



## **Neovacs, a leading biotech company in the field of therapeutic vaccines in oncology and inflammatory diseases, raises 13 million Euros from a international group of specialist investors, including the Novartis Venture Fund and Truffle Capital**

**Paris, July 17th 2007,** Neovacs ([www.neovacs.com](http://www.neovacs.com)), a biotech company pioneering the development of anti-cytokine and anti-viral regulation protein therapeutic vaccines for the treatment of certain cancers and inflammatory diseases, today announced a major €13 million share capital increase with the Novartis Venture Fund as the lead investor. Truffle Capital, an investor and majority shareholder since 2003, has reinvested €4 million in Neovacs. The Novartis Venture Fund and Truffle Capital are likely to invite one or two additional investors onboard in the coming months.

Neovacs is currently developing a broad portfolio of several promising therapeutic vaccines based on its patented, active anti-cytokine and anti-viral protein immunization technologies. Two products have already been tested in clinical trials: Tat toxoid, Neovacs' first anti-HIV therapeutic vaccine, and interferon alpha (IFN  $\gamma$ ) kinoid, a cytokinic immunogen which induces the production of neutralizing anti-interferon  $\gamma$  antibodies. The latter has been assessed in pilot clinical trials where induction of neutralizing anti-IFN  $\gamma$  antibodies was observed in around 200 HIV-infected patients, with good long-term tolerance. The interferon  $\gamma$  kinoid is currently being studied in murine models of systemic lupus erythematosus, with positive results having been presented at the 8<sup>th</sup> International Congress on Lupus which took place from May 23<sup>rd</sup> to 27<sup>th</sup> 2007 in Shanghai (China). Two other products, TNF  $\alpha$  kinoid and VEGF kinoid, are due to enter clinical trials following promising results in animal models of rheumatoid arthritis and certain cancers. These results were recently described in articles published in the prestigious journal *PNAS* ("TNF alpha kinoid vaccination-induced neutralizing antibodies to TNF alpha protect mice from autologous TNFalpha-driven chronic and acute inflammation", Le Buanec H. et al. (2006) *PNAS* 103:19442-19447; "VEGF kinoid vaccine, a therapeutic approach against tumor angiogenesis and metastasis" Haghghi Rad F. et al. (2007) *PNAS* 104:2837-2842).

Kinoid vaccines target serious, chronic pathologies. TNF  $\alpha$  kinoid targets rheumatoid arthritis, Crohn's disease and psoriasis. Several anti-TNF  $\alpha$  drugs are already on the market and their combined sales exceed \$10 billion. In the case of VEGF kinoid, the anticipated target pathologies include certain tumors and age-related macular degeneration. The specific anti-VEGF drugs currently on the market posted combined sales of over \$2 billion in 2006, and this figure is set to rise to over \$10 billion by 2010, according to certain analysts. Systemic lupus erythematosus (for which the interferon  $\gamma$  kinoid is being developed) has not seen a new treatment launched in the last 30 years and affects around 300,000 people in the Western world. The kinoid technology seeks to induce the production of specific anti-cytokine antibodies in the patient and thus reduce excessive cytokine levels. For example, an excess of TNF  $\alpha$  leads to an inflammatory reaction in rheumatoid arthritis and Crohn's disease, whereas VEGF stimulates the formation of blood vessels involved in tumor growth and metastasis. Kinoid vaccines may constitute an advantageous new generation of immunotherapeutics when compared with monoclonal antibodies, which have to be administered frequently and to which patients often develop resistance.

This new round of funding will enable Neovacs to rapidly initiate clinical trials of several of its products in the field of inflammatory disease and cancer.

*“This active support from the Novartis Venture Fund and Truffle Capital will boost our product development activity, with clinical trials planned in the months to come for TNF kinoid, followed by VEGF kinoid and interferon alpha kinoid. Financial support from the Novartis Venture Fund and Truffle Capital confirms the success of our ongoing corporate strategy and reinforces our very innovative scientific and medical approach”,* stated Guy-Charles Fanneau de La Horie, Neovacs' CEO. He added: *“Neovacs' goal is to become the acknowledged leader in anticytokine therapeutic vaccines within the next 2 to 3 years”.*

Florent Gros from the Novartis Venture Fund (lead investor in this new round of funding) commented: *“Neovacs is developing a very promising portfolio of active immunotherapies, and so we are delighted to help support a commercial and scientific project which meets the needs of so many patients”.* *“We are continuing to invest in Neovacs because we believe in its technology and its medical & commercial potential”,* emphasized Philippe Pouletty MD, CEO of Truffle Capital.

#### **About Neovacs:**

Neovacs, a spin-off from the Pierre & Marie Curie University in Paris, was founded on 1993 by Professor Daniel Zagury, one of France's most eminent immunologists and AIDS experts. Neovacs holds a broad patent portfolio and is developing several therapeutic vaccines for the treatment of AIDS, cancer and auto-immune & allergic diseases. Neovacs is acknowledged as a pioneer in the development of novel therapeutic vaccines against human cytokines (kinoids) and immunosuppressive viral proteins (toxoids). At present, monoclonal antibodies are widely used to neutralize cytokines and treat patients suffering from cytokine-related diseases. In contrast to exogenous therapies with monoclonal antibodies, Neovacs' therapeutic vaccines induce a powerful, natural polyclonal antibody response in the patient. For further information on Neovacs, visit our web site: [www.neovacs.com](http://www.neovacs.com)

#### **About Truffle Capital:**

Founded in 2002, Paris-based Truffle Capital currently manages €250 million in equity funds focused on innovative European corporate and academic spin-out companies in the biomed/biotech, IT & energy markets. Frequently a lead investor, Truffle Capital provides active Board-level managerial support to its portfolio companies. It has already invested in twenty or so European SMEs, several of which have since listed on the stock market. Truffle Capital is an independent fund management company accredited by France's financial regulator (the "Autorité des Marchés Financiers", AMF) and is managed by four partners with significant experience of company start-up, investment and hi-tech markets.

#### **About the Novartis Venture Fund**

Novartis Venture Fund, established in 1996, currently manages over \$550 million in committed capital and is invested in more than 50 private companies. As a financially-driven corporate life science investor, NVF invests in companies which have the potential to lead the next innovation wave in core therapeutic fields or explore new business areas that will be critical to patient care. The primary interest is in the development of novel therapeutics and platforms and is augmented with investments in medical devices, diagnostics, biomarkers and delivery systems. For example, NVF was a key investor in Infinity, Kudos, Syrrx, GylcArt, Idenix, Transform and Cytos. The Fund prefers to invest in the early stages of company development and is able to lead, co-lead or participate in a larger syndicate. The NVF team of nine investment professionals located in Basel, Switzerland, and Cambridge, MA, brings together extensive experience in pharmaceutical R&D and venture capital.

*Disclaimer: the development of new drug technologies is difficult, erratic and unpredictable. Neovacs' forecasts and future economic performance depend on research that has yet to be performed and on a number of other factors. The company's future economic performance may differ significantly from that currently forecast.*

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