

State of the Pharmaceutical Outsourcing Industry 2007

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Interphex 2007

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PharmSource Services

- *PharmSource Advantage*
 - *Bio/Pharmaceutical Outsourcing Report*
 - *Contractor database*
 - *Industry analysis and practices knowledge base*
- *Market Intelligence Service*
- *Sourcing Intelligence Service*
- *PharmSource Lead Sheet*
- *Custom consulting*

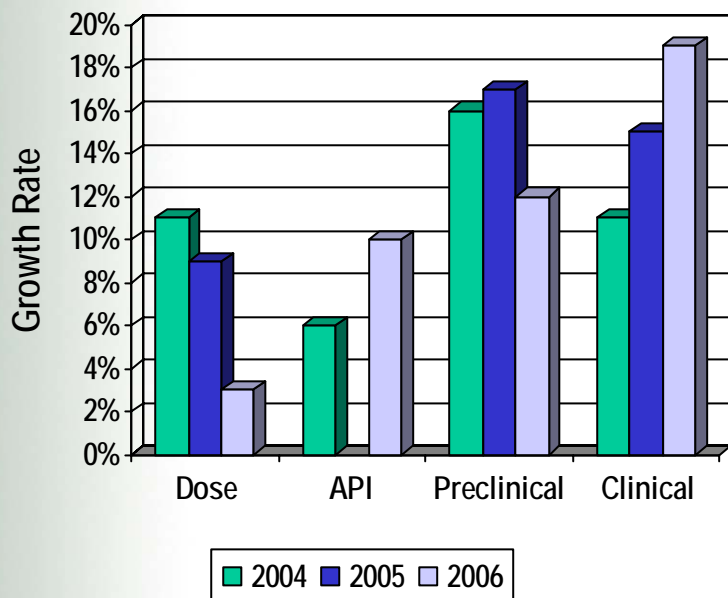
Agenda

- Market Conditions
- Key Trends to Watch
- Final Thoughts

Market conditions

Contractors benefit from pipeline growth

Contractor Revenue Growth



■ Capacity shortage concerns

- Preclinical
- Process development
- Formulation and CTM

■ Dose manufacturers had a so-so year

- Missed launches
- Older product mix
- CAH, Patheon problems

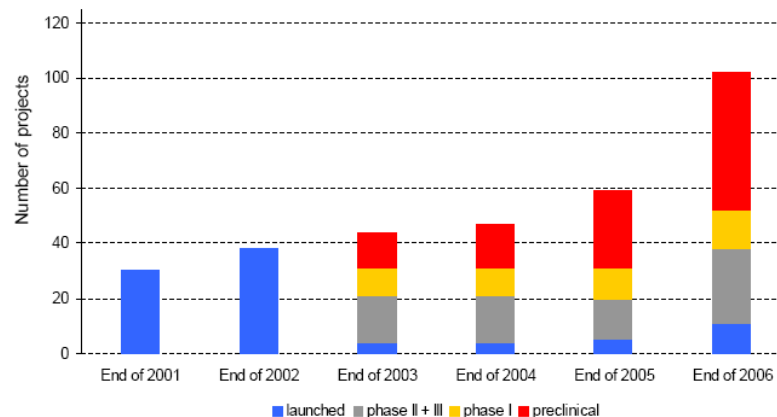
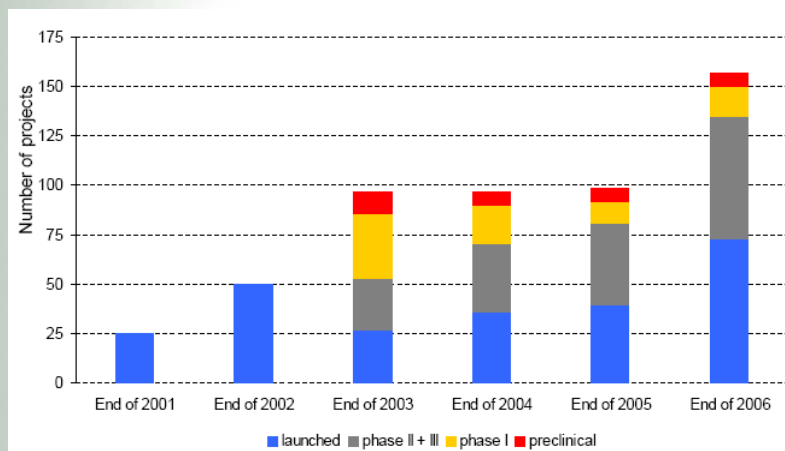
Market conditions

