

***Demand Dividend:***  
***A New Investment Vehicle for***  
***Financing Biotech Companies***



**February 2013**

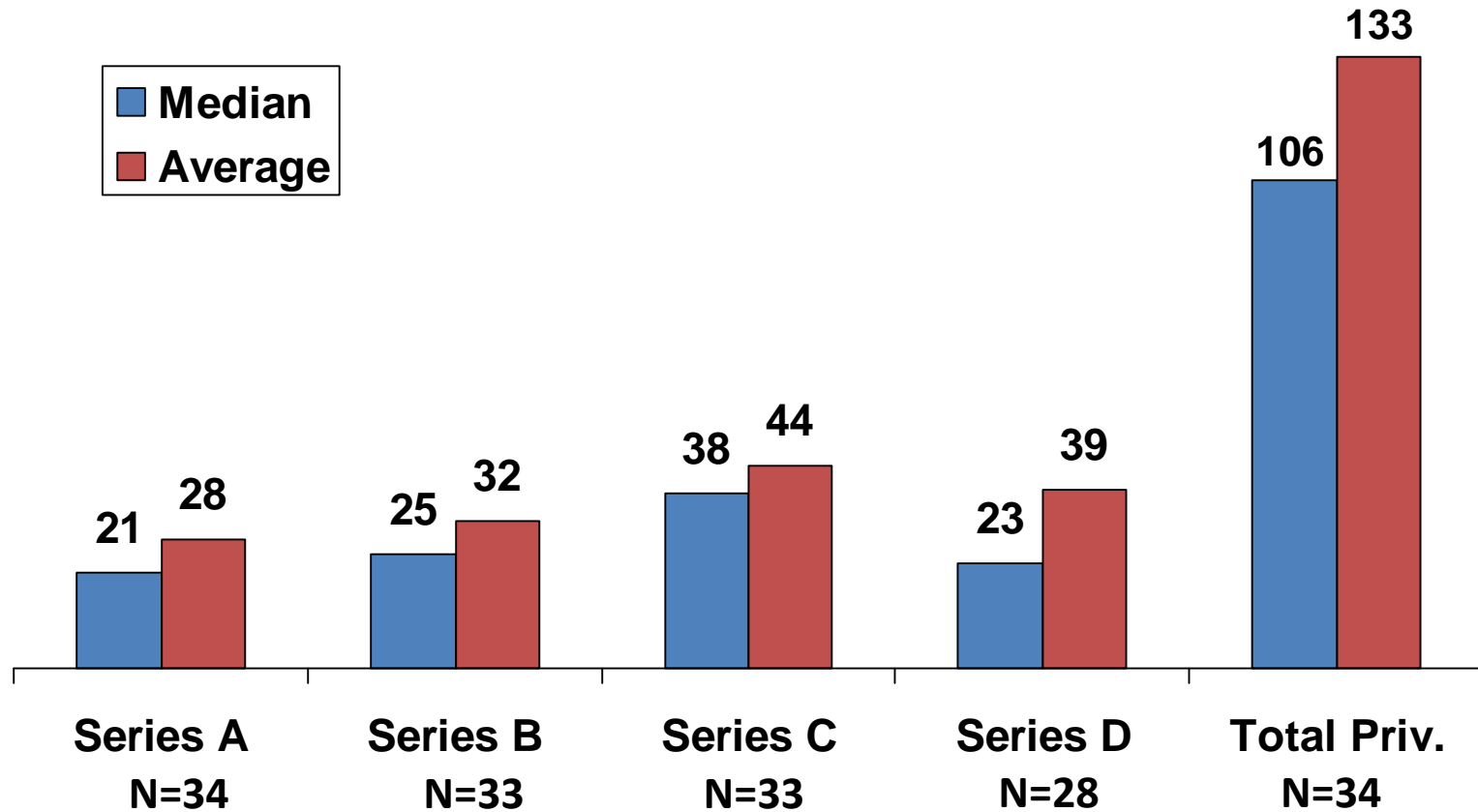
Mark G. Edwards  
Managing Director

**Bioscience**  
 **Advisors**

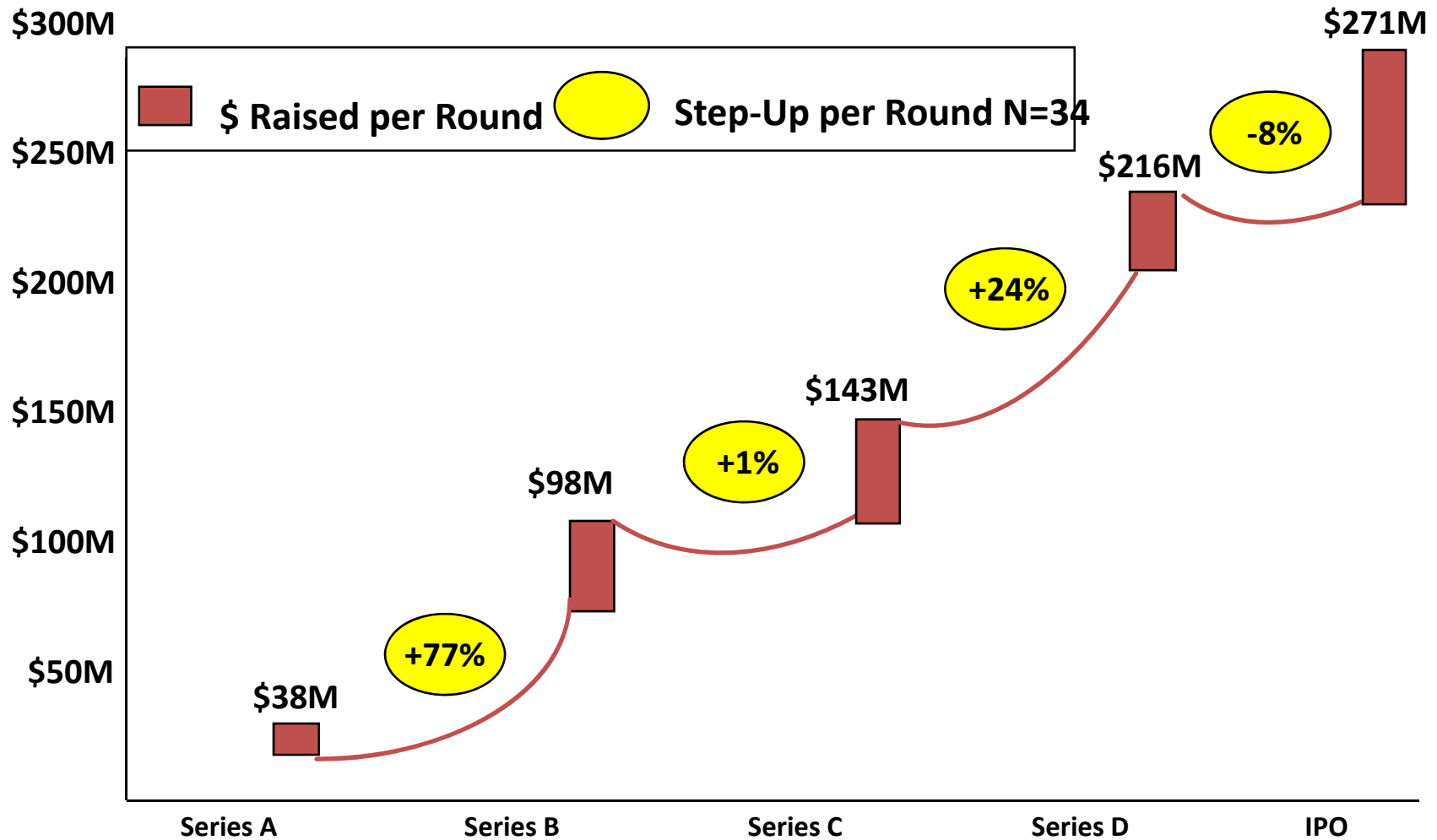
## Could Demand Dividend Financing Be Used by the Biotech Industry?

- 42 Biotech IPOs were completed as of December 31, 2012
- 34 of these Biotechs were venture backed
- Could a Demand Dividend (DD) round of financing take the place of one of the actual venture rounds for certain of these biotechs?
- What impact would a DD-based financing have on VC returns?

