

SUPPLEMENTAL MATERIAL

This appendix has been provided by the authors to give readers additional information about their work

Supplement to **Renin-Angiotensin-Aldosterone System Inhibitors and Survival in Patients Treated with Immune Checkpoint Inhibitors**

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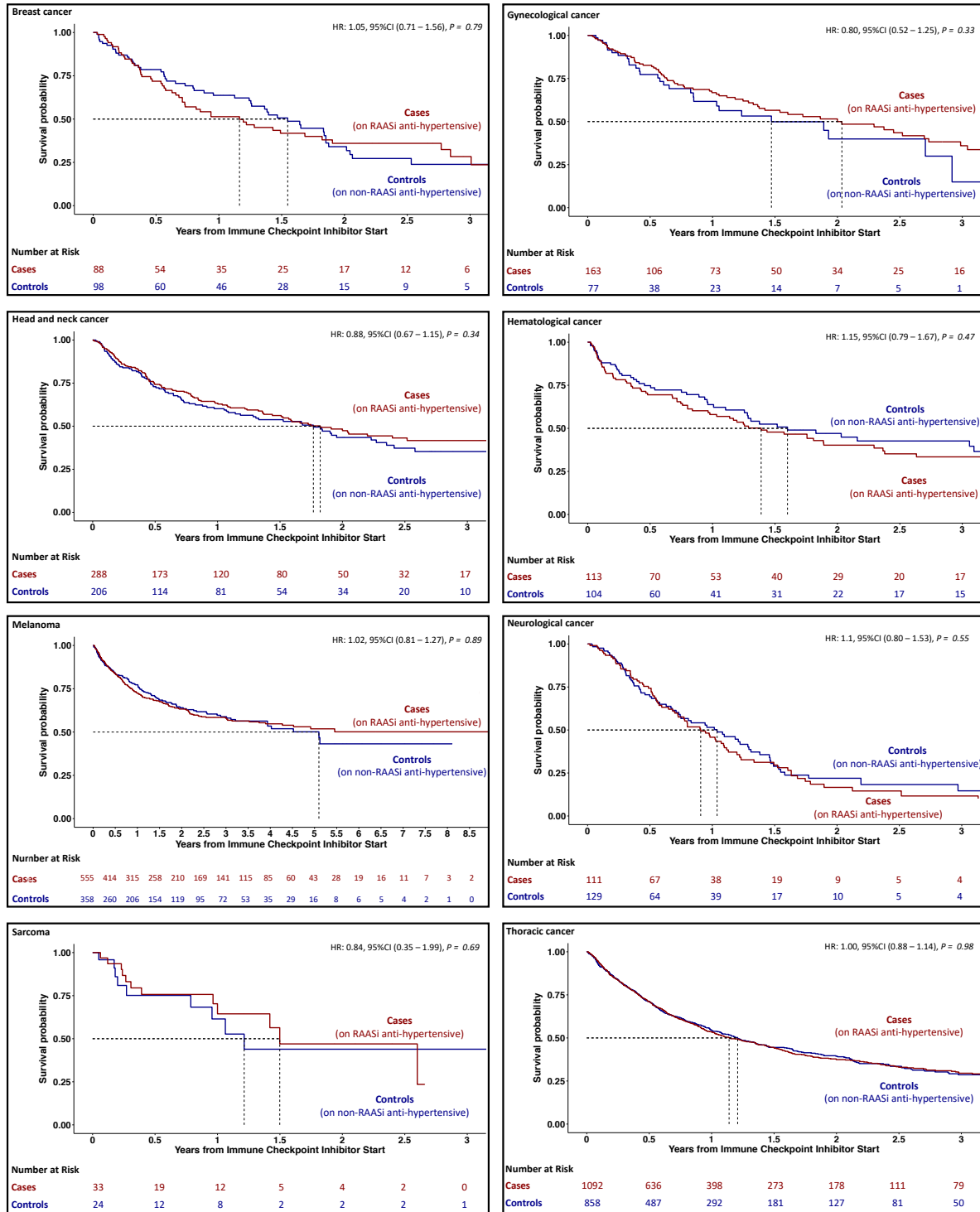
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Supplementary Table 1. Baseline characteristics of cases and controls. Cases: patients treated with a renin-angiotensin aldosterone system inhibitors for hypertension. Controls: patients treated with non- renin-angiotensin aldosterone system inhibitors for hypertension. Patients without available date of death were excluded.

