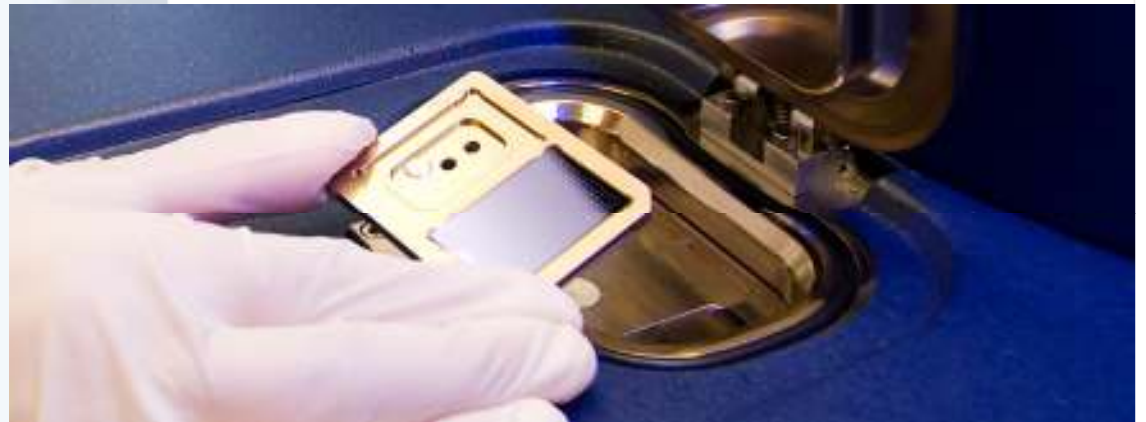


April 2010

www.venturefund.novartis.com

Corporate Venture Capital

Florent Gros



AGENDA

- Novartis Venture Funds
- Venture Drivers
- Exit Drivers
- European specificities

Innovative and Successful

■ A Decade of Success

- 14 years as a leading corporate (independent) venture capital firm
- Strong returns driven by looking beyond to what is “strategic to the industry”
- NVF reputation viewed as progressive & forward thinking
- Two capital choices – Venture Fund and Option Fund
- Independent decision making

■ Novartis Venture Fund portfolio:

- ~70 private companies
- ~\$750M USD Capital Base
- ~\$15-20M USD per investment
- 45+ portfolio company board seats
- Experienced team (Cambridge and Basel)

