

# Interleukin-6 may boost prediction of obesity-related cancers

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In patients with newly diagnosed type 2 diabetes, baseline interleukin-6 (IL-6) levels may enhance prediction of new-onset obesity-related cancers, according to a study scheduled to be presented at the annual

meeting of the European Association for the Study of Diabetes, being held from Sept. 9 to 13 in Madrid.

Mathilde Dahlin Bennetsen, from the Steno Diabetes Center Odense at Odense University Hospital in Denmark, and colleagues explored whether IL-6, tumor necrosis factor-alpha (TNF- $\alpha$ ), and high-sensitivity C-reactive protein (hsCRP) can serve as predictive biomarkers for obesity-related cancers in patients recently diagnosed with type 2 [diabetes](#). The analysis included 6,466 individuals followed for a median 8.8 years.

The researchers found that baseline IL-6 levels were associated with a higher subsequent obesity-related [cancer](#) risk. A one standard deviation increase in log-transformed IL-6 was tied to a 19 percent increased risk for obesity-related cancers in an adjusted analysis (hazard ratio, 1.19; 95 percent confidence interval, 1.07 to 1.31). There was no strong association seen between TNF- $\alpha$  (hazard ratio, 1.08; 95 percent confidence interval, 0.98 to 1.19) or hsCRP (hazard ratio, 1.08; 95 percent confidence interval, 0.97 to 1.21) and obesity-related cancers. In 4,335 participants with available smoking habit information, similar associations were seen. The addition of IL-6 to a cancer prediction model conferred a small but statistically significant increase in the C-index, from 0.685 to 0.693, whereas the addition of hsCRP or TNF- $\alpha$  did not result in improvements in model performance.

"Understanding which individuals are at higher risk for these cancers would allow for more targeted and effective monitoring and early detection, potentially improving outcomes through earlier intervention and personalized treatment," Bennetsen said in a statement.

**More information:** [Abstract](#)  
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