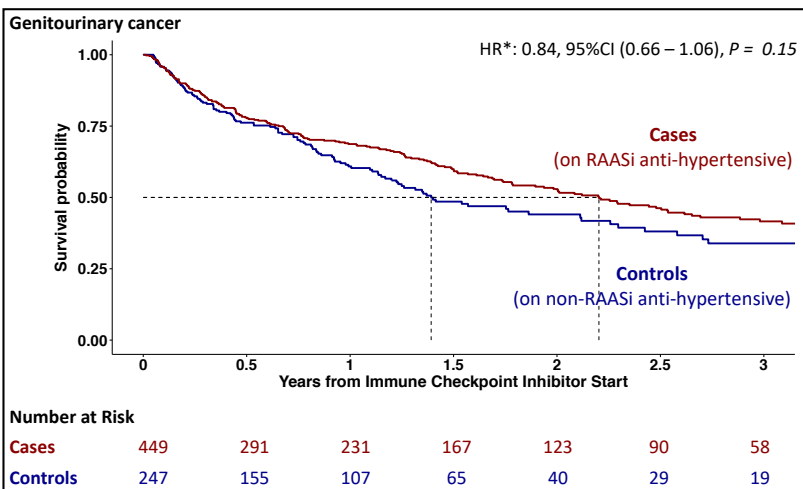
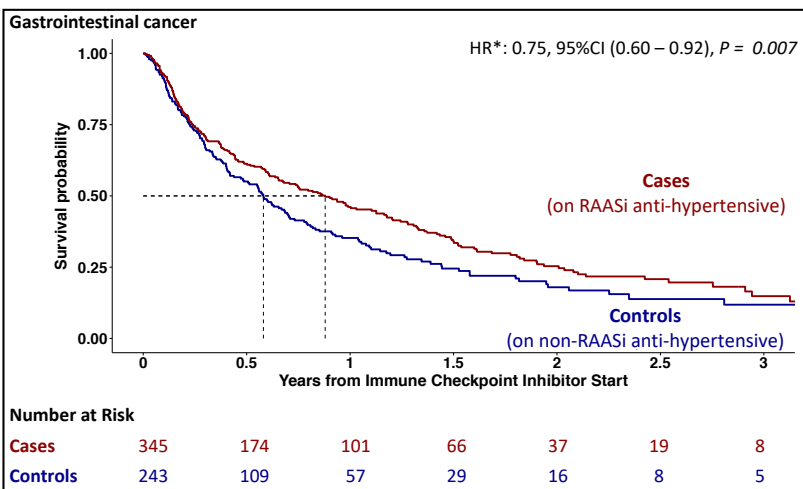
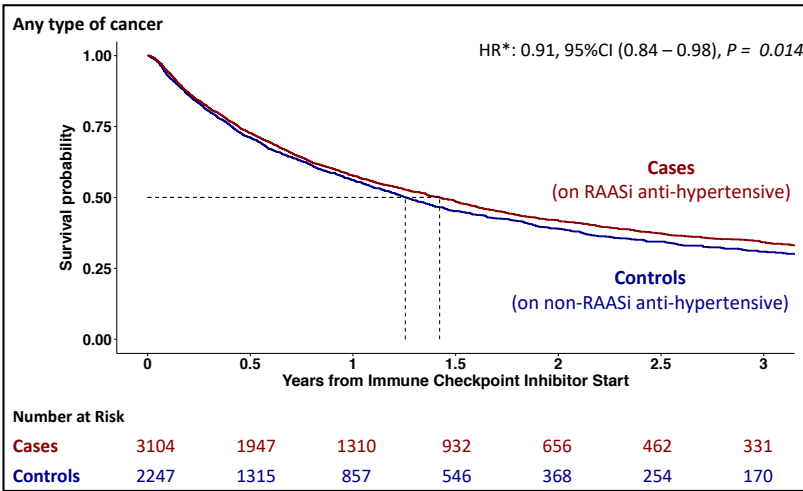
	Cases (N = 3,426)		Controls (N = 2,484)		P Value	
Demographic						
Sex – no. (%)						
Male	1,897	(61)	1,244	(55)	< 0.001	
Female	1,207	(39)	1,003	(46)		
Age – yrs mean. (SD)	68	(10)	66	(12)	< 0.001	
Race or ethnic group – no. (%)						
White	2,823	(93)	2,046	(93)	0.9	
Asian	77	(2.5)	60	(2.7)		
Black or African American	85	(2.8)	58	(2.6)		
Other	57	(1.9)	47	(2.1)		
Clinical variables – mean. (SD)						
Body mass index - kg/m ²	28.13	(6.11)	26.78	(5.74)	< 0.001	
Systolic blood pressure - mmHg	132.3	(19.05)	126.5	(17.91)	< 0.001	
Cancer types – no. (%)						
Breast	78	(2.6)	90	(4.1)	< 0.001	
Gastrointestinal	345	(12)	243	(11)		
Genitourinary	449	(15)	247	(11)		
Gynecological	150	(5.0)	68	(3.1)		
Head and Neck	262	(8.7)	189	(8.7)		
Hematological	100	(3.3)	91	(4.2)		
Melanoma	508	(17)	333	(15)		
Neurological	95	(3.2)	114	(5.3)		
Sarcoma	25	(0.8)	21	(1.0)		
Thoracic	1,987	(33)	773	(36)		
Cardiovascular risk factors – no (%)						
Diabetes mellitus	852	(27)	284	(13)		< 0.001
Smoking current or prior	1,183	(38)	913	(41)		0.062
Hyperlipidemia	1,923	(62)	1,047	(47)		< 0.001
Renal disease	604	(19)	279	(12)	< 0.001	
Cardiovascular medications – no. (%)						
Beta-blockers	1,729	(56)	1,651	(73)	< 0.001	
Calcium channel blockers	1,237	(40)	785	(35)	< 0.001	
Statins	1,900	(61)	917	(41)	< 0.001	
Aspirin	1,685	(54)	875	(39)	< 0.001	
Prior cancer therapy – no. (%)						
Anthracyclines	155	(5.0)	107	(4.8)	0.7	
5 fluorouracil	326	(11)	199	(8.9)	0.046	
Platin based therapy	1,264	(41)	939	(42)	0.4	

