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FOR PRIVATE CIRCULATION

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Stock details

| | |
|--------------------|--------------|
| BSE code | : 531349 |
| NSE symbol | : PANACEABIO |
| Market cap (Rs bn) | : 19.6 |
| Free float (%) | : 24 |
| 52-wk Hi/Lo (Rs) | : 531/253 |
| 2 Wk Avg volume | : 103,564 |
| Shares o/s (mn) | : 57.1 |

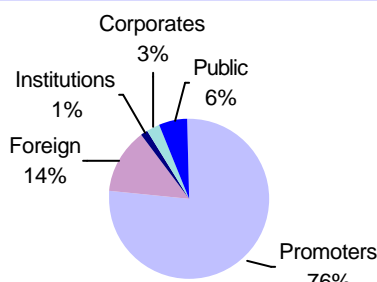
Summary table

| (Rs mn) | FY06 | FY07E | FY08E |
|-------------------|-------|-------|--------|
| Revenues | 5,419 | 6,998 | 10,648 |
| Growth (%) | 65.3 | 29.1 | 52.2 |
| EBITDA | 1,199 | 1,960 | 3,088 |
| EBITDA margin (%) | 22.1 | 28.0 | 29.0 |
| Net profit | 592 | 1,308 | 2,108 |
| Net Margin (%) | 10.9 | 18.7 | 19.8 |
| EPS diluted (Rs) | 10.4 | 18.4 | 29.6 |
| Growth (%) | 117.1 | 77.2 | 61.1 |
| DPS (Rs) | 1.0 | 1.0 | 1.0 |
| RoE (%) | 25.9 | 25.8 | 24.9 |
| RoCE (%) | 18.0 | 23.8 | 31.1 |
| EV/Sales (x) | 4.3 | 3.1 | 2.0 |
| EV/EBITDA (x) | 19.5 | 11.0 | 6.9 |
| P/E (x) | 37.1 | 18.7 | 11.6 |
| P/BV (x) | 14.2 | 3.4 | 2.7 |

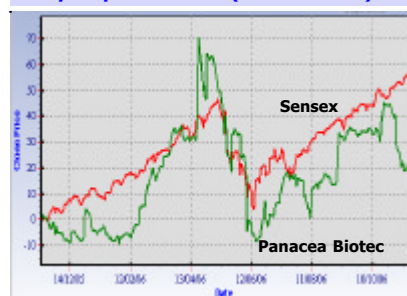
| FY06/07 | Q3 | Q4 | Q1 | Q2 |
|-----------|-------|-------|-------|-------|
| Net sales | 1,100 | 1,351 | 2,334 | 1,743 |
| EPS (Rs) | 0.9 | 2.0 | 8.7 | 8.1 |

Source: Company & Kotak Securities - Private Client Research

Shareholding pattern Q2FY07



One-year performance (Rel to sensx)



Source: Capitaline

Panacea Biotec Ltd

Price: Rs.344
 Target Price: Rs.512

Recommendation: BUY

Panacea Biotec Ltd, a research-based pharmaceutical company, has strong growth prospects driven by Vaccines, Proprietary NDDS-based products for international markets, and strategic collaborations. Panacea Biotec's key revenue driver is vaccines which contributed 76% to its total turnover in FY06. The company has well established brand equity in pediatric vaccines, pain management, diabetes management and organ transplantation.

Over the past three years, the company has consolidated its position and has achieved compounded annual growth of 26% in revenues and 41% in net profit. We expect revenue CAGR of 36% and earnings CAGR of 85% between FY06-08E. We feel that current valuations do not capture the future growth potential. We initiate our coverage with buy recommendation with one year target price of Rs.512.

Investment Argument

- Institutional Business of Vaccines.** The company is the largest supplier of OPV (Oral Polio Vaccine) to UNICEF for their requirements in India. In FY06, the company also started export of OPV to UNICEF for their international requirements and registered export turnover of Rs267mn. In H1FY07, the export of OPV to UNICEF has further grown to Rs723mn thereby indicating large demand of OPV in the international market. In the domestic market also the demand of OPV is expected to increase in the wake of recent increase in the number of polio cases in India which has increased from 66 in 2005 to around 522 in 2006. Polio eradication program is expected to continue till 2010.
- Combination Vaccines would be key growth driver.** The company has recently received WHO pre-qualification for EnivachB (r-Hep B) making it one of the nine companies in the world to get this pre-qualification. The process for WHO pre-qualification of other innovative combination vaccines is in advanced stage. We expect combination vaccines to register US\$5mn sales in FY07E and US\$30mn sales in FY08E on the back of supplies to UNICEF/WHO for their global requirements. Total vaccine business (domestic + exports) is likely to grow at 37% CAGR over FY06-08E.
- JV with Novartis Vaccines to drive growth in domestic vaccine industry.** The company has in 2005 launched innovative branded combination vaccines - EnivachB (r-Hep B), Ecovac4 (Hep B+DTP), Easyfour (Hib+DTP) and Easyfive (Hep B+DTP+Hib) in domestic market through its 50:50 JV with Novartis Vaccines (formerly Chiron Corporation) which is doing very well. In the first year of operations the company has added a turnover of Rs161mn as JV's contribution to its consolidated turnover. The joint venture has already registered a turnover of Rs194mn in H1FY07 as against Rs211mn in FY06.

The market size for these combination vaccines is close to Rs1.25bn and is growing at 25-30% per annum. We expect the JV to capture about 25% market share in FY07E to Rs300mn and 30% in FY08E to Rs450mn of potential revenues.

