

NOVARTIS
VENTURE FUNDS

activity

report 2010



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mission statement



- Investing in innovative life science companies for patient benefit creating attractive returns for entrepreneurs and investors

introduction

francis waldvogel

■ Letter from the Chairman of the Novartis Venture Fund

Ranking systems have become fashionable: from air transport to the life style of cities, from health care systems to universities, we can today establish the list of the best places to be in or the most dedicated services to be bestowed with. Corporate Venture Funds are also part of this trend, and to our great satisfaction, the Novartis Venture Funds (NVF) have been ranked among the top performers in the life science field.

Ranking systems, however, have their methodological limitations and intellectual shortcomings. Regarding the life sciences, it may be hazardous to consider the financial results of the funds only, without giving consideration to the scientific potential of their portfolio.

In addition, a ranking is merely a photograph of the present performance, and has little predictive value regarding the richness and future achievements of the fund's pipeline.

At NVF, we are proud to be ranked among the top performers, but new conditions and challenges are waiting for us in the year 2011: in the US, the health care reform initiated by the present administration, the recent decision to create a National Center for Advancing Translational Medicine with an impressive budget, and the general ambivalent trend for strong interest in basic research but growing investment in late stage products are setting new conditions for those in the medical research field. In Europe, the almost ubiquitous austerity measures will act as additional sources of uncertainty in the research domain. Finally, the present government regulations regarding new drugs and devices are becoming harsher everywhere, and have also to be factored into the development process. We are nevertheless optimistic, since we consider these challenges as opportunities to concentrate on the best, and the most innovative medical science.

Medical sciences have indeed never been as creative, diversified, and dynamic as today, emerging from a real melting pot where physics, material sciences, chemistry, biology, genetics, informatics and robotics converge. Miniaturization and nanoscale developments also move into the field. We believe therefore that this is a time for great opportunities to develop novel diagnostic tools, therapeutic agents and medical devices for unmet patients' needs, and that a diversified, multidisciplinary team is a must to develop these opportunities.



It is our firm conviction at NVF that with our past and present experience, and our willingness to consider the excellent ranking as an opportunity to review continuously our strategy and to do better, the NVF will become even more attractive, will fulfill its scientific and financial objectives and – above all, will contribute substantially to the needs of modern medicine.

introduction

spyros artavanis-tsakonas

■ Letter from the Chairman of the Novartis Option Fund

It is the rule rather than the exception that innovation in Biotech comes from creative scientists and entrepreneurs who have the vision to translate biological fundamentals and technologies into commercially viable concepts. Early stage biotechnology companies, which after all define the nucleus of such endeavours, rely on the ability and foresight of Venture Capital to support them. In difficult economic times, including the past year, fund raising for early stage concepts becomes particularly challenging, and it is for this reason that the role of the Novartis Option Fund is exceptionally important.

Our fund is not simply devoted to early stage companies but has what used to be a unique approach to investment, which, we are pleased to say, has now been adopted by others. The notion of incorporating a time-limited option to a company program with non-dilutive capital while the company retains its lead programs has proven to be well received in the biotechnology and venture capital community. In addition to capital, it offers the possibility to have the technology validated by Novartis and the opportunity to interact with experienced teams in the industry.

In spite of the general difficulty in the economy, since the first Novartis Option Fund investment in June of 2008, we have invested in a total of nine companies. While we will be devoting much energy in the next year to supporting and developing our portfolio companies, we intend to continue our search for exceptional early stage companies that are spearheading technological innovation.

I wish to thank all the board members for their help, and I praise the uncommon synergy we reached between the scientific advisors and the management team. The search for novel approaches to drug design and the development in areas of unmet medical need are goals that will continue to fuel our activities and guide our vision going forward.



investment

philosophy and focus

■ Reinhard Ambros: Executive Director of the Novartis Venture Funds

We accomplished another year of substantial growth and Novartis BioVentures Ltd (Bermuda) currently holds more than USD 700 mio under management and is advised by investment teams based in Basel, Switzerland, and Cambridge, MA, USA.

In 2010 our portfolio increased by four new investments and now comprises over 65 companies, making NVF one of the world's largest and most active corporate life sciences venture funds. Including the commitment of other investors, more than USD 2 bn is currently invested in total into NVF portfolio companies.

We achieved three liquidity events over this year and are confident we will be able to maintain our superb performance in the next years.

Investment Philosophy

We invest in innovations which are strategic to the healthcare industry and continue operating as a financially driven corporate life science investor offering support to those companies which have the potential to lead the next innovation wave and explore new business areas that will be critical to patient care. The broad and deep experience of the fund management team will contribute to the success of our portfolio companies. We take an active role in supporting our companies by having board representation and actively working with the management teams.

Investment Focus

Our primary focus will remain on the development of novel therapeutics and platforms for human health and we extend our reach into animal health. We broaden the therapeutics focus with investments in medical devices but also diagnostics or drug delivery systems. In our investments we look for unmet need and clinical impact, novel proprietary science and understanding of mechanism, management and board experience and capital efficiency in the program.



We prefer to have our initial investment at the earlier stage to build the company and follow with additional investment in pace with the company's progress. As transition from academic research to company formation is particularly difficult from a financial perspective, we intend to support such early ideas with the plan to form companies if the "experimental phase" is successful.



highlights

2010

■ M&A

FoldRx Pharmaceuticals, Inc: Pfizer Inc. (NYSE: PFE), one of the world's leading pharmaceutical companies, acquired FoldRx Pharmaceuticals for an undisclosed amount, which included an upfront payment and milestones on future performance. FoldRx developed a portfolio of pre-clinical and clinical products to treat diseases of protein misfolding, including its lead product tafamidis meglumine for the treatment of TTR Amyloidosis. FoldRx recently completed a PhII/III trial for TTR Amyloid Polyneuropathy, and is in PhII for TTR Amyloid Cardiomyopathy. Tafamidis is currently in registration.

Cequent Pharmaceuticals, Inc: MDRNA Inc. (NASDAQ: MRNA) acquired Cequent Pharmaceuticals in an all-stock transaction valued at USD 46 mio, and creating a new company Marina Biotech, Inc. Cequent was pioneering the development of novel therapeutics based on its proprietary TransKingdom RNA interference (tkRNAi) technology, which uses non-pathogenic bacteria as engines to produce and deliver RNAi directly into cells. Cequent's lead candidate CEQ508 was in clinical development for the treatment of Familial Adenomatous Polyposis (FAP).

■ IPOs

Evolve Holding SA: Evolve merged with Arpida in December 2009, resulting in a listing on the Swiss stock exchange (EVE). Evolve evolves small molecule drugs using massively combinatorial gene libraries that drive chemistry-rich pathways. Its lead product EV-077, is for the treatment of cardio-renal diseases. It is an oral thromboxane receptor antagonist and thromboxane synthase inhibitor and belongs to a novel structural class of drugs. A multiple ascending dose study started in Q4 2010 to determine the optimal dose range for PhII. Evolve is also completing preclinical studies for an antiviral and for a broad spectrum antifungal com-

pound which represents a new structural class incorporating a novel mechanism of action compared to existing antifungals. Evolve signed three collaborative deals in 2010 based on its synthetic biology platform: one in pharma with Roche AG and two in food ingredients with FOSU (vanillin) and Abunda Inc.

Neovacs SA: In May 2010, Neovacs filed for an IPO on Alternext Paris (ALNEV). Neovacs is focused on an active immunotherapy technology platform (Kinoids™) with applications in autoimmune diseases



es and other chronic conditions. Neovacs' current portfolio consists of 3 drug candidates: TNF-Kinoid, IFN α -Kinoid and VEGF-Kinoid. Its lead immunotherapy program (TNF-Kinoid) targets TNF-mediated chronic inflammatory diseases, and a PhII clinical trial in Crohn's disease and a PhII trial in rheumatoid arthritis (RA) are ongoing. The latter study is also the focus of collaboration with the French diagnostics company BMD, to develop theranostic tools for personalized care in RA. For IFN α -Kinoid, DSMB has confirmed good tolerability in patients for the ongoing PhII trial in the treatment of lupus.