Lonza pipeline reflects industry improvements

Lonza's Pipeline

Small Molecule Projects

Large Molecule Projects

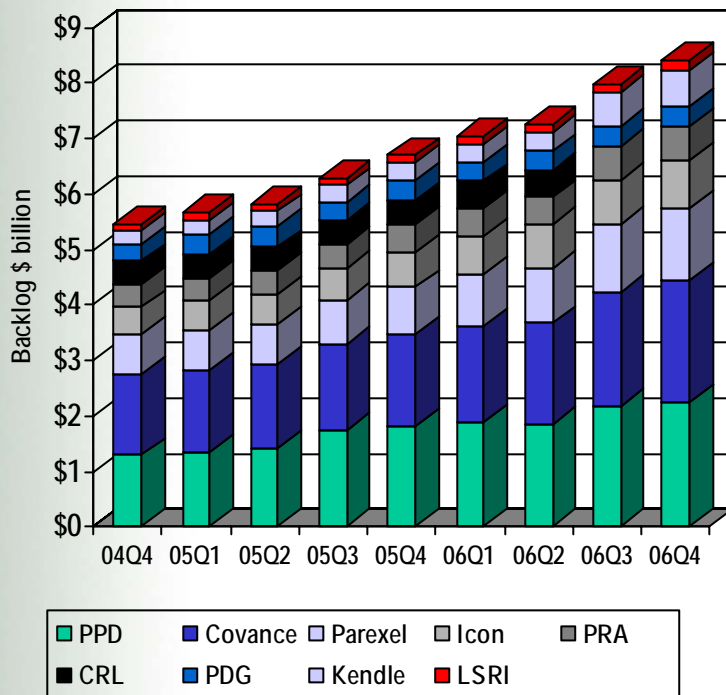


Source: Lonza Group presentation

Market conditions

Backlog reflects pipeline growth and CRO consolidation

Clinical CRO Backlogs



■ Growth in backlog reflects multiple factors

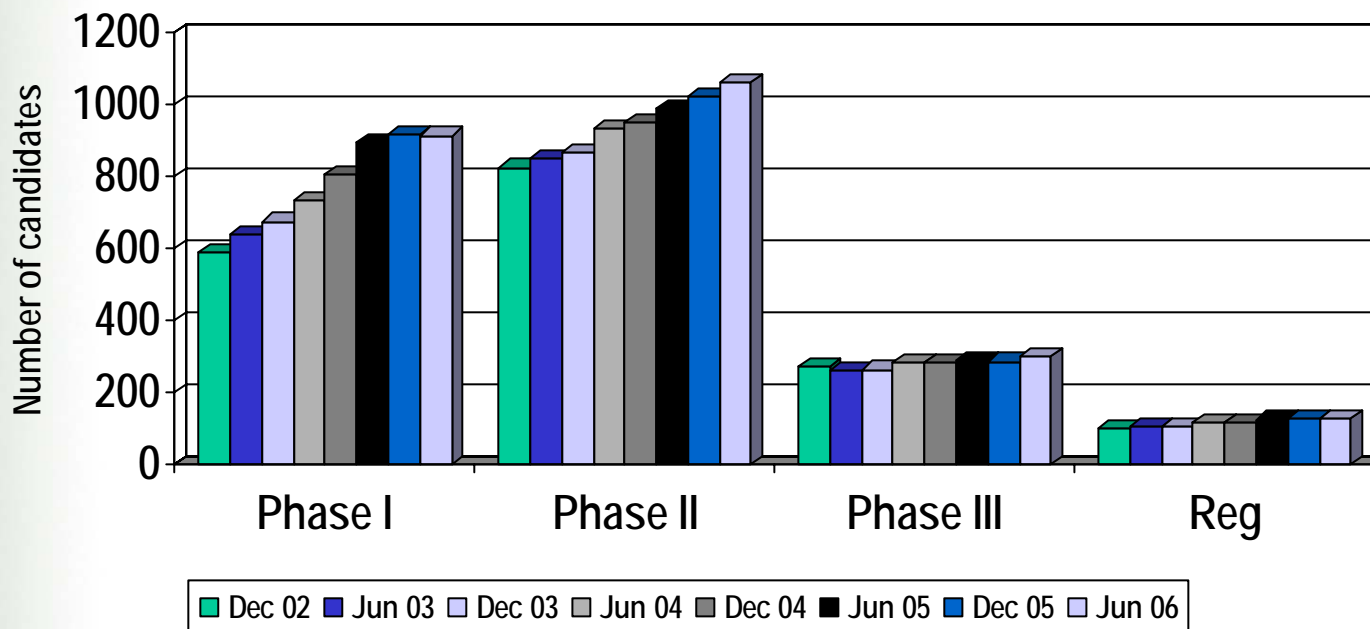
- More, larger and longer Phase III studies
- More Phase IV studies
- Longer contracting time frames
- Market share growth for major CROs

