



# Biovista

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CEO

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Company presentation by Despina Yancopoulou, PhD, MBA

**PRAXI HELP-FORWARD Network**



# Biovista - Profile

Drug repositioning company established in 1993

- **Biovista Inc. (VA, USA)**
- **Biovista Athens, Greece**

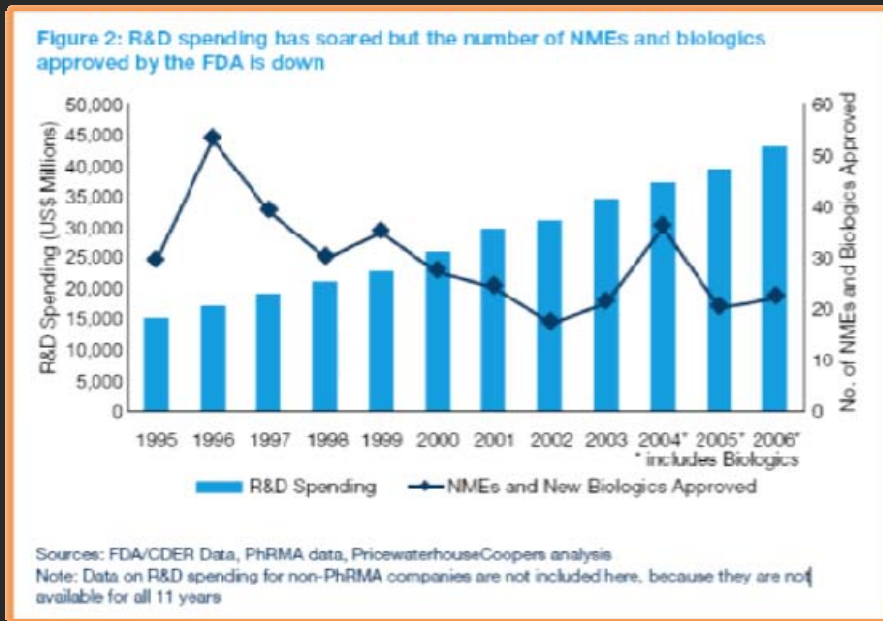
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Technology platform to identify suitable drugs and reposition them in isolation or in combination with other drugs to therapeutic areas currently not covered by existing products