■ Major Partnerships

Aileron Therapeutics, Inc: Roche (SIX: ROG), one of the world's largest research-focused pharmaceutical and diagnostics healthcare companies, entered into agreement with Aileron to globally develop and commercialize preclinical Stapled Peptides for at least 5 molecular targets in cancer, inflammation, virology, metabolism and neurology. Aileron will receive an upfront payment of USD 25 mio, FTE support, and up to USD 1.15 bn in performance-dependent milestones and royalties. Campbell Murray continues to serve on the board.

Anchor Therapeutics, Inc: Ortho-McNeil-Janssen Pharmaceuticals Inc. (OMJPI), a Johnson & Johnson (NYSE: JNJ) company, entered into a collaboration and license agreement with Anchor Therapeutics to develop and commercialize preclinical development candidates against GPCR targets in oncology and metabolic diseases, including Anchor's gpr39 program for the treatment of type 2 diabetes. The agreement includes an upfront payment and research support and up to USD 480 mio in milestone payments. Lauren Silverman continues to serve on the board.

BioRelix, Inc: Merck & Co., Inc. (NYSE: MRK) entered into a research collaboration agreement with BioRelix to identify new antibacterial drug candidates using the company's proprietary RiboSwitch technology platform. The parties will jointly undertake preclinical programs and Merck will follow with clinical evaluation for further development. The agreement includes an upfront fee and research funding, as well as additional payments and royalties upon reaching specified milestones and sales. Campbell Murray continues to serve on the board.

FORMA Therapeutics, Inc: Eisai Inc., the U.S. subsidiary of Tokyo-based Eisai Co., Ltd., (TYO: 4523) and FORMA entered into a strategic collaboration wherein Eisai will have non-exclusive access to FORMA's Diversity Oriented Synthesis (DOS) chemistry-generated compound library and cell-based screening platforms. An option for the cell-based screening platform is included in the deal. FORMA will receive upfront payments and committed funding of USD 20 mio and is eligible to receive milestones plus royalties on future products. Reinhard Ambros continues to serve on the board.

Intellikine, Inc: Infinity Pharmaceuticals Inc. (Nasdaq: INFI) entered into partnership with Intellikine to develop and commercialize Intellikine's portfolio of phosphoinositide-3-kinase (PI3K) delta and gamma inhibitors, including the orally bioavailable dual PI3K δ/γ -specific inhibitor INK1197, which will commence clinical development in 2011. The deal includes a USD 13.5 mio upfront payment, 2 years of FTE support, USD 25 mio for two additional NMEs, and up to USD 450 mio in performance-dependent milestones. Markus Goebel continues to serve on the board.

NovImmune, SA: Genentech, Inc. (NYSE: DNA) a member of the Roche group entered into an exclusive licensing agreement with NovImmune for a proprietary preclinical anti-IL-17 fully human monoclonal antibody. NovImmune received an undisclosed upfront payment and is eligible to receive clinical milestones and royalties.

highlights

new investments

Euthymics Bioscience, Inc is a privately held, Boston-based, clinical-stage drug development company with an initial focus on next-generation antidepressants. Euthymics' target patients are those who do not respond adequately to selective serotonin reuptake inhibitors (SSRIs), which represent the majority of prescriptions for the antidepressant market. The company's lead product, EB-1010, is an unbalanced triple reuptake inhibitor for treatment resistant depression, and is entering a PhII/III trial in SSRI non-responders in Q1 2011. Novartis Venture Funds co-led a USD 24 mio Series A round. Campbell Murray serves on the board.

Merus Biopharmaceuticals BV is a therapeutics company located in Utrecht, The Netherlands. Using its proprietary technology platforms that include novel transgenic mice (MeMo™), Merus aims to produce new highly potent human antibody-based drugs whether as full-length bispecific antibodies or as a mixture of monoclonal antibodies named Oligoclonics™. With this financing, Merus also entered into an option agreement with the Novartis Option Fund for an exclusive license to one of its oncology programs. The agreement includes upfront and potential milestone payments totaling over USD 200 mio plus royalties. The Novartis Option Fund co-led a EUR 21.7 mio (USD 30.7 mio) Series B financing round. Florent Gros serves on Merus' board.

Quoro Science, Inc is a spin-off biotechnology company from Institut Pasteur Korea (IP-K), located near Seoul, Korea. Quoro is committed to develop novel therapeutics against infectious diseases and its main focus is on HIV, HCV and TB infection. Quoro has exclusive rights to develop and commercialize drug candidates discovered with IP-K's pro-

prietary state-of-the-art technologies including the PhenomicScreen™ and PhenomicID™ platforms. At BIO KOREA 2010, Quoro was announced winner of the GATE II Project as the most promising Korean bio venture company. The Novartis Korea Venture Fund led a Series A extension round.

Ra Pharmaceuticals, Inc located in Cambridge, MA, is using proprietary combinatorial assembly and in vitro display technologies to discover novel macrocyclic compounds with enhanced



bioavailability and targeting a wide range of intracellular, cell-surface, and circulating proteins. Ra's initial focus is on orally available replacements for a variety of marketed biologics, as well as drugs targeting intracellular protein-protein interactions to fill unmet medical needs. The Novartis Venture Fund participated in Ra's USD 27 mio Series A financing in February 2010. Lauren Silverman serves on the board.

highlights

exits 2005-2010

■ M&A

[Cequent Pharmaceuticals, Inc](#)
Acquired by MDRNA in 2010

[FoldRx Pharmaceuticals, Inc](#)
Acquired by Pfizer in 2010

[Visiogen, Inc](#)
Acquired by Abbott in 2009

[Swiss Pharma Contract AG](#)
Acquired by Covance in 2009

[ESBATech AG](#)
Acquired by Alcon in 2009

[Ablation Frontiers, Inc](#)
Acquired by Medtronic in 2009

[Adenosine Therapeutics LLC](#)
Acquired by Clinical Data in 2008

[Torrey Pines Therapeutics, Inc](#)
Reverse merger into Axonyx in 2006

[Syrxx, Inc](#)
Acquired by Takeda in 2006

[Miikana Therapeutics, Inc](#)
Acquired by EntreMed in 2006

[KuDOS Pharmaceuticals, Ltd](#)
Acquired by AstraZeneca in 2006

[Infinity Pharmaceuticals, Inc](#)
Reverse merger into Discovery Partners in 2006

[Transform Pharmaceuticals, Inc](#)
Acquired by Johnson & Johnson in 2005

[GlycArt Biotechnology AG](#)
Acquired by Roche in 2005

■ IPOs

[Neovacs SA](#)
IPO in 2010, Alternext Paris: ALNEV

[Evolva Holding SA](#)
IPO in 2010, SWX: EVE

[Sirtris Pharmaceuticals, Inc](#)
IPO in 2007, NASDAQ: SIRT

[Acorda Therapeutics, Inc](#)
IPO in 2006, NASDAQ (GM): ACOR

[Xenoport, Inc](#)
IPO in 2005, NASDAQ: XNPT

[Speedel Holding, Ltd](#)
IPO in 2005, SWX: SPPN

[Silence Therapeutics plc](#)
IPO in 2005, LON: SLN

[Oscient Pharmaceuticals Corp](#)
IPO in 2005, NASDAQ: OSCI

[CombinatoRx, Inc](#)
IPO in 2005, NASDAQ: CRXX

our funds

venture and option fund

Novartis Venture Funds makes investments through two distinct investment vehicles: the Novartis Venture Fund and the Novartis Option Fund.

The Novartis Venture Fund

The Novartis Venture Fund is a financially driven venture fund which makes equity investments in life sciences companies across biotech, medical devices and diagnostics. The venture fund is stage agnostic and engages in seed investments as well as later stage investments. The Novartis Venture Fund typically leads or co-leads a deal and plays an active role on company boards.

