

## ASSOCIATION OF DIPEPTIDYL PEPTIDASE 4 INHIBITORS WITH RISK OF METASTASES IN PATIENTS WITH TYPE 2 DIABETES AND BREAST, PROSTATE OR DIGESTIVE SYSTEM CANCER

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### AIMS

Experimental and animal studies have supported the hypothesis that dipeptidyl peptidase-4 inhibitors (DPP-4i) may accelerate tumor metastasis. The aim was to analyze the relationships between DPP-4i therapy with risk of metastases in type 2 diabetes patients with breast, prostate and digestive organ cancers.

### METHODS

Type 2 diabetes patients with first diagnoses of breast, prostate or digestive organ cancer were selected in general and internal medicine practices (Disease Analyzer Germany: 01/2008-12/2014). Propensity score matching between DPP-4i users and non-users was carried out for age, sex, diabetes duration, and metformin use. Time-dependent Cox regression models were used to estimate hazard ratios (HR) for metastases further adjusting for HbA1c, body mass index, comorbidity and co-therapy with glucose-lowering drugs (3-4years follow-up).

### RESULTS

668 patients with newly diagnosed breast cancer, 906 with prostate cancer and 908 with digestive organ cancer were analyzed. In Cox regression, use

of DPP-4i was not associated with an increased risk of metastases in patients with breast (adjusted HR, 95%CI: 1.00, 0.49-2.02), prostate (0.98, 0.54-1.77) or digestive organ cancers (0.97, 0.57-1.66).

### CONCLUSIONS

This first observational study in patients with type 2 diabetes and breast, prostate or digestive organ cancer found no increased risk of metastases in DPP-4i users.

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If you would like to read any of the studies in its entirety, please, contact us to obtain the full version of a publication. Also, our research director is at your disposal if you have any further questions.

Thank you for your interest!