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# HIGHER AND LOWER LEVELS OF SERUM ALANINE AMINOTRANSFERASE WITHIN CURRENT RANGE IN THE ELDERLY ARE ASSOCIATED WITH ALL CAUSE MORTALITY

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**Background:** Serum alanine aminotransferase (ALT) levels below and above normal range has been found to serve as a marker of liver injury and to predict all-cause mortality. The need to adjust the normal range by age, gender, or other parameters remains unclear. The current normal range of serum ALT in Israel is 0-34 IU/L for women and 0-45 IU/L for men.

Aim: We aimed to test the applicability of the current normalrange values of ALT in the elderly.

**Design:** A retrospective design was used. The study population consisted of community-dwelling individuals aged ≥65 years who were tested for serum ALT in 2002 at a large health management organization and followed until end-December 2012.

Methods: Data were collected on demographics, laboratory tests,

co-morbidities, and mortality.

**Results:** The population included 49,634 subjects (59% women, mean age 83.2±6.3 years). ALT levels in the range of 16-25 IU/L were associated with the lowest mortality (HR=1), and values of <16 IU/L and >25 IU/L (unadjusted) were associated with higher mortality risk, yielding a U-shaped pattern.

Conclusions: Very low and very high levels of serum ALT within current normal range are associated with an increased risk of death in community-dwelling individuals ≥65 years old.

#### **Biography**

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