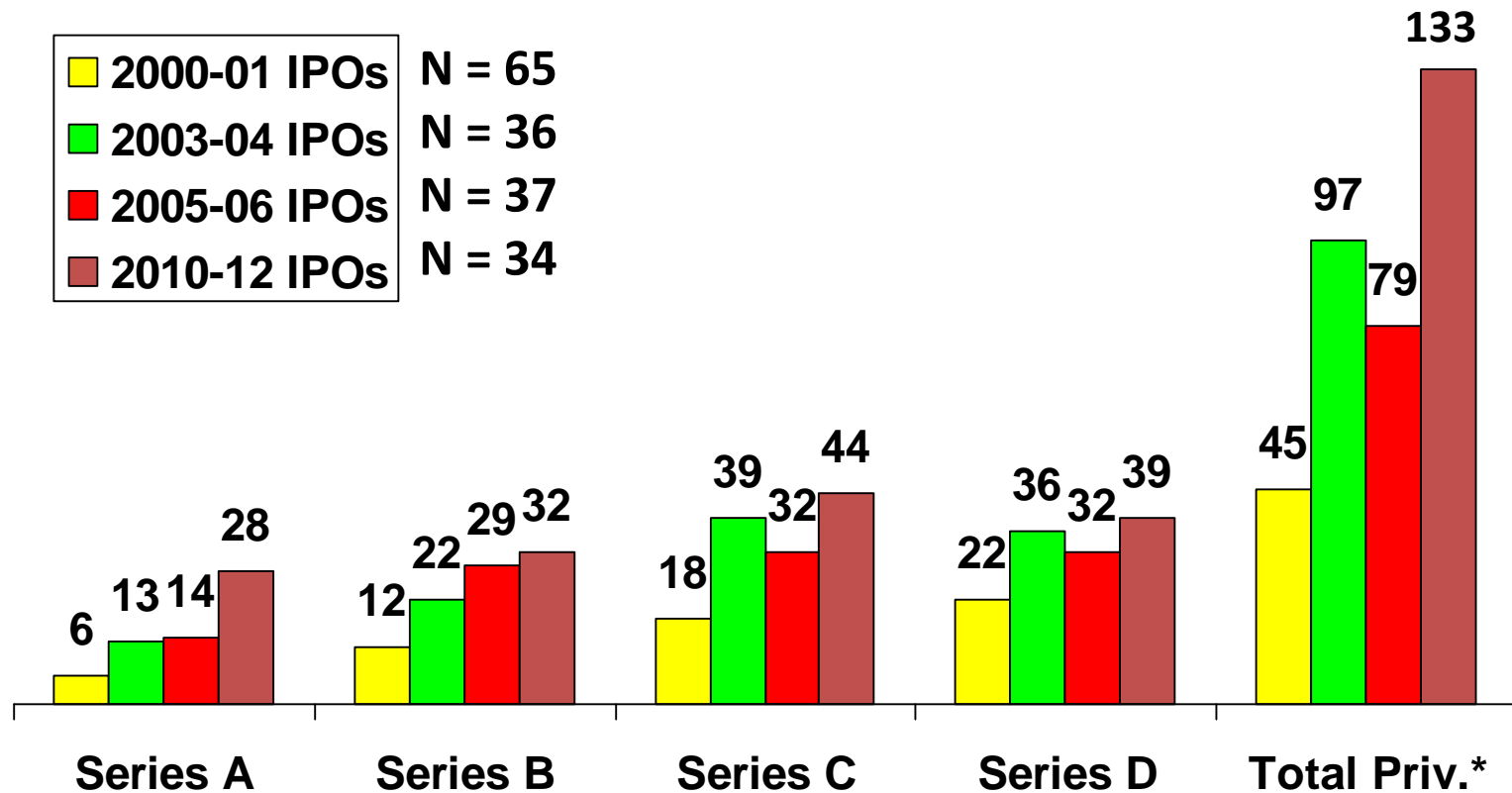
# Total Private Capital of Recent Biotech IPOs (N=34)