The Novartis Venture Fund was first established with CHF 100 mio in 1996 at the merger of Sandoz and Ciba Geigy and has since grown to more than USD 500 mio under management (out of a total of USD 700 mio), re-investing the returns generated. We seek companies in the US and Europe that are truly innovative, have the potential to offer significant patient benefit, have excellent management and are capital efficient.

We continue our approach of larger focused investments and anticipate total investments up to USD 15–20 mio per company over its life, but it can be as little as 100 000 USD to get started.

In 2010, the Novartis Venture Fund made investments in Euthymics Bioscience and Ra Pharmaceuticals.

The Novartis Option Fund

The mission of this fund is to seed innovative start-up companies during their earliest stages. The initial equity investment is coupled with an option to a specific therapeutic program giving early validation for the start-up company's technology.

The option is structured to provide the young company with the potential for an additional opportunity for success and must be consistent with the new company's corporate development plans.

The option program is not the main value driver in the start-up's pipeline and is limited in duration in order to maintain the company's full potential in the market. In addition to the non-dilutive cash payment, license terms are negotiated at the time of investment and are based upon benchmarks deemed relevant for the stage of the asset at the time of option exercise.

The Novartis Option Fund has an initial size of USD 200 mio. Investments are reviewed by a dedicated advisory board with a majority of ex-



ternal members. The focus of investments is on early stage, high risk/high return areas enabling the development of novel programs and technologies.

While we couple our investments with a limited option for Novartis, we are committed to build companies that will be attractive to many other life science partners. Thus we finance in a syndicate along with other venture capitalists and the financing model benefits all parties involved.

In 2010 the Option Fund made an investment in Merus Biopharmaceuticals.



our funds

korea fund

The Novartis Korea Venture Fund – fostering growth in a burgeoning biotech industry

In 2008, Novartis Venture Funds created the Novartis Korea Venture Fund, a unique commitment to early stage investing in innovative life sciences companies. The NKVF investment vehicle is committing USD 20 mio in capital.

Investment activity

In 2010 Novartis Korea Venture Fund is investing USD 1 mio into Quro Science, a spin-out from the Institut Pasteur Korea (IPK). Quro has access to the IPK's proprietary suite of cell assays and imaging technologies and is focused on anti-infectives, with lead programs in HIV, HCV, and TB. Quro is led by an International and Korean management team and has privileged access to expertise and resources from IPK.

Quro was the winner of the 2010 GATE II business plan competition with a panel of international VC judges (NVF, MPM, Domain, Orbimed). Ulf Nehrbass, CEO of Quro, says about the Novartis Korea Venture Fund "We are delighted to have this investment by the Novartis Korea Fund. The international experience and reputation of the NKVF will help Quro establish itself as a premier biotech company in Korea. We have found the process of the business plan competition a great opportunity to tap into the expertise and network of the Novartis Venture Fund."

Previously in 2009 Novartis Korea Venture Fund and OrbiMed's Caduceus Asia Partners had co-led a USD 6 mio Series A round investment in Pharm-Abcine, a specialized biotech company focused on the development of fully human therapeutic monoclonal antibodies for the treatment of cancer and inflammatory diseases. This investment brought together a unique international syndicate of investors.

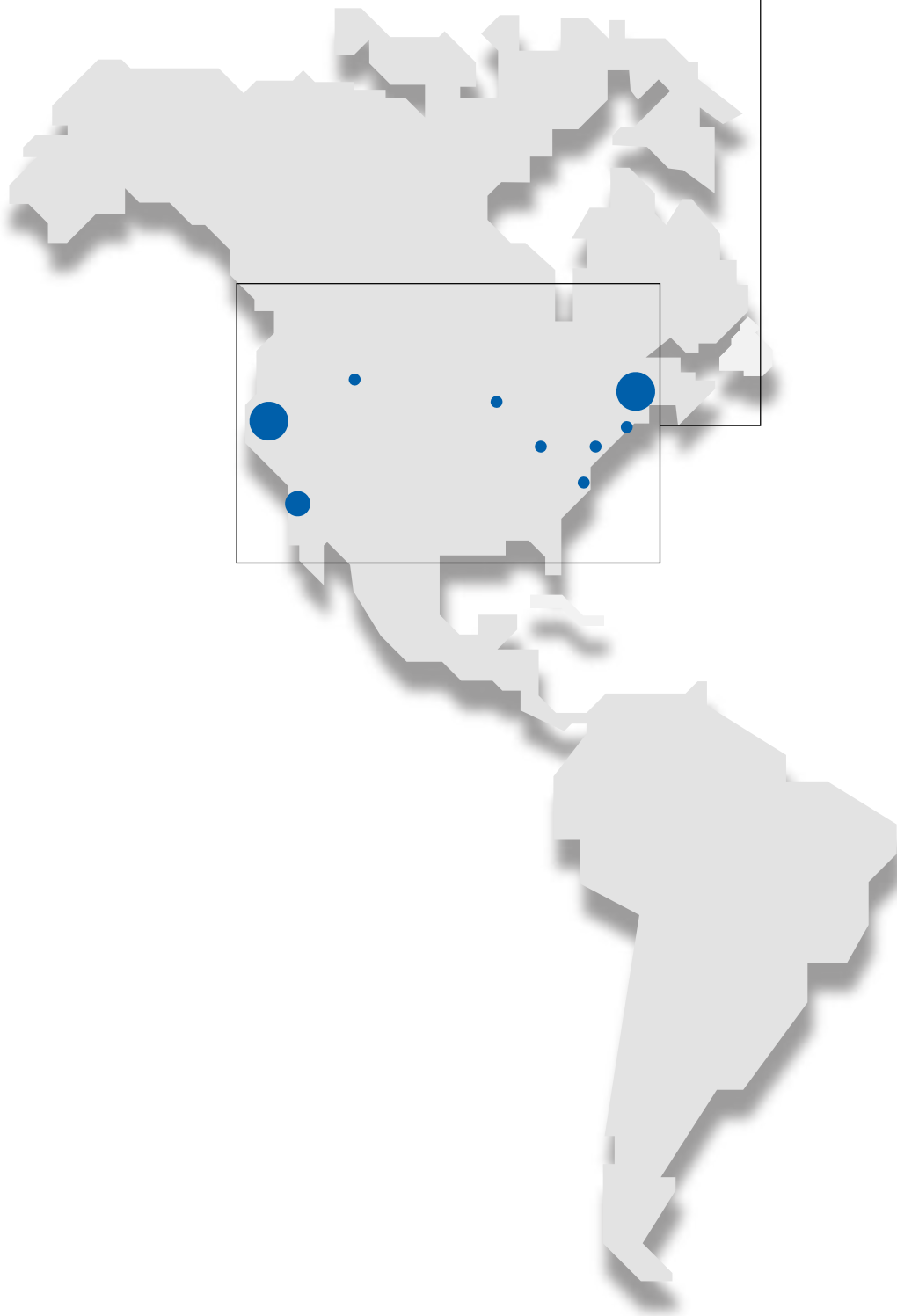
Looking to the future

We are looking forward to continue to work together with Korean and international partners to build innovative life sciences companies in Korea. Our mission is to create success for patients and investors.