Immune checkpoint inhibitor type – no. (%)					< 0.001
<i>Monotherapy</i>					
Programmed death-ligand-1	446	(14)	261	(12)	
Cytotoxic-T-Lymphocyte associated protein 4	130	(4.2)	63	(2.8)	
Programmed death-protein 1	2,299	(74)	1,740	(77)	
<i>Combination therapy</i>					
Cytotoxic-T-Lymphocyte associated protein 4/Programmed death protein 1	229	(7.4)	183	(8.1)	
Number of cycles of ICI – no, (IQR)	5	(2 – 11)	5	(2 – 10)	0.2

Supplementary Figure 1. Kaplan Meier curves of the survival probability in each cancer type in the full cohort. (Results for any type of cancer, gastrointestinal and genitourinary are reported in the main manuscript)



Supplementary Figure 2. Kaplan Meier curves of the survival probability in all types of cancer, genitourinary and gastrointestinal, excluding those who died but no date of death available. *: Adjusted hazard ratios for age, gender, body mass index, congestive heart failure, diabetes, renal disease, liver disease and smoking.



Supplementary Figure 3. Kaplan Meier curves of the survival probability in Kaplan Meier curves of the survival probability in all types of cancer, genitourinary and gastrointestinal in the propensity score matched cohort. * Adjusted hazard ratios for age, gender, body mass index, congestive heart failure, diabetes, renal disease, liver disease and smoking.