# 2010-12 Biotech IPOs: Average Valuation Step-Ups

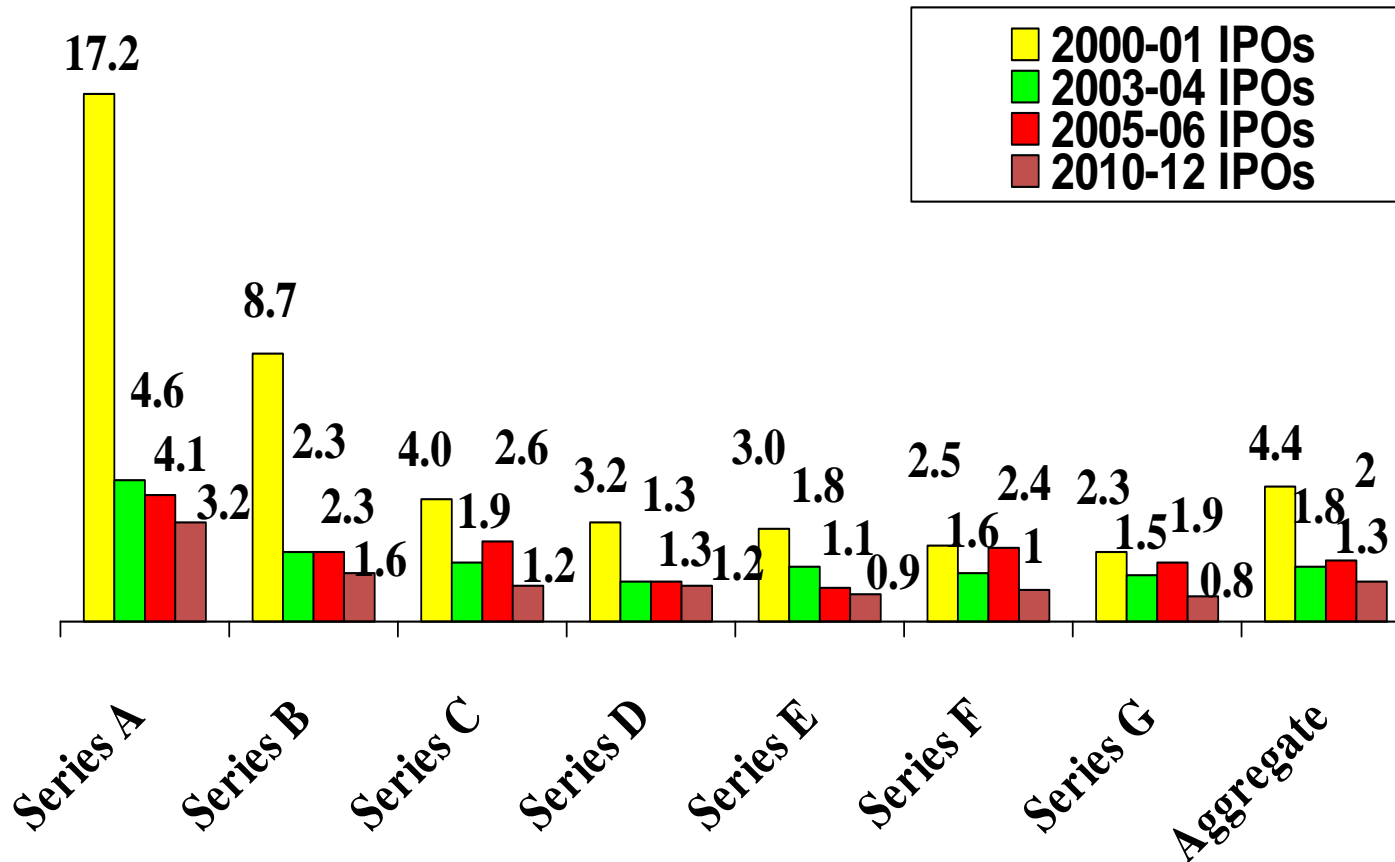


# Average Private Investments in Biotech IPOs (\$M)



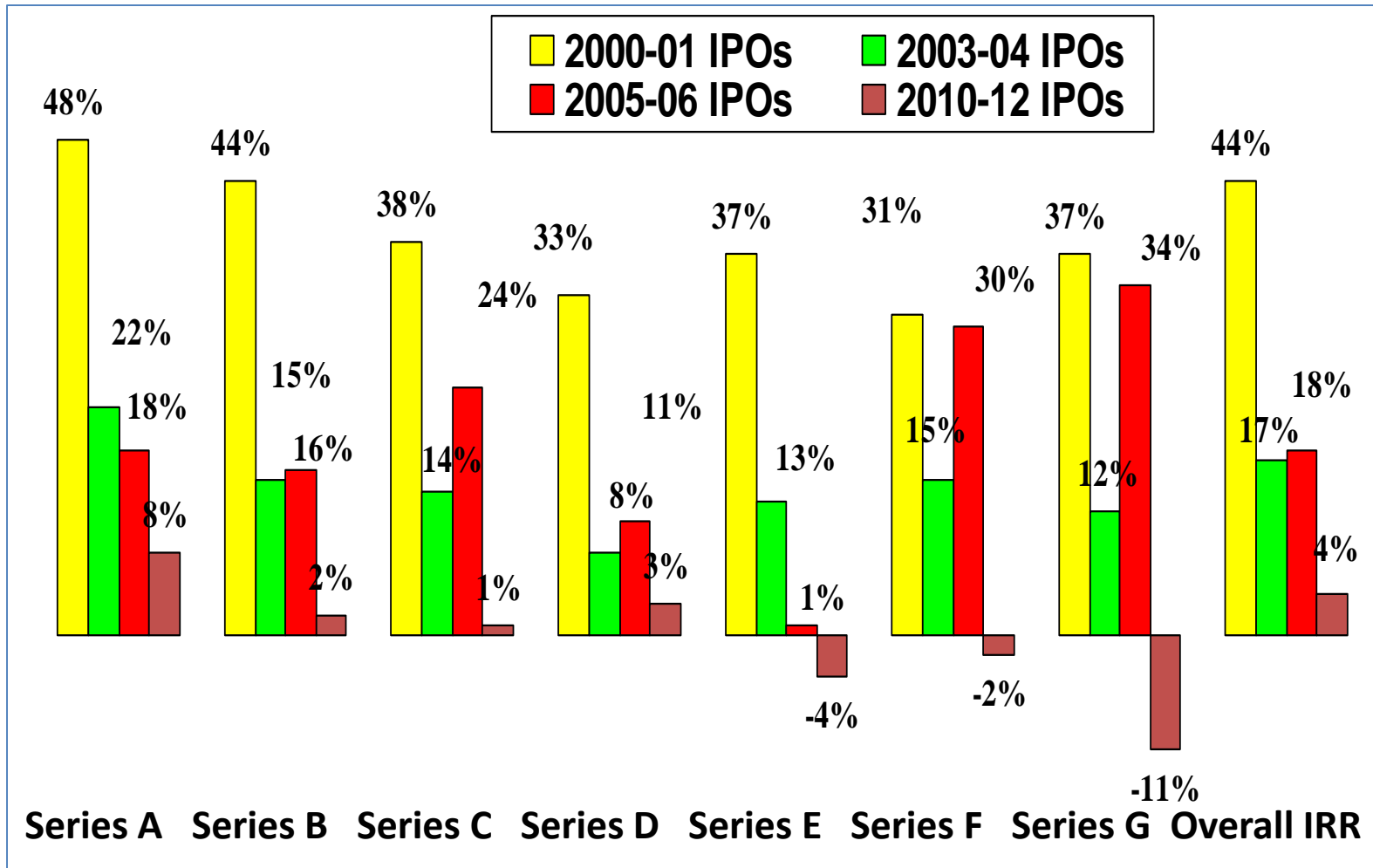
\* Private Round Totals do not correspond to the sum of each Series since not every company had all Series.

# VC Cash-on-Cash\* Returns from Biotech IPOs



\* Cash-on-Cash returns are calculated using IPO price

# Venture IRRs\* from Biotech IPOs



\* Internal Rate of Return (IRRs) are calculated using Initial Public Offering (IPO) stock price and assuming all private investment rounds are held until Dec. 31 of '01, '04, '06 and '12, respectively, with quarterly compounding.

## Enriching Alliance Payments (EAP) Available for Demand Dividend Repayment

Biotech (Partner – Date)	Financing Rnd (Date)	Upfront Fee	Milestones Received	Additional Milestones *
ChemoCentryx (GSK – 8/06)	\$17.7M (6/05)	\$38.5M	\$65M	\$122M
Ironwood (Forest – 9/07) (Almirall – 4/09) (Astellas – 11/09) (AstraZeneca – 10/12)	\$50M (2/07)	\$70M \$40M \$30M \$25M	\$135M \$37M	\$100M \$45M
Anacor Pharmaceutical (Schering – 2/07) (GSK – 10/07) (Medicis – 2/11)	\$25M (6/06)	\$40M \$12M \$7M	\$30M	\$69M \$153M
Endocyte (Merck – 4/12)	\$11.8M (12/10)	\$120M	\$5M	\$380M