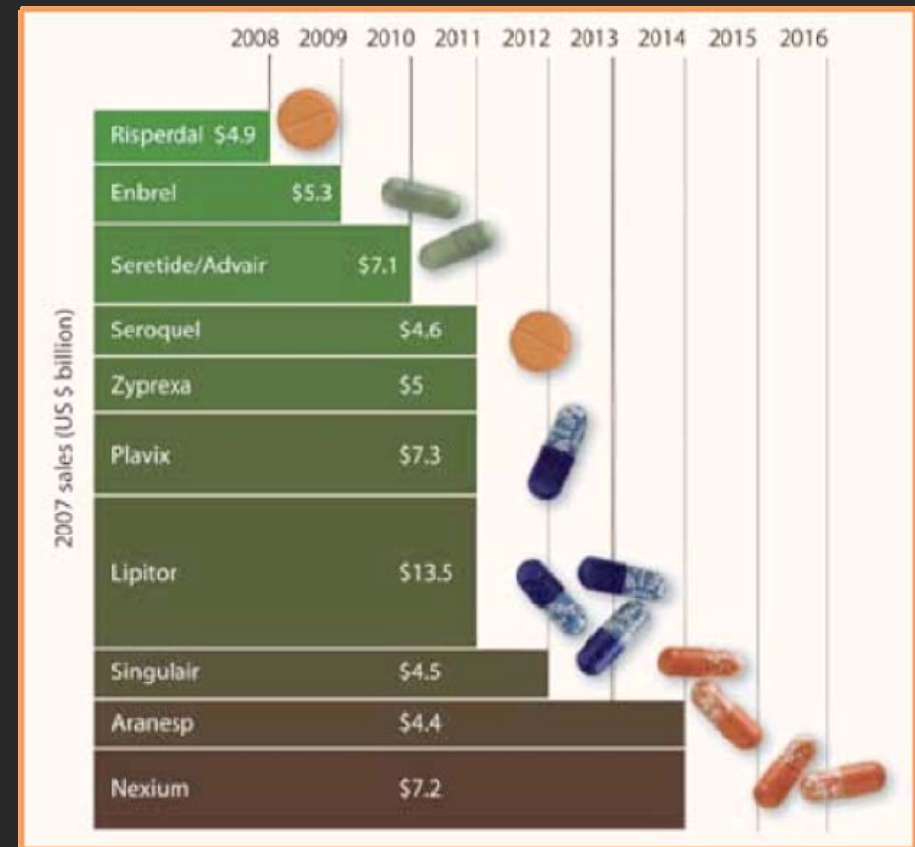
# Commercial drivers for repositioning

## Efficiency at the lab is falling



Source: PWC report: Pharma 2020: The vision  
Which path will you take?\*

## The patent cliff



The pharma industry will see over \$63 billion of annual income washed away due to patent erosion by 2014 . Source [www.rsc.org](http://www.rsc.org)



