

## Supplemental Online Content

Patrova J, Mannheimer B, Lindh JD, Falhammar H. Mortality in patients with nonfunctional adrenal tumors. *JAMA Intern Med*. Published online June 26, 2023.  
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**eFigure 1.** Overall survival by sex

**eFigure 2.** Overall survival by age

**eFigure 3.** Overall survival by adrenalectomy

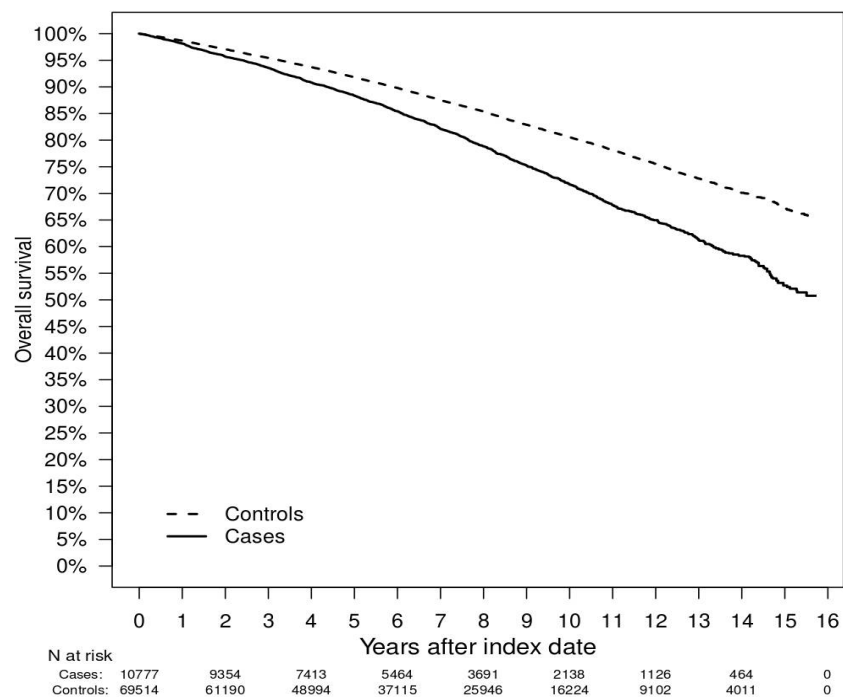
**eFigure 4.** Overall survival in sensitivity analyses

**eTable.** Potential confounders

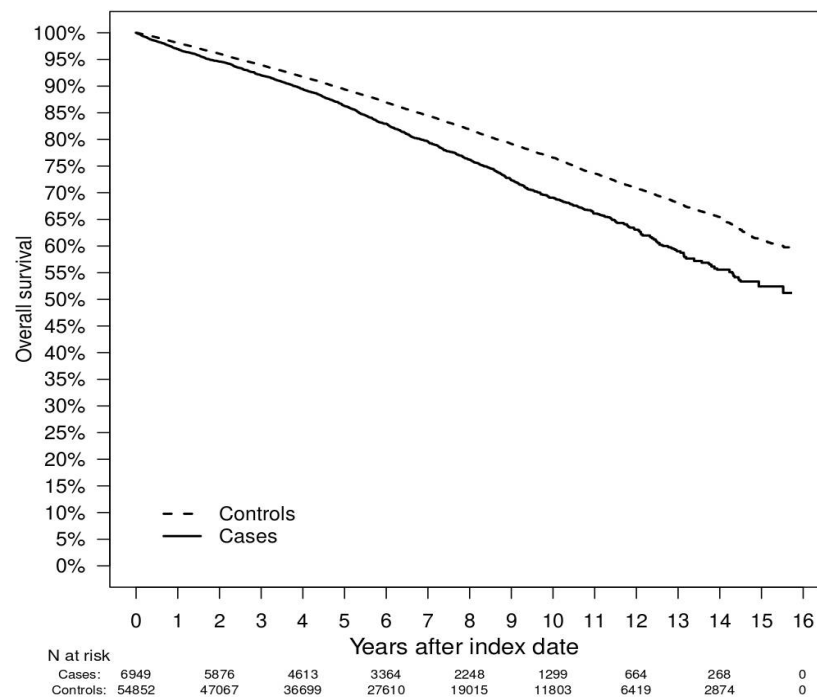
This supplemental material has been provided by the authors to give readers additional information about their work.