\* Additional development milestone payments due if achieved

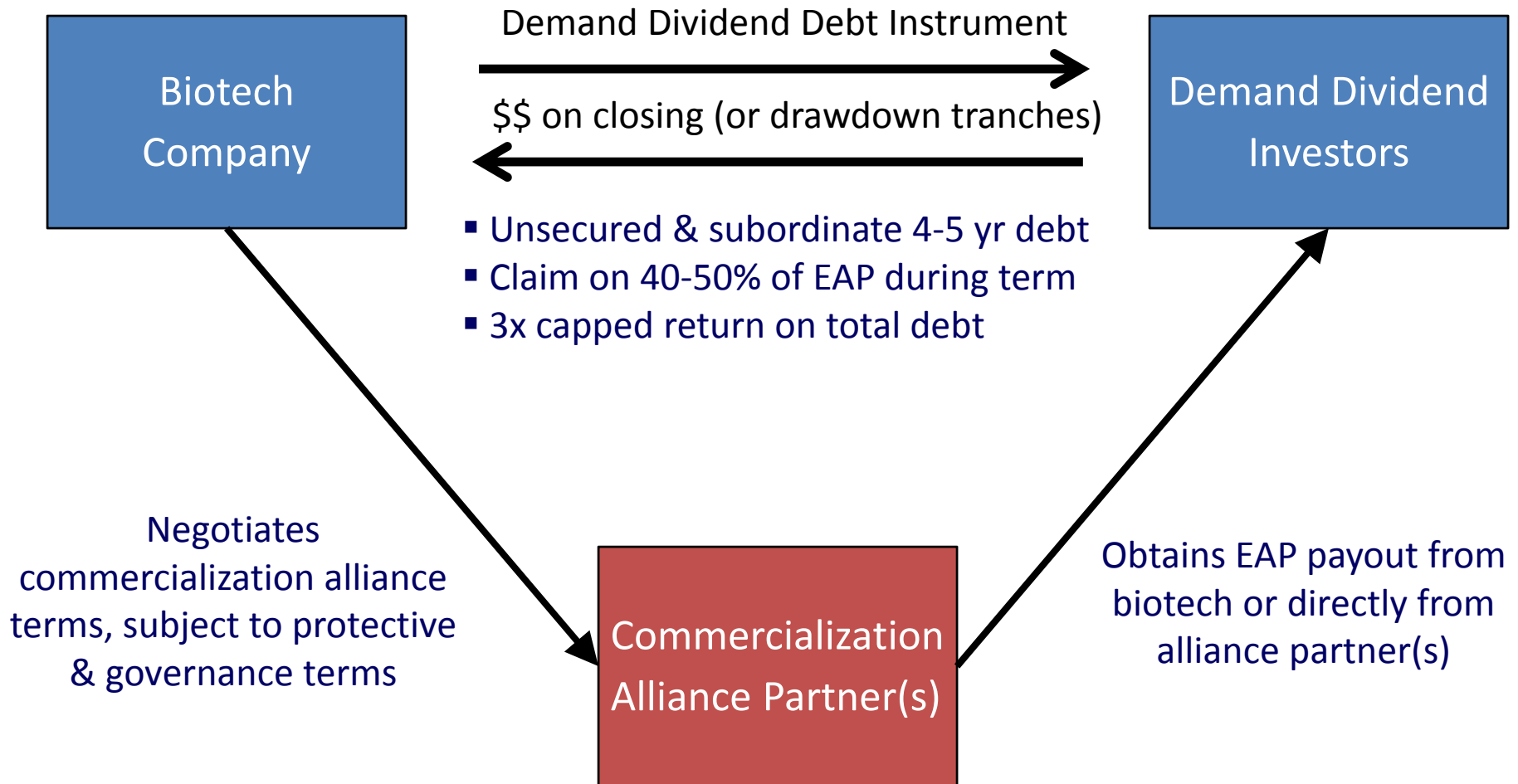


## Enriching Alliance Payments (EAP) Available for Demand Dividend Repayment (cont'd)

Biotech (Partner – Date)	Financing Rnd (Date)	Upfront Fee	Milestones Received	Additional Milestones *
Trius Therapeutics (Bayer – 7/11)	\$19.2M (11/09)	\$25M	\$11M	\$23M
AVEO Oncology (Schering – 3/07) (OSI – 9/07) (Biogen/DEC – 3/09) (Astellas – 2/11)	\$43.7M (1/04)	\$7.5M \$7.5M \$5M \$75M	\$11.5M \$7.8M \$5M \$15M	\$452M \$88M \$70M \$560M
Merrimack Pharm (Sanofi – 9/09)	\$60M (11/07)	\$60M	\$25M	\$385M
Tranzyme (Norgine – 6/10) (BMS – 12/09)	\$15M (6/09)	\$8M \$10M		\$80M