# Repositioning makes good financial sense

Traditional drug development  
to Phase II

5+ years

10 – 20M \$

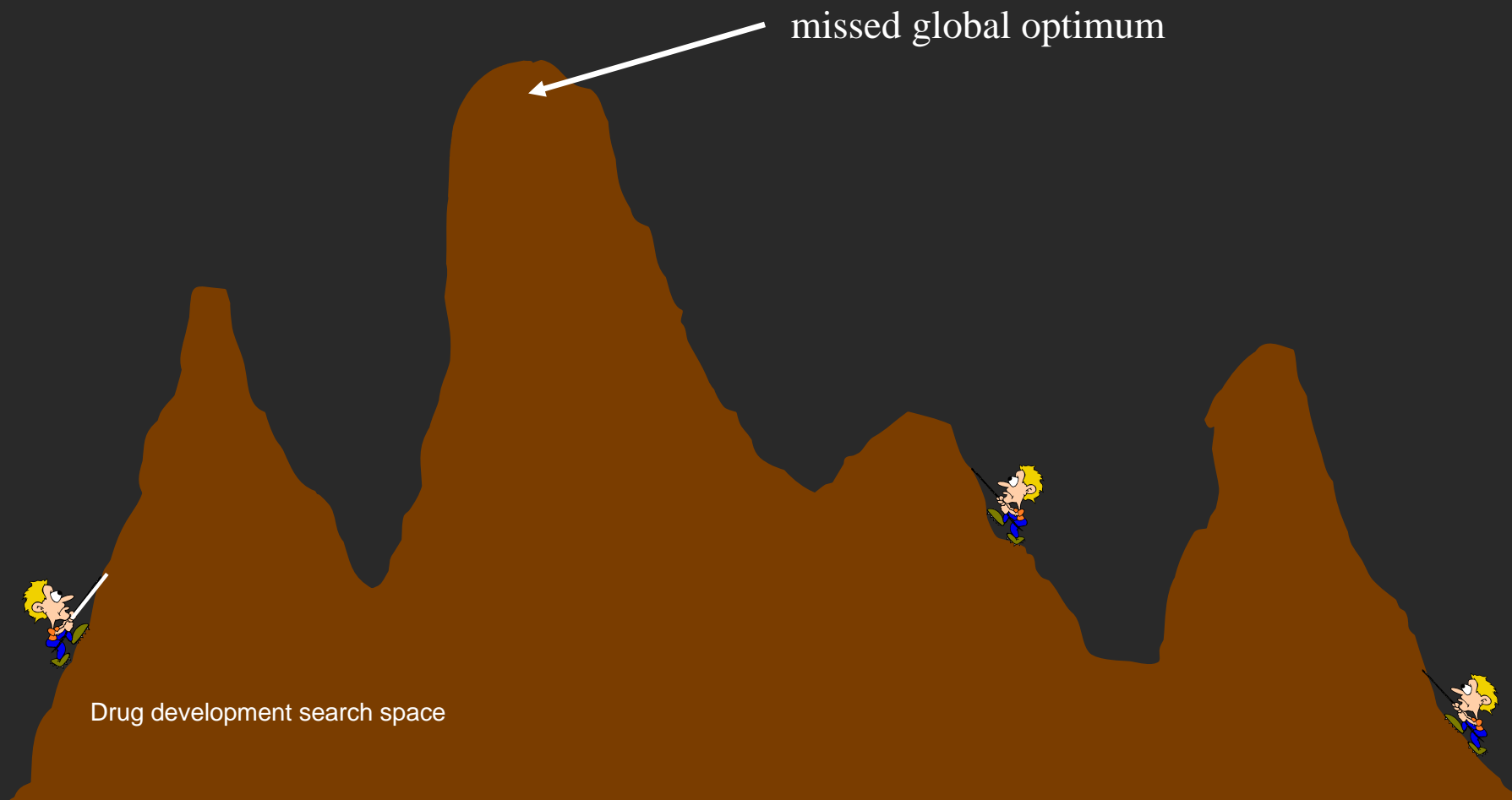
Drug Repositioning  
to Phase II

< 1 year

< 1M \$



# Local versus global optimization



Traditional drug development approaches allow us to reach local optima but we have poor maps to give us the overview and place us near the global optimum



# Biovista Discovery Algorithmics Platform

**Proprietary platform** supported by one of the world's largest databases with over 4 billion biological correlations.

Captures vast majority of publicly reported research findings, FDA adverse event reports and also proprietary experimental data, Integrated into a proprietary Clinical Outcome Search Space.

## How does it work?

This matches the mode of action (MoA) of any of over 12,000 marketed or generic drugs in 20 dimensions of genes, pathways, cell types, concomitant indications, biomarkers and other dimensions, against the MoA of over 8,000 diseases and 8,000 adverse events known to medicine.

## Biovista's Clinical Outcome Search Space is unique because

- it can link molecular data directly with clinical outcome
- repositions but also de-risks drugs by profiling their adverse events
- Provides a more balanced prediction of the clinical outcome



# Biovista business model

Biovista's business model is direct and has two parts:

1. **Pharma Services** - Performs repositioning and de-risking for drug development companies
2. **Discovers new uses for existing drugs**, patents these, validates them with animal models, and licenses these drugs for further development (Phase IIa)

