluding sub-Saharan Africa and India. The first drug commercialised under this arrangement is expected to be launched in 2010.

Daiichi-Sankyo: Daiichi Sankyo acquired a majority stake in an Indian firm last year for US\$4.6bn. Although the Indian firm continues to function as an independent generic company, Daiichi Sankyo can look forward to leveraging its product portfolio through the emerging market network. It also looks forward to exploiting further synergies on the manufacturing and innovative R&D research sides.

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Not uncharted territory - Novartis a successful example

Novartis (NOVN VX, Not rated) has an existing generic business through Sandoz (Not listed), which is the second-largest generic company in the world. Even under an innovator umbrella, Sandoz has continued to grow through acquisition in the generic space (eg, Hexal in Germany, Eon Labs in the US). In our view, the fact that Sandoz has been the first to launch biogenerics in Europe proves that synergies and headway can be exploited by the generic and innovator companies working together.

Teva (TEVA IT, Not rated) has a strong innovation portfolio, along with its core generic focus. This helps Teva to build its brand, create a balanced business model and generate a regular stream of cashflow to supplement its generic growth strategy. In 2007, its Copaxone, Azilect and Respiratory (HFA) franchises contributed US\$1.8bn of the company's total US\$9.4bn in sales.

As is evident, none of the top generic companies in the world is a pure generic player. Moving up the value chain and building a speciality pharma model is important for sustainable growth in the long term. Indian generic companies have been trying to do that, but with limited resources, it is proving to be a risky and difficult process to implement.

High potential in the emerging markets Pharma markets in 2030 (F) There is a possibility that the total pharmaceutical (USD billion) market size of BRICs* + Mexico and Turkey will reach as high as USD 330 billion-USD 420 billion (equal to 7.7%-8.8% CAGR) in 2030 from USD 56 billion in 2006. (The above market size would be equal to the total market size of N. America and Japan in 2006.) E5 64 Brazil Pharma market Japan breakdown of 330 - 42036 - 48top 40 Mexico countries (USD billion) (2006)USD 617 billion India N America 51 - 70 (USA, Canada) Russia

Fig 2 Emerging market focus - Why is it necessary?

Source: Daiichi Sankyo Company presentation, Macquarie Research, March 2009

India edge

- Because of the dominant positions of Indian players in the global generic space, they could be
 ideal partners or possible acquisition targets, in our view. Key competitive advantages include an
 established generic business, low-cost manufacturing, access to fast-growing emerging markets
 and strong and low-cost R&D capabilities.
- After the change from a process patent regime to a product patent regime, we believe the attractiveness of the Indian market has substantially increased from a long-term perspective for the innovative large-cap firms. A possible acquisition of an Indian generic firm with a decent domestic franchise can give them a decent head-start in terms of market share gain in the fastgrowing Indian pharma market.

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Outlook

- As more innovative players evolve this hybrid model, we believe the competition could intensify further. While many promoters may be reluctant to cash out completely at this stage, alliances work out to be alternative arrangements in the medium term. However, we believe that, given the competitive intensity in the industry, being vertically integrated provides an edge.
- Although the European (GSK, Sanofi, Novartis) and US (Pfizer) large-caps are already active in building generic capabilities in one way or another, we believe Japanese firms may also be active players in pursuing a generic strategy.
- Because the Japanese domestic market seems set to go through a phase of rapid pursuit of generics, many Japanese pharma players sitting on substantial cash might look to play the generic opportunity globally while defending their domestic positions. Daiichi Sanyo, through its Indian acquisition, already made the first move in June last year.
- We expect alliances, collaborations or outright acquisitions of generic players by the big pharma companies to gain momentum in the future, as they look at alternative strategies for growth. It is a unique business model for sustainable growth to effectively manage opportunities and play to each other's strength across the full pharmaceutical life-cycle.

Fig 3 Relative strength of Indian pharma companies

Company	Generic R&D	Mfg	New Drug	Front end	Indian market	Promoter	Comments
	Competencies	Capabilities	Discovery	Infrastructure	presence	Stake	
Sun Pharma	+++	+++	+++	++	+++	64%	Strong balance sheet, likely to be an acquirer
Dr Reddy	+++	+++	++	+++	++	26%	Global presence
Cipla	+++	+++	+	+	+++	39%	Following a partnership-based model
Lupin	+++	+++	+	+	++	51%	Building strong US business
Glenmark	+++	+++	+++	++	++	52%	Unmatched innovation capabilities
Piramal	+++	+++	+++	++	+++	50%	Strong domestic business, CRAMS a key driver
Divis	+++	+++	+	++	+	53%	CRAMS model
Dishman	+++	+++	+	++	+	61%	CRAMS model
Aurobindo	+++	+++	+	++	+	58%	FCCB an issue, tie-up with Pfizer a strong
							operational boost
Jubilant	+++	+++	+	+	+	50%	CRAMS model
Wockhardt	+++	+++	+	+	+	74%	Debt a major issue, biogeneric capability strong
Biocon	+++	+++	+++	+	+	61%	Biologics a core strength, CRAMS a key driver
Note: +++ im	plies Excellent, +-	+ implies Good	, + implies F	air			
Source: Macq	uarie Research, N	March 2009					

