



GENEURO INNOVATION SAS

One line pitch:

GeNeuro develops biotechnology treatments for disorders associated with endogenous retrovirus expression and presenting high unmet medical needs

Market Analysis:

Multiple sclerosis is a US\$14 bn market with a compound annual growth rate (CAGR) of 22% from 1997 to 2012. The number of treated patients currently is estimated 660,000 in 2012. For the next 10 years, a CAGR of 3.5% is anticipated and the market is expected to be of around \$20bn in 2022 with a slightly stronger growth in the US market compared to the non-US market. The increased in patients is expected to be around 2% per year in the USA while the price of yearly treatment could increase to \$36k. In non-US markets, the increase of patients of 3% per year while the average prices should remain similar to the current ones.

Business Proposition:

GeNeuro's therapeutic approach targets the proteins expressed by human endogenous retrovirus (HERV-W). GeNeuro develops humanized monoclonal antibodies targeting these pathologic HERV-W proteins. One of these proteins, MSRV-Env plays a key role in the causation and maintenance of multiple sclerosis: GeNeuro lead product, GNbAC1, is a humanized monoclonal antibody targeting MSRV-Env, it is currently in Phase II clinical development. GeNeuro also develops other therapeutic monoclonal antibodies, which target and neutralize the pathogenic retroviral proteins implicated in the inflammatory and autoimmune cascades of neuroinflammatory and autoimmune disorders such as schizophrenia, neuropathies or diabetes.

Competitive Advantage:

All current MS treatments are targeting the immune system, but despite an action on the frequency of the neurological crises, the effect over the long term on the progression of the handicap has not been shown. GNbAC1 by neutralizing MSRV-Env which appears as a critical causal factor can neutralize the progression of the disease and not only prevent the inflammatory crises of MS but also block the slow neurodegeneration which leads to a severe handicap. GNbAC1 can have a strong effect on neuroprotection and remyelination, making it particularly appropriate for progressive MS. Also, this monoclonal antibody is highly specific for its target MSRV-Env and has no impact on the immune system, offering critical safety advantages.

Investment Attractiveness:

GeNeuro has developed a breakthrough immunotherapy, based on a humanized monoclonal antibody, GNbAC1, targeting a toxic protein MSRV-Env encoded by an endogenous retrovirus, proven to be a key trigger and fueling mechanism of the development of MS. Unlike other MS therapeutics, GeNeuro's therapy acts upstream on an initial trigger, MSRV-Env, of the pathogenetic cascade. By its causal mechanism of action, GNbAC1 could stop the progression of the disease and treat chronic forms of MS in a safe way. Phase II results have shown the perfect safety of the antibody and the clinical stability observed in 10 patients treated over one year is promising in terms of efficacy. The current investors, Ecllosion, Institut Mérieux, bioMérieux, are committed to support GeNeuro in its development.

IP Situation:

Broad patent protection: GeNeuro unique approach is protected by more than 25 families of patents covering all aspects of the endogenous retrovirus biology, ENV protein and its specific receptor TLR4. Product patents have been filed including different types of monoclonal antibodies for both diagnostic and therapeutic use as well alternative interfering routes to MS. GeNeuro continues to file new patents on its R&D activities.



COMPANY PROFILE

- **Website:**
geneuro.com
- **Activity:** Biotech
- **Contact:**
Curtin Francois
fc@geneuro.com
- **Location:**
60 Avenue Rockefeller
69008 Lyon
France
- **Founded in:** 01/02/2006
- **Employees:** 18
- **Management:**
Curtin Francois
CEO
Perron Hervé
CSO
Lang Alois
CDO
Guichard Christophe
CFO
- **Financial information (€):**
 - **Company stage:**
Phase II
 - **Capital raised to date:**
25m
 - **Monthly burn rate:**
0.26m
 - **Capital seeking and date:**
35m by end 2014
- **Investors:**
Ecllosion 2, Institut Mérieux,
bioMérieux
- **Referred by:**
Anne-Marie Graffin Biovision
Investor Conference