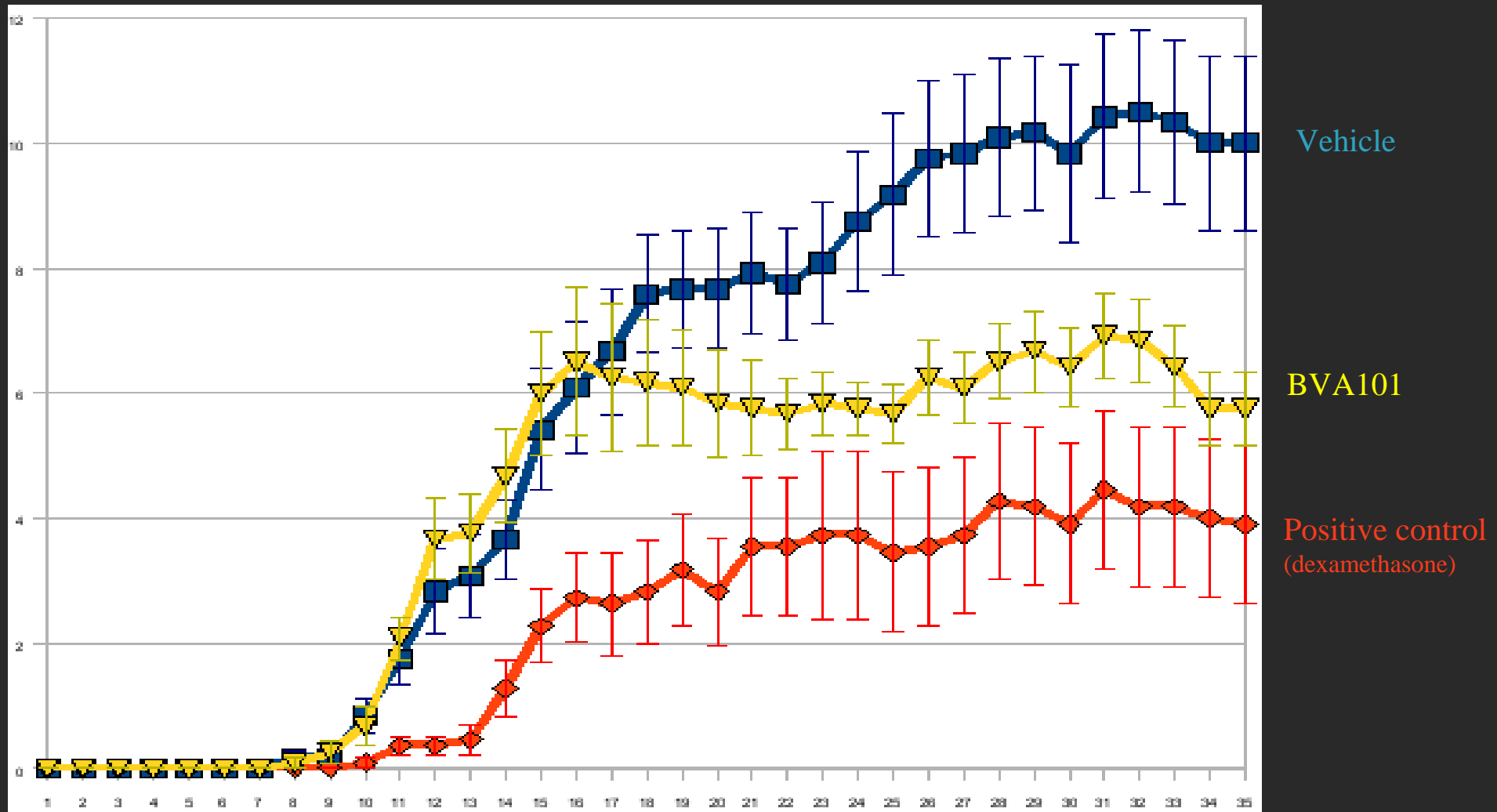
BVA101: repositioned drug for progressive MS showed +ve results in MOG mouse model of MS (press release April 3<sup>rd</sup> 2009)

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# BVA 101 results





# The Biovista Pipeline

1. BVA 101 in PMS ✓
2. BVA 1010 in Epilepsy ✓
3. BVA 201 in RRMS June '09
4. BVA 301 in MD May '09
5. BVA 401 in PMS June '09
6. ... + another 4 by Q4 2009

As drugs are repositioned they are largely proven safe enabling them enter Phase II(a) trials

IP portfolio - partnering opportunity for pharma/biotech



# Sample Clients & Collaborators

biogen idec



Lonza



U.S. Food and Drug Administration



National Aeronautics and Space Administration



# Biovista Management

## Andreas Persidis, PhD Co-founder & C.E.O.

- 20 years in high-tech project management
- Senior development management at Delcam, Ergon, Archetypon, Panafon
- EU expert evaluator
- PhD, Artificial intelligence (Strathclyde)