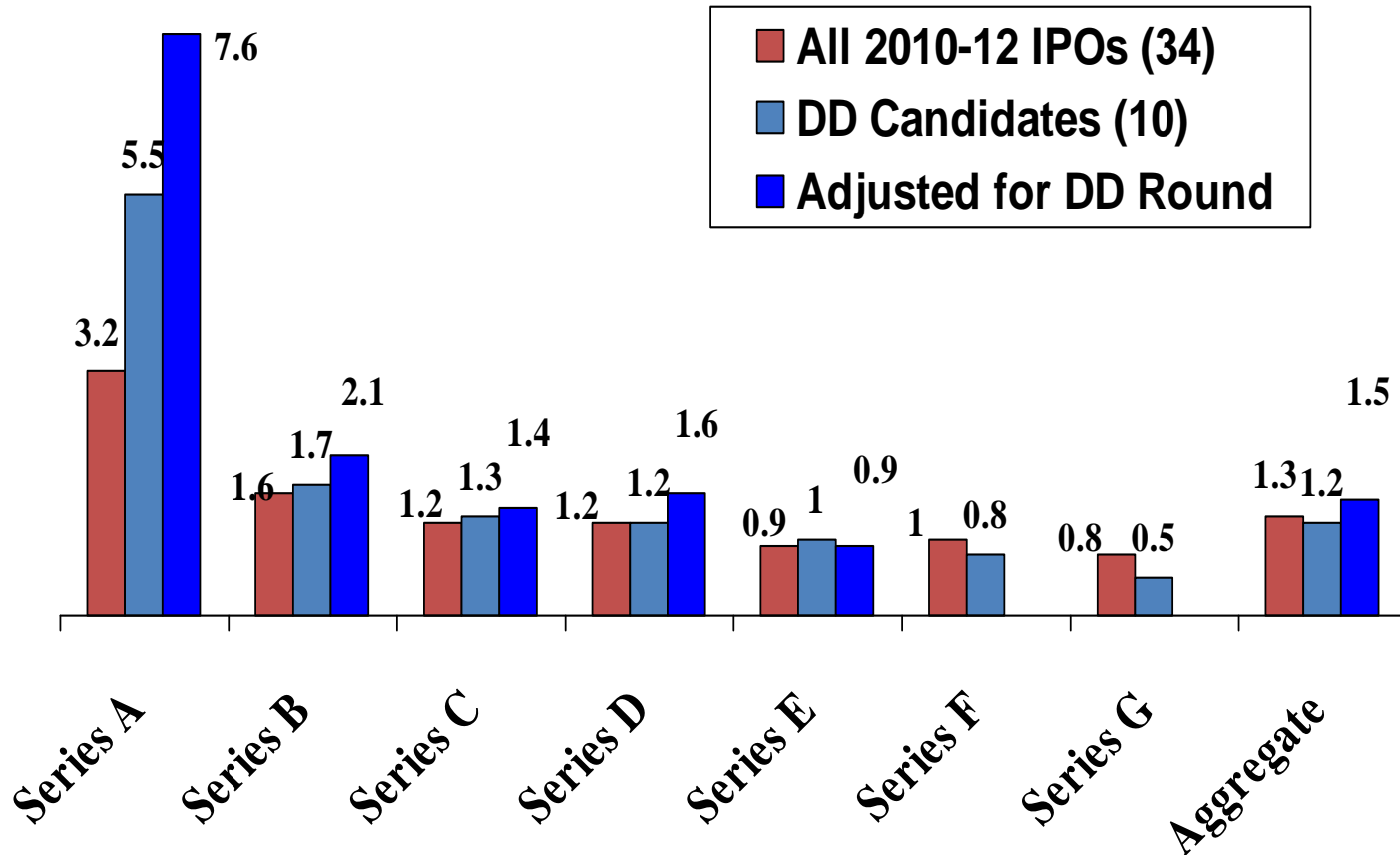
\* Additional development milestone payments due if achieved