Fig 4 Evolving hybrid model

Pfizer	Operates through a generic subsidiary in US called Greenstone. Recent deal with Aurobindo to help build a strong product portfolio for distribution in US and Europe. They expect the deal with Aurobindo Pharma to contribute US\$200m in sales by 2010.
GSK	Recent deal with Aspen could help it launch generic drugs in several emerging markets. Speculation in some media reports that it is looking to acquire generic firms.
Sanofi-Aventis	Zentiva acquisition provides it with generic entry in eastern European markets. Speculation in some media reports that it is looking to acquire generic firms.
Novartis	Prominent player in the generic space through its 100% subsidiary Sandoz
Merck KGA	Divested its generic division in 2007 to concentrate on innovation business. Mylan acquired its generic division
AZN	No moves to get into generic space so far.
Roche	No moves to get into generic space so far.
Daiichi Sankyo	Acquired majority stake in Indian firm last year to mark its entry into generic space.
Takeda	No moves to get into generic space so far. Speculation in some media reports that it is looking to acquire generic firms. Strong balance sheet with substantial cash.
Astellas	No moves to get into generic space so far. Strong balance sheet with substantial cash.
Mitsubishi Tanabe	Announced generics to be a key focus area. Strong balance sheet with substantial cash.
Source: Macquarie Research, March 2009	

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Important disclosures:

Recommendation definitions

Macquarie - Australia/New Zealand

Outperform – return >5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return >5% below benchmark return

Macquarie - Asia/Europe

Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%

Macquarie First South - South Africa

Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%

Macquarie - Canada

Outperform – return >5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return >5% below benchmark return

Macquarie - USA

Outperform (Buy) – return >5% in excess of benchmark return

Neutral (Hold) – return within 5% of benchmark return Underperform (Sell)– return >5% below benchmark return

Recommendations - 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

Volatility index definition*

This is calculated from the volatility of historical price movements.

Very high-highest risk – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

High – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

Medium – stock should be expected to move up or down at least 30–40% in a year.

Low-medium – stock should be expected to move up or down at least 25–30% in a year.

 \boldsymbol{Low} – stock should be expected to move up or down at least 15–25% in a year.

* Applicable to Australian/NZ/Canada stocks only

Financial definitions

All "Adjusted" data items have had the following adjustments made:

Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

EPS = adjusted net profit / efpowa*

ROA = adjusted ebit / average total assets
ROA Banks/Insurance = adjusted net profit /average
total assets

ROE = adjusted net profit / average shareholders funds Gross cashflow = adjusted net profit + depreciation *equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

Recommendation proportions - For quarter ending 31 December 2008

	AU/NZ	Asia	RSA	USA	CA	EUR
Outperform	38.55%	50.61%	64.52%	53.13%	65.55%	43.00%
Neutral	41.82%	15.92%	25.81%	40.63%	27.73%	48.00%
Underperform	19.64%	33.47%	9.68%	6.25%	6.72%	9.00%

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Tim Rocks (Asia) Daniel McCormack (Asia) Desh Peramunetilleke (Asia) Mahesh Kedia (Asia) Michael Kurtz (China) Seshadri Sen (India) Ferry Wong (Indonesia) Chris Hunt (Japan) Peter Eadon-Clarke (Japan) Prem Jearajasingam (Malaysia) Edward Ong (Malaysia) Alex Pomento (Philippines) Tuck Yin Soong (ASEAN, Singapore) Daniel Chang (Taiwan) Alastair Macdonald (Thailand)	(852) 3922 3585 (852) 3922 4073 (852)3922 3564 (852) 3922 3576 (8621) 2412 9002 (9122) 6653 3053 (6221) 515 7335 (813) 3512 7878 (813) 3512 7850 (603) 2059 8989 (603) 2059 8982 (632) 857 0899 (65) 6231 2838 (8862) 2734 7516 (662) 694 7741

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Mark Duncan (Korea, Taiwan)	(8862) 2734 7510
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Michael Newman (Tokyo)	(813) 3512 7920
Charles Nelson (UK/Europe)	(44) 20 3037 4832
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Nick Ainsworth (Generalist)	(852) 3922 2010
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Adam Zaki (Asia) Mona Lee (Hong Kong) Mike Keen (Europe) (852) 3922 2002 (852) 3922 2085

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