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## Data in Brief





#### Data Article

# Circulating growth factors data associated with insulin secretagogue use in women with incident breast cancer



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#### ABSTRACT

Oral drugs stimulating insulin production may impact growth factor levels. The data presented shows the relationship between pre-existing insulin secretagogues use, growth factor profiles at the time of breast cancer diagnosis and subsequent cancer outcomes in women diagnosed with breast cancer and type 2 diabetes mellitus. A Pearson correlation analysis evaluating the relationship between growth factors stratified by diabetes pharmacotherapy and controls is also provided.

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TGF VEGF Insulin secretagogue Breast cancer Diabetes Cancer outcomes Cancer prognosis

#### **Specifications Table**

| Subject area<br>More specific sub-<br>ject area | Clinical and Translational Research<br>Biomarker Research, Cancer Epidemiology  |
|---|---|
| Type of data                                    | Tables  |
| How data was acquired                           | Tumor registry query was followed by vital status ascertainment, and medical records review   |
| ·   | Luminex®-based quantitation of growth factors (epidermal growth factor, fibroblast growth factor 2, vascular endothelial growth factor, hepatocyte growth factor, platelet-derived growth factor BB, and tumor growth factor-β) from plasma samples was conducted.  |
|   | A Luminex®200 <sup>TM</sup> instrument with Xponent 3.1 software was used to  |
|   | acquire all data  |
| Data format                                     | Analyzed  |
| Experimental factors                            | Growth factors were determined from the corresponding plasma samples collected at the time of breast cancer diagnosis   |
| Experimental<br>features                        | The dataset included 97 adult females with diabetes mellitus and newly diagnosed breast cancer (cases) and 194 matched controls (breast cancer only). Clinical and treatment history were evaluated in relationship with cancer outcomes and growth factor profiles. A growth factor correlation analysis was also performed. |
| Data source<br>location                         | United States, Buffalo, NY - 42° 53' 50.3592"N; 78° 52' 2.658"W   |
| Data accessibility                              | The data is with this article   |

#### Value of the data

- This dataset shows the observed relationship between baseline insulin secretagogues use, circulating growth factor levels at the time of cancer diagnosis and breast cancer outcomes.
- Reported data may guide future studies evaluating pharmacotherapy-induced growth factor modulation in breast cancer.
- These observations can assist future study design in evaluating the relationship between diabetes pharmacotherapy safety and circulating growth factors levels at the time of cancer diagnosis.

#### 1. Data

Reported data represents the observed association between use of insulin secretagogues preceding breast cancer and the growth factor profiles at the time of cancer diagnosis in women with diabetes mellitus (Table 1). Data in Table 2 includes the observed correlations between growth factors stratified by type 2 diabetes mellitus pharmacotherapy and controls. C-peptide correlation with each of the studied growth factors is presented in Table 2, however details regarding its determination from plasma, association with cancer outcomes and insulin secretagogues use has been already reported by us [2].

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