

## **Elixir Pharmaceuticals Announces Issuance of SIRT Patent Covering Development of New Therapies Based on Breakthrough Science**

### **Major Disease Applications Include Type 2 Diabetes and Obesity**

CAMBRIDGE, Mass.--([BUSINESS WIRE](#))-- Elixir Pharmaceuticals, Inc., announced today issuance of U.S. Patent No. 7,351,542, which covers the discovery of new and existing chemical entities that modulate the activity of a human sirtuin, SIRT 2. Elixir's rights to this patent were made possible through an exclusive license.

Sirtuins are a class of enzymes believed to play a significant role in diseases of aging, including type 2 diabetes and obesity. SIRT 2 is one of the seven human SIRT (or sirtuin) enzymes. Elixir co-founder Dr. Lenny Guarente of MIT and others have shown that the down-regulation of SIRT 2 elicits positive effects on metabolism. Therefore, pharmaceutical compounds that block the activity of this enzyme could have clinical utility to treat a range of metabolic diseases, such as diabetes and obesity. This new patent adds to Elixir's broad portfolio of issued patents and patent applications related to the development of sirtuin-based therapeutics.

"We are pleased to announce the granting of this important patent, which further extends our leadership position in the SIRT field," William K. Heiden, Elixir's President and Chief Executive Officer stated. "Our portfolio includes not only broad issued and filed patents such as this new patent, but also positions having specific composition claims covering pharmaceutical compounds which are modulators (both activators and inhibitors) of key sirtuin enzymes and utility in major disease categories. This newly issued patent is an important addition to our broader intellectual property estate supporting the development of SIRT therapeutics."

"Elixir has been involved in the field of SIRT for eight years. Our team has built an unmatched knowledge base regarding SIRT biology and enzymology. Much of the earlier SIRT research focused on SIRT 1, and has developed to a state where we have compounds that both increase the activity of the enzyme, as well as inhibitors that block the enzyme's activity," commented Peter S. DiStefano, Ph.D., Chief Scientific Officer of Elixir Pharmaceuticals. "Elixir and our collaborators have now begun to uncover the significant potential of modulating SIRT 2, and this newly issued patent based on work from one of our collaborators is a testament to the progress being made."

### **About Elixir Pharmaceuticals**

Elixir is a pharmaceutical company focused on the discovery, development and commercialization of novel pharmaceuticals for the treatment of metabolic diseases such as diabetes and obesity. The Company's scientific founders identified that modulation of specific genes can slow the aging process and increase longevity. Elixir is developing small molecule drugs that mimic these longevity responses and these drugs will be used to treat a range of age-related diseases, including the major metabolic

diseases. In addition to modulators of SIRT, the Company is developing an oral ghrelin antagonist for the treatment of metabolic disease. Elixir is also developing EX-1314, an oral drug being developed for the treatment of type 1 diabetic gastroparesis. Finally, the Company has a late-stage product for the treatment of type 2 diabetes in a final phase III trial in the U.S., with NDA filing expected in 2009.

### **About Our Sirtuin Development Program**

Building upon the Company's knowledge of the regulation of aging and metabolism, Elixir Pharmaceuticals has developed a leadership position in the field of sirtuins, or SIRT, a class of seven naturally occurring human enzymes, known to affect the storage and use of energy in cells. Elixir Pharmaceuticals believes that sirtuin modulators, compounds which increase or decrease the activity or the amount of sirtuin enzymes, may have potential clinical utility in numerous, large pharmaceutical markets with unmet medical needs such as metabolic disease, cancer and neurodegenerative diseases. Elixir Pharmaceuticals has an extensive intellectual property position with regards to screening, chemical composition of matter and utility claims for sirtuin modulators.

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