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

One line pitch:
Artificial Pancreas service for Diabetes treatment. We will save lives, amputations, ocular and renal complications, and radically improve everyday life for the patients.

Market Analysis:
The Artificial Pancreas is aimed at diabetes patients that treat themselves with insulin every day, e.g. type 1 and a small portion of type 2, representing 300,000 patients in France and 2 million in Europe. This population has been increasing steadily at around 4% per year. The annual healthcare costs of a diabetes patient are quite high, and an artificial pancreas would significantly decrease this cost through lower incident rate and ongoing costs, even including the cost of the service itself. Combined with the huge impact an AP has on everyday life of a patient, who no longer has to measure his own doses constantly, we believe there is a very large effective market for an AP service, with potentially rapid adoption (for a medical device).

Business Proposition:
Diabeloop is the integration of 5 things: an Insulin Pump, a glucose sensor, a controller (restricted smartphone where the algorithm, control software and interface resides), a remote server with alert algorithms and an interface for the medical team, and design of a patient support service for dedicated nurses. This service will significantly reduce hypoglycemic events and associated comas, increase glucose control and associated ocular, renal complications and amputations, and fundamentally improve everyday life of diabetes patients.

Competitive Advantage:
In this field, Diabeloop is unique in that it combines an academic background, direct diabetes care experience, industrialization expertise and a very strong network with both diabetes key opinion leaders and the medical regulatory authorities. The CERITD, Guillaume Charpentier and 10 university diabetes centers form an outstanding research and clinical team. The CEA brings world-class modelling, algorithm and industrialization expertise. And the CERITD already treats a large number of patients, bringing both care and service expertise along with the authorities network. Diabeloop brings all these areas of expertise centered around patient use and acceptance factors by the health system along with speed-to-market.

Investment Attractiveness:
The type 1 Diabetes market is very large and growing. The Diabeloop solution is actively demanded by patients and will have a strong clinical and quality-of-life impact. The Diabeloop team has a unique mix of skills, expertise, relationships and technology and is positioned to be first on the artificial pancreas market. There is also an incredible amount of investment and partnership activity ongoing in the diabetes market that demonstrates both the market attractiveness and exit opportunities for an investment in Diabeloop.

IP Situation:
A number of patents are in submission. The background algorithms are by definition hard to patent, but the difficulty in building them and the clinical studies required to validate and register the product for CE marking provide a strong barrier to entry.