Biolojic Design – Using AI to design smart therapeutics

Investment rational:

Using machine learning, we create superior drugs by programming antibodies to become dynamic functional switches that affect biology in new ways. Biolojic's AI-designed antibodies provide a precise molecular effect, in the desired micro-environment, at the right time, leading to greater efficacy and lower toxicity, while maintaining impeccable developability, half-life, stability and safety of human antibodies. The first AI-designed antibody in the clinic was designed by Biolojic and entered the phase 1/2 last year. It already shows great promise in treating solid tumors. Biolojic has a pipeline of fully owned smart antibodies, as well as several partnerships with big pharma and biotech.

Business Strategy

We target well-understood, validated biological pathways, where there is still grave unmet need. We use our technology to design smart antibodies that affect these pathways more precisely and therefore can succeed where traditional drugs have failed. In addition to the antibody that is already in the clinic, we expect that 5 of our revolutionary antibodies will reach clinical proof of concepts over the next few years.

In the meantime, our partnerships with pharma, which are typically based on upfront, milestones and royalties, generate revenue that gives us significant flexibility.

Core Technology

Our maverick team harnesses the interplay of biology, AI and drug development to redefine the drug design process. Relying on big-data, our platform mimics the way the human immune system makes antibodies, allowing us to create personalized smart drugs that act like nano-robots. Unlike conventional drugs, which behave the same everywhere, our programmable antibodies can sense the micro-environment in a specific patient at a specific time and respond dynamically.

Product Profile/Pipeline

We are developing a pipeline of computationally-designed therapeutics that unlock the full potential of well-studied pathways. We are focusing on diseases that involve the delicate control mechanisms of the immune system, including cancer, autoimmune and inflammatory diseases.