NVF Investment Criteria

Unmet need /
Clinical Impact

Management
experience

Innovation
Patient Benefit
Superior Returns

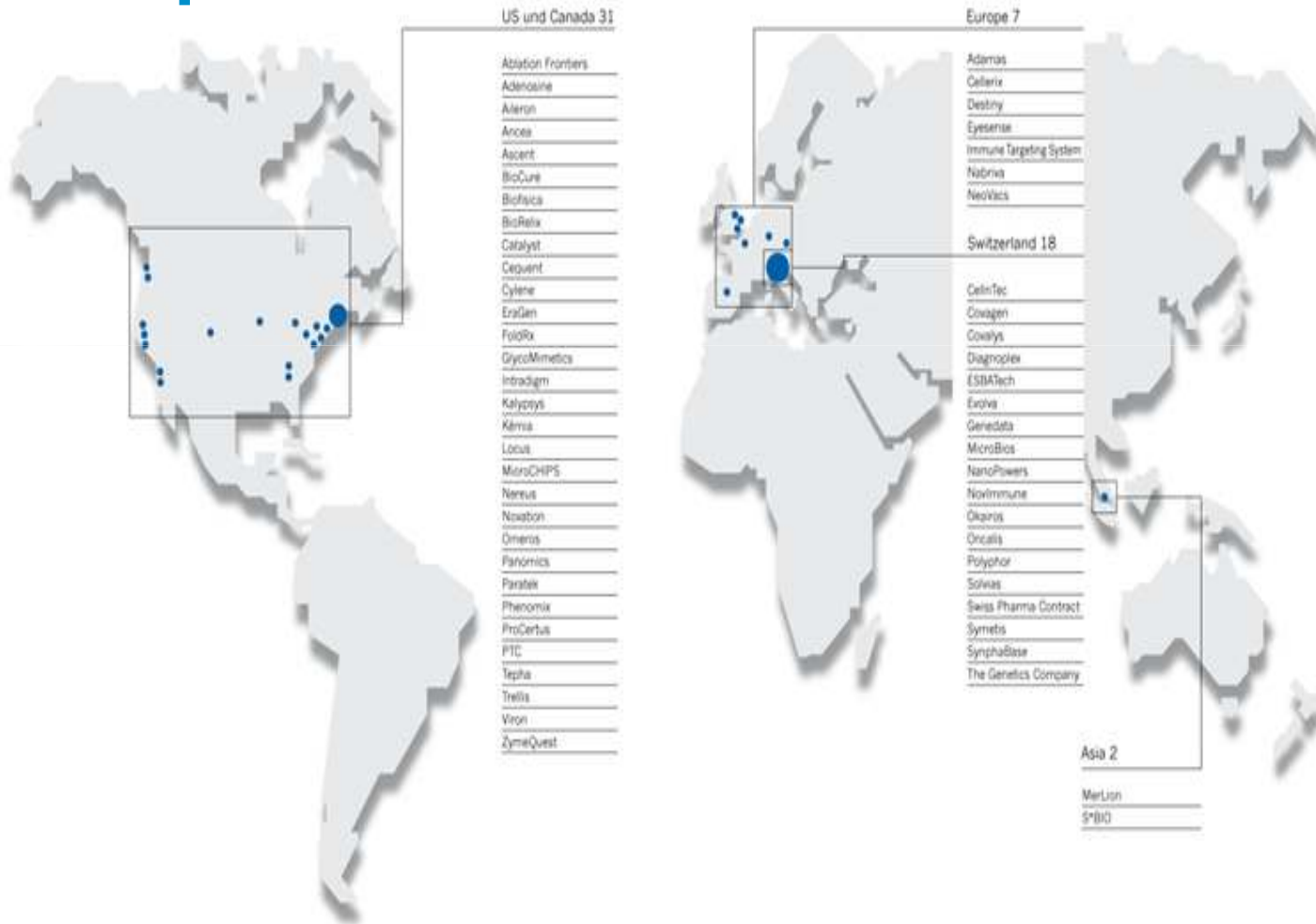
Novel proprietary science
/ understanding of
mechanism

Capital
efficiency

Typical Investment Process

- Screen ~1000 companies and proposals per year
- Of the screened companies <1% conclude with an investment
- Lead syndicates when appropriate
- Multi-stage due diligence process with investment decision vested in the Novartis VC team and reviewed by independent board
- New investments +/- 20% stake, diluted down to +/- 15% in later rounds, typically with board seat
- Follow on investments dependent on operational performance and financial discipline
- NVF is a long-term partner and enabler in developing the company and finding profitable exit