## Aris Persidis, PhD Co-founder & President

- 15 years in bio-entrepreneurship
- SVP, Upstate (sold in 2004 for \$205 million); President, RHeoGene (sold to Rohm & Haas); co-founder stock in Anadys (IPO 2004) and CellZome
- Honeywell Futurist Award; Assistant Prof., (Adj.) Wharton Business School;
- Author, 'Industry Trends' column for *Nature Biotechnology*; Chair, Jefferson Corner Group (Angel Investing Fund)
- PhD, Biochemistry (Cambridge)

## Graham Anthony, MBA CFO

- 12 years finance; closed over 30 acquisitions; sold six businesses
- 8 years in business management of start-up/entrepreneurial ventures
- MBA, (University of Virginia) Darden School; Batten Fellow

## Ellen Friedla, PhD Senior Consultant, Drug Safety and Repositioning Programs

- 22 years as epidemiologist and pharmacist
- Senior positions as Drug Safety Director at BiogenIdec, Merck, Berlex
- Directly involved in the clinical development of Crixivan, Rotateg, Zostavac, Garasil, Campath, Fludara, Betaseron, Tysabri, Rituxan
- Dr.PH., Epidemiology (Columbia University)

## R&D

- Team of 9: 3 PhDs, 1 M.D./PhD, 5 MSc
- Also, 5 M.D.s under external consulting contracts

