



# THE VALUATION EXPERTS

**Creativity in Deal Making: a Valuation  
Approach to Facilitate Deals**

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# Agenda



- **Trends in deal-making**
- **Valuation of a product / deal**
- **Deal Value drivers**
- **Creativity/Deal facilitator**
- **Q&A**

# Venture Valuation



VENTURE VALUATION



**Independent assessment and valuation of Life Sciences companies / therapeutic products**

**Company, Deals & Investors Database  
Biotechgate.com**



- Switzerland (HQ); Canada; UK; Singapore; India; China
- Global experience with 25 people
- Track record of over 350 valued companies / products
- Investor clients such as Novartis, GSK, Fraunhofer Gesellschaft, European Investment Bank; Company clients: Arpida/Evolva; 4SC;
- Product valuation for licensing deals

# Trends in Deal Making



## Average of Up-front

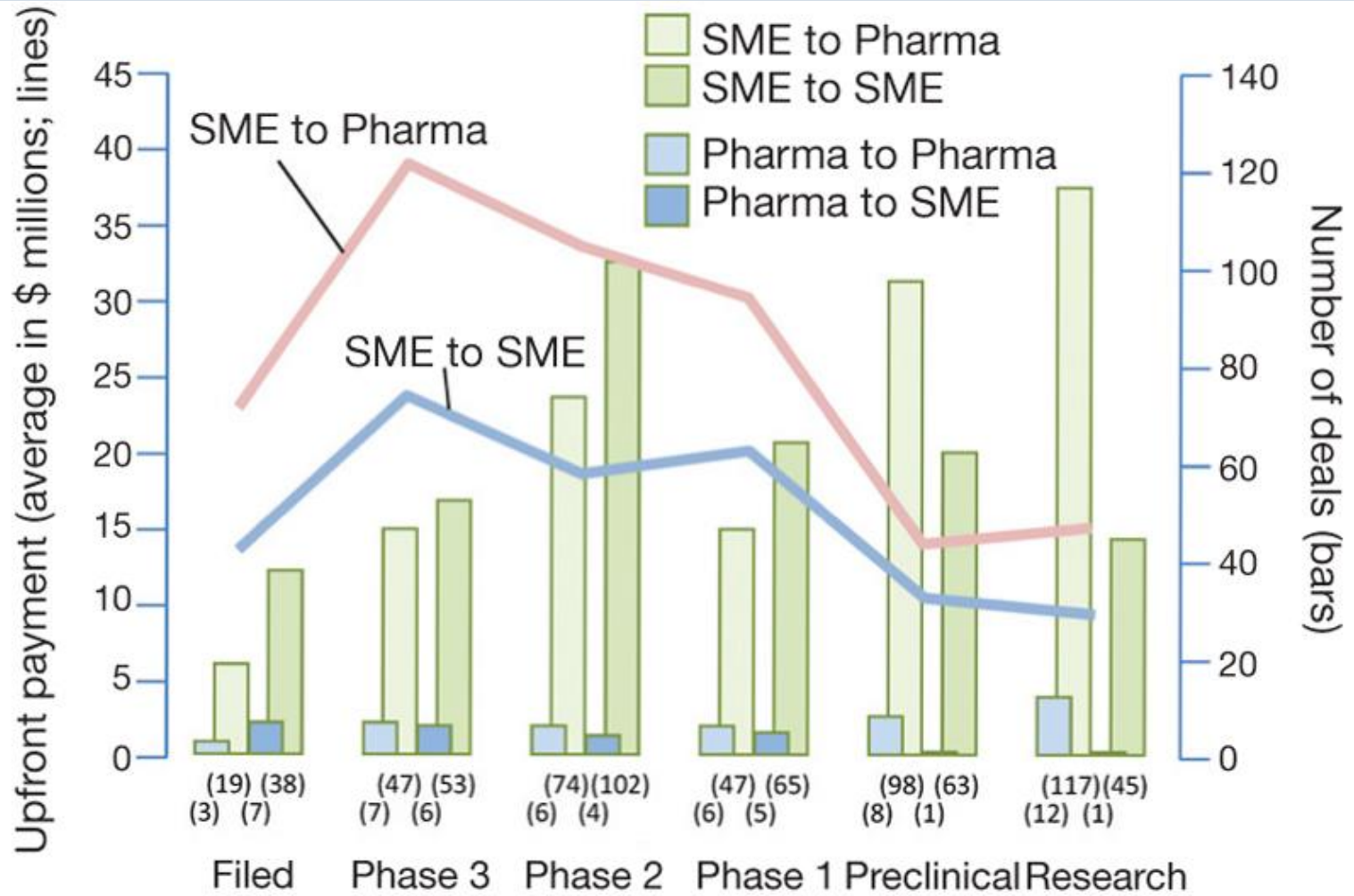
In m USD	2006	2007	2008	2009	2010	2011	2012	2013	2014
Research	16	28	17	8	21	6	13	36	49
Preclinical	11	12	21	11	13	19	14	17	20
Phase I	33	31	35	62	10	27	17	25	21
Phase I/II	20		40	20	50	3	46	52	14
Phase II	50	37	41	50	55	26	44	72	70
Phase III	24	48	75	43	62	50	22	74	151
<b>Total</b>	<b>25</b>	<b>32</b>	<b>38</b>	<b>32</b>	<b>33</b>	<b>23</b>	<b>24</b>	<b>42</b>	<b>53</b>