Market conditions

Pipeline continues to grow

Global Drug Development Pipeline

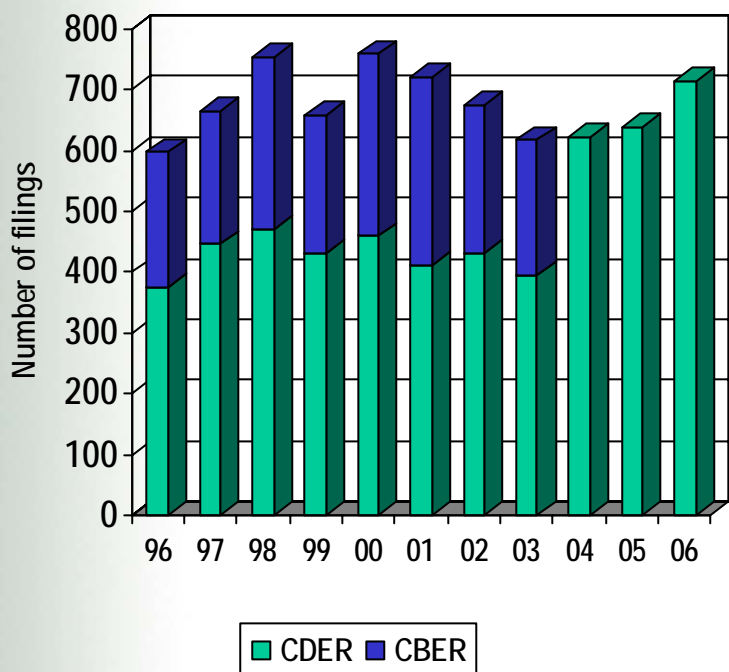
Source: IMS and Bear Stearns



Market conditions

Commercial IND filings are promising

Commercial IND Filings at FDA

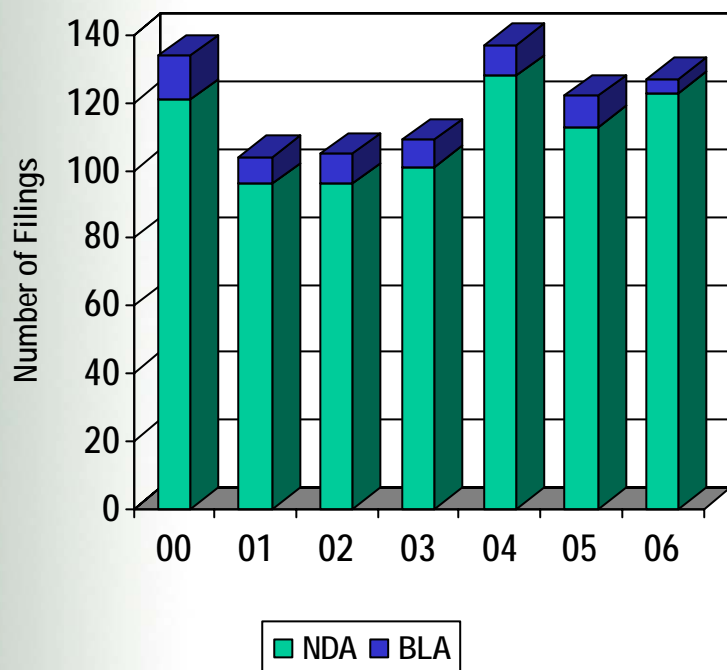


- Continued IND growth presages more Phase II and III activity

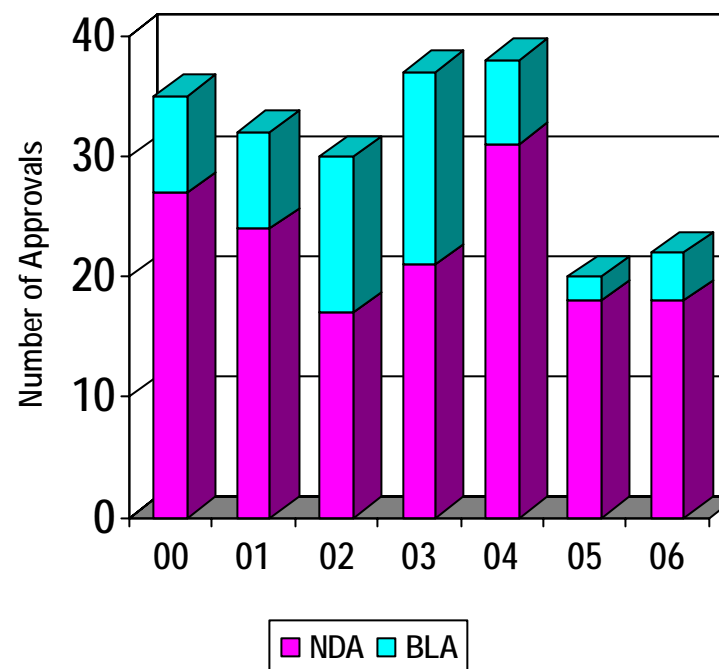