geographic presence



US and Canada

Aileron

Akebia

Alios

Anchor

Avila

BioRelix

Catalyst

Cylene

Euthymics

Forma

GlycoMimetics

Intellikine

LigoCyte

MicroCHIPS

Nereus

Paratek

Portaero

ProCertus

Proteostasis

PTC

Pulmatrix

Ra

Sonitus

Tepha

Tokai

Trellis

Viamet

Europe

Bicycle

Cellerix

Destiny

Eyesense

Heptares

ITS

Merus

Nabriva

Opsona

Oxagen

Switzerland

Covagen

Diagnoplex

Genedata

MyoPowers

NovImmune

Okairos

Polyphor

Symetis

Asia

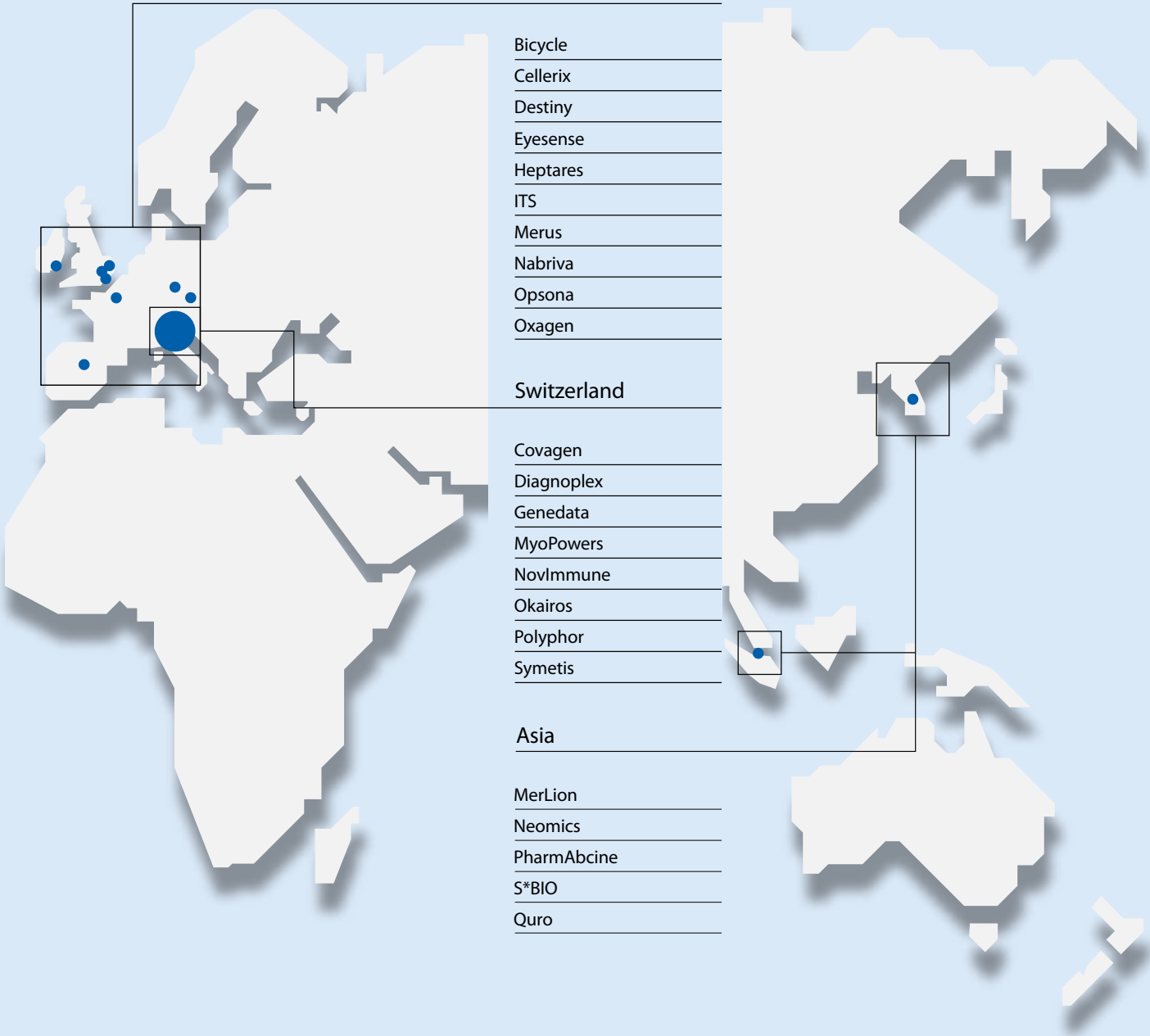
MerLion

Neomics

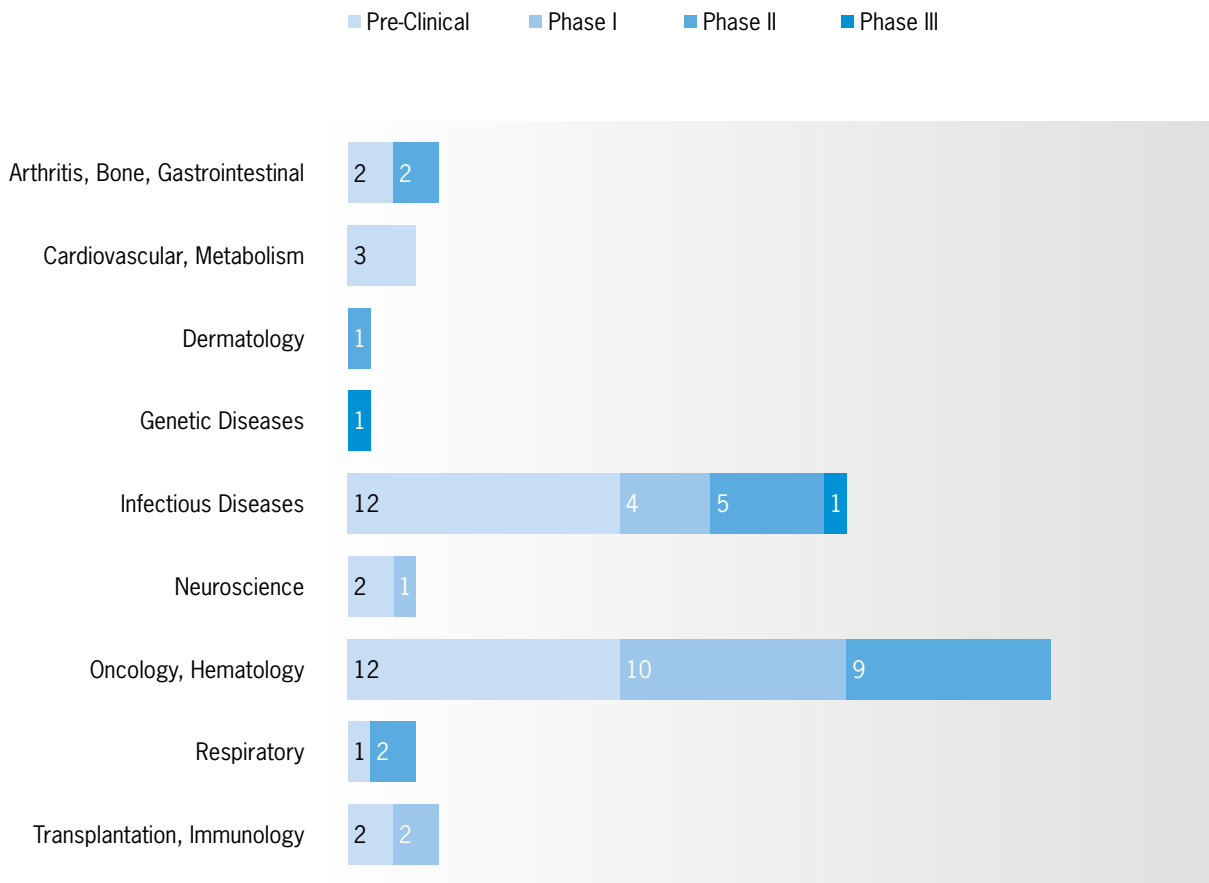
PharmAbcine

S*BIO

Quro



pipeline overview of portfolio companies



pipelines

of portfolio companies

Therapeutic Area	Company	Substance	MoA/Indication	Pre-clinical	PhI	PhII	PhIII	
Arthritis, Bone, Gastrointestinal	Cellerix	Cx 611	Stem cells/RA (allogenic)		●			
		Cx 601	Stem cells/Perianal fistulas (allogenic)			●		
	NovImmune	NI-0401	anti-CD3 mAb/Crohn's disease		●	●		
Cardiovascular and Metabolism	Akebia Therapeutics	AKB-9778	HPTPβ-inhibitor/AP-2 modulator	●				
	Anchor	ANC-39	gpr39 modulator/type 2 diabetes	●				
	Catalyst Biosciences	Alterase	anti-complement	●				
Dermatology	Cellerix	Cx 501	Chimeric skin/Epidermolysis Bullosa			●		
Genetic Diseases	PTC Therapeutics	PTC 124	Bypass nonsense mutation/Cystic fibrosis, Duchenne muscular dystrophy				●	
Infectious Diseases	Alios BioPharma	AB-AV series	antivirals	●				
	Avila Therapeutics	AVL-181	HCV NS3 inhibitor	●				
	BioRelix	RiboSwitch series	antibiotics	●				
	Destiny Pharma	XF series	photodynamic antibiotics	●	●			
	GlycoMimetics	GMI-1051	pan-selectin inhibitor	●				
	Immune Targeting Systems		Influenza vaccine	synthetic peptides		●		
			HBV vaccine	synthetic peptides	●			
	LigoCyte Pharmaceuticals		Norovirus vaccine	Virus-like-particle vaccine		●	●	
			Influenza vaccine	Virus-like-particle vaccine	●			
	MerLion Pharmaceuticals		Finaxloxacin	Broad spectrum antibiotic			●	
	Merus		Oligoconlonics	RSV	●			
	Nabriva Therapeutics		BC-3781	Pleuromutilins antibiotic			●	
			BC-7013	topical Pleuromutilins antibiotic		●		

portfolio company pipelines

continued

Therapeutic Area			Pre-clinical	PhI	PhII	PhIII
Company	Substance	MoA/Indication				
Infectious Diseases						
Okairos	Malaria Vaccine	adenovirus platform			●	
	HCV Vaccine	adenovirus platform			●	
	TB vaccine	adenovirus platform	●			
Paratek Pharmaceuticals	MK-2764 PTK0796 (Oral & IV)	Tetracyclin antibiotic/ Hospital and community infections				●
	Tetracyclin	Tetracyclin antibiotic	●			
Polyphor	POL7080	Pseudomonas antibiotic	●			
Trellis Bioscience	MAb	RSV MAb	●			
Neuroscience						
Euthymics	EB-1010	triple reuptake inhibitor/major depression			●	
	EB-1020	triple reuptake inhibitor/ADHD	●			
Heptares Therapeutics	HT01	Undisclosed GPCR	●			
Oncology, Hematology						
Aileron Therapeutics	ALN-0034 series	Apoptosis activator	●			
	ALN-0001 series	Apoptosis activator	●			
Akebia Therapeutics	AKB-6548	HIF-PH inhibitor			●	
Avila Therapeutics	AVL-292	Btk inhibitor		●		
Catalyst Biosciences	CB 813	Factor VIIa/hemophilia	●			
	hrFIX	Factor IX/hemophilia	●			
Cylene Pharmaceuticals	Quarflorin	rRNA biogenesis inhibitor/carcinoid, neuroendocrine tumors			●	
	CX-4945	oral CK2 inhibitor		●		
	CX-5011	oral CK2 inhibitor	●			
	CX-6258	PIM1,2,3 inhibitor	●			
	CX-5461	oral Pol I inhibitor	●			
GlycoMimetics	GMI-1070	Pan-selectin inhibitor/sickle cell disease			●	
Intellikine	INK128	TORC1/2 inhibitor		●		
	INK1197	PI3K δ/γ inhibitor	●			
Merus	bispecific mAb	Her2/Her3	●			
Neomics	NEO-01	AIMP1 modulator	●			
	NEO-02	AIMP2-DX2 inhibitor	●			

Therapeutic Area			Pre-clinical	PhI	PhII	PhIII
Company	Substance	MoA/Indication				
Oncology, Hematology						
Nereus Pharmaceuticals	NPI-0052	Proteasome inhibitor/Solid tumors, lymphoma multiple myeloma			●	
	NPI-2358	Vascular disruptingent/Solid tumors		●		
PharmAbcine	TTAC0001	VEGFR-2 mAb	●			
Polyphor	POL6326	CXCR4 inhibitors			●	
ProCertus BioPharm	PrC-210	Radioprotector		●		
	ProDermaCel™, DermX, and OralX	Vasoconstrictor/Protection for Radio- and chemo-therapy		●	●	
