

Supplementary file

Title:

Sex differences in cancer mortality among solid organ transplant recipients

Authors:

Sarah S Jackson, Ruth M Pfeiffer, Erin Gardner, Mei-Chin Hsieh, Tabassum Insaf, Charles F Lynch, Bozena Morawski, Shuhui Wang, Kelly J Yu, and Eric A Engels

Table of Contents:

Supplemental Table 1. Cancer-specific mortality rates and male-to-female mortality ratios in transplant recipients and the general population among patients with localized stage cancer receiving treatment.....	2
Supplemental Table 2. Cancer-specific mortality male-to-female hazard ratios among transplant recipients by transplanted organ.....	3

Supplemental Table 1. Cancer-specific mortality rates and male-to-female mortality ratios in transplant recipients and the general population among patients with localized stage cancer receiving treatment^a

Cancer site	Cancer-specific mortality rate in transplant recipients (per 1,000 py)		Cancer-specific mortality rate in the general population (per 1,000 py)		Cancer-specific mortality HR (95% CI) _{Transplant^a}	Cancer-specific mortality HR (95% CI) _{GenPop^a}	Interaction <i>P</i> -value
	Male	Female	Male	Female			
Lip	22.0	9.3	6.4	6.0	2.19 (0.83, 5.78)	1.28 (0.91, 1.79)	0.313
Stomach	39.0	43.1	42.1	29.5	0.97 (0.36, 2.62)	1.43 (1.32, 1.55)	0.108
Colorectal	26.7	27.1	13.2	12.4	1.07 (0.71, 1.63)	1.24 (1.20, 1.29)	0.534
Anus	29.6	35.0	26.7	16.6	1.02 (0.47, 2.23)	1.76 (1.53, 2.01)	0.094
Liver (including intrahepatic bile duct)	166.5	107.4	115.9	118.2	1.86 (1.07, 3.25)	1.06 (1.01, 1.11)	0.085
Pancreas	175.9	162.2	125.4	118.3	0.45 (0.13, 1.54)	0.99 (0.90, 1.07)	0.809
Larynx	52.5	110.7	28.0	30.3	0.42 (0.18, 0.97)	0.89 (0.80, 0.99)	0.035
Lung	117.2	97.6	74.4	51.4	1.15 (0.91, 1.46)	1.38 (1.34, 1.43)	0.085
Melanoma of the skin	30.8	22.1	6.7	3.7	1.36 (0.88, 2.08)	1.60 (1.51, 1.70)	0.363
Urinary bladder	90.2	96.0	20.0	20.9	0.79 (0.51, 1.23)	1.03 (0.99, 1.07)	0.495
Kidney (including renal pelvis)	17.4	14.1	11.4	9.4	1.29 (0.98, 1.69)	1.31 (1.23, 1.40)	0.596
Brain	692.9	760.5	242.4	215.6	0.98 (0.64, 1.50)	1.06 (1.02, 1.10)	0.932
Thyroid	2.9	1.2	1.5	0.7	5.29 (0.88, 31.93)	1.79 (1.47, 2.17)	0.654

^a Analyses were restricted to patients with local stage cancers. Treatment was defined as the receipt of surgery receipt of surgery, radiotherapy, and/or chemotherapy. Adjusted for age (<40 years, 40-79 years in 10-year increments, and 80+ years), race/ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, and Asian-American Pacific Islander), and year of diagnosis (1995-1999, 2000-2004, 2005-2009, 2010-2014, 2015-2019).

Note: Bolding indicates statistical significance at *P*<0.05.

Supplemental Table 2. Cancer-specific mortality male-to-female hazard ratios among transplant recipients by transplanted organ				
Cancer site	Cancer-specific M:F HR _{Transplant} (95% CI) ^a			
	Liver	Kidney	Heart and/or Lung	P-value
Lip	--	1.56 (0.49, 4.98)	0.28 (0.04, 1.84)	0.797
Stomach	1.10 (0.47, 2.57)	1.01 (0.72, 1.40)	0.83 (0.33, 2.09)	0.406
Colorectal	0.86 (0.61, 1.23)	0.83 (0.69, 1.01)	0.96 (0.65, 1.42)	0.744
Anus	1.88 (0.44, 7.98)	0.81 (0.43, 1.51)	3.47 (0.74, 16.23)	0.368
Liver (including intrahepatic bile duct)	0.95 (0.58, 1.56)	1.46 (0.99, 2.15)	1.24 (0.48, 3.23)	0.594
Pancreas	1.10 (0.70, 1.71)	1.00 (0.79, 1.27)	1.06 (0.59, 1.92)	0.047
Larynx	1.03 (0.35, 3.04)	0.61 (0.24, 1.55)	3.63 (0.37, 35.94)	0.605
Lung	1.32 (1.10, 1.59)	1.13 (1.01, 1.25)	1.18 (1.01, 1.39)	0.605
Melanoma of the skin	0.63 (0.32, 1.25)	1.14 (0.78, 1.66)	5.44 (1.22, 24.2)	0.016
Urinary bladder	0.62 (0.16, 2.34)	0.87 (0.64, 1.20)	0.96 (0.48, 1.94)	0.958
Kidney (including renal pelvis)	2.41 (0.78, 7.43)	1.33 (1.09, 1.62)	1.00 (0.42, 2.34)	0.699
Brain	0.03 (0.01, 0.25)	1.49 (0.90, 2.46)	0.70 (0.18, 2.68)	0.037
Thyroid	--	2.69 (0.95, 7.64)	--	--
^a Adjusted for age (<40 years, 40-79 years in 10-year increments, and 80+ years), race and ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, and Asian American Pacific Islander), stage of cancer (localized, regional, distant, or unknown), year of diagnosis (1995-1999, 2000-2004, 2005-2009, 2010-2014, 2015-2019), and receipt of treatment (chemotherapy, radiation, and/or surgery). Note: Bolding indicates statistical significance at <i>P</i> <0.05. -- indicates there were too few (or no cases) to produce an estimate in the organ category.				