

Entrepreneurial ID «venture leaders» 2008



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PRECLIN Ventures: Development and validation of therapeutics against chronic inflammatory diseases.

Industry: Biotech

The venture leader

Bettina Ernst is co-founder and CEO of the ETH Spin-off company PRECLIN Ventures. She has a total of 10 years of experience working in basic immunology. Bettina spent many years in the U.S., where she obtained her PhD, carried out postdoctoral studies and gained experience in the biotechnology/pharmaceutical industry. Her main scientific contribution was the finding that naive T cells in the periphery require continuous signals from neighbor cells through MHC-TCR contact to survive – a paper that has received over 350 citations. Recently, Bettina shifted her focus to laboratory management and refined her business expertise by undertaking an MBA.

In addition, Bettina was one of Switzerland's leading gymnasts, participating in the 1984 Olympic games. She also won the Amateur division of the Hawaiian Ironman in 1996 and again in 1998.

The Company / project

In order to increase the success rate of drugs entering clinical development, PRECLIN Ventures (PV) has developed an integrated approach that places equal importance upon the *in vivo* generation *and* preclinical validation of therapeutics. PV utilizes two core technology platforms in its approach: (1) novel humanized knock-in mice where the target mouse gene has been replaced by its human counterpart; and (2) an unparalleled panel of mouse models of human disease. Together this strategy will translate into a faster time to market and greater efficacy of drugs in the clinical.

For offsetting the burn-rate of the in-house mouse and drug development, PV offers its 'systems biology' style approach for the testing of external lead candidate drugs in mouse models of inflammatory disease as a fee-for-service. PV can provide efficacy reports for drugs simultaneously in multiple disease models including forms of: Inflammatory Bowel Disease (IBD); Chronic Obstructive Pulmonary Disease (COPD); Asthma; and infections with a range of viral, bacterial, protozoan and parasitic pathogens. Simultaneous assessment of drugs in multiple disease models can provide an overall efficacy snapshot within 2 months – a strategy that can speed up the preclinical phase of drug development up to 10 times, leading to a faster time to market.

The immediate target customers for this 'fee-for-service' will be biotechnology companies who need to test their drug candidates in conventional mouse models, but have neither the expertise nor the infrastructure to perform such studies. Annual revenues of CHF 2.4M from the fee-for-service are targeted within 3 years. Out-licensing of in-house generated mAb after year 3 will exponentially increase the value of the company. In order to establish PV's internal therapeutics pipeline, cover initial laboratory setup costs, and to recruit key team members PV is seeking seed financing of CHF 2 million over 2 years. Incorporation of the company is planned for June 08.

PV aims to attract customers in need of drug validation services in the chronic inflammatory disease market, partners for synergizing strengths and a lead investor for seed financing.