PTC Therapeutics	PTC299	VEGF inhibitor/Solid tumors		●		
S*BIO	SB939	HDAC inhibitor/Solid or hematological tumors		●	●	
	SB1518	Jak2 inhibitors			●	
	SB1317	CDK/Flt3 inhibitor		●		
Tokai Pharmaceuticals	TOK-001	AR-antagonist/CYP17-inhibitor		●	●	
Respiratory						
Oxagen	OC-459	CRTH2 inhibitor			●	
Polyphor	POL6014	serine protease inhibitors/COPD	●			
Pulmatrix	PUR003	cationic airway lining modulator (iCALM)			●	
Transplantation, Immunology						
Covagen	COV-01	anti-IL17 Fynomer	●			
NovImmune	NI-0401	anti-CD3 mAb		●		
Opsona	OPN-305	anti-TLR2 mAb/Tx kidney ischemic reperfusion		●		
	Nalp3	Nalp3 small molecule/inflammation	●			

*All information derived from the respective companies website or companies public information.

medical device and diagnostics

Seeking the best clinical solution

Our understanding of human physiology is more robust than our still emerging understanding of human biology. Some clinical needs are best served with a mechanical solution, rather than a pharmacological one, and this has been demonstrated over the last thirty years with remarkable medical progress in cardiology, vascular diseases, ophthalmology, and orthopedics. In the years to come, devices, drugs, and tissue engineering will all work together to better treat the patient, and the Novartis Venture Fund will look across the spectrum to find the best clinical solutions. New diagnostic approaches will also change the clinical practice of medicine in years to come. Better understanding of pathways and genetic and biological markers, will enable more rapid and accurate diagnosis, allowing physicians to not only identify disease earlier, but also to identify the best therapeutic option given the stage of a disease. The Novartis Venture Fund has invested in medical devices since its inception in 1996, but has recently focused its efforts on medical devices more keenly. Our device investments are led by Steven Weinstein in our Cambridge office. We currently have targeted 20% of our fund to medical device and diagnostic opportunities.

Our focus

In both diagnostics and medical device investments, the NVF looks for opportunities that can change the practice of medicine and produce meaningful patient benefit. We look for underserved indications, or where a company's technology enables a completely new treatment paradigm. Our device investment strategy is stage agnostic, but we prefer opportunities where we can fund the largest question and/or challenge the company faces. We are happy to lead an investment, and invest in the United States and Europe.

Investment activity and recent portfolio

In 2010, our portfolio company Sonitus Medical was honored by the Cleveland Clinic as a Top 10 Medical Innovation for the development of its bone conduction product for single sided deafness. We were also pleased that Symetis, which is developing a novel heart valve, successfully closed a USD 25.8 mio financing, which will advance its clinical efforts.



Sonitus SoundBite™ ITM device



private equity portfolio

■ Aileron Therapeutics Inc.

Joseph A. Yanchik III, Cambridge, MA, US
www.aileronrx.com

Aileron Therapeutics is developing the first generation of peptide therapeutics directed at intracellular protein-protein interaction targets that are not addressable by current drug modalities. The company's proprietary cell penetrating "Stapled Peptide" technology is being applied to generate breakthrough therapeutics for the treatment of cancer and other diseases. "Stapled Peptides" have the potential to become a major new class of drugs for intracellular and extracellular targets across therapeutic areas.

■ Akebia Therapeutics Inc.

Joseph Gardner, Cincinnati, OH, US
www.akebia.com

Akebia Therapeutics is developing novel small molecule therapies to ameliorate patient suffering caused by anemia or vascular disease. Akebia's portfolio includes a broad array of enzyme inhibitors that specifically upregulate hypoxia inducible factor (HIF) and angiogenic mechanisms.