- ❑ **Proprietary NDDS-based products for international markets - Next big growth driver.** At present, the company is exporting its branded formulations to several countries in CIS regions, African Region and SEA region. The export turnover has registered growth of 78% in H1FY07 at Rs134mn as against Rs75mn in H1FY06. According to company, it is in process of registering its existing branded formulations in several countries in these regions and plans to launch Panimun Bioral (Cyclosporin) NDDS formulations in the Brazilian market by FY07-08. We have assumed that Panimun Bioral could yield revenues of US\$10mn in FY08E and US\$15mn in FY09E. Further, formulations exports in other developing countries are expected to yield around US\$10mn in FY08E. Overall, we expect NDDS-based proprietary product exports to contribute around 10% to revenues by FY08E.
- ❑ **Strategic collaborations for new innovative vaccines to benefit in the medium-to-long-term** Panacea Biotec has entered into several strategic collaborations and tie-ups with various global institutions for developing, manufacturing and marketing innovative vaccines for launch over the next few years. These collaborations are of long-term nature and are likely to turn out to be one of the growth drivers in the medium-to-long term.

Key risks and concerns

- ❑ Price cut and/or potential slowdown in domestic formulation market.
- ❑ Execution risk in innovative combination vaccines and NDDS-based proprietary products.
- ❑ Potential delays in regulatory approvals for combination vaccines, Panimun Bioral (Cyclosporin), Sitcom (piles management) and other NDDS-based formulation products.
- ❑ Separation risk for collaborations and tie-ups/JVs.

Valuation and recommendation

Panacea has posted EPS of Rs10.4 in FY06 and we expect EPS to grow by 77% and 61% to Rs18.4 and Rs29.6 in FY07E and FY08E respectively. At current market price Rs344, the stock is trading at 18.7x FY07E and 11.6x FY08E fully diluted earnings. We believe that current valuations do not capture the future growth potential. We initiate our coverage with BUY recommendation with one year target price of Rs.512 per share.

- ❑ We have valued Panacea on the basis of the DCF value Rs.512 (assuming WACC - 12.5%; Terminal growth - 3%) for one year time horizon.
- ❑ At our target price of Rs.512, the stock will be valued at 10.7x FY08E EV/EBIDTA and 17.3x FY08E fully diluted earnings.
- ❑ Our target price provides an upside of 49% over the period of one year. We recommend **BUY**.

We recommend a BUY on Panacea Biotec with a price target of Rs.512 (upside 49%)

POLIO – A GLOBAL AND INDIAN SCENARIO

Background

The World Health Assembly had passed a resolution in 1988 for the WHO to take steps for the global eradication of poliomyelitis. Due to the strong advocacy of the WHO and UNICEF, Government of India (GOI) launched this program countrywide in the year 1995. The National Pulse-Polio Program was started by GOI in the year 1995 with the objective of eradication of the Wild Polio-Virus (WPV) transmission in the country. This program is an integral part of the Global Polio Eradication Initiative (GPEI). A vast sum of financial resources has been devoted by the Government of India on this program.

Current status of polio cases

Ever since the global polio eradication program started in 1988, there has been a significant progress in combating the deadly disease. The number of countries affected by polio came down rapidly from about 125 countries in 1998 to 4 countries in 2005. The 4 countries which are still polio endemic are India, Pakistan, Afghanistan & Nigeria. Within India, UP and Bihar are the states with the maximum number of polio cases.

From an estimated 350,000 cases in 1988 worldwide, the total number of cases stands reduced to around 1646 in 2006 (Till November 14, 2006).

For India, there was significant progress in restricting the number of polio cases: from ~ 25,000 cases in 1988 to just 66 in 2005. The table below shows the reduction over the same period:

| Number of Polio Cases Reported | | | |
|--------------------------------|--------|----------|-------------|
| | India | Pakistan | Afghanistan |
| 1988 | ~25000 | - | - |
| 2000 | 265 | 199 | 27 |
| 2001 | 268 | 119 | 11 |
| 2002 | 1600 | 90 | 10 |
| 2003 | 225 | 103 | 8 |
| 2004 | 134 | 53 | 4 |
| 2005 | 66 | 28 | 9 |
| 2006 (Till 14 Nov) | 522 | 29 | 29 |

Source: WHO

As per the WHO guidelines, a WHO region can be certified polio free only if does not record any case of polio during a period of consecutive 3 years following the year in which it records a zero case of polio for the first time. India hopes to register zero case for the first time in year 2007, thereafter the if it does not record any case of polio in year 2008, 2009 and 2010 India can achieve its target of becoming a polio free country. This however does not tantamount to stoppage of immunization activities, which may continue until our neighboring countries Pakistan and Afghanistan also become polio free by that time.

WHO plans to achieve global polio eradication by 2008 as per its Global Polio Eradication Initiative, "Strategic Plan 2004-2008". According to this plan, a region can be considered polio free after every country and area in the specified WHO region provides the WHO evidence that there are no indigenous wild polio virus cases for at least three consecutive years. This evidence is then verified by the national certification committees and provided to a regional certification commission, which will decide, based on the data received, if the region can be certified as polio free.

Considering the above facts, polio immunization with oral polio vaccine will continue at least till 2010 and thereafter it will be gradually phased out depending upon polio eradication status in neighboring countries. In post eradication era, the mode of polio immunization will change from oral route at present to injectables. Panacea Biotec is already developing an injectable polio vaccine to support and broaden its revenue streams. Therefore it is believed that OPV business will remain stable for the next 5 years - thereafter could be replaced by the IPV business.