Source:



Research: equity / research funding; multiple programs

# Trends in Deal Making



Source: Nature Biotechnology; The premium of a big pharma license deal; July 2014.

# Trends in Deal making



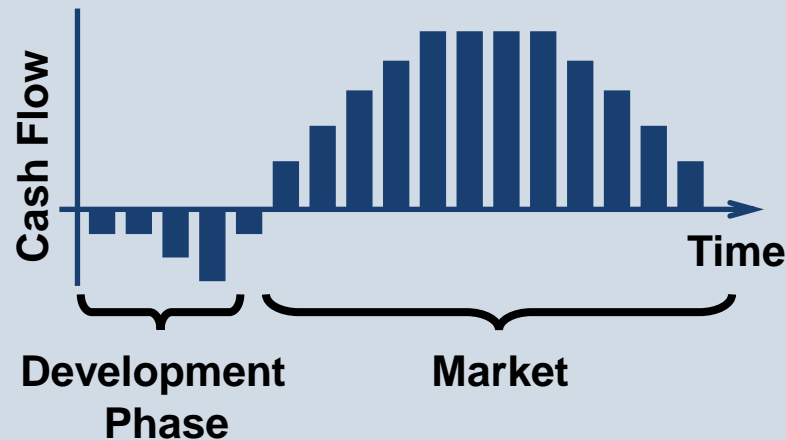
- Pharma companies have gap in pipeline
- Licensing model: Biotech (B) => Pharma (P), but also B => B, P => B and P => P
- Biotech compete with Pharma in-house R&D
- Pharma compete with investors
- Asia as active player (in- & out-licensing)

**=> Continuing demand for Licensing, M&A**

# rNPV Product Valuation



1. Development phase => investment  
Risk ( $r$ ) => success rate
2. Market phase => revenues  
Patent expiry => end of revenues  
(often no terminal value)
3. Discount / WACC => non-specific risk



# Deal Example



## Aurigene, India



## Curis, USA

Subsidiary of Dr. Reddy's Laboratories  
550 employees

Publicly listed; Market cap: USD 270m  
45 employees

8 clinical candidates developed by Partners (Pierre Fabre, Debiopharm)

Collaboration with Roche and Genentech

Normally retain India rights

Focus on Immune modulation for oncology using peptides

Focus on oncology

Strength in pre-clinical development; bringing drug candidates from hit generation through IND filing

