January 9, 2008

Rigel Announces Initiation of Phase 1 Clinical Trial of R348 for Rheumatoid Arthritis, Psoriasis and Other Immune Disorders

SOUTH SAN FRANCISCO, Calif., Jan. 9 /PRNewswire-FirstCall/ -- Rigel Pharmaceuticals, Inc. (Nasdaq: RIGL) announced today that it has begun enrolling patients in a Phase 1 study to evaluate the safety and tolerability of R348, an orally available, potent inhibitor of Janus Kinase 3 (JAK3), as a potential treatment for patients with rheumatoid arthritis (RA), psoriasis and other immune disorders. In preclinical studies, R348 was shown to be effective in reducing arthritic symptoms, bone destruction and swelling. It has also shown efficacy in models of psoriasis and transplant rejection. This is Rigel's fourth novel product candidate in clinical trials.

"R348 enters the clinic at a time when Rigel's product portfolio is demonstrating its potential contribution to the field of immunology," said Donald G. Payan, M.D., executive vice president and chief scientific officer at Rigel. "With R348 targeting T-cells and our oral syk kinase inhibitor, R788, targeting B-cells and other immune cells, Rigel has mounted a comprehensive assault on autoimmune disorders," he added.

This study will evaluate the safety and pharmacokinetics of R348 in young, healthy males using a double blind, placebo controlled, single dose and multiple rising doses of R348. Results are expected in mid-2008.

JAK3 in RA and Other Immune Disorders

RA affects approximately 1% of the population worldwide -- approximately 2.1 million Americans -- and is a debilitating and degenerative autoimmune disease. Psoriasis affects approximately 7.5 million in the U.S. and an estimated 125 million worldwide, and is a lifelong skin disease. About 10-30% of patients with psoriasis also develop psoriatic arthritis, which causes pain, swelling and stiffness of the joints. These diseases are mediated by activated T-cells, which rely on JAK3 signaling.

Current treatments for these diseases include steroids, methotrexate and various injectable biologic agents. Rigel's product candidate, R348, is believed to be orally bio-available and may provide an attractive alternative or supplement to currently used agents.

R348 is also being studied as a potential treatment for transplant rejection and graft vs. host disease.

About Rigel (http://www.Rigel.com)

Rigel is a clinical-stage drug development company that discovers and develops novel, small-molecule drugs for the treatment of inflammatory/autoimmune diseases and cancer, as well as viral and metabolic diseases. Our goal is to file one new investigational new drug (IND) application in a significant indication each year. Rigel has achieved this goal every year since 2002. Our pioneering research focuses on intracellular signaling pathways and related targets that are critical to disease mechanisms. Rigel's productivity has resulted in strategic collaborations with large pharmaceutical partners to develop and market our product candidates. Rigel has product development programs in inflammatory/autoimmune diseases such as rheumatoid arthritis, thrombocytopenia and asthma, as well as in cancer.

This press release contains "forward-looking" statements, including statements related to the potential efficacy and commercial potential of R348 and Rigel's plans to pursue further clinical development thereof. Any statements contained in this press release that are not statements of historical fact may be deemed to be forward-looking statements. Words such as "believes," "plans," "potential," and similar expressions are intended to identify these forward-looking statements. There are a number of important factors that could cause Rigel's results to differ materially from those indicated by these forward-looking statements, including risks associated with the timing and success of clinical trials and the commercialization of product candidates, potential problems that may arise in the clinical testing and approval process and Rigel's need for additional capital, as well as other risks detailed from time to time in Rigel's SEC reports, including its Form 10-Q for the quarter ended September 30, 2007. Rigel does not undertake any obligation to update forward-looking statements.

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