India, Pakistan, Afghanistan and Nigeria are still polio endemic

In 2006 number of polio cases in India has increased dramatically

Guidelines to certify polio free region

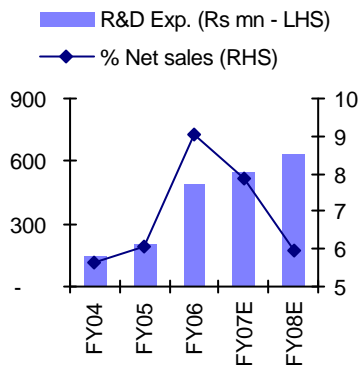
Polio immunization with OPV are expected to continue at least till 2010

COMPANY BUSINESS AND STRATEGY

Ranks as the 2nd largest vaccine producer and 3rd largest biotech company in India

Panacea Biotech is a research-based pharmaceutical company involved in research, manufacturing and marketing of vaccines, branded pharmaceutical formulations and biopharmaceuticals. It ranks as the 2nd largest vaccines producer and 3rd largest biotechnology company in India. The company is also amongst the top 50 pharmaceutical companies in India. The product portfolio includes highly innovative prescription products in important therapeutic areas like pain management, diabetes/cardiovascular, renal disease management, osteoporosis, anti-tubercular, gastrointestinal care products and vaccines.

Total R&D expenditure



Source - Company Annual Report, Kotak Securities - Private Client Research

Strategy to grow business in multiple horizons

R&D and manufacturing set-up

Panacea Biotech has 4 R&D centers with over 200 scientists, 10 international product patents valid in more than 60 countries worldwide including, US, UK, Japan, China, Brazil, Australia etc. The company is setting up its 5th R&D center at Navi Mumbai. The Company has pioneered vaccines development and R&D in drug delivery in pharmaceutical formulations. It also has expanded its research activities in the area of Biopharmaceuticals and New Drug Discovery as well as advanced drug delivery.

It has state-of-the-art infrastructure for production of vaccines and pharmaceutical formulations. Its manufacturing facilities comply with the international standards of USFDA, UK-MHRA, SA-MCC as well as WHO-cGMP.

Key business strategy

Panacea Biotech's key business strategy is to enhance its growth prospects in multiple horizons viz. short-term, medium-term and long-term. In the short term, the growth will be driven by (a) launch of NDDS and other new products in domestic market (b) tapping domestic market through marketing JV with Novartis and (c) introduction of Cyclosporin to Latin American markets.

In the medium-to-long term, key growth drivers are (a) launch of thermo stable vaccines and other new vaccines (b) supply of anti-TB, ARV and combination vaccines to WHO/UNICEF (c) launch of branded pharmaceutical formulations in LATAM markets, SEA region, S. Africa and French speaking African region (d) out-licensing /launch of patented products in the developed markets of Europe and US, and (e) potential supply of Anthrax vaccine to US for national stockpiling program.

We believe the company is now gearing up for its first step of big growth in the international markets and will likely derive revenues from Vaccines and proprietary/technology products.

Gearing up for its first step of big growth in the international markets

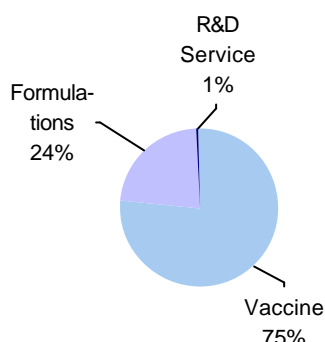
Future Growth Strategy - Summary

| Horizon | Strategy |
|--------------------------------|--|
| Short-term < 2 years | ■ Launch of NDDS & Other new products to drive growth in domestic markets |
| | ■ Tapping domestic vaccine market through marketing JV with Novartis (Chiron) |
| | ■ Introduction of Panimun Bioral (Cyclosporine) to Latin American markets |
| Medium-term 2-5 years | ■ Launch of Thermostable Vaccines and other new vaccines |
| | ■ Supply of Anti-TB and ARV and Combination Vaccines to WHO/UNICEF |
| | ■ Introduction of Human Hair Growth Peptide based formulation in global markets |
| | ■ Launch of branded formulations in Latam markets, SEA Region, S. Africa and french speaking African region. |
| Long-term > 5 years | ■ Launch of Patented Products in the developed markets of US & Europe. |
| | ■ Out-licensing / Launch of Patented Products in the developed markets of US and Europe. |
| | ■ Potential supply of Anthrax Vaccines to US for national stockpiling program. |

Source: Company Presentation

KEY INVESTMENT RATIONALE

Revenue break up (FY06)



Source - Company Annual Report

Oral Polio/Combination Vaccines would be key growth driver

Panacea Biotech has been focusing on two main streams of health management viz. Prophylactic (prevention) and Therapeutic (treatment). The prophylactic part is represented by the Vaccines portfolio and therapeutic part by the pharmaceutical formulations.

The vaccines business is further divided into two segments viz. Oral Polio Vaccines and Combination Vaccines. In oral polio vaccine, the company has established a dominant position in India (with 70% market share) and we expect around 20% annual growth in oral polio vaccine over the next two years.

The company has developed innovative branded combination vaccines - EnivachB (r-Hep B) Ecovac4 (Hep B+DTP), Easyfour (Hib+DTP) and Easyfive (Hep B+DTP+Hib) in the domestic market. It has recently received WHO pre-qualification for EnivachB (r-Hep B), and other innovative combination vaccines are in advanced stages. It also has several new vaccines and technologies under various stages of development such as thermo-stable vaccines, recombinant anthrax vaccine etc.

