

DIABETES

Long-term use of insulin glargine might increase the risk of breast cancer

Use of insulin glargine for >5 years might increase the risk of breast cancer in women with type 2 diabetes mellitus (T2DM), especially if they have previously been treated with other insulins before starting to take insulin glargine.

Concern exists that the use of insulin glargine is associated with an increased risk of cancers, including breast cancer, in patients with T2DM, but the evidence for this link is limited. Suissa and co-investigators studied a large cohort of insulin-treated women with T2DM to assess the risk of breast cancer associated with the use of insulin glargine compared with that for other insulins.

Of 15,227 women, including 4,579 women treated with insulin glargine and 10,648 age-matched women treated with other insulins, 246 developed breast cancer during up to 8 years of follow-up. After adjustment for a number of covariates, the use of insulin glargine for up to 5 years was not associated with an

increased risk of breast cancer. However, a trend towards an increased risk of breast cancer with insulin glargine was observed when the drug was used for more than 5 years. More particularly, the risk was significantly increased among women who had been receiving other insulins before starting insulin glargine.

“This potential cancer risk with long-term use of insulin glargine, which needs to be confirmed with other studies and thus should be interpreted with caution, must be weighed against advantages insulin glargine may have over other insulins in terms of patient preferences and hypoglycemia risk,” concludes lead researcher Samy Suissa of McGill University, Montreal.

Carol Wilson

Original article Suissa, S. *et al.* Long-term effects of insulin glargine on the risk of breast cancer. *Diabetologia* doi:10.1007/s00125-011-2190-9