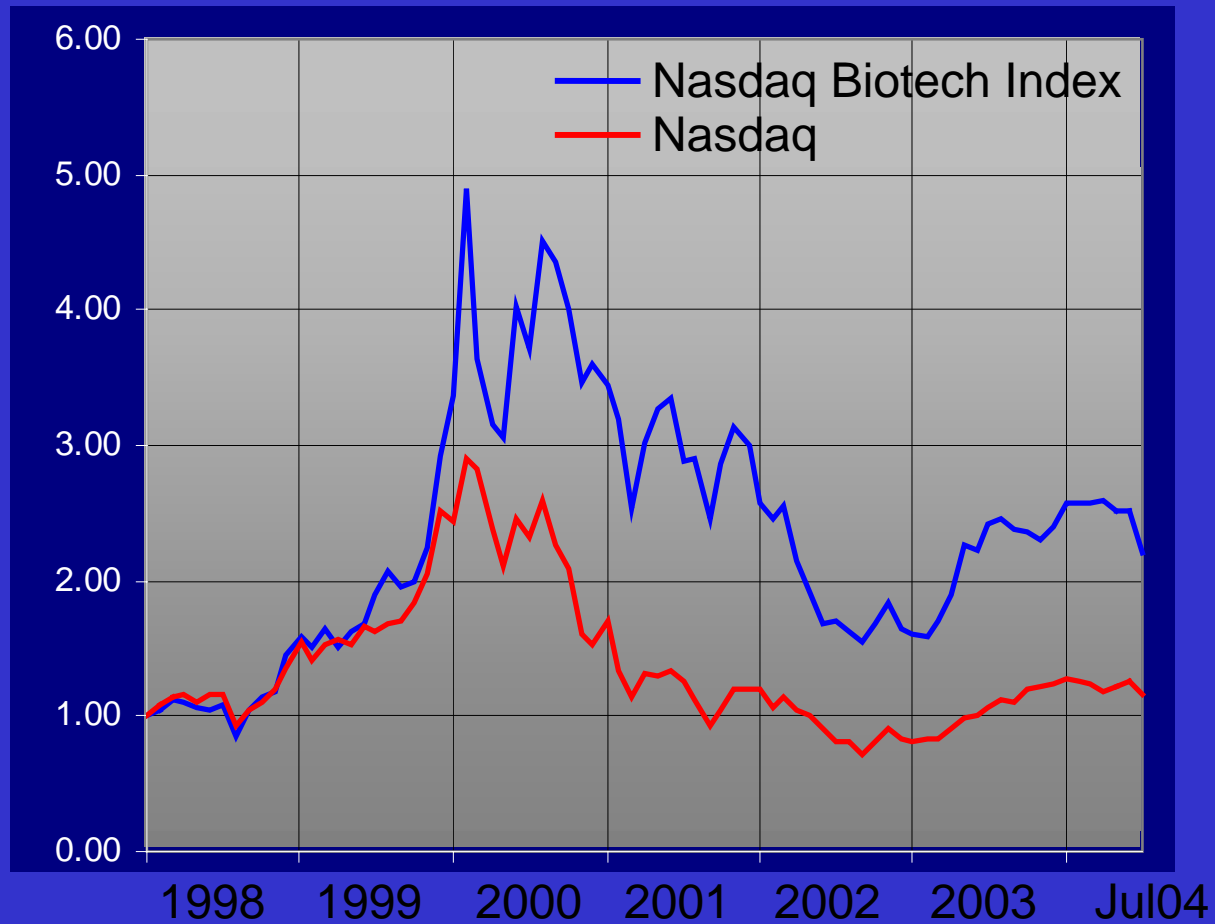


# Drug Development Deficit from an Investors Point of View

A.N. “Jerry” Karabelas, Ph.D.  
