# SENG 474: Data Mining - Group Project

## **Group Formation**

#### Team Members (Undergraduates)

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### **Project Description**

Using the National Cancer Institute's (NIH) Surveillance, Epidemiology, and End Results Program (SEER) to train the potential algorithm, we plan to create a predictive model observing survival outcomes of diabetic cancer patients taking metformin relative to those who are not [1]. Metformin has previously shown to have antitumoral and protective qualities in several cancers including those with primary sites in the head and neck [2]. This project will likely be carried out utilizing the SEER\*stat program to access the database(s) information as well as the Tensorflow neural network platform.

#### References:

- 1. National Cancer Institute's (NIH) Surveillance, Epidemiology, and End Results Program (SEER). https://seer.cancer.gov/
- 2. Lindsay, C., Kostiuk, M., Conrad, D., O'Connell, D. A., Harris, J., Seikaly, H., & Biron, V. L. (2019). Antitumour Effects of Metformin and Curcumin in Human Papillomavirus Positive and Negative Head and Neck Cancer Cells. *Molecular Carcinogenesis*, 1-14. doi:10.1002/mc.23087