Market indicators

NDA filings steady, but NME approvals drop

NDA Filings with FDA



NME Approvals



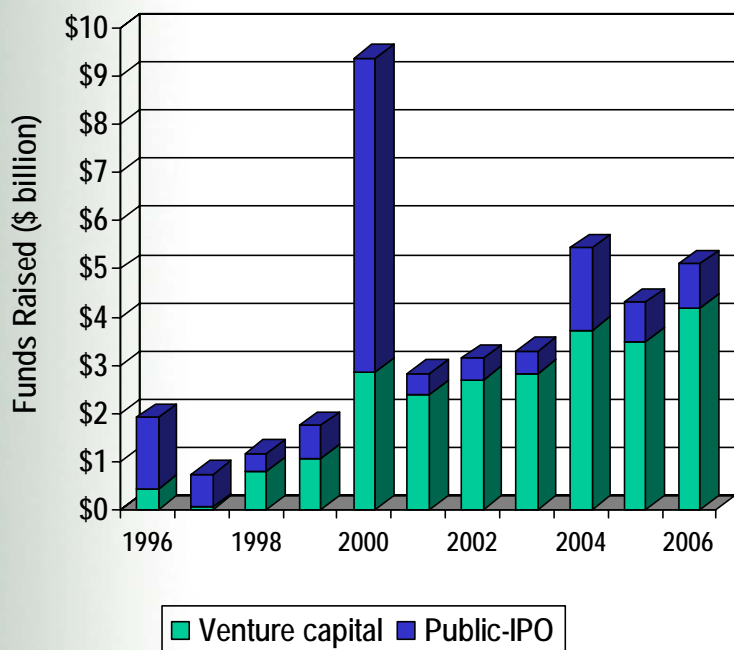
Trends to Watch

- Venture investing in biopharma
- Patheon restructuring
- Role of private equity investors
- Industry consolidation
- Big pharma outsourcing trends
- Exchange rates and European CMOs

Trends to watch #1

Will VCs maintain support of biopharma?