We expect combination vaccines to register US\$5mn sales in FY07E and US\$30mn sales in FY08E from exports to Latin America, SE Asia, CIS republics, Africa through international marketing collaboration. Total vaccine business (domestic + exports) likely to grow at 37% CAGR over FY06-08E.

Critical vaccines under development

| Product | Manufacturing & Analytical Validation | Developmental stages Mfg & Analytical Standardisation | Pre-Clinical | Clinical Trial |
|---|---------------------------------------|---|-------------------------|--|
| Recombinant Anthrax Vaccine | Completed | Completed | Completed | Phase I/IIa in Progress – expected to be completed by FY07 |
| Sabin based Inactivated Polio Vaccine | Completed | Completed | Completed | To be initiated shortly |
| Hib Conjugate Vaccine | Completed | Completed | Completed | Initiated |
| Hepatitis A Vaccine | Completed | Completed | To be initiated shortly | |
| Menigococcal (ACYW135) Conjugate Vaccine | Completed | Completed | To be initiated shortly | |
| Pneumococcal 7 strain Vaccine | Completed | Completed | To be initiated shortly | |
| Japanese Encephalitis Vaccine | Completed | In Progress | | |
| Varicella Vaccine, Live Attenuated | In Progress | In Progress | | |
| Hexavalent Vaccine | In Progress | In Progress | | |

Source: Company Presentation

Revenue potential of up to US\$250 mn in FY09...

Recombinant Anthrax Vaccine – a Big Opportunity

Potential supply of Recombinant Anthrax vaccine to US Government under national stockpiling program presents US\$1bn opportunity for Panacea Biotech in 2010 (not factored in our estimates). According to the company, it has recently concluded Phase I/IIa clinical trials and expects the final results by end of FY07. We expect the Company will be in a position to file its dossier with USFDA in FY08. As per the latest industry information, the US-FDA's Center for Biologics Evaluation and Research had imposed a clinical hold on the VaxGen Inc.'s forthcoming Phase II trial for its anthrax vaccine candidate and has asked it to resolve the issue by 18.12.06. This latest development increases the probability of Panacea Biotech's potential supply of anthrax vaccine to USG earlier than our estimated timeline. We believe any positive development on this front could result in revenue potential of up to US\$250mn to Panacea Biotech in FY09 (not factored in our estimates).

JV with Novartis Vaccines to drive growth in domestic vaccine industry

We expect JV to capture about 30% market share in FY08 to Rs.450mn of potential revenue

The company has in 2005 launched innovative branded combination vaccines - EnivacHB (r-Hep B), Ecovac4 (Hep B+DTP), Easyfour (Hib+DTP) and Easyfive (Hep B+DTP+Hib) in domestic market through its 50:50 JV with Novartis Vaccines (formerly Chiron Corporation) which is doing very well. In the first year of operations the company has added a turnover of Rs161mn as JV's contribution to its consolidated turnover. The joint venture has already registered standalone turnover of Rs194mn in H1FY07 as against Rs211mn in FY06.

The market size for these combination vaccines is close to Rs1.25bn and is growing at 25-30% per annum. We expect the JV to capture about 25% market share in FY07E to Rs300mn and 30% in FY08E to Rs450mn of potential revenues.

Strategic collaborations for new innovative vaccines to benefit in the medium-to-long-term

Panacea Biotec has entered into several strategic collaborations and tie-ups with various global institutions for developing, manufacturing and marketing innovative vaccines for launch over the next few years. These collaborations are of long-term nature and are likely to turn out to be one of the growth drivers in the medium-to-long term. The following table summarizes the various collaborations.

| Collaborations and Tie-ups | |
|--|---|
| Partner | Remark |
| Biotech Consortium India Ltd | 10 year in-licensing agreement for development, manufacture and marketing of Anthrax Vaccine starting November 2001. |
| National Inst. Of Immunology, India | 10 year exclusive in-licensing agreement for Japanese Encephalitis Vaccines starting May 2004. |
| Cambridge Biostability | Development of thermostable vaccines, which eliminates need for cold chain for storage and distribution of vaccines. |
| National Inst. Of Health, USA | In-licensing technology for development of hormone based formulations for hair growth. |
| European MNC | Research collaboration to enhance bio-availability of their patented NCE using Panacea Biotec's drug delivery technology; Filed joint patent application and have supplied GMP batches for Phase I & II clinical trials in Europe |
| Nederlands Vaccin Instituut (NVI) | Panacea Biotec to manufacture and market IPV based combination vaccines for Global Markets (excluding Netherlands, Finland, Norway & Denmark). |
| National Research Dev. Corp., India | Panacea Biotec to manufacture and market Foot & Mouth disease vaccine developed by India Veterinary Research Institute in India & International markets. |
| PT. Bio Farma, Indonesia | Panacea Biotec to manufacture and market Measles vaccine in Global markets. |

Source: Company Presentation

Proprietary NDDS-based products for international markets - Next big growth driver

we expect NDDS-based proprietary product exports to contribute around 10% to revenues by FY08E

Gearing up to launch proprietary products in European and US markets beginning FY08-09

- Exports to Latin American Countries, CIS countries, SEA Region and African Region.** At present the company is exporting its branded formulations in several countries in CIS regions, African Region and SEA region. The export turnover has registered growth of 78% in H1FY07 at Rs134mn as against Rs75mn in H1FY06. The company is in process of registering its existing branded formulations in several countries in these regions and plans to launch Panimun Bioral (Cyclosporin) NDDS formulations in the Brazilian market by FY07-08. We have assumed that Panimun Bioral could yield revenues of US\$10mn in FY08E and US\$15mn in FY09E. Further, formulations exports in other developing countries would yield around US\$10mn in FY08E. Overall, we expect NDDS-based proprietary product exports to contribute around 10% to revenues by FY08E.
- Developed Markets of Europe & US.** The company has well established track record for NDDS-based formulations in the domestic market and is now set to capitalize this opportunity at global front with 10 international product patent in hand. Panacea is now gearing up to enter into next big league by launching its proprietary NDDS-based products in European and US markets beginning FY08-09. These patented products in the niche areas of pain management, organ transplantation, piles management etc. offers a huge revenue potential beginning FY09-10, which has not been factored in our estimates. The company is in advanced stage of filing its product dossier for two key products with the EU authorities in the next 3-6 months.