**eFigure 1. Overall survival by sex: Panel A- women, Panel B- men.** Kaplan-Meier survival curves after post-hoc analysis showing mortality in subgroups of the 17,726 individuals with non-functional adrenal adenomas compared to 124,366 controls, Cox-proportional hazard ratio analysis, adjusted for age and possible confounders,  $P < 0.001$ . All individuals with malignancy discovered within the first three months after the diagnosis of the non-functional adrenal adenoma have been excluded.

A:

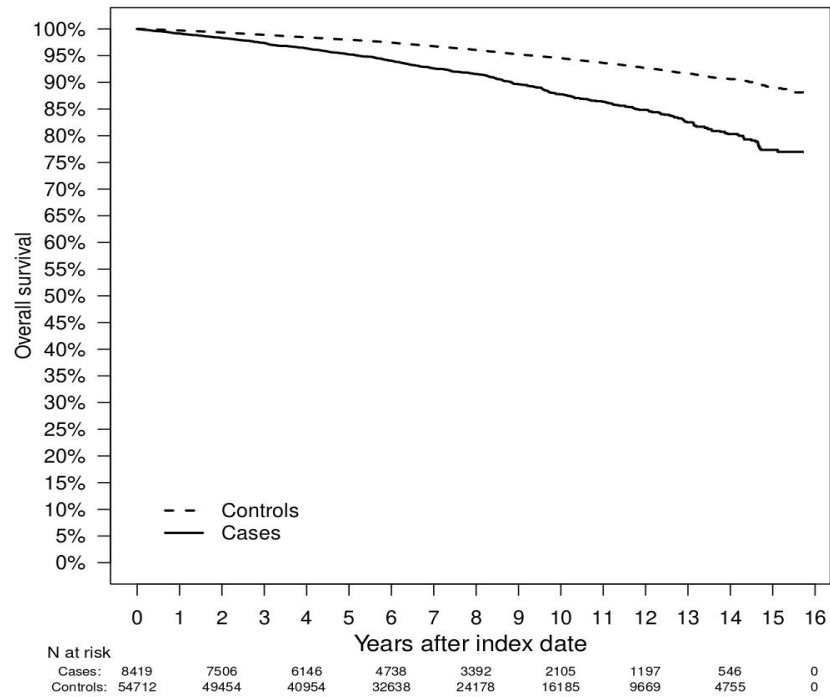


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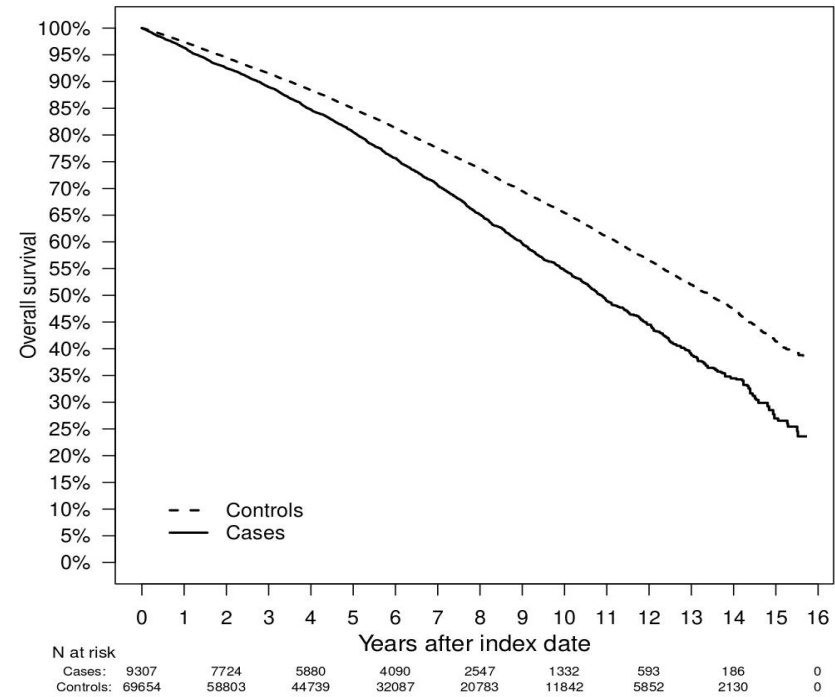