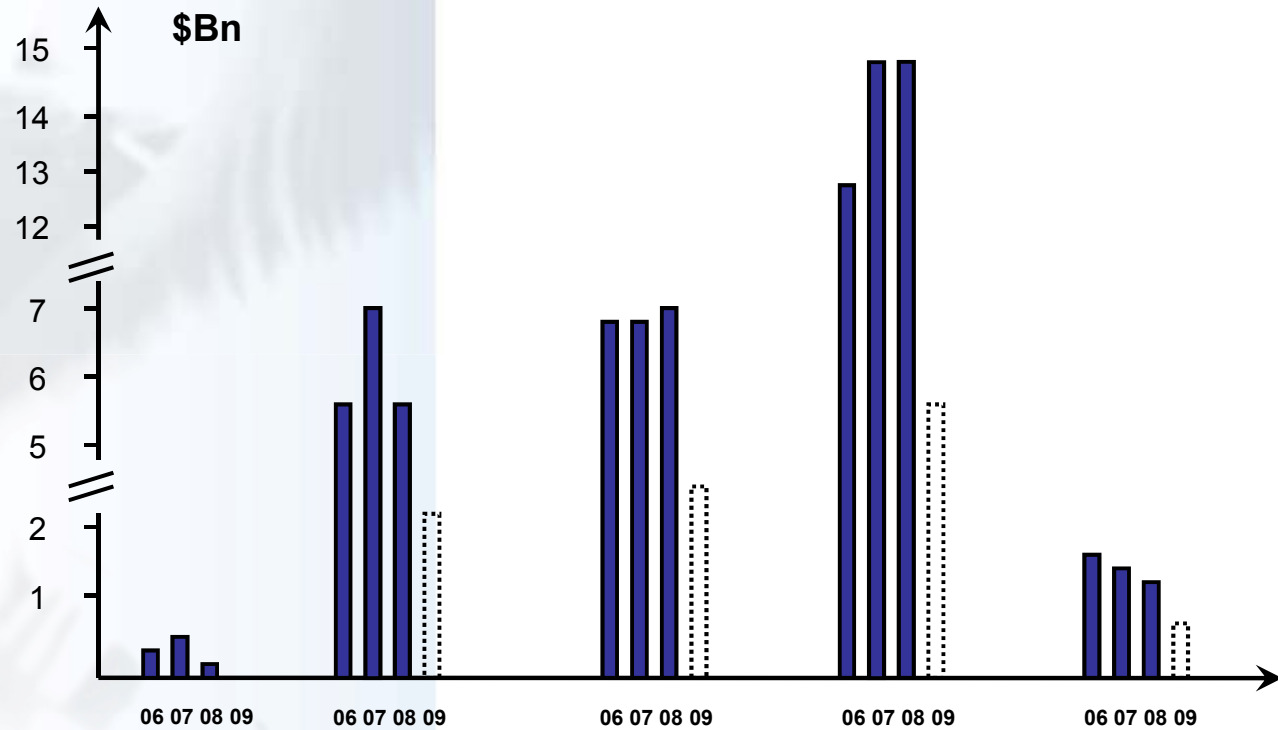
Geographic Distribution of companies





Venture Drivers

Evolution of Total Venture



**Q1 2009 vs.
Q1 2008**

-80%

-37%

-54%

-60%

-38%

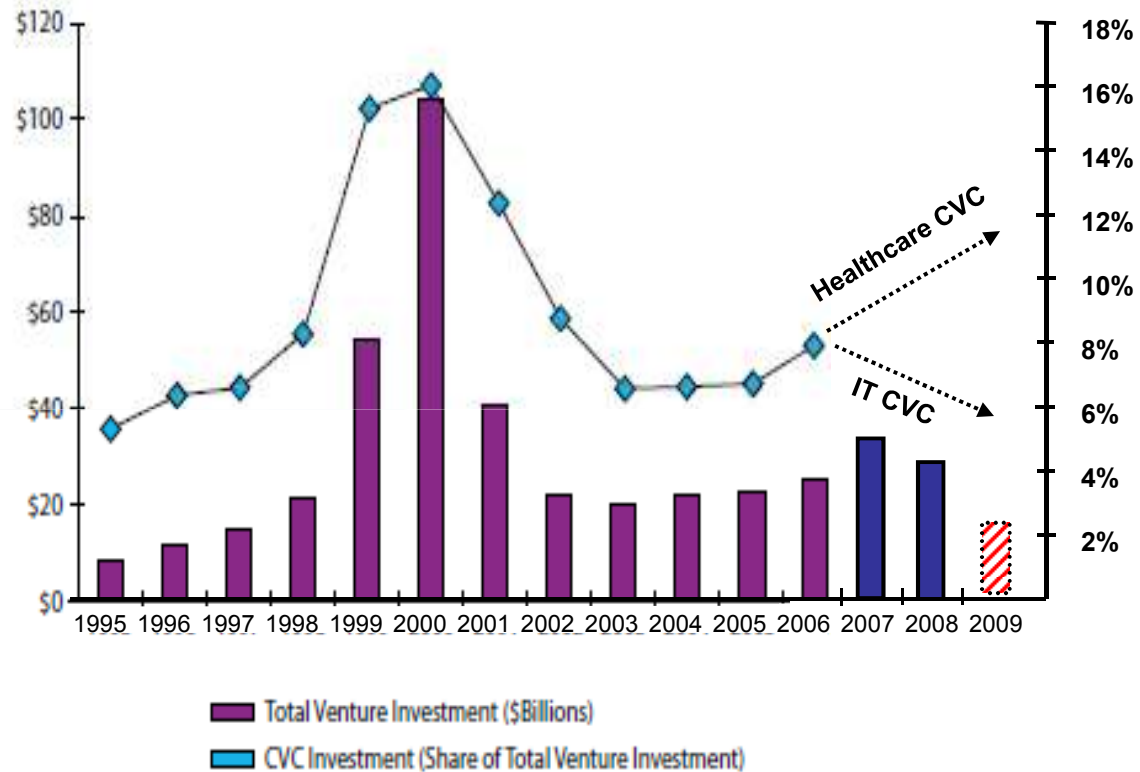
Source: NVCA, Thomson Financial

VCs Consequences....

