

For Immediate Release

National Institutes of Health (NIH) Funds Discovery Research for Treatment of Rheumatoid Arthritis at Orphagen Pharmaceuticals

San Diego, September 1, 2007--Orphagen announced today that it has been awarded \$258,166 in grant funding from the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), a component of the National Institutes of Health (NIH), to investigate new therapeutic agents for treatment of rheumatoid arthritis (RA) and psoriasis.

The description of the proposed research reads in part: “Our goal is to create an entirely new class of orally-bioavailable drugs for RA that blocks the major T cell-mediated arm of immune pathogenesis in the disease, thereby providing an efficacious therapy with reduced side effects and broader therapeutic utility in comparison to steroids, methotrexate and other small molecule drugs routinely used for treatment of RA. With regard to relevance to public health, rheumatoid arthritis (RA) is a painful and crippling disease that affects two million Americans. New drugs that target the immune system (such as etanercept and infliximab) have provided relief for some but not all patients, but the drugs also have serious side effects that may limit their use. The proposed studies would take the first step to develop a new class of small molecule, orally-bioavailable drugs designed to inhibit the function of a novel, potentially pathogenic immune cell that recent scientific evidence strongly suggests is involved in the pathogenesis of RA.”

Orphagen’s award is based on fundamental discoveries concerning regulation of a new class of helper T lymphocytes, the Th-17 cell, that has a critical regulatory and effector role in the immune response. Th-17 cells have been implicated in several forms of autoimmune and inflammatory disease, including IBD, psoriasis, multiple sclerosis, steroid-resistant asthma, and rheumatoid arthritis.

Orphagen's grant funding derives from the SBIR (Small Business Innovative Research) program that supports exclusively small businesses that are majority-owned by individuals. The program is highly competitive, and fewer than 20% of proposals ultimately receive funding. NIAMS is an institute of the NIH, which is in turn the premier funding source for innovative biomedical research in the U.S.

Contact: Scott Thacher

Phone: (858) 481-6191

e-mail: smt@orphagen.com

Orphagen Pharmaceuticals, 11494 Sorrento Valley Road, San Diego, CA 92121