NDDS Products in the Pipeline for US/EU Markets

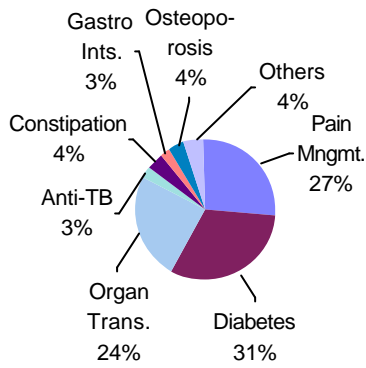
| Brand | NDDS Details | Launch | Mkt. Size |
|---------------------------|---|--------|--|
| Willgo | Nimesulide controlled release formulation | 2008 | US\$150mn in Europe Potential Mkt. of US\$ 5 Bn |
| Panimun Bioral | Cyclosporin formulation based on SEDDS technology | 2008 | US\$2.2bn globally |
| SITCOM (ThankGod) | Euphorbia prostrata extract for Haemorrhoids management | 2008 | US\$500mn in Europe/US |
| XEED | Anti-TB fixed dose combination with innovative Drug Delivery for optimum bioavailability of all drugs | 2008 | Expected US\$650mn in 2009 |
| Nimulid Safeinject | Parenteral formulation of Nimesulide based on co-solvent technique | 2008 | US\$150 mn in Europe |
| Nimulid MD | Nimesulide tablets based on fast mouth dissolving technology | 2008 | US\$150mn in Europe |
| Nimulid | Transgel nimesulide transdermal gel | 2008 | US\$150mn in Europe |
| Pangraf | Tacrolimus based formulation for organ transplantation | 2008 | US\$2.2bn globally |
| 2 Good | Amoxycillin modified release | 2008 | US\$300mn |

Source: Company

Patented Products for International Launches (NDDS)

| Panacea Biotec Brands | Therapeutic Areas | Launch* |
|-------------------------|---------------------------------|---------|
| Willgo | Pain Management | 2008-09 |
| Sitcom | Piles management | 2008-09 |
| Panimun Bioral | Cyclosporin (Immunosuppressant) | 2008-09 |
| OD PEP | Gastro Intestinal | 2008-09 |
| Pangraf | Organ Transplantation | 2008-09 |
| 2 Good | Anti-bacterial | 2008-09 |
| Nimulid Transdermal Gel | Pain Management | 2008-09 |

Source: Company Presentation; * UK, France, Italy & Germany in 2008, USA in 2009

Formulation sales (FY06)

Source - Company Annual Report

Domestic formulations to supplement growth - Grow at 22% CAGR over FY06-08E

The company has established strong brand equity in niche therapeutic areas like pain management, osteoporosis, diabetes, organ transplant, gastro-intestinal and pediatric immunization. Its two main brands, Glizid-M and Nimulid are among the top 200 brands in India (ORG-IMS MAT March-06).

Panacea Biotech's brand building efforts in the domestic market is evident from the fact that over 80% of its domestic formulation sales come from 7 key brands viz. Nimulid, Willgo, Glizid, Glizid-M, Panimum Bioral, PanGraf and Mycept from 3 therapeutic areas. Most importantly, each of these brands rank among Top-2 within their respective therapeutic categories with considerable market share (ORG IMS MAT March-06).

We expect domestic formulation business to grow at 22% CAGR over the next two years driven by ramp-up of sales from products launches in FY06 and new proprietary products launches and line extensions.

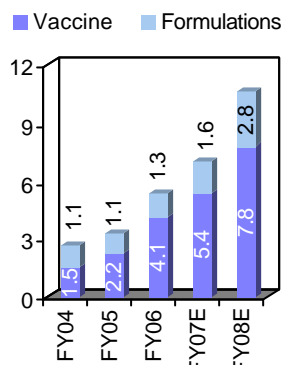
Domestic Formulation Sales analysis

| (Rs mn) | | FY05 | | FY06 | | Growth |
|--------------------------|---------------------------------|-------------|------------|-------------|------------|-----------|
| Therapeutic area | Major Brands | Sales | (%) | Sales | (%) | (%) |
| Pain Management | Nimulid, Willgo | 322 | 27 | 376 | 27 | 17 |
| Diabetes Management | Glizid, Glizid M | 361 | 31 | 436 | 31 | 21 |
| Organ Transplantation | Panimum Bioral, PanGraf, Mycept | 279 | 24 | 343 | 24 | 23 |
| Anti-TB | Xeed, Myser | 42 | 4 | 46 | 3 | 10 |
| Constipation | Gush, Livoluk | 42 | 4 | 49 | 4 | 19 |
| Gastro Intestinal | Giro, OD PEP | 27 | 2 | 40 | 3 | 50 |
| Anti-Osteoporosis | Alphadol, Alphadol-C | 50 | 4 | 54 | 4 | 8 |
| Others | | 57 | 5 | 62 | 4 | 8 |
| Formulation Sales | | 1180 | 100 | 1406 | 100 | 19 |

Source - Company, Kotak Securities - Private Client Research

FINANCIALS: EXCELLENT SHOW

Businesswise sales break up (Rs bn)



Source - Company Annual Report, Kotak Securities - Private Client Research

Strong revenue growth seen in vaccine business; margins improved steadily

Panacea has recorded a 25.7% (3-year CAGR) sales growth to Rs5.42bn in FY06 from Rs2.73bn in FY03. Net profit growth was even higher at 41% due to improvement in net margin to 10.9% in FY06 from 7.7%. This growth in topline has been achieved mainly due to sharp growth in vaccines business.

