METAFLORA BIOSYSTEMS
Bio & Health (Biotech - Medtech - e/m-Health - Pharma)

One line pitch:
METAFLORA biosystems is developing a breakthrough technology platform for the diagnostic of human diseases. METAdiag, the future in metabolism discovery.

Market Analysis:
METAFLORA is focused on personalized, predictive and preventive medicine through metabolic monitoring of cells. Its breakthrough proprietary technology allows for the first time a precise and easy assessment of cell metabolism by quantifying nutrient transporters expression at the cell surface. Nutrient transporters are responsible for the uptake of nutrients which fuel cells, and are thus key players of cell metabolism. For example, Metaflora develop the first IVD (In Vitro Diagnostics) test dedicated to the Glut1 Deficiency Syndrome (Glut1DS) which is a rare disease and this test will be a kind of orphan drug with an expected global market above 60 M€.

Business Proposition:
METAFLORA INVENTS BIOLOGICAL PROBES FOR NUTRIENT TRANSPORTERS TO ANALYZE CELL METABOLISM. METAFLORA has already invented 12 biological probes targeting transporters that are essential for proper metabolic function. Transporter expression profiles at the cell surface reflect the cell’s well-being and adaptation to its environment. METAFORA is the exclusive owner of probes known as RBDs (receptor-binding domains) and each RBD is specific for a given transporter. METAFLORA has engineered biological probes created by fusing 2 smart building blocks: a retrovirus-derived ligand able to bind a nutrient transporter and a fluorescent protein from jellyfish detectable by laser. With RBDs, we can detect and count transporters using common cytometers that are available in most labs.

Competitive Advantage:
After a successful launch of a series of Research Use Only products on the Life Sciences market in 2014, the company is leveraging its experience in metabolic biomarkers to enter into its new growth driver: the diagnostics. There is no direct competitor at this stage.

Investment Attractiveness:
METAFLORA’s KITS ALREADY ADOPTED BY THE LIFESCIENCE MARKET (Institut Pasteur, Genopole, CEA, ICM, GE healthcare, Novartis, Covance, ...). PRODUCTS LAUNCHED ON THE MARKET IN ONLY 2 YEARS.

IP Situation:
METAFLORA is the exclusive owner of probes known as RBDs (receptor-binding domains) and each RBD is specific for a given transporter. The technology is strongly protected by granted patent families.