Partner, Care Capital



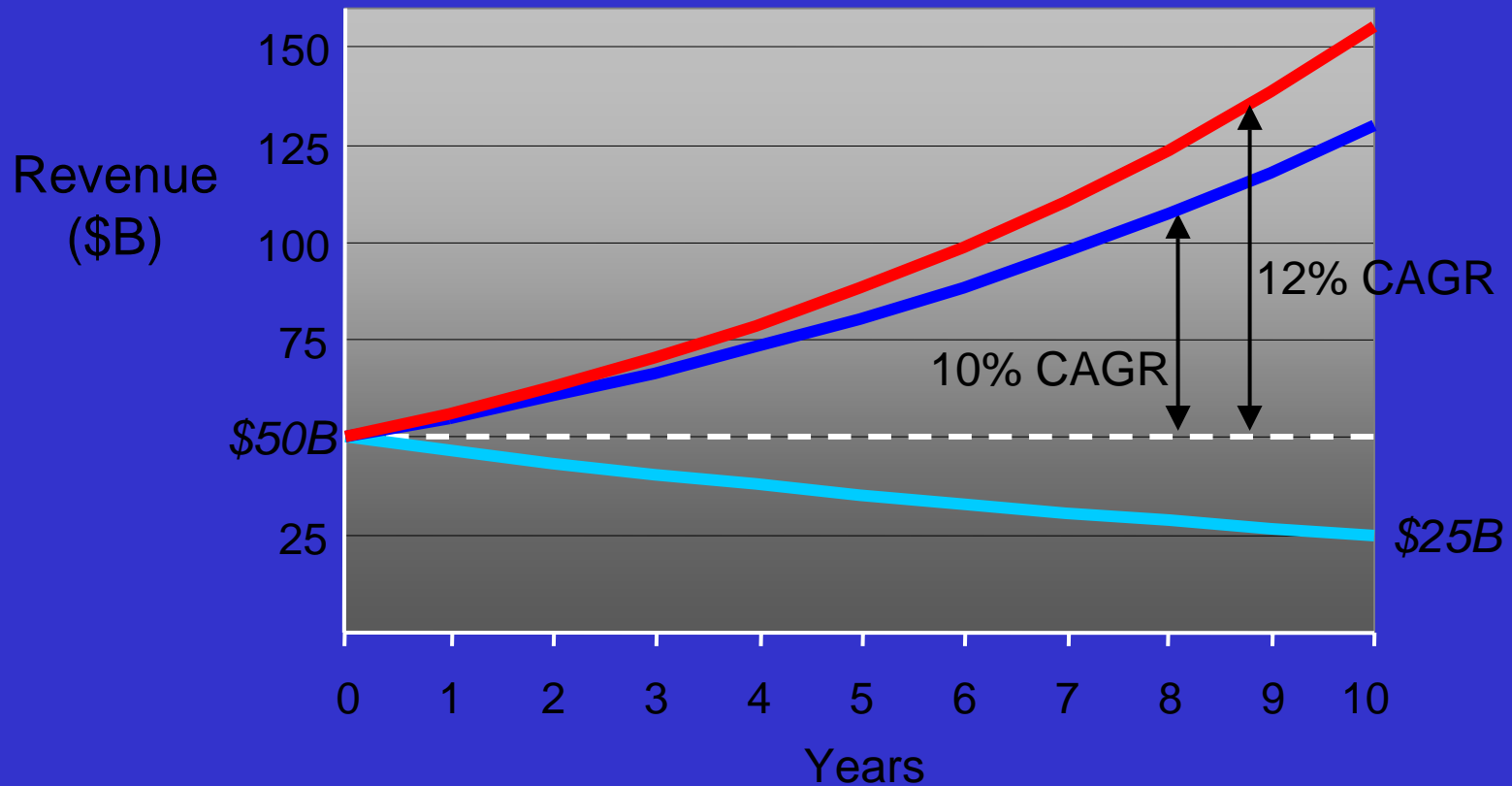
# Bio Tech Index



So Why Am I Smiling?



