

# Poster 5: Diabetes mellitus mortality amongst endometrial cancer patients: Analysis of the SEER database

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Topic

Endometrial

## Objectives

Given frequent comorbidity, this study examines the relationship between diabetes-related mortality and demographic risk factors in endometrial cancer (EC) patients.

### Methods

Endometrial cancer (EC) patients in the Surveillance, Epidemiology, and End Results (SEER) incidence database (2000-2021, SEER\*Stat version 8.4.3) with a primary outcome of death from diabetes mellitus (DM) were analyzed. Factors evaluated included age, race, ethnicity, cancer stage, marital status, income, and population density. Chi-square tests were used to assess demographic associations, and risk ratios were calculated to quantify the relative risk of DM-related mortality across subgroups.

### Results

Of the 263,361 EC patients, 1,719 died from DM-related causes. The majority were ages 65-74 (58%), White (79%), had localized cancer (49%), non-Hispanic (86%), unmarried (64%), earned \$60,000-\$79,999 per year (47%), and lived in metropolitan areas (58%). Chisquare testing showed significant associations between DM-related mortality and age, race, cancer stage, marital status, and population density (p< 0.05). Compared to the overall population of EC patients, those aged 75-84 had a 71% higher risk of DM-related mortality, Native Americans had 77% higher risk, unmarried individuals had 27% higher risk, and those with incomes under \$40,000 had 74% higher risk on a statistically significant level (p< 0.05) (Table 1).

### Conclusions

EC patients who are older, Native American, unmarried, or low-income face the highest risk of DM-related mortality. Proactive diabetes management tailored to these high-risk groups could enhance their survival. Prospective, multi-center studies are needed to unravel the mechanism of association between these demographic risk factors and diabetes-related mortality.

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