...40% revenue CAGR over FY06-08E

We expect net sales to grow by 29.1% at Rs7bn and 52.2% at Rs10.6bn in FY07 and FY08E respectively. The revenue growth will be driven by (a) launch of NDDS and other new products in domestic market (b) tapping domestic vaccine market through marketing JV with Novartis/Chiron and (c) introduction of Cyclosporin to Latin American markets.

Vaccine business which has contributed 76% to revenue in FY06 will likely to come down to 73% in FY08E to Rs7.8bn to grow at 37.6% CAGR over FY06-08E. While formulation business which has accounted 24% to net sales in FY06, will likely to go up to 27% by FY08E to Rs2.83bn mainly driven by launch of NDDS-based products in international markets.

...89% earning CAGR over FY06-08E

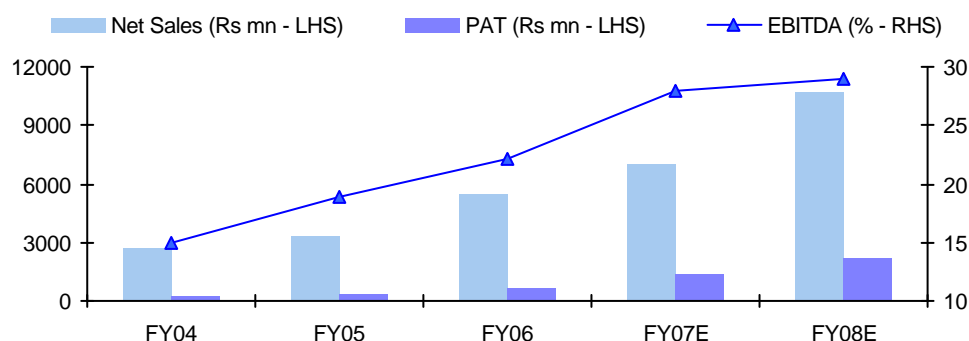
We expect Panacea to deliver 121% and 61% earnings growth in FY07E and FY08E respectively driven by (a) 40% net sales CAGR during FY06-08E led by strong growth in vaccines in both institutional and private markets, impact of Panimun Bioral (Cyclosporin) and Sitcom (Piles management) exports to Brazil, and export of several other formulation products in developing countries (b) operating margin expansion to 29% in FY08E from 22.1% in FY06 due to the entry into high margin markets (c) tax and excise duty savings on account of commencement of manufacturing facility at Baddi (HP).

Business-wise Revenue Break-up

| (Rs mn) | FY05 | FY06 | FY07E | FY08E |
|-----------------------------------|--------------|--------------|--------------|---------------|
| Vaccines | 2,181 | 4,122 | 5,378 | 7,804 |
| % of Sales | 67 | 76 | 77 | 73 |
| % Growth Y-o-Y | 46 | 89 | 30 | 45 |
| Formulations | 1,093 | 1,289 | 1,611 | 2,833 |
| % of Sales | 33 | 24 | 23 | 27 |
| % Growth Y-o-Y | -3 | 18 | 25 | 76 |
| Research & Development | 5 | 8 | 9 | 11 |
| % of Sales | 0.1 | 0.1 | 0.1 | 0.1 |
| % Growth Y-o-Y | -24 | 60 | 20 | 20 |
| Net Sales | 3,279 | 5,419 | 6,998 | 10,648 |
| % Growth Y-o-Y | 25 | 65 | 29 | 52 |

Source: Company Annual Report 2006, Kotak Securities - Private Client Research

Annual performance trend



Source: Source: Company, Kotak Securities - Private Client Research

Commencement of Baddi formulation facility adds to margins...

The company has set up a state-of-the-art formulation plant at Baddi (HP) to manufacture oral finished dosage forms. The facility is spread over 70000 sqm with dedicated blocks for tablets; hard gelatin capsules liquid orals & ointments and is equipped with modern equipments and machineries meeting regulatory standards of the US, Europe, japons and S. African markets.

We estimate excise duty and income tax rate to decline to around 1% and 25% respectively by FY08E

The company has also successfully set up a new manufacturing facility for Soft Gelatin Capsule at Baddi enabling it to supply the Panimun Bioral and soft gel products in domestic and international markets.

The plants has commenced commercial production and we expect margins to improve going forward as company is enjoying the tax incentives, including a 10 years exemption of sales tax and excise duty and income tax (100% for first 5 years and 30% for next five years). The planned new projects under implementation at Baddi will further add to the tax incentives. Overall, we estimate excise duty and income tax rate to decline to around 1% and 25% respectively by FY08E.

The Company is in process of launching its patented products in the EU/US markets and we expect inspection of its manufacturing facilities by EU/US regulating authorities in FY08.

H1-FY07 RESULT HIGHLIGHTS

Growth driven by all round performance...