# The Jürgen Drews Insight

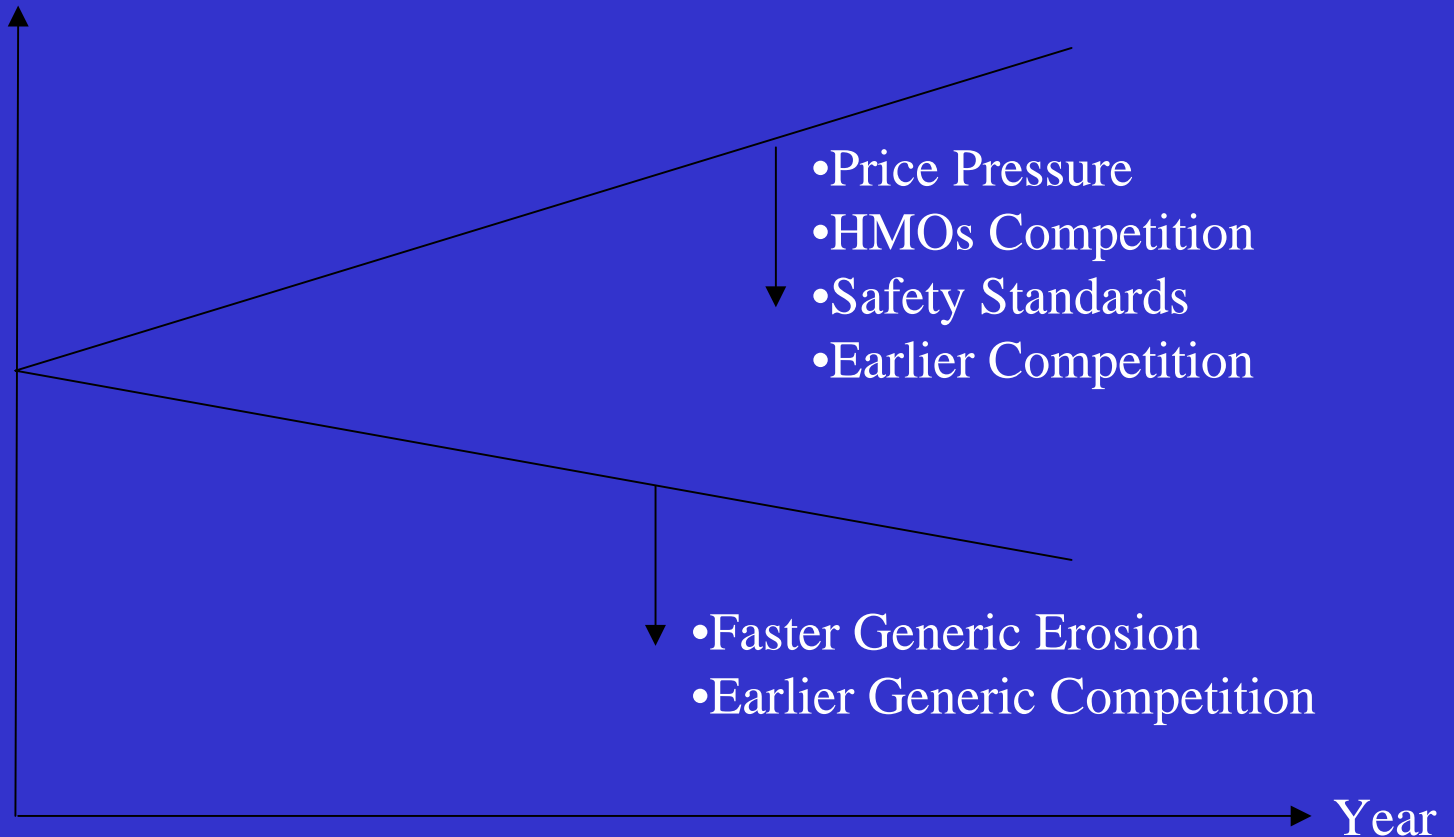


*...is the current growth rate sustainable?*



# Current Pressures on the Model

Earnings



# The Deficit is Real and Spans all Companies, Big and Small

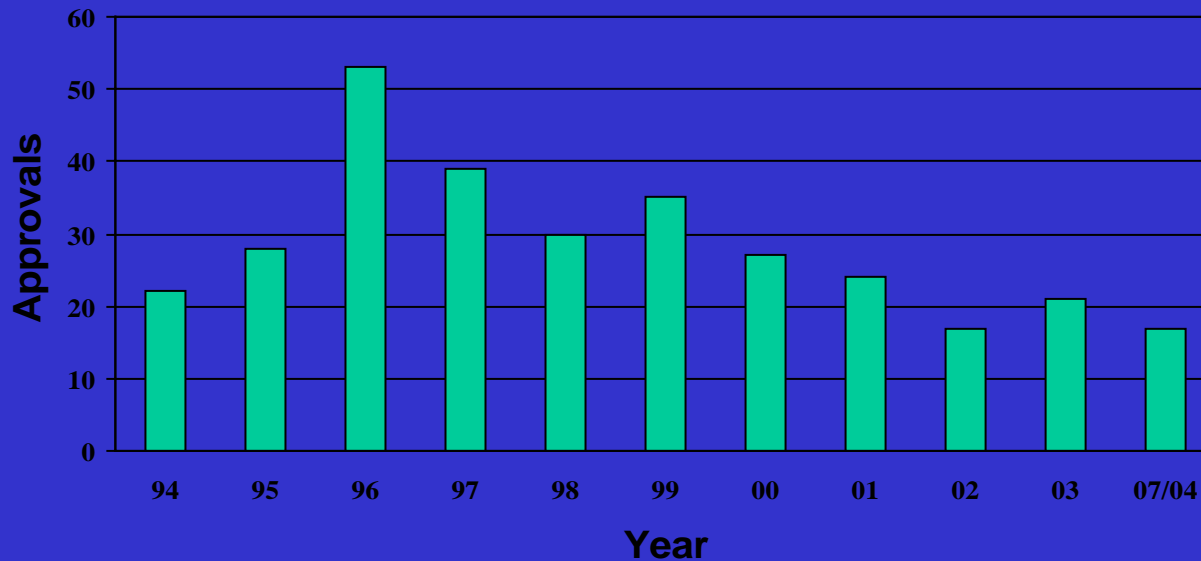
- FDA Approvals

<u>Year</u>	<u>NME Approvals</u>
2000	27
2001	24
2002	17
2003	21
07/2004	17



# Deficit is More Apparent because of '97 Modernization Act of FDA

## New Molecular Entity (NME) Approvals



# Drug Development Deficit of Big Pharma

- Higher attrition rate early
- Focus on “no brainers” at the cost of true innovation
- Late safety failures



## The Investor's View of This?

“Happy Days are Here Again”

