

October 9, 2002

## Xencor Receives Advanced Technology Program Grant For Safer Protein Therapeutics

Monrovia, CA – October 9, 2002 – Xencor today announced that it has been awarded a \$2 million Advanced Technology Program grant from the National Institute of Standards and Technology to support the discovery of safer and more effective protein therapeutics. The three-year federal grant, titled "Rational Design of Non-immunogenic Proteins," supports the development of Xencor's ImmunoPDA<sup>™</sup> technology to create new, noimmunogenic proteins optimized for therapeutic use and to eliminate immunogenicity from known protein drugs.

The promise of biotherapeutics is threatened by the potential for immune rejection of the administered protein drug, called immunogenicity. Adverse immunogenic responses to protein therapeutics occur not only in candidates during late stage clinical trials, but even in products that have already been on the market for several years, such as interferon beta and erythropoietin. Adverse immune responses can both reduce a drug's efficacy and cause serious adverse reactions such as neutralizing antibodies or allergic shock. There are no standard methods for eliminating protein immunogenicity, and current approaches to eliminate it lack a rational basis. These current approaches also have difficulty maintaining protein function and efficacy.

"With support from this Advanced Technology Program grant, Xencor is overcoming immunogenicity obstacles by developing the ImmunoPDA<sup>™</sup> platform, the first in silico method for rational deimmunizationsaid Bassil Dahiyat, Ph.D., President and Chief Executive Officer of Xencor. "We combine the entire knowledgebase of immunogenicity determinants with our proprietary Protein Design Automation (PDA) technology to identify specific protein regions that elicit immune responses and replace them with rationally designed protein segments that enhance protein function and stability. The result is the generation of biotherapeutics with optimized pharmacology and lower cost that are not recognized as foreign by the human immune system. We also are using ImmunoPDA<sup>™</sup> technology to reduce immune responses against currently marketed biotherapeutic's.

About the Protein Design Automation platform

Xencor's PDA technology is the first method to combine advanced computational methods, high performance computing and experimental screening for protein optimization and sequence design. Xencor uses the information embedded in protein structure to optimize the function of a protein including its activity, binding affinity and specificity, stability, expression level, and potency.

## About the Advanced Technology Program

The Advanced Technology Program, managed by the National Institute of Standards and Technology, provides cost-shared funding to industry for high-risk R&D projects with the potential to spark important, broad-based economic benefits for the United States. The awards are made on the basis of a rigorous peer-reviewed selection process. For more information, consult the ATP web site, <u>www.atp.nist.gov</u>.

## About Xencor

Xencor discovers and develops protein and small molecule therapeutics using its proprietary rational protein design and chemical biology platforms. Xencor's platforms apply high performance computing and advanced cell biology to rapidly discover drugs with novel mechanisms and improved safety and efficacy. Xencor is a privately held biopharmaceutical company located in Monrovia, CA. Additional information is available at <u>www.xencor.com</u>.