Bio/Pharma Funding
Source: Burrill and Company



- Venture capital has supported growth in early pipeline and strong demand for services
- VC trickles down to smaller CROs and CMOs
 - Big pharma spend focused on big CROs/CMOs
 - VC downturn would hurt smaller CROs/CMOs
- Near-term looks positive
 - Big pharma acquisitions and in-licensing providing VC exit
 - More money will flow to early stage companies

Trends to watch #2

Patheon works to restore profitability

■ Private equity investment

- Costly terms from PE firm
- No serious buyer interest
- Breathing room from banks

■ Focus now on costs

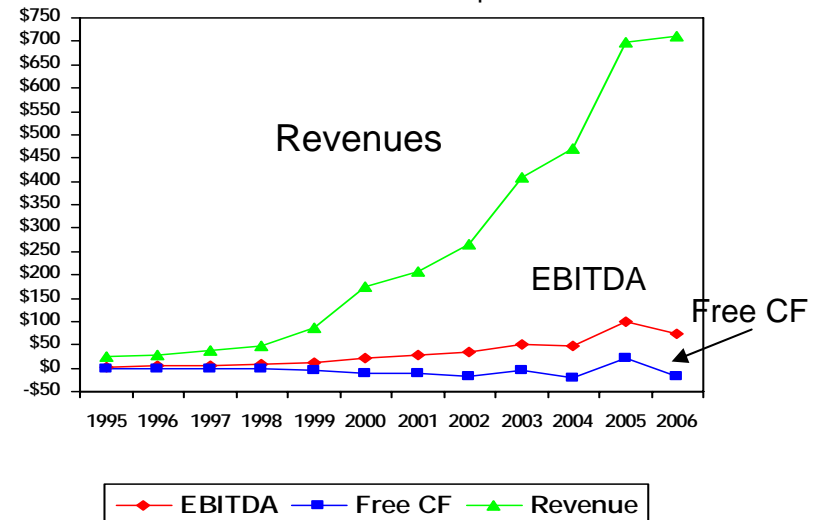
- Operational improvements
- Selling OTC business/facilities
- Facility closing

■ Some major client wins

- “Carve outs” in Europe
- Cephalon for Janssen Cilag
- Merck relationship
- Clients staying despite problems

Patheon Performance

Source: Patheon annual reports



**Patheon may be best positioned
CMO for strategic partnering!**

Trends to watch #3

Private Equity Attracted to Pharma Services

Company	Investor	Year
Cardinal Health PTS	Blackstone Group	2007
Althea Technologies	Telegraph Hill Partners	2007
Cambridge Major Laboratories	Arlington Capital Partners	2007
Patheon	JLL Partners	2007
BioReliance	Avista Capital Partners	2007
Groupe Novasep	Gilde Buyout Partners	2006
Cetero Research	KRG Capital Partners	2006
Aptuit	Welsh Carson	2005
WIL Research	Behrman Capital	2004
ABC Laboratories	Celerity Partners	2003
NextPharma	CSFB Capital Partners	1999

Trends to watch #3

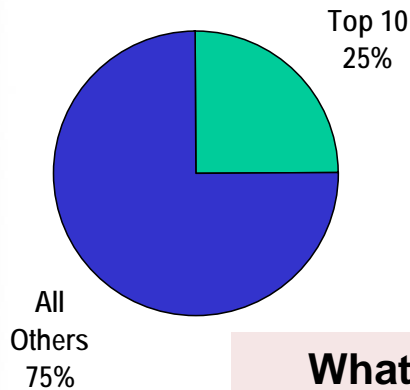
Private Equity is Good for Pharma Services

Commitment to the business	<ul style="list-style-type: none">■ De-conglomerated, single business focus■ Greater access to capital■ Freedom from quarterly pressures
Industry consolidation	<ul style="list-style-type: none">■ Acquisitions to build capabilities and scale■ Resources to build market share
Business/financial discipline	<ul style="list-style-type: none">■ 24/7 utilization■ Continuous improvement■ Excellent project management

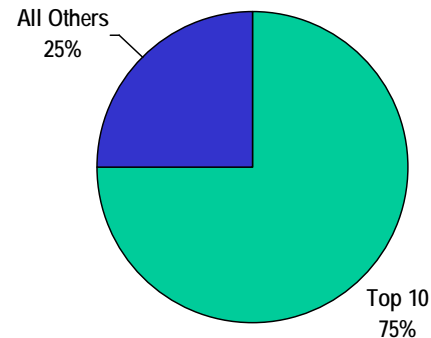
Trends to watch #4

CMC industry ripe for consolidation

Contract Dose
Manufacturing
Market Share



Contract Clinical Research
Market Share



What will drive consolidation?