■ Alios BioPharma Inc.

Lawrence Blatt, San Francisco, CA, US
www.aliosbiopharma.com

Alios is discovering and developing novel therapeutic agents based on: small molecule activators of innate immunity antiviral pathways (RNase L activation), phosphate protected nucleotide prodrug chemistry, and glycoprotein-engineering of interferons (Glycoferon). This complementary group of platform technologies has the potential to generate distinct therapeutic products to treat serious viral infections such as chronic hepatitis B and C, HIV, respiratory viruses (e.g. pandemic influenza) and emerging viral diseases (e.g. SARS).

■ Anchor Therapeutics Inc.

Frederick Jones, Cambridge, MA, US
www.anchorrx.com

Anchor Therapeutics designs and develops peptide modulators of G protein coupled receptors (GPCRs), the largest family of drug targets. Anchor's peptides, called pepducins, modulate GPCR activity utilizing a unique intracellular allosteric mechanism that is well suited for intractable and orphan targets. Anchor is developing internal programs to create new treatment options for diabetes, inflammation, cancer and regenerative medicine and is also collaborating with partners to leverage the broad applications of its pepducin technology.

■ Avila Therapeutics Inc.

Katrine Bosley, Waltham, MA, US
www.avilatx.com

Avila Therapeutics is a drug discovery company developing a novel proprietary chemistry platform – Avilomics™ – for the generation of new medicines that covalently bond to and silence disease-causing proteins. A pipeline of novel therapeutics is being developed for viral infection, cancer and autoimmune diseases.

■ Bicycle Therapeutics Ltd.

John Tite, Cambridge, UK
www.bicycletherapeutics.com

Bicycle Therapeutics has a platform technology to create a new generation of biotherapeutics combining features of small molecules and biopharmaceuticals to create highly specific and highly stable drugs. Bicycle Therapeutics is a spin-out from the Medical Research Council Laboratory of Molecular Biology, Cambridge, based on the work of the founding scientists Sir Gregory Winter and Prof. Christian Heinis.



■ BioRelix Inc.

Brian Dixon, New Haven, CT, US
www.biorelix.com

BioRelix discovers and develops antibiotics that target pathogens resistant to currently available drugs by using novel patented bacterial RNA targets called RiboSwitches™.

■ Catalyst Biosciences Inc.

Nassim Usman, South San Francisco, CA, US
www.catalystbiosciences.com

Catalyst creates novel catalytic biopharmaceutical products based on engineered human proteases with the aim to establish protease therapeutics as a therapeutic platform.

■ Cellerix SA

Eduardo Bravo, Madrid, ES
www.cellerix.com

Cellerix is a Madrid-based biopharmaceutical company that is developing innovative medicines with advanced clinical programs that are using mesenchymal stem cells of adipocyte origin, for the treatment of various clinical indications including RA, IBD and complex fistulas. The company is completing PhII for allogenic indications.

■ Covagen AG

Julian Bertschinger, Zürich, CH
www.covagen.com

Covagen develops protein therapeutics based on Fynomers, a novel protein scaffold.

■ Cylene Pharmaceuticals Inc.

William Rice, San Diego, CA, US
www.cylenepharma.com

Cylene is using its unique discovery platforms to design and develop small molecule drugs that selectively target cancer cells. Cylene's Serine/Threonine kinase inhibitor platform has created inhibitors of CK2 and the PIM family of kinases.

■ Destiny Pharma Ltd.

Bill Love, Brighton, UK
www.destiny-pharma.demon.co.uk

Destiny Pharma focuses on the treatment and prevention of microbial infections. It is developing products which are effective against hospital "superbugs" such as methicillin-resistant Staphylococcus aureus (MRSA).

■ Diagnoplex Biosciences AG

Stavros Therianos, Lausanne, CH
www.diagnoplex.com

Diagnoplex is leveraging its molecular platform capabilities to develop a colorectal cancer (CRC) screening test. Diagnoplex's non-invasive CRC test, named "COLOX", will be made available as a ready-to-use clinical laboratory kit.

private equity portfolio

continued

■ Euthymics Bioscience Inc.

Anthony A. McKinney, Cambridge, MA, US
www.euthymics.com

Euthymics is a clinical-stage drug development company with an initial focus on next-generation antidepressants. Euthymics' target patients are those who do not respond adequately to selective serotonin reuptake inhibitors (SSRIs), which represent the majority of prescriptions for the antidepressant market. The company's lead program is an unbalanced triple reuptake inhibitor for treatment resistant depression. In addition the company has a pipeline of CNS assets including compounds for the treatment of ADHD, neuropathic pain and alleviation of addiction.

■ Eyesense AG

Achim Müller, Frankfurt, DE
www.eyesense.de

EyeSense develops an ophthalmic diagnostics system which can measure glucose levels without sampling blood. It is based on measuring the glucose in the interstitial fluid below the conjunctiva of the eye using a hand-held optical read-out device.

■ Forma Therapeutics Inc.

Steven Tregay, Cambridge, MA, US
www.formatherapeutics.com

Forma Therapeutics technologies enable screening, identification and characterization of small molecules that exhibit different binding modes. The technology applies peptides, protein or small molecules as ligands to probe/assay interaction sites and the implementation of high throughput screening assays for identification of novel small molecules for specific target sites in oncology and ID.

■ Genedata AG

Othmar Pfannes, Basel, CH
www.genedata.com

Genedata provides computational solutions for drug discovery and systems biology research with a combination of software products and professional services that have been developed in partnership with major pharma and biotech companies.

■ GlycoMimetics Inc.

Rachel King, Gaithersburg, MD, US
www.glycomimetics.com

GlycoMimetics develops small molecule drugs that mimic the functions of certain carbohydrates. The company's initial focus is on therapeutics to treat a variety of inflammatory conditions, including sickle cell disease, and an adjunctive therapy for use with antibiotics in the treatment of chronic *Pseudomonas* infections.

■ Heptares Therapeutics Ltd.

Malcolm Weir, London, UK
www.heptares.com

Heptares Therapeutics is a drug discovery company which applies structural knowledge of G-protein coupled receptors (GPCRs) to the design and development of its own drug molecules. HTL is a spin-out from the MRC Laboratory of Molecular Biology, Cambridge, based on the pioneering work of the founding scientists Richard Henderson and Chris Tate and of a wider group of MRC scientists, including Gebhard Schertler, and Ed Hulme of the National Institute of Medical Research.



■ Immune Targeting Systems Ltd.

Carlton Brown, London, UK
www.its-innovation.co.uk

Immune Targeting Systems (ITS) is a London based vaccine company developing vaccines for mutating viruses. Its innovative synthetic T cell platform allows to develop novel vaccines for the prevention and treatment of major life-threatening viral infections of global impact, including pandemic and seasonal influenza. ITS is completing phase I for a pandemic influenza vaccine.

■ Intellikine Inc.

Troy Wilson, San Diego, CA, US
www.intellikine.com

Intellikine develops novel oral small molecules in the PI3K/mTOR pathway with a focus on oncology and immunology.

■ LigoCyte Pharmaceuticals Inc.

Don Beeman, Bozeman, MT, US
www.ligocyte.com

LigoCyte Pharmaceuticals is focused on novel vaccines based on its proprietary virus-like particle technology platform. The lead projects are a Norovirus and a RSU vaccine.

■ MerLion Pharmaceuticals Pte Ltd.

Tony Buss, Singapore
www.merlionpharma.com

Merlion Pharmaceuticals maintains one of the world's largest and most diverse collections of natural product samples, and has an anti-infective compound in early clinical development.

■ Merus Biopharmaceuticals BV

Ton Logtenberg, Utrecht, NL
www.merus.nl

Merus is a drug discovery company leveraging proprietary antibody platforms directed to generation and production of multiple monoclonal antibodies (termed Oligoclonics) and bi-specific antibodies (termed Biclonics) from a single cell line. The technology platform leverages fixed VL chains to produce functional monoclonal and bi-specific antibodies in a single cell. Merus' lead programs are Oligoclonic products.