H1-FY07 results have confirmed the higher performance trajectory which is propelled by strong growth in both vaccine and formulation business. The company has expanded its geographic reach by exporting the branded formulations and vaccines to several countries. The company's joint venture with Novartis Vaccines is also doing well with profitable growth and now commands around 25% market share in the combination vaccines market.

During the first half of FY07, vaccines business has recorded 47% growth at Rs3.2bn from Rs2.2bn in corresponding period of last year, mainly due to higher volume in OPV and increased supply of combination vaccine to Novartis JV. The formulation business has registered a growth of 19% to Rs840mn against Rs706mn in H1-FY06 led by expansion in geographic coverage.

Operating profit grew by sharp 84.6% to Rs1428mn from Rs773mn due to increase in sales from high margin products and saving in other expenses relative to sales. Net profit grew by 117% to Rs963mn from Rs443mn in H1-FY06 mainly due to higher other income and expansion in operating margin.

KEY RISKS AND CONCERNS

- Price cut and/or potential slowdown in domestic formulation market and risk of failure in NDDS research initiatives.
- Timely execution risk – Panacea is working on several new combination vaccines and proprietary products. Any delay in execution of new business segment could roll-over the revenue to farther period.
- Potential delays in regulatory approvals for combination vaccines, Panimun Bioral (Cyclosporin), Sitcom (piles management) and other NDDS-based formulation products.
- Separation risk – The Company has entered into several collaborations and tie-ups/JVs. Pre-mature break-up of these long-term relationship would impact the revenue directly.
- The company has raised US\$100 by way of FCCB in two tranches of US\$50mn each in Feb'06. The Tranche-1 of US\$50mn has been fully converted into equity at Rs276.30 per share and from Tranche-2 of US\$50mn, which has a conversion price of Rs357.57 per share, 10% has been converted into equity during Oct-06.

VALUATIONS AND RECOMMENDATION

Panacea has posted EPS of Rs10.4 in FY06 and we expect EPS to grow by 77% and 61% to Rs18.4 and Rs29.6 in FY07E and FY08E respectively. At current market price Rs344, the stock is trading at 18.7x FY07E and 11.6x FY08E fully diluted earnings. We believe that current valuations do not capture the future growth potential. We initiate our coverage with **BUY** recommendation with one year target price of Rs.513 per share.

DCF valuation

| DCF valuation per share (Rs mn) | |
|---------------------------------|------------|
| Terminal Value | 18,700 |
| Total FCFF | 33,913 |
| Net Debt (adjusted for cash) | (3,053) |
| Shareholders' Value | 36,965 |
| Value per share (Rs) | 512 |

Source: Kotak Securities - Private Client Research

Assumptions

| | |
|------------------------|--------|
| Growth (FY12E-16E) (%) | 8 |
| Terminal Growth (%) | 3 |
| WACC (%) | 12.5 |
| Equity (M Cap) (Rs mn) | 19,642 |
| Debt (Rs mn) | 141 |
| Cost of debt (%) | 6.0 |
| Risk free rate (%) | 7.0 |
| Risk premium (%) | 7.0 |
| Beta (x) | 0.8 |
| Cost of equity (%) | 12.6 |

| Free Cash Flow to Firm (FCFF) | | | | | | | |
|-------------------------------|--------------|------------|--------------|--------------|--------------|--------------|--------------|
| | FY05 | FY06 | FY07E | FY08E | FY09E | FY10E | FY11E |
| PAT | 273 | 592 | 1,308 | 2,108 | 2,445 | 2,957 | 3,471 |
| Add: Depreciation | 140 | 143 | 257 | 384 | 471 | 481 | 451 |
| Add: Interest (1-tax rate) | 95 | 95 | 107 | 18 | 18 | 18 | 18 |
| Less: Capex | 439 | 1,135 | 1,000 | 800 | 600 | 200 | 200 |
| Less: Change in NWC | 283 | (602) | 190 | 998 | 440 | 506 | 582 |
| Less: Investments | (0.7) | - | - | - | - | - | - |
| FCFF | (214) | 298 | 482 | 712 | 1,894 | 2,749 | 3,157 |
| Years from now | - | - | - | 1.00 | 2.00 | 3.00 | 4.00 |
| Discounted Value | | 298 | 482 | 633 | 1,495 | 1,928 | 1,968 |

Source: Kotak Securities - Private Client Research

Sensitivity Analysis

| Terminal growth (%) | WACC (%) | | | | |
|---------------------|----------|------|------------|------|------|
| | 11.5 | 12.0 | 12.5 | 13.0 | 13.5 |
| 2% | 545 | 515 | 487 | 463 | 440 |
| 3% | 581 | 546 | 512 | 487 | 462 |
| 4% | 628 | 586 | 549 | 516 | 487 |
| 5% | 688 | 637 | 592 | 553 | 519 |
| 6% | 770 | 704 | 646 | 600 | 559 |

Source: Kotak Securities - Private Client Research

We recommend a BUY on Panacea Biotec with a price target of Rs.512 (upside 49%)

- We have valued Panacea on the basis of the DCF value Rs.512 (assuming WACC - 12.5%; Terminal growth - 3%) for one year time horizon.
- At our target price of Rs.512, the stock will be valued at 10.7x FY08E EV/EBIDTA and 17.3x FY08E fully diluted earnings.
- Our target price provides an upside of 49% over the period of one year. We recommend **BUY**.