3 phase I products in development, plus marketed product by Roche / Genentech

**=> Jan 2015: Collaboration, License, Option Agreement to Discover, Develop, Commercialize Oncology Targets**



# Aurigene / Curis deal



- ⇒ Option to License Immuno-Oncology programs
- ⇒ excl. India / Russia rights

## Up-front:

Curis issue 17.1M shares (19.9%) = USD 23.2 m

## Milestone payment:

	1st / 2nd	3rd / 4th	Further programs
Option fee / clinical approval / commercial	USD 10m	USD 7.5m	USD 53m
	USD 42.5m	USD 42.5m	USD 87.5m

## Royalties:

~10% royalties (high single digits to 10%)

**Deal value:** USD 370m (5 prog.) / 1<sup>st</sup> prog. = USD 57m

# Product Value – 1<sup>st</sup> Prog. $\forall$

## Value of 1<sup>st</sup> Program:

- rNPV  $\Rightarrow$  USD 31.1m

## Value of deal:

## rNPV

- 1/5 of up-front\*  $\Rightarrow$  USD 3,2m
- Clinical milestones (USD 10m)  $\Rightarrow$  USD 2,0m
- Approval/market (USD 42.5)  $\Rightarrow$  USD 0,6m
- Royalties (10%)  $\Rightarrow$  USD 6,1m
- **Total (38% to Aurigene)  $\Rightarrow$  USD 11,9m**

\* Including taxes 24%

# Deal Value drivers



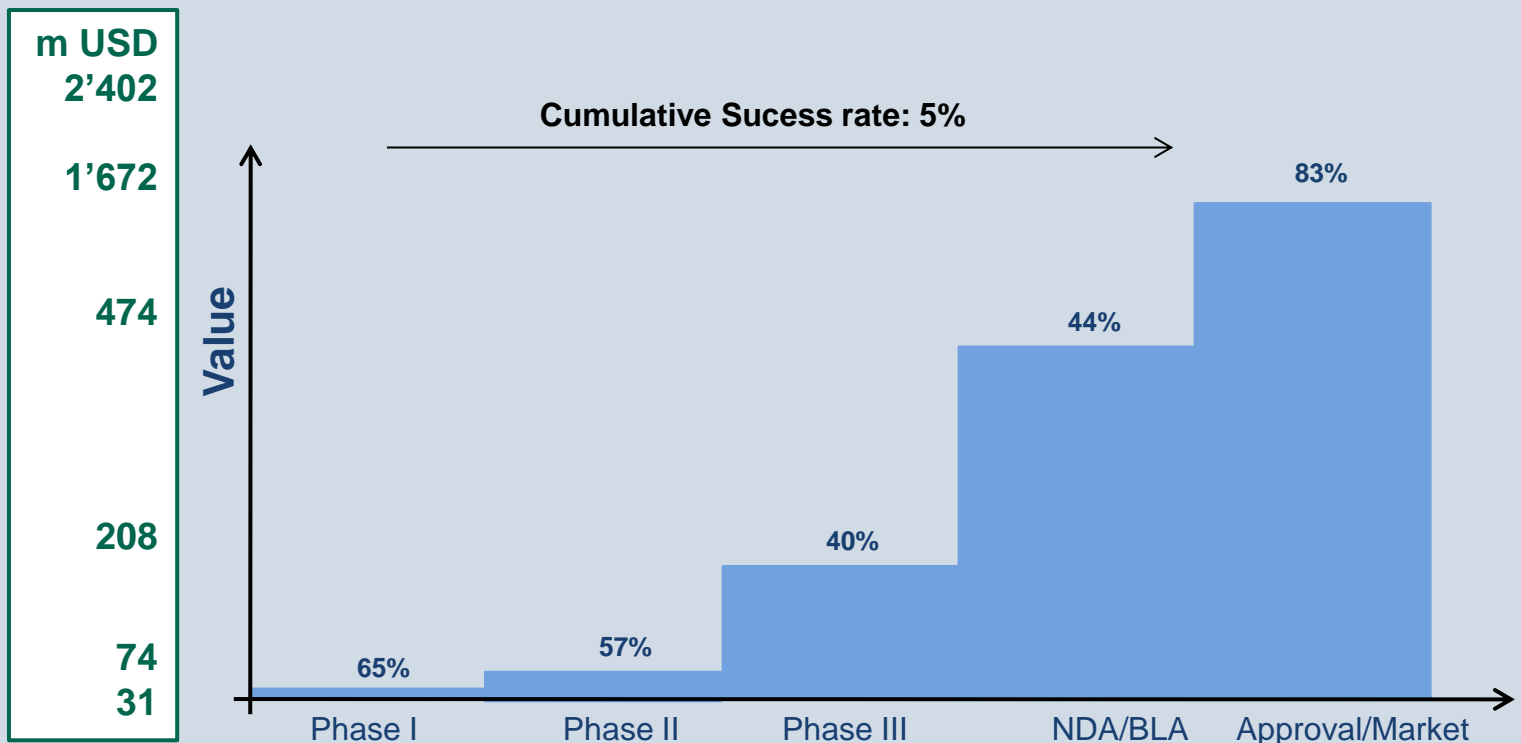
- **Option / Shares**
- **Extend of program**
- **Development costs**
- **Market (pricing/reimbursement, competition, indication(s), IP)**
- **Product Risk (success rate)**
- **Deal Structure**
- **Discount rate / cost of capital**
- **Deal structure**
- **Taxes**

