BPT264: Selectively Activates T<sub>reg</sub> with Minimal Effect on CD<sub>8</sub> T cells, NK cells and Eosinophils

**RATIONAL DESIGN**

BPT264: Base synthetic cytokine engineered to lack binding to IL-2Ra and with enhanced affinity to IL-2Ra.

**IN VITRO PROFILE**

BPT264 Shows Uniquely Augmented Binding to IL-2Ra, no β Binding and Weak Binding to β by Compared to Wild-Type IL-2 (Prolinokin).

BPT264 Selectively Activates T<sub>reg</sub> with Minimal Activity on CD<sub>8</sub> T cells, CD<sub>4</sub><sup>+</sup> T<sub>con</sub>s and NK cells in Human, Cyno Monkey and Mouse

**MOUSE PK/PD**

BPT264 has an Extended PK Profile in Mouse

**CYNO IMMUNO PD**

BPT264 Selectively Expands T<sub>reg</sub> in Cyno by Almost 60-Fold to Reach >60% of Total CD<sub>4</sub><sup>+</sup> T<sub>cells</sub>

**EFFECTACY**

BPT264 Demonstrates Strong and Long-Lasting Efficacy in a Keyhole Limpet Hemocyanin (KLH)-Induced Delayed Type Hypersensitivity Model

**CONCLUSIONS**

BPT264 is a uniquely α-enhanced/bβ-dead half-life extended IL-2 generated using our novel chemical protein synthesis technology with best-in-class properties.

- In vitro, BPT264 highly selectively activates T<sub>reg</sub> from human, cynomolgus monkey and mouse, with almost no activation of CD<sub>4</sub><sup>+</sup> T<sub>con</sub>s or CD<sub>8</sub><sup>+</sup> T cells.
- In mouse, BPT264 selectively expands T<sub>reg</sub> >30x and strongly suppresses antigen-driven inflammation.
- In cynomolgus monkey, BPT264 is well tolerated and substantial expansion of T<sub>reg</sub> nearly 60-fold (constituting 66% of the CD<sub>4</sub><sup>+</sup> T cell population) with no effect on CD<sub>8</sub><sup>+</sup> T cells, NK cells and CD<sub>4</sub><sup>+</sup> T<sub>con</sub>s.
- Based on these best-in-class properties, IND-enabling studies have been initiated.

**ABOUT BRIGHT PEAK**

Bright Peak is a privately held biotechnology company based in Basel, Switzerland and San Diego, CA. We are rapidly advancing a robust portfolio of next-generation, multi-functional, cytokine-based immunotherapeutics for the treatment of patients with cancer and autoimmune diseases. We are uniquely positioned to leverage the world-class protein engineering capabilities and our unique cell-free technology platform to chemically synthesize and conjugate novel protein therapeutics that reflect state-of-the-art insights into cytokine and T cell checkpoint biology. Our pipeline strategies begin with discovery to IND-enabling, and encompassing enhanced cytokines, antibody-cytokine conjugates and other novel formats. Bright Peak is funded by syndicate of leading healthcare investors.