

Public release date: 1-Mar-2010

Contact: Aaron Lohr

alohr@endo-society.org

240-482-1380

The Endocrine Society

## Hormone thought to slow aging associated with increased risk of cancer death

Chevy Chase, MD— According to a new study accepted for publication in The Endocrine Society's *Journal of Clinical Endocrinology & Metabolism* (JCEM), older men with high levels of the hormone IGF-I (insulin-like growth factor 1) are at increased risk of cancer death, independent of age, lifestyle and cancer history.

IGF-I is a protein hormone similar in structure to insulin and is regulated in the body by growth hormone (GH). Levels of GH and IGF-I decline progressively with age in both men and women and this drop is thought to be related to deteriorating health conditions found with advanced age. In an attempt to combat aging some people use GH as its actions elevate IGF-1. This study however showed that older men who had higher levels of IGF-I were more likely to die from a cancer-related cause in the following 18 years than men with lower levels.

"This is the first population-based study to show an association of higher IGF-I levels with increased risk of a cancer-related death in older men," said Gail Laughlin, PhD, of the University of California San Diego, and corresponding author of the study. "Although the design of this study does not explicitly show that the higher IGF-I levels caused the cancer death, it does encourage more study as well as a reexamination of the use of IGF-I enhancing therapies as an anti-aging strategy."

In this study researchers used data on 633 men aged 50 and older from the Rancho Bernardo Study, a population-based study of healthy aging. Study participants took part in a research clinic examination between the years of 1988 and 1991 where their blood was obtained and IGF-1 was measured. All participants had their vital status followed through July 2006. Researchers found that men in this study who had IGF-I levels above 100 ng/ml had almost twice the risk of cancer death in the following 18 years than men with lower levels.

"In this study, the increased risk of cancer death for older men with high levels of IGF-I was not explained by differences in age, body size, lifestyle or cancer history," said Jacqueline Major,



PhD, lead author on the study, now at the National Cancer Institute. "If these results are confirmed in other populations, these findings suggest that serum IGF-I may have potential importance as a biomarker for prognostic testing."

###

Other researchers working on the study include: the Principal Investigator and founder of the Rancho Bernardo Study, Elizabeth Barrett-Connor; and Donna Kritz-Silverstein and Deborah Wingard of the University of California, San Diego.

The article, "Insulin-like Growth Factor-I (IGF-I) and Cancer Mortality in Older Men," will appear in the March 2010 issue of JCEM.

Founded in 1916, The Endocrine Society is the world's oldest, largest and most active organization devoted to research on hormones and the clinical practice of endocrinology. Today, The Endocrine Society's membership consists of over 14,000 scientists, physicians, educators, nurses and students in more than 100 countries. Society members represent all basic, applied, and clinical interests in endocrinology. The Endocrine Society is based in Chevy Chase, Maryland. To learn more about the Society and the field of endocrinology, visit our site at www.endo-society.org.