**eFigure 2. Overall survival by age: Panel A: < 65-year-old, Panel B: ≥ 65-year-old.** Kaplan-Meier survival curves after post-hoc analysis showing mortality in subgroups of the 17,726 individuals with non-functional adrenal adenomas compared to 124,366 controls, Cox-proportional hazard ratio analysis, adjusted for age and possible confounders,  $P < 0.001$ . All individuals with malignancy discovered within the first three months after the diagnosis of the non-functional adrenal adenoma have been excluded.

A:

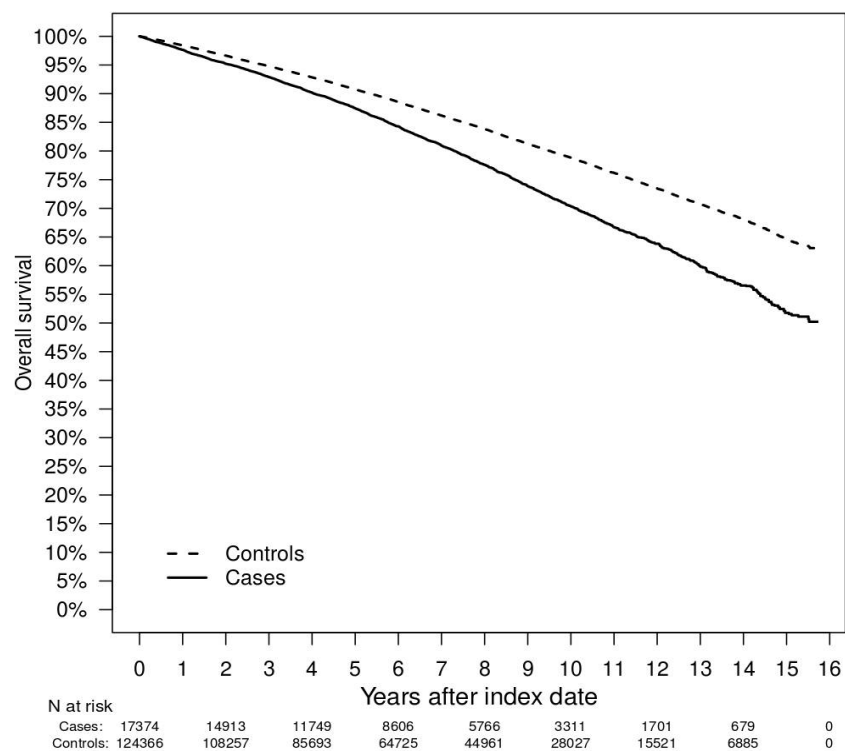


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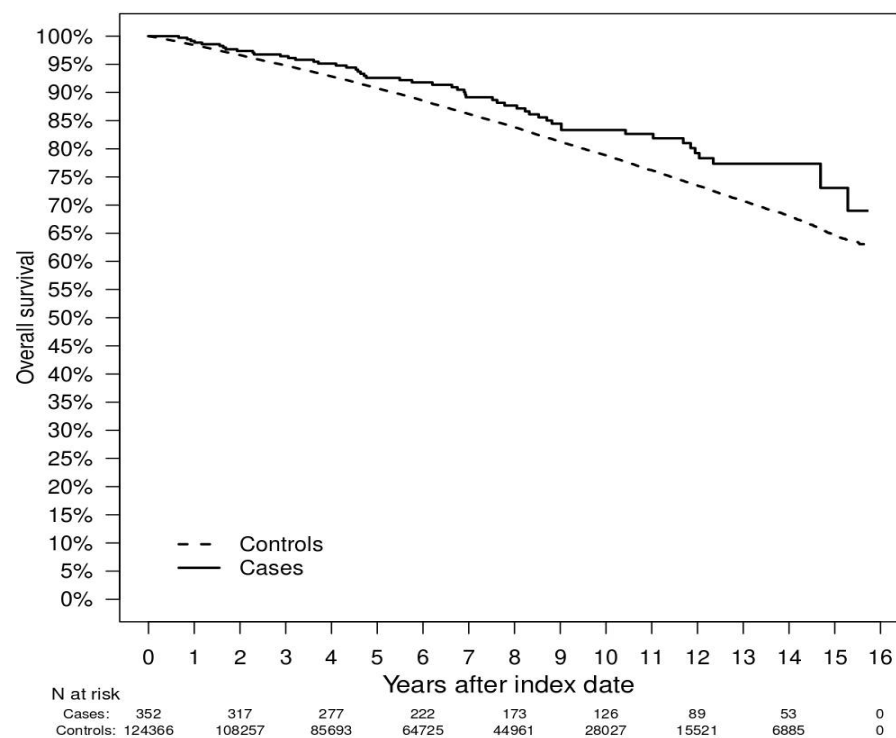