**But:** Characteristics of “Winner” has changed  
“Product in / Platform out”

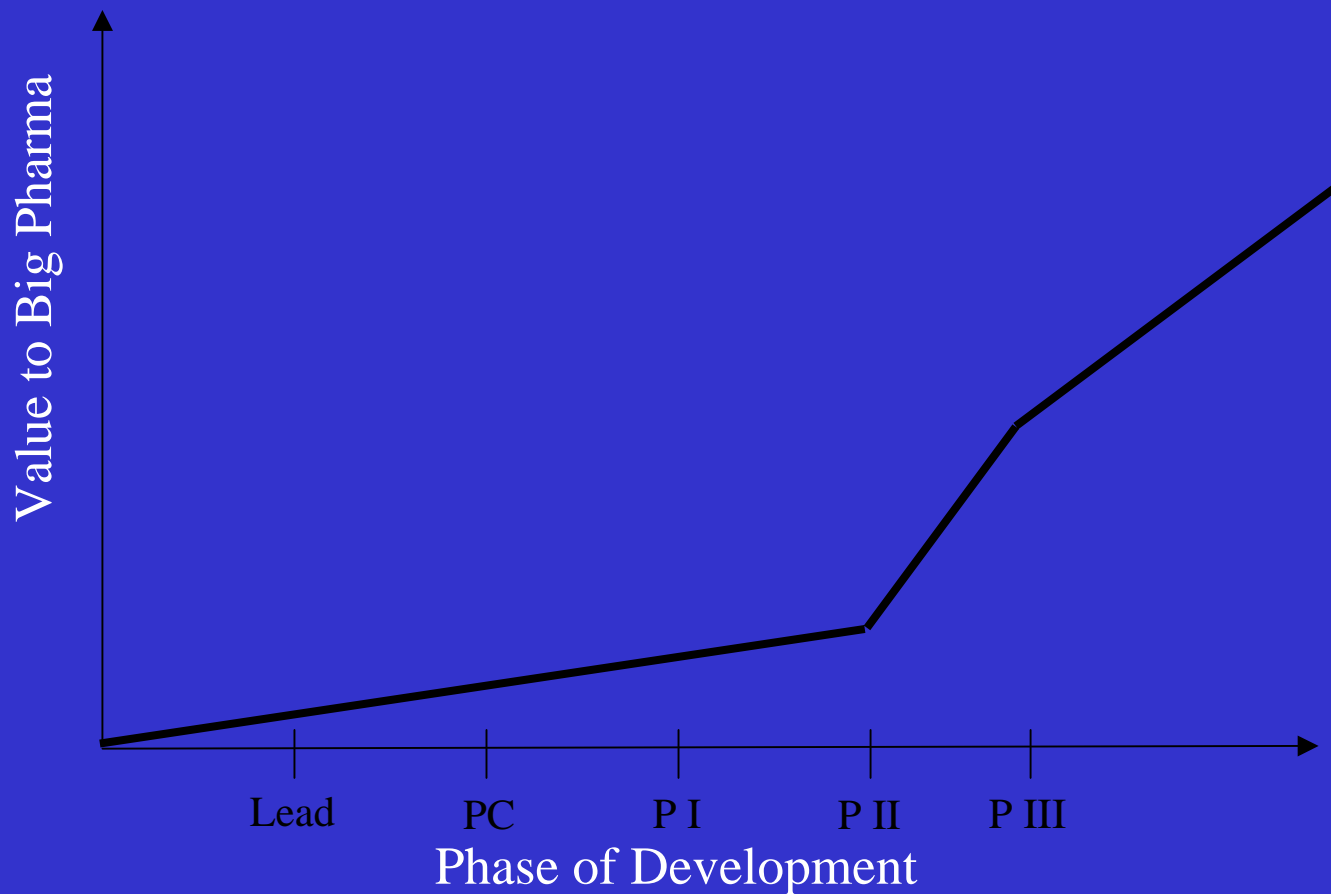


## For Young Companies that Get Exciting Drugs to Proof of Concept:

- Competition among big and medium pharma to do a deal
- Cost of doing a deal has risen, exponentially



# Proof of Concept: The Point of Value Inflection



## Some Examples:

Company	Drug Name	Upfront	Milestones		Implied Transaction Value
			Development	Commercial	
Eyetech / Pfizer	Macugen	\$100 mm Cash	\$195 mm	\$450 mm	\$745 mm
GSK / Theravance	LABA	\$10 mm Cash and \$40 mm Equity	\$495 mm	\$150 mm	\$545 mm
Idenix / Novartis	Hep B&C Antiviral	\$255 mm Cash	Not Disclosed	Not Disclosed	\$1,200 mm



# Sometimes, They Buy the Company

## BioCentury Extra

Monday, December 22, 2003

2000 (All times EST)

Vol. 11 No. 246

*Tickers in blue are live links to updated stock prices.*

### MONDAY'S TOP STORY

## Pfizer acquiring Esperion for \$1.3B

**PFE** plans to acquire cardiovascular company **ESPR** for \$1.3 billion in cash. PFE will pay \$35 per **ESPR** share, which is a 54% premium to **ESPR**'s closing price over the last 20 trading days. **ESPR** will operate as a division of PFE's Global Research and Development organization and will remain in Ann Arbor, Mich.

PFE said the deal will add **ESPR**'s acute cardiovascular therapeutics to the pharma company's chronic heart therapies, such as cholesterol drug Lipitor. **ESPR** recently published Phase II clinical results for ETC-216 ApoA-I Milano to treat acute coronary syndromes (ACS) showing that the compound met the primary endpoint of reducing percent atheroma (plaque) volume compared to baseline. ETC-216 increases HDL cholesterol, while Lipitor lowers LDL cholesterol. **ESPR** had said it wanted to partner ETC-216 by the middle of 2004 and planned to start a Phase III trial in 2005.



## What Does Care Capital Look For?

- Companies working in hot areas
  - Antivirals
  - CHF
  - Degenerative nerve diseases
- Solid preclinical evidence, Phase I safety



## What Value Do We Seek to Add?

- Position in Phase II
  - The right patient type
  - The right endpoint
  - The right benefit

Examples: Epigenesis – inhaled steroid

Inotek – PARP inhibitor

- Help execute the deal
  - Dynavax, Nitromed, etc.



# The Deficit Also Yields New Investor Opportunity

- Clinical Development Capital (CDC) – at risk financing of Phase III trials



## CDC Benefits for Big Pharma

- “More shots on goal”
- Greater value retention than partnering or “shelving”



## CDC Benefits for Small Companies

- Thorough due diligence check
- Less expensive than equity capital



# Investor View of the Drug Development Deficit

- Focus on drug development companies
- Help take company to Phase IIA and a deal
- Seek opportunities to help Big Pharma close the gap in other ways

