

Connection Between Diabetes Mellitus and Cancer Stage

Bailey, A and Davis, L

University of Arizona College of Pharmacy



Pharmacy



Abstract

- Hyperglycemia is correlated with poorer outcomes in cancer patients
- The purpose of this study was to look if there is a correlation between patients with diabetes mellitus (DM) and their diagnosed cancer stage.
- The results were 43.5% of DM patients had stage IV pancreatic cancer versus 51.1% of non-DM patients.
- Our conclusion is DM does not lead to more advanced staging of malignancy in pancreatic cancer.

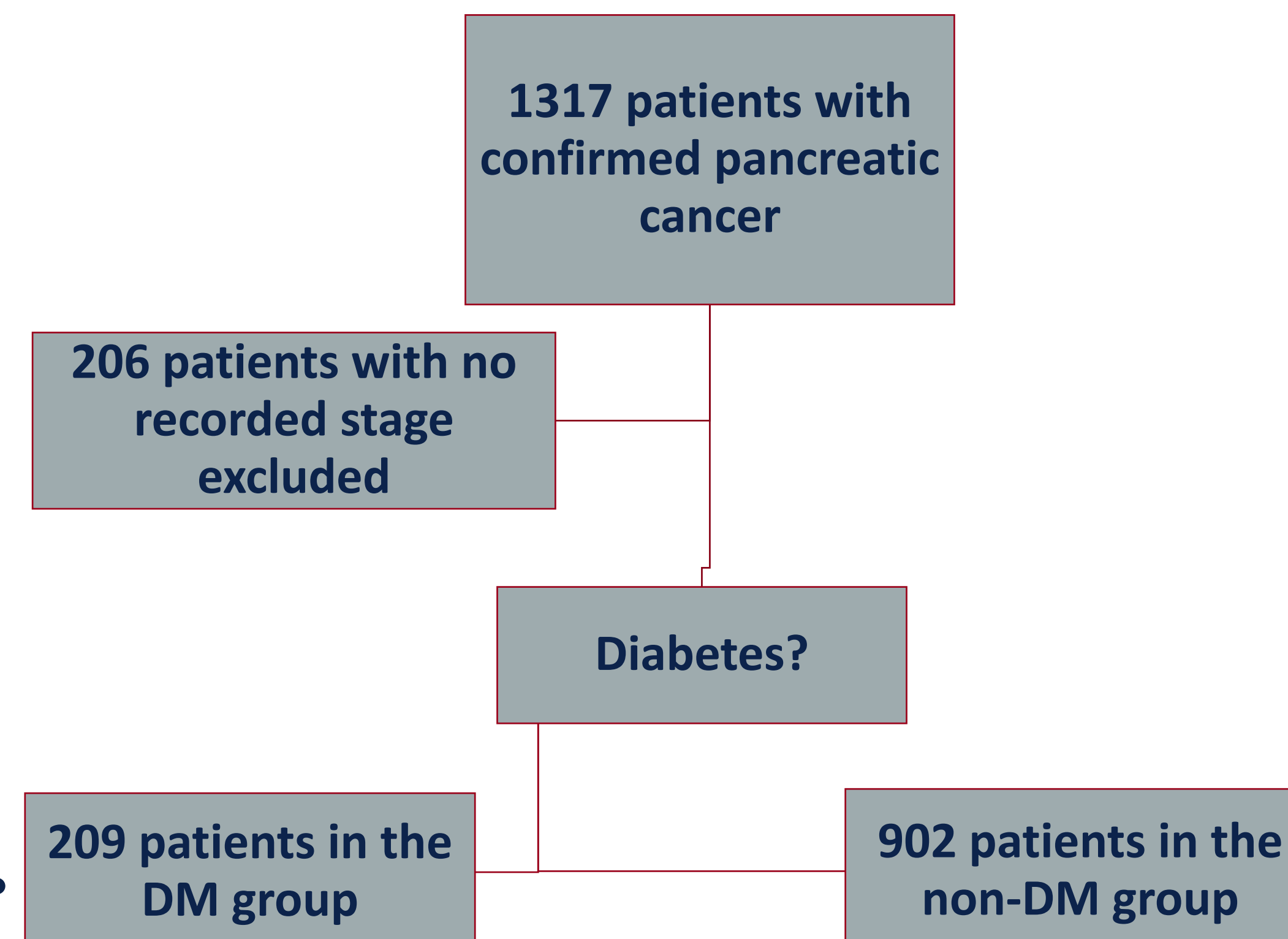
Methods



Methods (cont.)

- Retrospective data from 2005-2015 was collected from *The Hospital of the University of Pennsylvania*
- Included subjects needed to have a diagnosis of pancreatic adenocarcinoma that was previously untreated
- Subjects were excluded if they did not have a clinical stage listed
- Subjects were separated into the DM group if they had a known history of DM with at least 1 HgA1c value.
- Clinical stage rates between the two groups were compared.

Baseline Characteristics



Results

	Diabetes Group (n)	Non-Diabetes Group (n)	p-value
Stage I	15.8% (33)	16.0% (144)	0.6
Stage II	30.1% (63)	21.3% (192)	0.006
Stage III	10.5% (22)	11.6% (105)	0.07
Stage IV	43.5% (91)	51.1% (461)	0.049

Discussion

- The hypothesis that we would see a trend in higher staged malignancy in the DM group was not shown, and interestingly trended in the opposite direction.
- There are many confounding variables that should be considered in our study results. E.g. diabetic patients might be seeing health care providers more often, which could increase the chances of catching a pancreatic cancer diagnosis at an earlier stage.
- Conclusions from this study are limited because these results only reflect the proportion of stages at diagnosis, not the overall risk of developing pancreatic cancer

Conclusion

- Diabetic patients do not have an increased proportion of advanced staged pancreatic cancer. Further research needs to be done exploring this relationship between hyperglycemia and cancer risk.



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