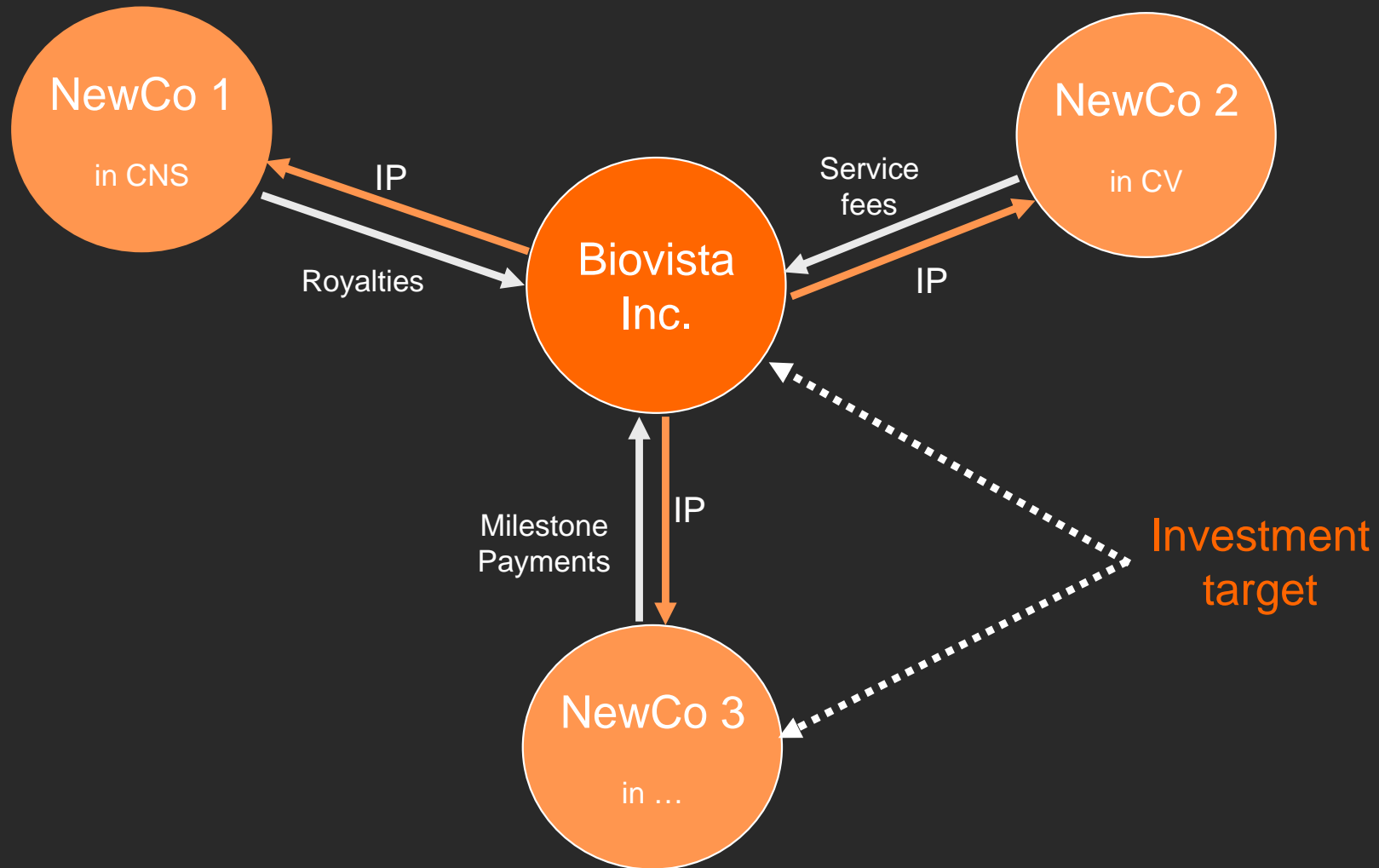


# Business Advisory Group

<b>Spyros Artavanis-Tsakonas</b>	Professor, Harvard University; Co-founder, Exelixis, Cellzome, Anadys, Board of Directors, Novartis Venture Fund.
<b>Andy Colyer</b>	Ex Lehman and Merrill Lynch; Portfolio Manager, Sands Capital
<b>Robin Gadsby</b>	Ex President, Director, ICI-Americas; Chairman of the Board, Cempra Pharmaceuticals
<b>Norman Hardman</b>	Ex Ciba-Sandoz drug development, ex. CEO Amicus
<b>Tom Klenke</b>	Ex Intuit; Developed and sold eClass Direct
<b>Tom Niehaus</b>	Managing Director, Triple Point Capital
<b>Frank Sands, Jr.</b>	President, Sands Capital
<b>Marc Steiner</b>	CEO, Global Wines / DS Holding / Biodenix, Germany
<b>Kleanthis Xanthopoulos</b>	Ex. Co-founder, President and CEO, Anadys; Managing Director, Enterprise Partners Venture Capital



# The Biovista Investment Opportunities





# Summary

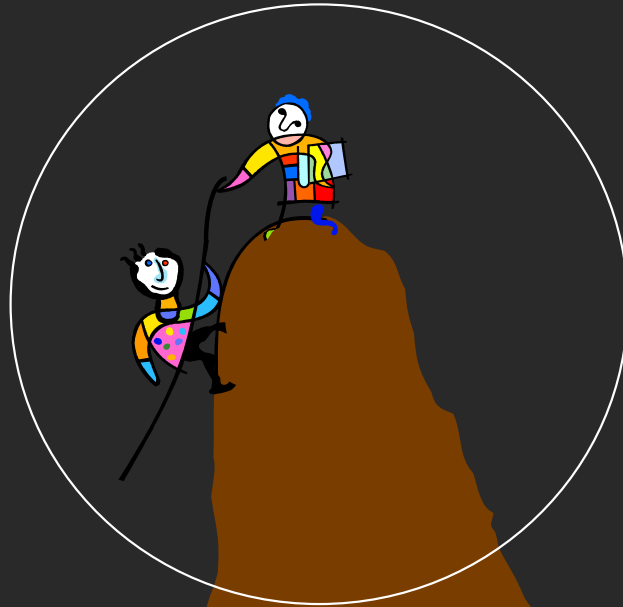
- Biovista Inc. (VA, USA) and Biovista Europe (Greece)
- **Valuation** at angel stage \$15M (Aug. '08), \$34M (April '09)
- **5 patents filed**, additional 4-5 by end 2009
- Looking for **biotech/pharma partners** for drug repositioning services and out-licensing of IP for further development
- Looking to raise ~ **\$10-20M** to support repositioning portfolio



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Thank you!