- Lower valuations, more down-rounds and pay-to-play
- More scrutiny / due diligence and longer approval process
- Increased capital reserves for follow-on investments
- Increased focus on M&A driven by lower valuations and more widespread “build vs. buy” considerations

Text

Corporate VCs



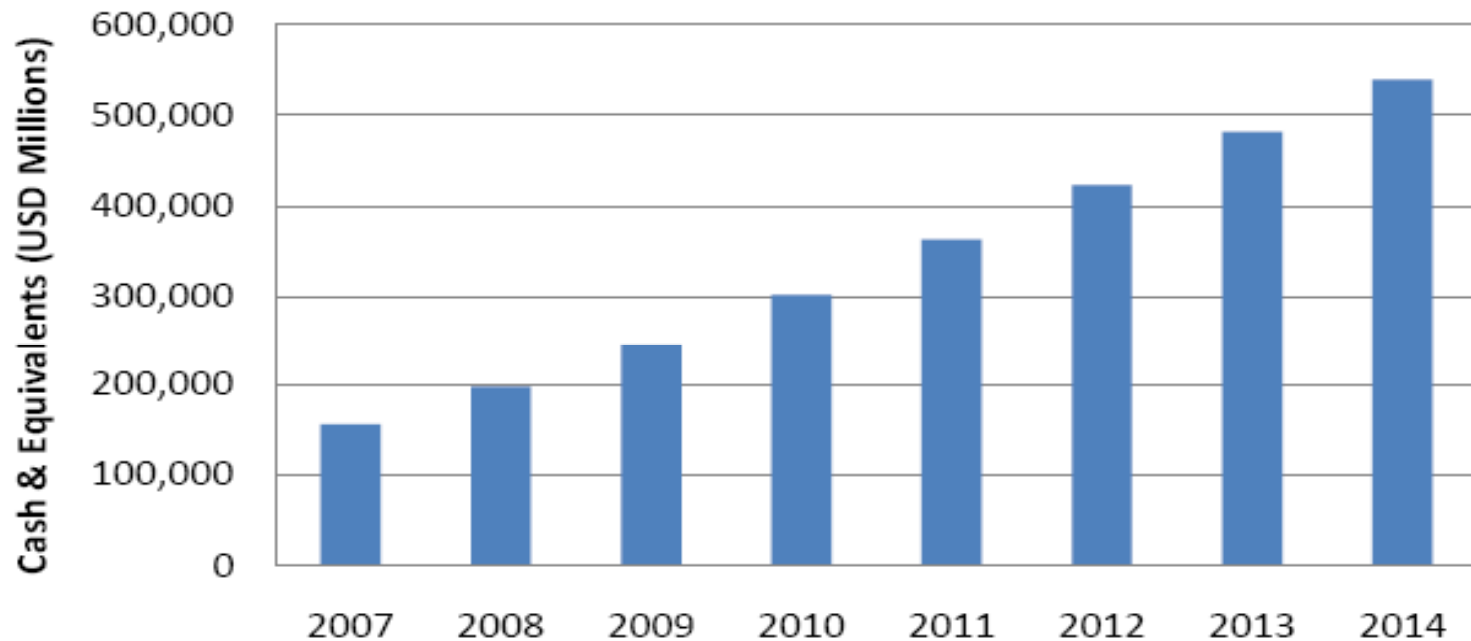
Healthcare Corporate VCs seem to be backed by stronger strategic motivations and management commitment (and probably cash flows) that ensure stability and continuity even in a downturn

Source: NVCA, Thomson Financial. Kauffman Fellows

A background image featuring a microscope and several pills, overlaid with a large, semi-transparent white 'V' logo.