# Demand Dividend Investment Vehicle: Basic Structure



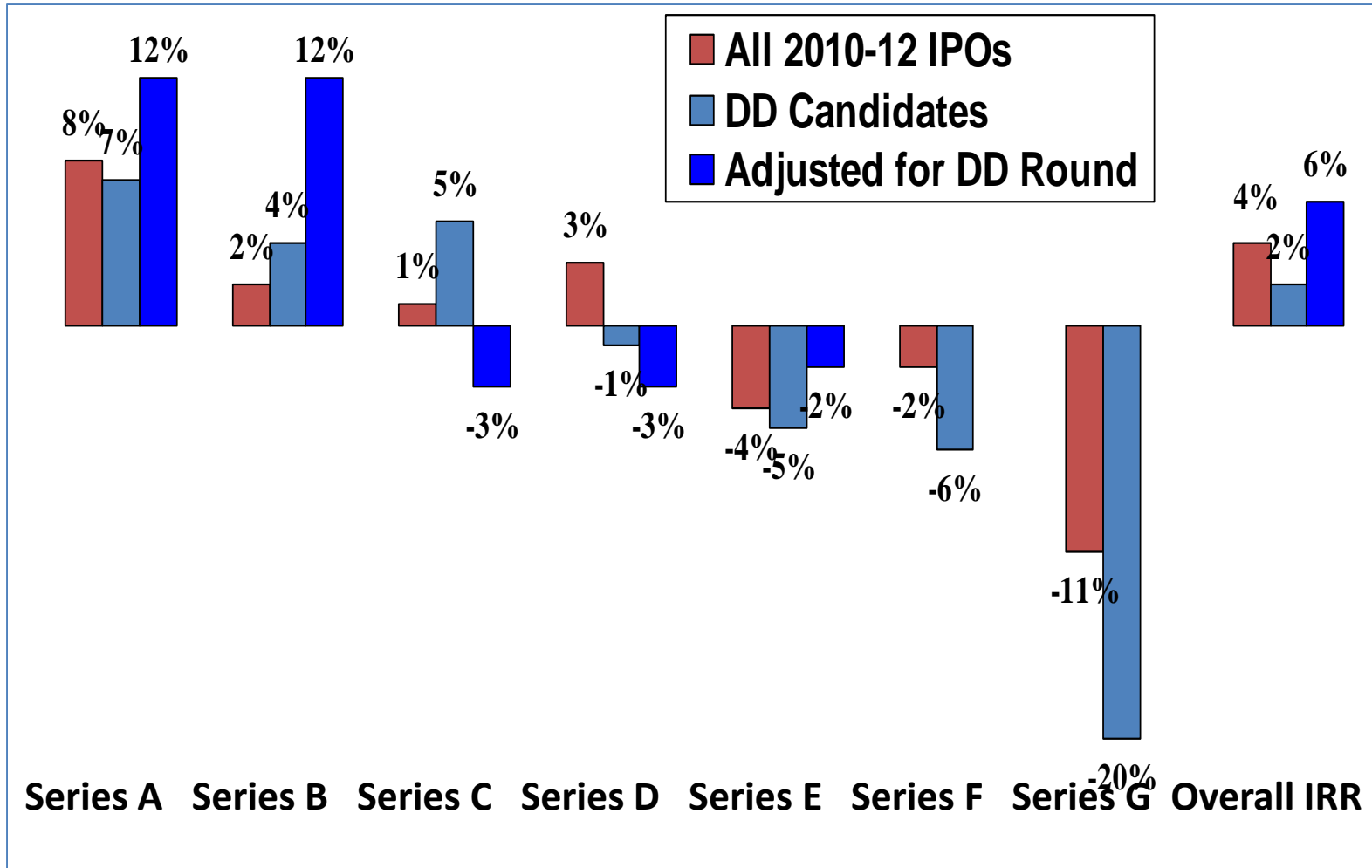
EAP = Enriching Alliance Payments from commercialization alliances commenced during term

# VC Cash-on-Cash\* Returns from Biotech IPOs Assuming Use of a Demand Dividend (DD) Financing



\* Cash-on-Cash returns are calculated using IPO price

# Venture IRRs\* from Biotech IPOs Assuming Use of a Demand Dividend (DD) Financing



\* Internal Rate of Return (IRRs) are calculated using Initial Public Offering (IPO) stock price and assuming all private investment rounds are held until Dec. 31 of 2012, with quarterly compounding.