- Acquisitions and mergers
- Market share battles
- Preferred provider initiatives
- Client base consolidation

Source: PharmSource estimates

www.pharmsource.com

Trends to watch #4

CMC consolidation plays

Integrated service providers	<ul style="list-style-type: none">■ Aptuit■ Almac Group■ Fisher Clinical■ Azopharma
Global network providers	<ul style="list-style-type: none">■ SGS■ Eurofins■ Intertek Group■ Lonza■ Patheon

Who is going to consolidate manufacturing?

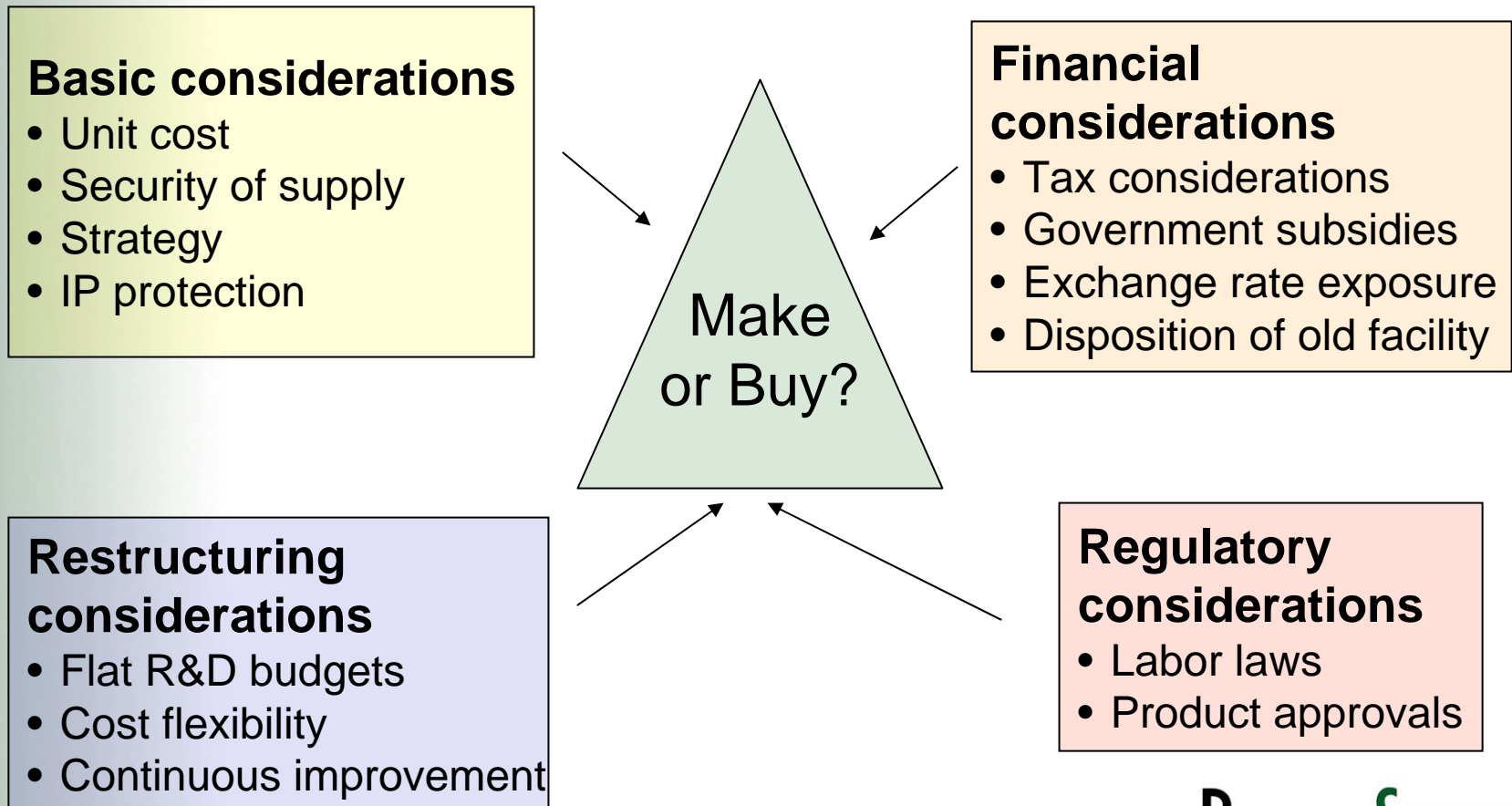
Trends to watch #5

What impact from Big Pharma outsourcing?

- Some Big Pharma promising big shift
 - Pfizer, Merck target 30-35% of manufacturing
 - Clinical, preclinical growing rapidly
 - Large chunks of business
 - e.g., Patheon “carve-outs” and Merck deals
 - **But will it be good business or more of the same?**
 - Older, orphan products
- More successful pharma companies not outsourcing, building more capacity
 - Novartis
 - Amgen
 - Lilly
 - Mixed models will be more common
 - e.g., Genentech

Trends to watch #5

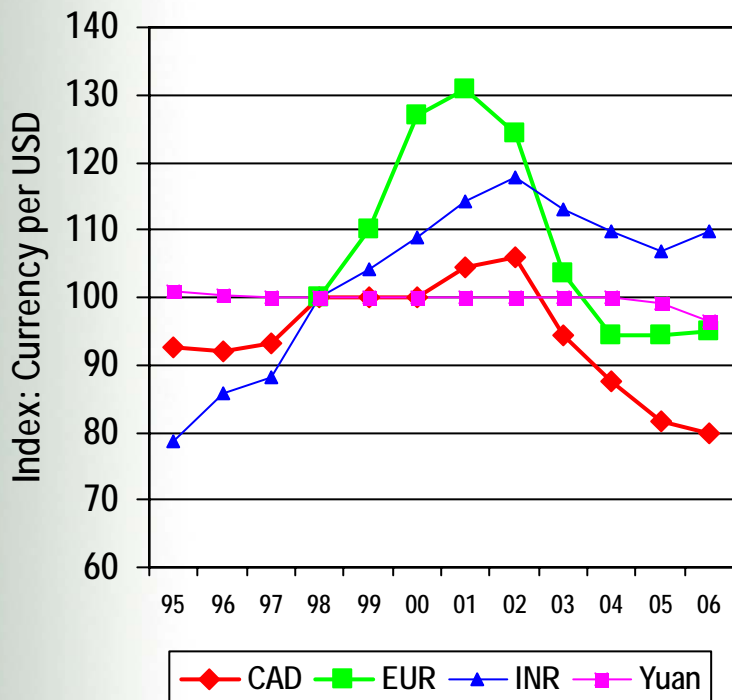
CMOs must understand complex manufacturing calculus



Trends to Watch #6

USD decline driving CRO/CMO strategy

Exchange Rates 1995-2006



- A major cause of Patheon problems
- Strong Euro hurts EU CMO efforts to find US customers
 - In face of already weak local demand, too many competitors
 - Favors working in US, exporting to EU and Canada
- EU CMOs/CROs seeking assets outside Europe
 - Haupt buys Japan operation
 - Several looking for US companies

What about Asia?

- Big pharma continues to look to Asia
 - Manufacturing in Singapore
 - Discovery in India, China
 - Preclinical base growing
 - Experimental deal structures
- CMOs moving slowly
 - Lonza, other API CMOs opening China, India sites
 - NextPharma Indian JV
- How significant are impediments?
 - Rising labor and other input costs
 - Lack of infrastructure
 - Exchange rate pressures
 - IP protection
- Indian CMOs continue to look for western assets
- **Generics a bigger opportunity in near- and mid-term**

Final thoughts

Avoid complacency in robust market

- Growth stresses can undermine market opportunity
 - Staff shortages
 - Outrunning project management
 - Outgrow senior management
- Strategy focus – think 5 years ahead
 - Big players – get bigger
 - Mid-size players – find a partner to get bigger faster
 - Small players – find a niche

Recognize the difference
between smart and lucky