**eFigure 3. Overall survival by adrenalectomy: Panel A: no adrenalectomy, Panel B: adrenalectomy.** Kaplan-Meier survival curves after post-hoc analysis showing mortality in subgroups of the 17,726 individuals with non-functional adrenal adenomas compared to 124,366 controls, Cox-proportional hazard ratio analysis, adjusted for age and possible confounders, P-value in Panel A <0.001, P-value in Panel B = 0.03. All individuals with malignancy discovered within the first three months after the diagnosis of the non-functional adrenal adenoma have been excluded.

A:



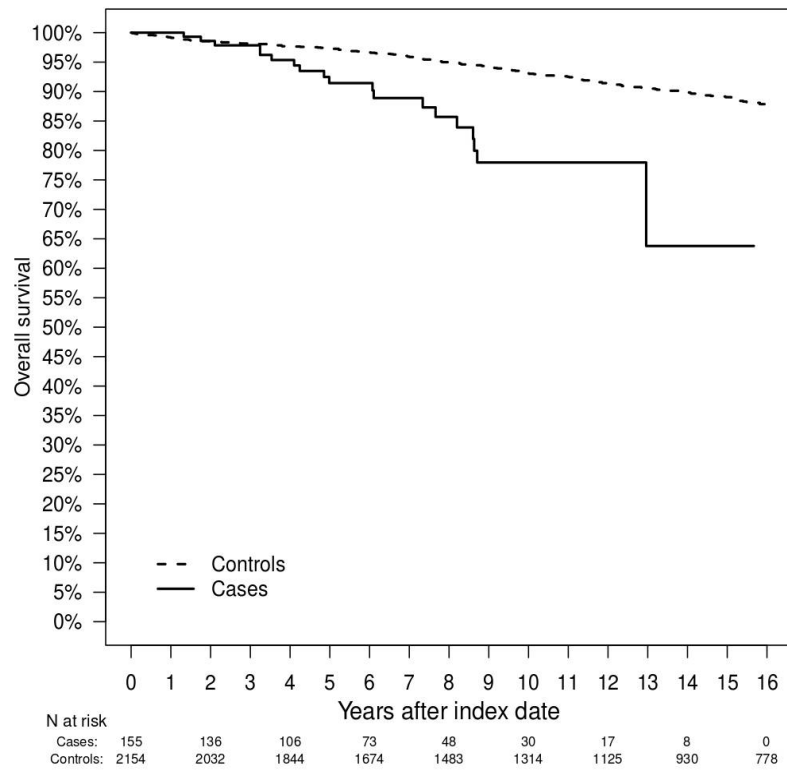
B:



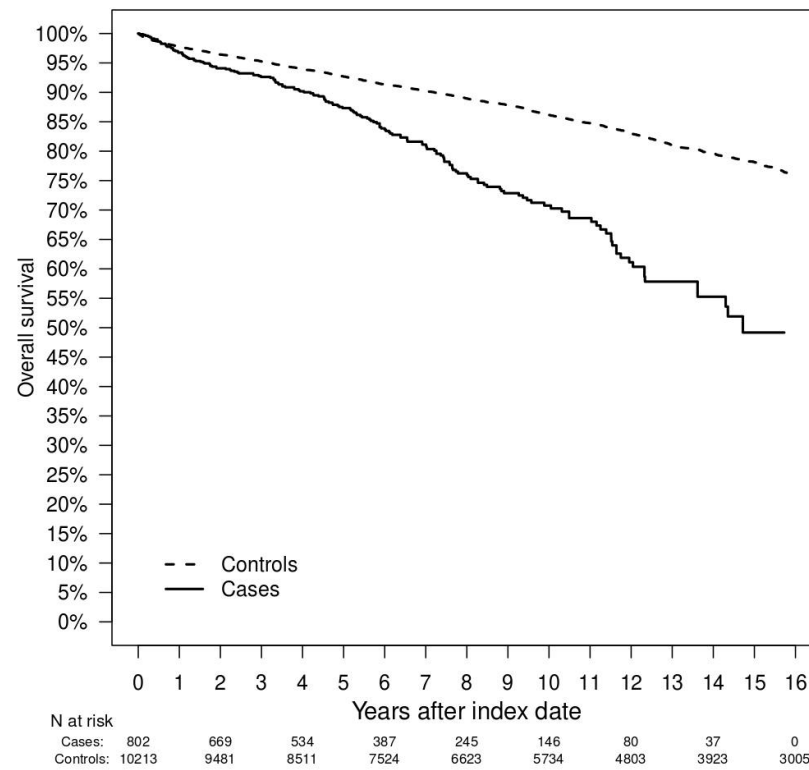
**eFigure 4. Overall survival in sensitivity analyses: Panel A: acute appendicitis, Panel B: gallbladder, biliary tract and**

**pancreas diseases.** Panel A: Kaplan-Meier survival curves after sensitivity analysis showing mortality in 155 individuals with appendicitis and non-functional adrenal adenomas compared to 2,154 controls with appendicitis. Panel B: Kaplan-Meier survival curves after sensitivity analysis showing mortality in 802 individuals with non-functional adrenal adenomas and gallbladder and/or biliary tract and/or pancreas diseases compared to 10,213 controls with gallbladder and/or biliary tract and/or pancreas disease. P-value in Panel A and B <0.001. All individuals with malignancy discovered within the first three months after the diagnosis of the non-functional adrenal adenoma have been excluded.

A:



B:



**eTable 1. Potential confounders**

<b>Confounder</b>	<b>Composite variables</b>	<b>ICD-10 code</b>
<b>Renal diseases</b>	Renal failure	N17-19
<b>Infections</b>	Sepsis Pneumonia Meningitis, encephalitis, brain abscess	A41 J18 G00 - G07
<b>Cardiovascular diseases</b>	Ischemic heart disease Heart failure Thromboembolism	I20-I25 I50 I802 and I26
<b>Gastrointestinal diseases</b>	Gallbladder, biliary tract and pancreas diseases Inflammatory bowel disease Liver failure / liver diseases	K80-K87  K51, K50 K70-77
<b>Cerebrovascular diseases</b>	Nontraumatic subarachnoid hemorrhage Nontraumatic intracerebral hemorrhage Other and unspecified nontraumatic intracranial hemorrhage Cerebral infarction Stroke, not specified as hemorrhage or infarction Sequelae of cerebrovascular disease	I60 I61 I62  I63 I64 I69
<b>Other diseases</b>	Chronic obstructive pulmonary disease / Pulmonary emphysema	J44 and/or J43
<b>Alcohol misuse</b>		E24.4, F10, G62.1, G72.1, I42.6, K29.2, K70, K86
<b>Socioeconomic factors</b>	Education: Preschool education Preschool class education Primary or lower secondary education Upper secondary education Bachelor's level education Master's level education Postgraduate education  Income (Disposable income for one person in SEK)  Unemployment (Number of days in unemployment)	
<b>Number of prolonged hospitalizations</b>	≥3 days hospitalization at least once	