# rNPV – Success rate



## The relation between Risk and Value

- Completion of a phase → Direct value increase



# Deal structure



Two very different deal structures can have same value:

1

Cash Flow



- Non-discounted, non-risk adjusted

rNPV



- 4 million upfront
- 53 million milestones
- 10% royalties

2

rNPV



- 10 million upfront
- 53 million milestones
- 5% royalties

# Cost of equity / WACC



## Cost of Equity / discount rate in rNPV:

- Early stage                    12% - 28%
- Mid stage                        10% - 22%
- Late stage                       9% - 20%
- Pharma                         below 10% (incl. debt)

Source. [www.biostrat.dk](http://www.biostrat.dk)

Cost of equity and non-development associated risks.

20% => USD 31m

25% => USD 19m

15% => USD 55m

# Cost of equity / WACC



	Aurigene, India	Curis, USA
Cost of Capital	10% (20%)	20% (20%)
rNPV of 1 <sup>st</sup> product	USD 42m (USD 31m)	
Deal value	USD 23m (USD 12m)	USD 19m (USD 19m)
% of Deal	54% (38%)	46% (62%)

# Taxes



	Aurigene, India	Curis, USA
Taxes (OECD)	24% (24%)	12.5% (24%)
rNPV of 1 <sup>st</sup> product	USD 36m (USD 31m)	
Deal value	USD 12m (USD 12m)	USD 24m (USD 19m)
% of Deal	32% (38%)	68% (62%)



# Creativity/Deal facilitator

- Have alternatives / options (M&A, other partners)
- Look at comparable deals
- Know what you want and know what your potential partner wants
- Investigate partner
- Provide all relevant information => reduce risk

# Creativity/Deal facilitator

- Escalating annual payments
- Fallback if deal is terminated
- Deal structure (licensing, co-marketing, co-promotion)
- Understand all stakeholders including Investors (they push for front-loaded deals)

# Conclusion



- Valuation is key in the development any product
- Value is based on risk and potential
- Options / Shares as instrument
- Think about worst case => protection
- Biotechs: out-license early stage products / own development of most advanced programs
- Think outside the box => **BE CREATIV**



# THE VALUATION EXPERTS

Thank you for listening!

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