Profit and loss statement (Rs mn)

| Year end March | FY06 | FY07E | FY08E | FY09E |
|--------------------------|--------------|--------------|---------------|---------------|
| Revenues | 5,419 | 6,998 | 10,648 | 12,246 |
| % Change Y-o-Y | 65.3 | 29.1 | 52.2 | 15.0 |
| Total Expenditure | 4,220 | 5,039 | 7,560 | 8,572 |
| EBITDA | 1,199 | 1,960 | 3,088 | 3,674 |
| % Change Y-o-Y | 93.1 | 63.5 | 57.6 | 19.0 |
| Other Income | 72 | 300 | 130 | 80 |
| Depreciation | 143 | 257 | 384 | 471 |
| EBIT | 1,128 | 2,002 | 2,834 | 3,283 |
| Interest | 133 | 133 | 23 | 23 |
| Profit before tax | 987 | 1,869 | 2,811 | 3,260 |
| Tax | 394 | 561 | 703 | 815 |
| as % of PBT | 40.0 | 30.0 | 25.0 | 25.0 |
| Net Income | 592 | 1,308 | 2,108 | 2,445 |
| % Change Y-o-Y | 117.1 | 120.8 | 61.1 | 16.0 |
| Shares outstanding (Mn) | 57.2 | 71.3 | 71.3 | 71.3 |
| EPS - Fully diluted (Rs) | 10.4 | 18.4 | 29.6 | 34.3 |
| CEPS (Rs) | 13.0 | 22.0 | 35.0 | 40.9 |
| BVPS (Rs) | 27 | 101 | 130 | 163 |
| DPS (Rs) | 1.0 | 1.0 | 1.0 | 1.0 |

Cash flow statement (Rs mn)

| Year end March | FY06 | FY07E | FY08E | FY09E |
|-----------------------------|----------------|----------------|--------------|--------------|
| PAT | 592 | 1,308 | 2,108 | 2,445 |
| Depreciation | 260 | 444 | 525 | 634 |
| Change in NWC | (602) | 190 | 998 | 440 |
| Operating Cash Flow | 1,454 | 1,562 | 1,635 | 2,639 |
| Capex | 1,135 | 1,000 | 800 | 600 |
| Investment Cash Flow | (1,135) | (1,000) | (800) | (600) |
| Loans | 4,251 | (5,722) | - | - |
| Dividend | 112 | 104 | 81 | 81 |
| Issue of capital | (144) | 4,008 | (450) | - |
| Financial Cash Flow | 3,995 | (1,818) | (531) | (81) |
| Change in Cash | 4,349 | (1,256) | 304 | 1,958 |
| Opening Cash | 100 | 4,449 | 3,193 | 3,497 |
| Closing Cash | 4,449 | 3,193 | 3,497 | 5,455 |

Source: Company, Kotak Securities - Private Client Research

Balance sheet (Rs mn)

| Year end March | FY06 | FY07E | FY08E | FY09E |
|----------------------------|--------------|--------------|--------------|---------------|
| Shareholder's Equity | 57 | 71 | 71 | 71 |
| Reserves | 1,495 | 7,148 | 9,175 | 11,539 |
| Total Networth | 1,553 | 7,219 | 9,246 | 11,610 |
| Secured Loans | 1,159 | 1 | 1 | 1 |
| Unsecured Loans | 4,703 | 140 | 140 | 140 |
| Total Loans | 5,862 | 141 | 141 | 141 |
| Net deferred tax liability | 247 | 434 | 574 | 737 |
| Total Liability | 8,566 | 8,243 | 9,961 | 12,488 |
| Net Fixed Assets | 2,362 | 3,104 | 3,520 | 3,650 |
| Inventory | 1,817 | 1,771 | 2,684 | 3,087 |
| Debtors | 767 | 873 | 1,324 | 1,522 |
| Cash & Bank Balance | 4,449 | 3,193 | 3,497 | 5,455 |
| Loans & Advances | 701 | 708 | 1,074 | 1,235 |
| Current Liabilities | 1,030 | 1,062 | 1,610 | 1,852 |
| Provisions | 509 | 354 | 537 | 617 |
| Net Current Assets | 6,194 | 5,129 | 6,431 | 8,829 |
| Total Assets | 8,566 | 8,243 | 9,961 | 12,488 |

Ratio analysis

| Year end March | FY06 | FY07E | FY08E | FY09E |
|----------------------------|------|-------|-------|-------|
| Debt-Equity Ratio | 2.4 | 0.0 | 0.0 | 0.0 |
| Current Ratio | 5.0 | 4.6 | 4.0 | 4.6 |
| Inventory Turnover | 2.3 | 2.8 | 3.4 | 3.0 |
| Debtors Turnover | 7.1 | 8.6 | 9.8 | 8.7 |
| Fixed Assets Turnover | 2.9 | 2.6 | 2.7 | 2.5 |
| Interest coverage (x) | 8.4 | 15.0 | 125.1 | 144.9 |
| EBITDA Margin (%) | 22.1 | 28.0 | 29.0 | 30.0 |
| PAT Margin (%) | 10.9 | 18.7 | 19.8 | 20.0 |
| RoE (%) | 25.9 | 25.8 | 24.9 | 23.4 |
| RoCE (%) | 18.0 | 23.8 | 31.1 | 29.2 |
| EV/Sales (x) | 4.3 | 3.1 | 2.0 | 1.6 |
| EV/ EBITDA (x) | 19.5 | 11.0 | 6.9 | 5.2 |
| Price to earnings (x) | 37.1 | 18.7 | 11.6 | 10.0 |
| Price to book value (x) | 14.2 | 3.4 | 2.7 | 2.1 |
| Price to cash earnings (x) | 29.7 | 15.7 | 9.8 | 8.4 |

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