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Drug development search space



# Appendices

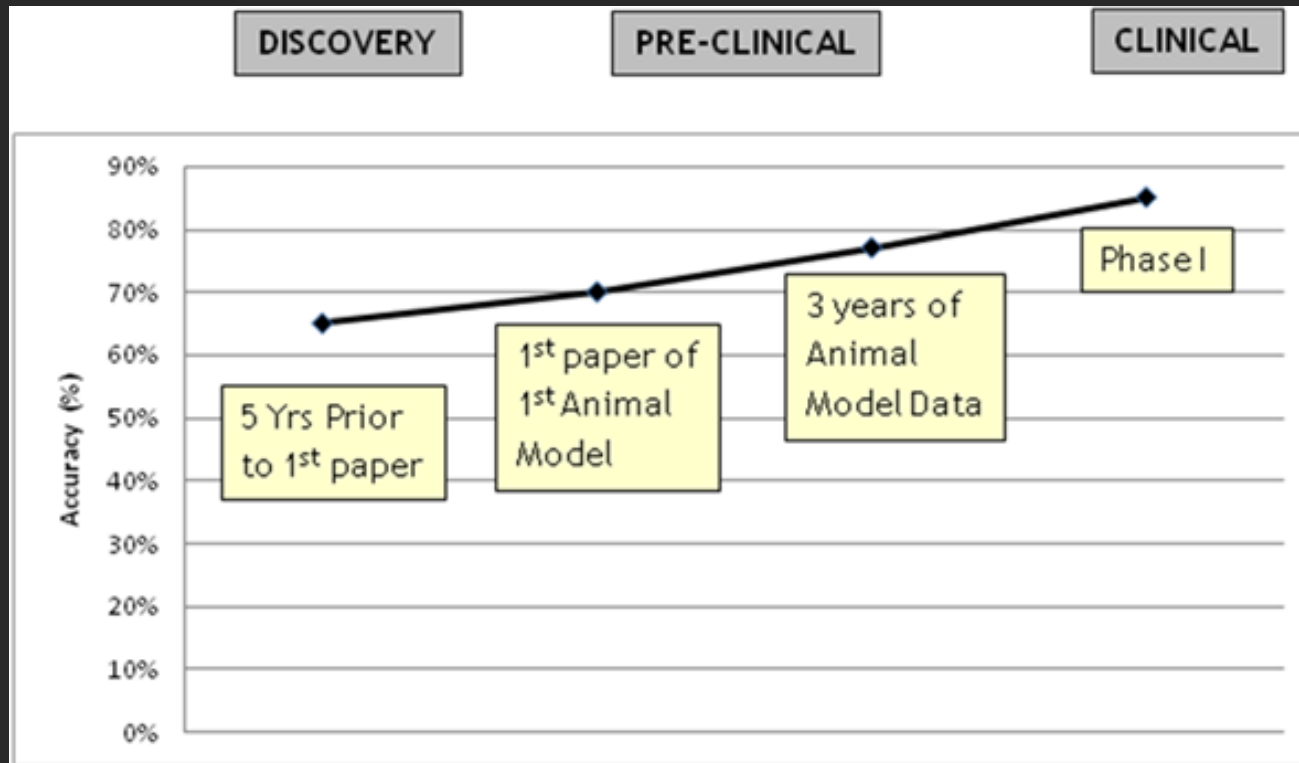


# Platform Evaluation questions

- What Predictive Accuracy?
- What Predictive Horizon?



# Predictive Accuracy



Stage	Discovery	Pre-clinical	Phase I
Biovista	65%	70%-78%	86%
Traditional process	1 in 10.000	1 in 250	1 in 5-10



# Benefits of Biovista Platform

- **Validated** performance (60-80% accuracy)
- It is **predictive** (useful window of 7+ years)
- **Works** where others fail
- Unique to offer **Benefit/Risk** analysis
- Supports **prolific** rate of IP creation



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