Exit Drivers

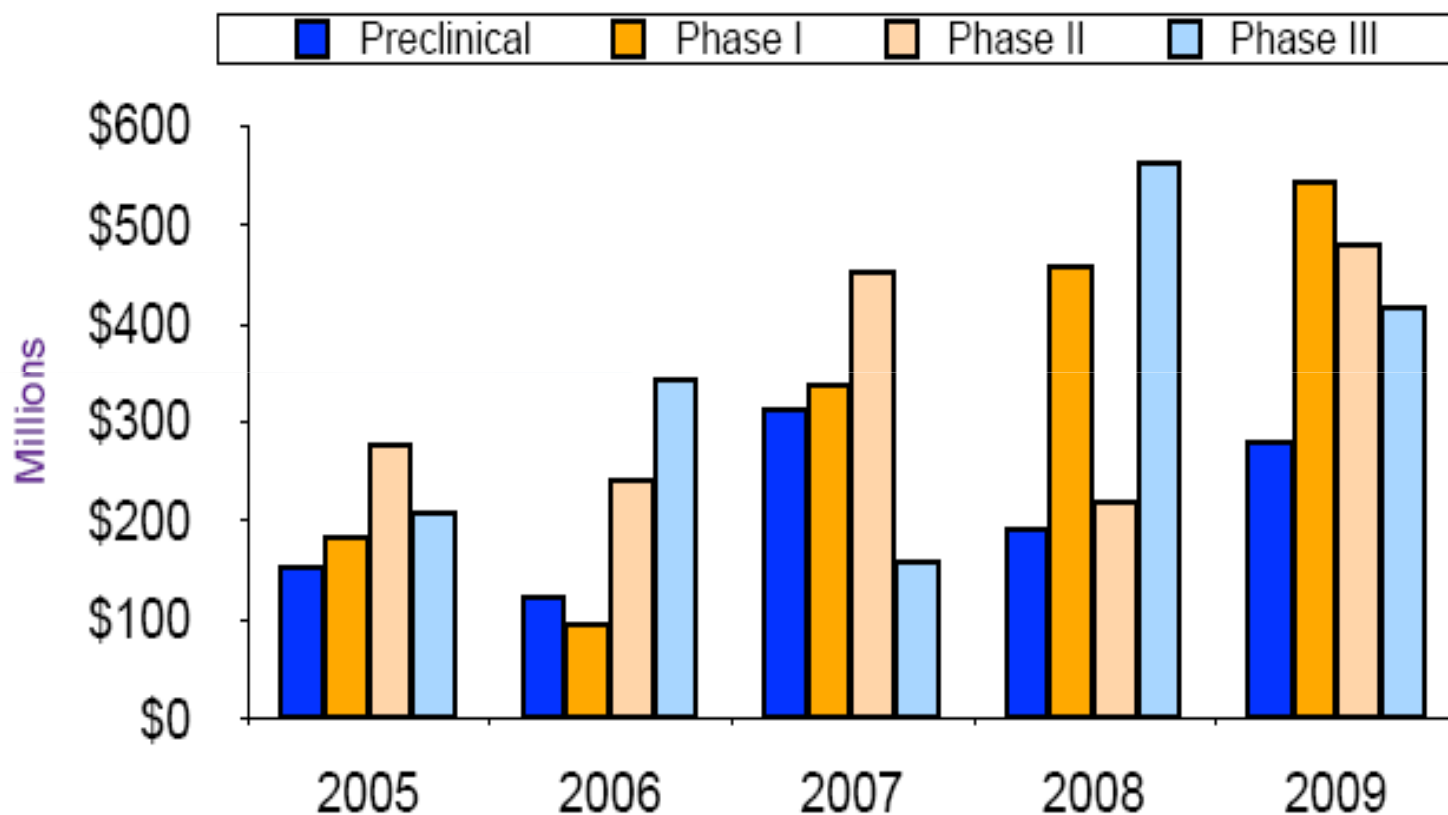
Pharma has cash for biotech assets



- **Biotech / medtech lack cash (> 40% have more than a years' worth cash - nearly 100 publicly-traded biotechs do not have enough cash to last 6 months)**

Source: Evaluate

Pharma deals continue to increase



*Potential Deal Values include only upfront payments and at risk milestone payments (not adjusted) and excludes royalties

Exit top-performers

- Top performing biotechs have raised median pre-exit funding of \$36m and exit at a value of \$250m, generating a median ROI of 5.4; **median performers have raised median pre-exit \$66m and exit at \$133m, generating an ROI of 1.7**
- Top performers have typically **been exclusively venture funded pre-exit**; companies with only venture funding represent 85% of the top performers in contrast to 49% of the total exited
- Top performers have a focused portfolio at exit; top performers 3 development and launched candidates at exit while the median have almost twice as many

Source: BioCentury; Windhover; McKinsey analysis

Exit Drivers

- **Out- and in-licensing ARE NOT major performance drivers; top performers have licensed at the same rate as the median – BUT reliance on early stage alliances does help to be attractive for VCs**
- **VCs are exclusively focused on exit, minimum 1.7x ROI**

Source: BioCentury; Windhover; McKinsey analysis



European Specificities ?