■ MicroCHIPS Inc.

Ajit S. Gill, Bedford, MA, US
www.mchips.com

MicroCHIPS develops devices for the controlled release of drugs and the elective exposure of biosensors using its patented reservoir array technologies.

■ MyoPowers Medical Technology SA

Martin Horst, Lausanne, CH
www.myopowers.ch

MyoPowers aims to develop medical implants that restore or improve muscle function. The Company has developed several animal proof-of-concepts, and is completing preclinical studies with a device aimed for the treatment of severe urinary incontinence in males and females, one of the largest under-developed therapeutic areas today.

■ Nabriva Therapeutics AG

David Chiswell, Vienna, AT
www.nabriva.com

Nabriva is a specialist antibiotic company with a pipeline of innovative antibacterials for the treatment of serious infections in humans caused by multi-drug resistant pathogens.

private equity portfolio

continued

■ Neomics Co. Ltd.

Chiuk In, Seoul, KR
www.neomics.com

Neomics develops novel therapeutics with applications in oncology and tissue regeneration.

■ Nereus Pharmaceuticals Inc.

Kobi M. Sethna, San Diego, CA, US
www.nereuspharm.com

Nereus pursues untapped sources of chemical diversity which together with its expertise in marine microbiology and integrated technologies enabled the identification and development of two oncology drug candidates which are in clinical trials.

■ NovImmune AG

Jack Barbut, Geneva, CH
www.novimmune.com

NovImmune is a drug development company focusing on immune mechanisms targeted to inflammation. NovImmune has a portfolio of fully human therapeutic monoclonal antibodies in development.

■ Okairos AG

Riccardo Cortese, Basel, CH
www.okairos.com

Okairos is a Swiss based vaccine company, with a subsidiary in Italy, developing vaccines for mutating viruses. Its innovative viral adenovirus T cell platform allows to develop novel vaccines for the prevention and treatment of major life-threatening infections, including TB, ebola, malaria and hepatitis C. The company is completing phase I/II for hepatitis C and completed several phase II positive studies for malaria.

■ Opsona Ltd.

Mark Heffernan, Dublin, IE
www.opsona.com

Opsona is a drug development company, focused on novel therapeutic and preventative approaches to inflammatory and related diseases. Opsona has a pipeline of therapeutics in advanced pre-clinical development which modulate the innate immune system, including biologics and small molecules that are targeting TLR-2 and Nalp-3. The company has signed a partnering deal with CSL. Opsona has obtained in 2010 a 6 mio Euro FP7 grant for developing their TLR-2 mAb for treatment of transplant kidney ischemic reperfusion.

■ Oxagen Ltd.

Mark Payton, Oxford, UK
www.oxagen.co.uk

Oxagen is a drug discovery and development company specializing in inflammation with a first in class CRTH2 antagonist program in inflammatory and respiratory diseases.

■ Paratek Pharmaceuticals Inc.

Thomas Bigger, Boston, MA, US
www.paratekpharm.com

Paratek is engaged in the discovery and commercialization of new anti-infectives based on novel tetracycline structures that allow for antibacterial and anti-inflammatory properties.

■ PharmAbcine

Jin San Yoo, Seoul, KR
www.pharmabcine.com

PharmAbcine develops fully human therapeutic monoclonal antibodies for the treatment of cancer and inflammatory diseases. PharmAbcine is a spin-out from Korea Research Institute of Bioscience & Biotechnology (KRIBB).



■ Polyphor AG

Jean-Pierre Obrecht, Allschwil, CH
www.polyphor.com

Polyphor delivers syntheses of focused libraries of small molecules and epitope mimetic proteins of high purity and in substantial quantity and performs lead optimization, utilizing rapid parallel synthesis production. In parallel, Polyphor develops its own drugs and has a drug candidate for hematopoietic stem cell transplantation in clinical trials.

■ Portaero Inc.

David Plough, Cupertino, CA, US

Portaero is a medical technology company developing a device for the treatment of chronic obstructive pulmonary diseases, in particular emphysema.

■ ProCetus BioPharm Inc.

Paul M. Weiss, Madison, WI, US
www.procetus.com

ProCetus aims to discover and develop products that will protect cancer patients against chemotherapy- and radiotherapy-induced dermatological and gastrointestinal side effects.

■ Proteostasis Therapeutics Inc.

Greg Licholai, Cambridge, MA, US
www.proteostasis.com

Proteostasis is discovering and developing novel small molecule therapeutics designed to control the body's protein homeostasis, or Proteostasis Network. The Proteostasis Network maintains the body's natural balance of proteins, thereby providing protective effects from various disease states. These novel therapies are designed to treat multiple genetic and degenerative disorders associated with deficiencies of the Proteostasis Network, such as Alzheimer's disease, emphysema, Huntington's disease, and type II diabetes.

■ PTC Therapeutics Inc.

Stuart Peltz, South Plainfield, NJ, US
www.ptcbio.com

PTC Therapeutics is a biopharmaceutical company focused on the discovery and development of orally administered, proprietary small-molecule drugs that target post-transcriptional control processes.

■ Pulmatrix Inc.

Robert Connelly, CEO, Lexington, MA, US
www.pulmatrix.com

Pulmatrix is developing a new class of therapies - inhaled cationic airway lining modulators (iCALM) - that harness the natural host defenses and immune response to safely prevent and treat respiratory infections, reduce airway inflammation, and prevent acute exacerbations in patients with chronic inflammatory airway disease. The lead iCALM therapy may have broad application for respiratory diseases such as COPD, asthma, and cystic fibrosis and respiratory infections including influenza, rhinovirus, ventilator associated pneumonia (VAP) and respiratory syncytial virus (RSV).

■ Quro Science Co. Ltd.

Ulf Nehrbass, Bundang-gu, KR
www.quroscience.com

Quro is a spin-off biotechnology company from Institut Pasteur Korea (IP-K) committed to develop novel therapeutics against infectious diseases. Quro's main focus is on HIV, HCV and TB infection. Quro has exclusive rights to develop and commercialize drug candidates discovered with IP-K's proprietary state-of-the-art technologies including the PhenomicScreen™ and PhenomicID™ platforms.

private equity portfolio

continued

■ Ra Pharmaceuticals Inc.

Doug Treco, Cambridge, MA, US
www.rapharma.com

Ra is using proprietary combinatorial assembly and in vitro display technologies to discover novel macrocyclic compounds with enhanced bioavailability and targeting a wide range of intracellular, cell-surface, and circulating proteins. Ra's initial focus is on orally available replacements for a variety of marketed biologics, as well as drugs targeting intracellular protein-protein interactions to fill unmet medical needs.

■ S*BIO Pte Ltd.

Jan-Anders Karlsson, Singapore
www.sbio.com

S*Bio joined our portfolio as a former Chiron investment. S*Bio is a drug discovery company with a small molecule approach to cancer targets.

■ Sonitus Medical Inc.

Amir Abolfathi CEO, San Mateo, CA, US
www.sonitusmedical.com

Sonitus Medical is developing innovative medical device products to treat hearing disorders.

■ Symetis AG

Jacques Essinger, Lausanne, CH
www.symetis.com

Symetis is developing a catheter-mediated delivery system on the beating heart to insert stented mechanical valves for application in cardiac valve replacement.

■ Tepha Inc.

Simon Williams, Lexington, MA, US
www.tepha.com

Tepha's proprietary technology utilizes genetic engineering to produce bioabsorbable polymers, known as polyhydroxyalkanoates (PHAs). Potential products range from medical devices, such as surgical patches, sutures and ligaments to cardiovascular stents and drug delivery systems.

■ Tokai Pharmaceuticals Inc.

