



Mirror Image Phage Display Discovery of a D-peptide TNF α Inhibitor for the Oral Treatment of Inflammatory Disease

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The inflammatory cytokine TNF- α is a central protagonist in the pathogenesis of inflammatory diseases including rheumatoid arthritis, psoriasis and inflammatory bowel disease. As such, biologic inhibitors of TNF α , primarily antibody and derivatives, comprise a \$40 B+ market for treatment of these diseases. Though successful, these biotherapeutics require parenteral delivery, and frequently elicit an immune response, blunting their therapeutic utility. To obviate these limitations we've used the technique of Mirror Image Phage Display to discover a potent synthetic inhibitor of TNF α . Comprised of all D-amino acids, the enantiomeric peptide is not recognized by common proteases, shows exceptional gut stability, no detectable immunogenicity, and efficacy in multiple models of TNF α -driven inflammatory disease, thus providing an orally bioavailable alternative to injectable biologics for systemic disease and direct delivery opportunity for the treatment of inflammatory bowel disease.



ABOUT the SPEAKER

Dr. Wahl, CEO/founder of D Biotherapeutics, previously held senior drug discovery positions at Ambrx, AbbVie, Biogen Idec, Seattle Genetics, Trubion, and Bristol-Myers Squibb, and is an expert in the discovery and preclinical development of antibody-drug conjugate (ADC) therapeutics for autoimmune diseases and cancer. He received his PhD in Biochemistry/Biophysics from the University of Rochester, was a Research Fellow at Stanford Medical School and has authored more than 60 scientific publications and 30 issued patents.

Monday, October 19 at Noon
1003 Engineering Centers (Tong Auditorium)

