

# Séminaire de Modèles Industriels 2013

# Phylogica

This company is a Spin-out from Institute of Child Health Research in Perth, Australia, and the Fox Chase Cancer Centre in Philadelphia, PA. Phylogica is a biotechnology company based in Perth, Australia and Oxford, UK, which provides peptide drug discovery services to the Pharmaceutical industry. It is a leading peptide drug discovery company that utilises proprietary libraries (Phylomer® peptides) and screening methodologies to identify unique peptide drug candidates for its pharmaceutical and biotechnology partners (including Roche, Medimmune (AstraZeneca), Pfizer and Janssen (Johnson & Johnson)). Phenomica is new spinoff between Phylogica and the Cambridge University in the UK, which was created to pursue commercial opportunities created by the proven use of Phylomer libraries for target discovery and validation.

### • Vernalis.

One of the UK's leading development stage pharmaceutical companies, Vernalis takes promising product candidates along a commercially-focused path to market. They derive pipeline candidates both from successful collaborations with a number of global pharmaceutical businesses and their own research activities. The pipeline is split between those products they will commercialize and their NCE portfolio. Vernalis has a licensing deal with Tris Pharma, Inc, obtaining exclusive rights to Tris' extended release technology for use in the US prescription cough/cold market. Vernalis currently has six programs in development, in CNS, oncology and inflammation.

## Stada

Business model: Focus on products with off-patent active pharmaceutical ingredients, in the pharmaceutical market. STADA has focused on selected segments within the health care and pharmaceutical market. With regard to costs and risks, STADA deliberately does not conduct any own research on, or marketing of new active pharmaceutical ingredients, but rather focuses on the development and marketing of products with active ingredients – generally active pharmaceutical ingredients – which are free from commercial property rights, particularly patents. These products from STADA are then commercially positioned in the two core segments of Generics and Branded Products.

The strategic success factors of the STADA Group include, in particular, a comprehensive product portfolio, strong product development, an international sales structure with a local focus and an accelerated acquisition policy, including long-standing experience in integration management. In addition, a high degree of flexibility due to short decision-making processes, functional centralized reporting structures and efficient cost management are part of STADA's success story.

# Merck-Serono.

Merck Serono began when the German chemical and pharmaceutical group Merck acquired Serono, the Swiss-based biotechnology leader, integrating two companies with a total of over 400 years of experience in drug-making. Merck KGaA has a history dating back to 1668, when Friedrich Jacob Merck acquired the Engel Apotheke ("Angel pharmacy") in Darmstadt, Germany. Serono's roots as a pioneer in the use of recombinant DNA technology go back to Italy in the early 1900's.

## Elan

Elan is a neuroscience-focused biotechnology company headquartered in Dublin, Ireland. Elan's work includes research, development, and commercial activities for neurodegenerative diseases, such as Alzheimer's disease and Parkinson's disease and autoimmune diseases, including multiple sclerosis. Elan has a long history as a pioneer in treating neurodegenerative diseases. Elan has generated the core science and fundamental discoveries responsible for breakthrough compounds that profoundly impact disease ranging from multiple sclerosis to Alzheimer's disease and Parkinson's disease. These discoveries have been fostered by a culture of scientific innovation and risk-taking. Marketed therapies – including Tysabri for the treatment of multiple sclerosis and Crohn's disease—provide important treatments for patients with unmet medical needs. Elan collaborates with many of the world's leading academics, biotech and pharmaceutical companies to maximize the potential of its science and accelerate bringing new therapies to market.



# Séminaire de Modèles Industriels 2013

#### Alkermes

"Alkermes' proprietary technologies and deep expertise gives us the edge in developing innovative medicines with therapeutically advantageous properties to target CNS diseases in unique ways:

-Long-acting injectable technologies enabling the gradual release into the body of small molecules as well as complex macromolecules at a controlled rate over a specific period of time.

-Oral Controlled-Release Technologies: solid-oral dosage technologies overcome many of the technical challenges of oral drug formulation and have been successfully commercialized in two dozen products worldwide. Oral delayed release, extended release, immediate release, pulsatile release, and chrono-timed delivery

-Nanoparticle Technology: the NanoCrystal® technology and the NanOsmotic® technology and enable enhanced bioavailability of poorly water-soluble drug compounds. The NanoCrystal technology involves reducing the size of drug particles to increase their exposed surface area, then stabilizing the nanoparticles to maintain their reduced particle size.

