

AnaptysBio Announces Development of Novel Anti-IL33 Therapeutic Antibody

January 10, 2014 5:12 PM ET

First-in-class program for the treatment of atopic dermatitis and allergic diseases

SAN DIEGO, Calif. — AnaptysBio, Inc., a privately-held therapeutic antibody company, today announced the development of a first-in-class therapeutic antibody to interleukin-33 (IL-33). Discovered using the Company's proprietary SHM-XEL platform, AnaptysBio's anti-IL-33 lead candidate antibody (ANB020) inhibits IL-33 cytokine function by blocking interaction with its receptor at low picomolar potency.

The therapeutic mechanism of ANB020 is a promising new approach with potential for the treatment of a number of inflammatory diseases mediated by Type 2 helper T (Th2) cells, including atopic dermatitis, severe asthma, allergic rhinitis and food allergies. IL-33 has also been implicated in COPD (chronic obstructive pulmonary disease) and tissue fibrosis. As a pro-inflammatory cytokine, IL-33 is directly associated with tissue damage through activation of various Th2-type responses. Genetic studies have correlated elevated expression of IL-33 and its receptor with increased incidence of atopic dermatitis and severe asthma across a range of ethnic groups.

AnaptysBio's ANB020 lead candidate is the first reported example of a functional anti-IL-33 therapeutic antibody. Attempts with previous antibody technologies have failed to generate therapeutic grade functional anti-IL33 antibodies. AnaptysBio's SHM-XEL platform has excelled in developing highly functional leads against biological targets previously thought to be intractable for antibody development.

"The success of our anti-IL33 program highlights AnaptysBio's competitive advantage in rapidly developing therapeutic antibodies against emerging therapeutic targets," said Hamza Suria, AnaptysBio's president and chief executive officer. "Our business model is focused on leveraging SHM-XEL to develop first-generation antibodies for unmet needs in inflammatory disease, oncology and fibrosis."