Seth Harrison, Cambridge, MA, US
www.tokaipharma.com

Tokai develops best-in-class therapies for hormone-dependent growth disorders. The company's lead program is a proprietary small molecule Specific Androgen Receptor Modulator/Lyase Inhibitor (SARM/LI) for Castration Resistant Prostate Cancer (CRPC).

■ Trellis Bioscience Inc.

Stote Ellsworth, South San Francisco, CA, US
www.trellisbio.com

Trellis Bioscience is a private biotechnology company leveraging its proprietary CellSpot™ technology to deliver higher quality therapeutic monoclonal antibodies. The company has programs in infectious disease and oncology.

■ Viamet Pharmaceuticals Inc.

Robert Schotzinger, Morrisville, NC, US
www.viamet.com

Viamet discovers and develops "best-in-class" small-molecule inhibitors of validated metalloenzymes via an innovative metal-binding approach, their proprietary Metallophile® Technology.





board of directors

novartis venture fund



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Former Chairman of the Board of the Swiss
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■ Prof. Michel Aguet
Director of the Swiss Institute for Experimental
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neering, and Professor of the Institute of Chemi-
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■ Prof. Daniel Louvard
Director of Research, Institut Curie,
Paris, France



■ Prof. Hidde Ploegh
Professor of Biology, Massachusetts Institute of
Technology. Member, Whitehead Institute for Bio-
medical Research



In addition the following people are supporting the Novartis Option Fund Board, [Dr. Trevor Mundel](#), Head of Global Development, Novartis Pharma; [Anthony Rosenberg](#), Head of Global Business Development & Licensing, Novartis Pharma AG; [Dr. Charles Wilson](#), Global Head of Strategic Alliance, NIBR and [Dr. Reinhard Ambros](#), Head of Novartis Venture Funds, Novartis International AG.



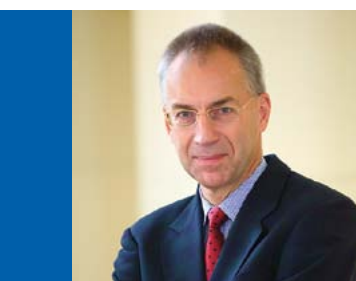
fund management



■ Reinhard Ambros

Global Head of Novartis Venture Funds. He was Managing Director of the Novartis BioVenture Fund in the USA. Previously, he worked with Novartis Corporate Finance where he held the position of Head of Group Strategic Planning for several years. He was responsible for post merger integrations at Novartis Corporate M&A and was global head BD & L cardiovascular and metabolic diseases at Novartis

Pharma. Earlier in his career he had global leadership positions for key drug development projects at Novartis and Roche. He trained as a pharmacist, Ph.D. in medicinal chemistry and pharmacology and focused postdoctoral training in clinical pharmacology. Board seats include Cyclene, Forma, Genedata, Symetis and Tokai.



■ Markus Goebel

is a Managing Director. Previously he worked as head Pharma Corporate M&A and head Nervous System BD&L Pharma. An M.D. by training and certified, amongst others, in Haematology/Oncology he worked for Farmitalia Germany and later held several positions in R&D, Marketing and Strategy at Roche headquarters before joining Novartis.

Markus Goebel received an M.D. and a Ph.D. from the Ludwig Maximilian's University in Munich and an MBA from Henley. Markus serves on the boards of Intellikine, LigoCyte and Trellis, and works with Ra.



■ Florent Gros

is a Managing Director in Basel. Previously he worked as Head of IP Transactions at Novartis and managed patent functions in Cambridge. Earlier in his career he had European Leadership of IP at Pasteur-Mérieux-Connaught (now Sanofi-Pasteur) and managed the IP of 5 R&D centers at Nestlé. Florent has a Biotechnology Engineering

Degree (France), with a diploma thesis from Glaxo-Vaccine (Belgium). He also holds European and French patent law degrees, as well as a Masters in Private Law, and is a Kauffman Fellow (class 12). Board seats include Cellerix, Immune Targeting Systems, Merus, Nanopowers, Okairos and Opsona, and he works with NovImmune.



■ Anja König

is a Managing Director in Basel. She is active in Switzerland and Europe and also responsible for expanding the fund's presence to Asia Pacific. Prior to joining Novartis she was an Associate Partner at McKinsey and Company, a global consultancy, where she worked with companies in health care in the US, Europe and Emerging Markets.

Anja König is a scientist by training and holds a Ph.D. in physics from Cornell University. Anja serves on the boards of Bicycle, Covagen, Diagnoplex, Heptares, Nabriva and Oxagen, and works with Destiny, MerLion, Neomics, PharmAbcine, Polyphor, Quro and S*BIO.



■ Campbell Murray

is a Managing Director in Cambridge. Prior to joining the fund, he worked at the Novartis Institutes for BioMedical Research as the director of special projects. Campbell is a New Zealand trained physician, Kauffman Fellow and holds an MBA from Harvard Business School and an MPP (public policy) from the John F. Kennedy School of

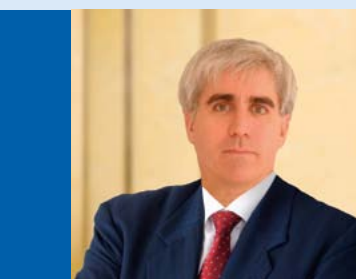
Government where he was a Knox Fellow and Rotary Ambassadorial Scholar. Campbell serves on the boards of Aileron, Akebia, Alios BioPharma, BioRelix, ProCertus BioPharm and Tokai Pharmaceuticals and as an observer on the board of Tepha.



■ Lauren Silverman

is a Managing Director in Cambridge. Prior to joining NVF she was Global Head of Oncology Research Operations for Novartis. Previously, Lauren spent much of her career in BD&L, first at OSI Pharmaceuticals and later at Pfizer. Lauren was also a Director of Strategic Alliances and Head of Cell Biology where she led multiple research

teams after having been a founding scientist of Cadus Pharmaceuticals. Lauren was a postdoctoral fellow at Memorial Sloan Kettering Cancer Center and Princeton University and earned her Ph.D. in molecular biology from the University of Utah. Current board seats include Anchor, Proteostasis, Ra, Viamet, and Pulmatrix.



■ Henry Skinner

is a Managing Director in Cambridge. Prior to the Novartis Venture Funds he worked as Executive Director and global head Strategic Alliances, Therapeutics and head Strategic Alliances, Technologies at the Novartis Institutes for Biomedical Research. Prior to joining Novartis he was CEO of SelectX Pharmaceuticals and President and CEO of NeoGenesis Pharmaceuticals, which was acquired

by Schering-Plough. He was also Director of Technology Acquisitions for Pharmacia & Upjohn and Director of Business Development at Lexicon Genetics. He was a postdoctoral fellow at Baylor College of Medicine and earned his Ph.D. in Microbiology and M.S. in Biochemistry from the University of Illinois. Henry serves on the board of Avila, and works with Cyline and FORMA..



■ Steven D. Weinstein

is a Managing Director in Cambridge. Prior to Novartis, Steve spent five years at Prism Venture Partners, where he focused on medical devices. Steve started his venture career in 1999 as a Kauffman Fellow with Mid-Atlantic Venture Funds. As an entrepreneur and CEO, he raised angel funds to buy the assets of a defunct distribution business out of bankruptcy, and then successfully rebuilt the business over the next five

years. Steve holds an MBA with distinction from the University of Michigan Business School and a BS in mechanical engineering from Columbia University. He has led the investments and serves/d on the board of: Ablation Frontiers (acquired by Medtronic), Portaero, Sonitus Medical, and Visio-gen (acquired by Abbott), and works with Catalyst Biosciences and GlycoMimetics.



■ Simon Wheeler

joined the Venture Fund in 2009. His focus is on animal health and OTC opportunities. Previously he held various technical and marketing roles at Novartis Animal Health and Pharmacia. He trained as a veterinarian and gained a PhD and neurology board certification at the University of London. He held faculty positions at North Carolina State

University and The Royal Veterinary College, London. He has an MBA from The Open University Business School.

contact

information

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