# Ablynx

Ablynx is is a Belgium biopharmaceutical company focused on the discovery and development of Nanobodies®, a novel class of antibody-derived therapeutic proteins based on single-domain antibody fragments, for a range of serious human diseases including inflammation, haematology, oncology and pulmonary disease. The unique characteristics of Nanobodies and continuous innovation have allowed Ablynx, and its partners, to develop differentiated drug products such as both antagonistic and agonistic Nanobodies, bispecific Nanobodies. Today, the Company has approximately 25 projects in the pipeline and seven Nanobodies in clinical development. Ablynx's in-house lead programmes in the clinic, ozoralizumab, caplacizumab, and ALX-0061 are in Phase II clinical development. Ozoralizumab, is a subcutaneously administered, half-life extended Nanobody targeting TNF-alpa. Caplacizumab is a Nanobody targeting von Willebrand factor (vWF), delivered intravenously and via a subcutaneous injection, and is being evaluated in patients with thrombotic thrombocytopenic purpura (TTP). ALX-0061 is a half-life extended Nanobody that binds with high affinity to IL-6 receptor, both the soluble and membrane-bound form. It is currently in Phase II clinical trials in patients with rheumatoid arthritis.

# • Biomérieux

Acteur mondial dans le domaine du diagnostic in vitro depuis plus de 45 ans, bioMérieux offre des solutions de diagnostic (réactifs, instruments et logiciels) qui déterminent l'origine d'une maladie ou d'une contamination pour améliorer la santé des patients et assurer la sécurité des consommateurs. BioMérieux s'est donné pour mission de contribuer à améliorer la santé publique mondiale par le diagnostic in vitro. Afin de remplir cette mission, la société s'appuie sur ses atouts majeurs: Spécialisation : bioMérieux est spécialisée dans les maladies infectieuses pour les applications cliniques et industrielles, et dans les tests à haute valeur médicale dans des domaines tels que le cancer et les maladies cardio-vasculaires. Dimension internationale : présent dans plus de 150 pays à travers 40 filiales et un vaste réseau de distributeurs. Expérience et savoir-faire de plus de 45 ans dans le domaine des maladies infectieuses. Innovation scientifique et technologique, avec 13 % du chiffre d'affaires de bioMérieux consacré à la R&D et la maîtrise des 3 technologies clés du diagnostic : bactériologie, immunoessais et biologie moléculaire

## IPSEN

Ipsen is a global specialty-driven pharmaceutical company with total sales exceeding €1.1 billion in 2011. Ipsen's ambition is to become a leader in specialty healthcare solutions for targeted debilitating diseases. Its development strategy is supported by four franchises: neurology / Dysport®, endocrinology / Somatuline®, uro-oncology / Decapeptyl® and hemophilia. Moreover, the Group has an active policy of partnerships. R&D is focused on innovative and differentiated technological patientdriven platforms, peptides and toxins. In 2011, R&D expenditure totaled more than €250 million, above 21% of Group sales. The Group has total worldwide staff of close to 4,500 employees.

### UCB

UCB (Union chimique belge) est une entreprise belge biopharmaceutique ayant pour activités principales la recherche, le développement et la commercialisation de produits pharmaceutiques et biotechnologiques. Elle est spécialisée dans la recherche de solutions thérapeutiques pour des patients souffrant de maladies sévères, traitées par des spécialistes, plus particulièrement dans le domaine du système nerveux central (en ce compris l'épilepsie), des inflammations (y compris les allergies) et l'oncologie. UCB possède des centres de Recherche et de Développement en Europe, en Asie et aux États-Unis. En 2007, 788 millions d'euros ont été investis en R&D. Le produit UCB le plus vendu en 2007, avec plus d'un milliard d'euros de vente, était Keppra, un médicament pour traiter l'épilepsie. Elle a lancé en 2006 le premier patch visant à traiter la maladie de Parkinson et, en 2008, un médicament pour le traitement de la maladie de Crohn. En 2006, UCB a acheté l'entreprise pharmaceutique allemande Schwarz Pharma pour 4,4 milliards d'euros.