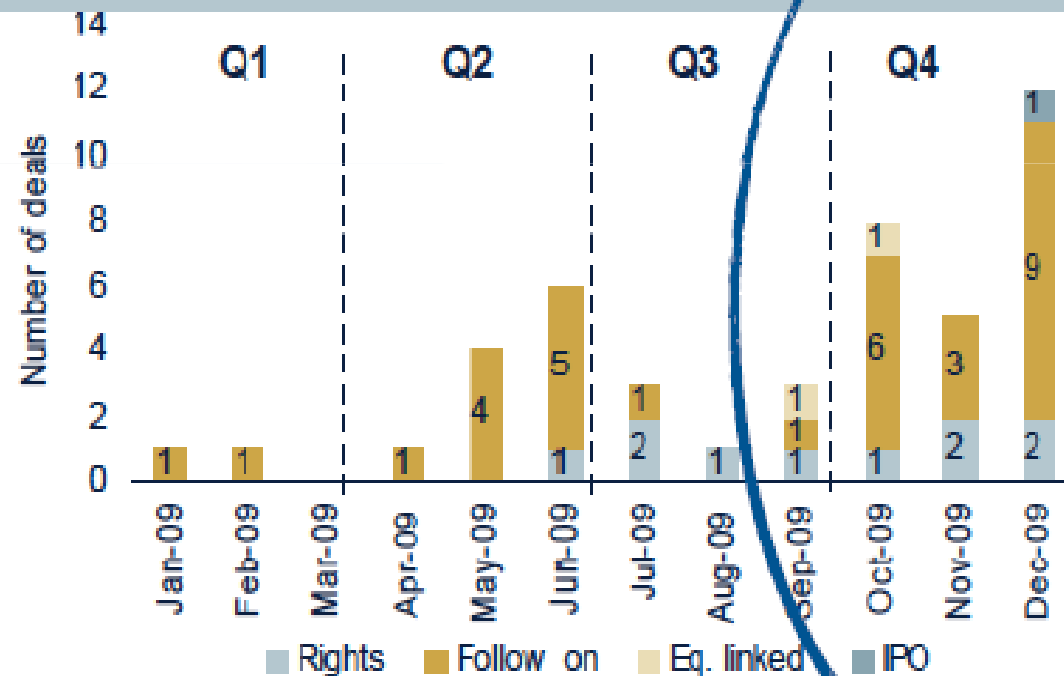
European Public Funding 2009

Pricing Date	Issuer Name	Offer Type	Offer Price	Current price	% change since pricing
1/28/09	SSL International plc	Follow-on	5	7.53	51%
2/18/09	Algeta ASA	Follow-on	11	54.5	395%
4/17/09	Bioton	Follow-on	0.29	0.19	-34%
5/15/09	Meda AB	Follow-on	53.5	69.75	30%
5/27/09	Pronova BioPharma ASA	Follow-on	18.5	16.8	-9%
6/5/09	Proximagen Neuroscience plc	Follow-on	1.4	1.09	-22%
6/15/09	Active Biotech AB	Rights	20	107.5	438%
7/3/09	Ypsomed	Rights	68.5	70.8	3%
9/21/09	Alapis SA	Rights	0.46	0.46	0%
9/24/09	Qiagen NV	Follow-on	21.02	20.78	-1%
10/22/09	Eurand NV	Follow-on	11.24	9.8	-13%
11/11/09	Neurosearch A/S	Rights	60	203	238%
11/16/09	4SC AG	Rights	3	3.12	4%
11/17/09	ThromboGenics NV	Follow-on	16	14.86	-7%
11/18/09	NicOx SA	Follow-on	8	5.1	-36%
12/3/09	Movetis	IPO	12.25	12.25	0%
12/3/09	Galaplast A/S	Follow-on	440	595	35%
12/18/09	Innate Pharma	Follow-on	2.27	2.15	-5%
12/21/09	NicOx SA	Rights	3	5.1	70%

Source: PharmaVenture

Funding Climate

2009 Breakdown by issue type and number of deals



Source: Rothshilds

Funding Strategy

- **VC activity has contracted**
- **Generalist VCs have moved away leaving a fewer specialist VC firms**
- **Venture arms of big pharma now essential players (new in 2010: Serono, Boehringer, Sanofi, Merieux etc.)**
- **Some government match-fund initiatives have emerged (UK Innovation Fund €150m, French Innobio €150 mio, Max Plack)**
- **Large European grants through the Innovation Medicines Initiatives (FP7, Eureka etc). Large local grants available in France, Belgium, Italy. Attractive tax credit in France (€1 credit for €3 invested)**

**Not yet out of the woods, but
situation is improving**

Thank You!

**Florent Gros
Managing Director
Novartis Venture Funds**