

Supplementary data to:

Increased incidence of cancer and cancer-related mortality among persons with chronic hepatitis C infection, 2006-2010

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Table 1. Summary of Studies Reporting a Significant Association Between Non-liver Cancers and HCV-infection

Study, Year (Reference No.)	Non-liver cancers associated with HCV-infection (P<0.05)	Location	Study Type	No. Persons with HCV	No. Cases of Cancer	Period
El-Serag et al., 2002 (6)	Non-Hodgkin lymphoma	United States: Veterans	Case-Control	34,204	513	1992-1999
Giordano et al., 2007 (7)	Non-Hodgkin lymphoma	United States: Veterans	Cohort	146,394	3,953	1997-2004
Gordon et al., 2010 (8)	Kidney	United States: Detroit, MI	Cohort	3,057	17	1997-2008
Nobles et al., 2004 (9)	Head and neck	United States: Veterans	Case-Control	21	99	1991-2002
Zuckerman et al., 1997 (10)	Non-Hodgkin lymphoma	United States: Los Angeles, CA	Case-Control	26	120	1994-1996
Sanjose et al., 2008 (11)	Non-Hodgkin lymphoma	North America, Europe and Australia †	Case-Control	172	4,784	1998-2004
Duberg et al., 2005 (12)	Non-Hodgkin lymphoma, multiple myeloma	Sweden	Cohort	27,150	97	1990-2000
Montella et al., 2003 (13)	Thyroid	Italy	Case-Control	16	130	1997-1999
Nagao et al., 1995 (14)	Oral cavity	Japan	Case-Control	24	100	1989-1993
Nieters et al., 2006 (15)	Non-Hodgkin lymphoma	Europe ‡	Case-Control	53	1,807	1998-2004
Omland et al., 2010 (16)	Lung (men), pancreas	Denmark	Cohort	4,204	100	1994-2003
Sanjose et al., 2004 (17)	Non-Hodgkin lymphoma	Spain	Case-Control	40	529	1998-2002
Spinelli et al., 2008 (18)	Non-Hodgkin lymphoma	Canada	Case-Control	19	776	2000-2004
Su et al., 2011 (19)	Breast (age <50 years)	Taiwan	Case-Control	56	1,958	2000-2008
Su et al., 2012 (20)	Oral cavity	Taiwan	Cohort	5,311	21	2000-2008
Swart et al., 2012 (21)	Cervix, mouth, pancreas, tonsil, trachea bronchus and lung (grouped together), unknown primary	Australia	Cohort	14, 892	240	1985-2007
Woo et al., 2013 (22)	Pancreas	Korea	Case-Control	21	753	2001-2011

Table 2. Codes Used for Analysis of Cancer Incidence (ICD-O-3/Morphology) and Cancer-related Mortality (ICD-10) Among Chronic HCV-infected Persons (CHeCS) Compared to SEER or MCOB,* 2006-2010

Cancers	Codes		
	ICD-O-3†	Morphology†	ICD-10‡
Oral Cavity and Pharynx	NA	NA	C01, C02.0, C06.0, C06.9, C09.0, C09.9, C11.9, C14.0
Lip, Gum and Mouth	C03.1, C04.0, C04.9, C06.9	8070, 8071, 8072, 8200	NA
Digestive System			
Esophagus	C15.4, C15.5	8010, 8070, 8140	C15.0, C15.9
Stomach	C16.0, C16.2, C16.3	8140, 8240, 8480, 8490	NA
Colon	C18.2, C18.4, C18.5, C18.6, C18.7, C18.9	8010, 8140, 8210	C18.0, C18.9
Rectum	C20.9	8140, 8240, 8263	C20
Liver	C22.0	8000, 8140, 8160, 8170, 8180	C22.0, C22.9
Pancreas	C24.1, C25.0, C25.1, C25.2, C25.9,	8000, 8010, 8140, 8154, 8500, 8574	C25.0, C25.9
Other Digestive Organs	NA	NA	C16.0, C16.9, C21.0, C22.1, C23, C24.0, C26.0, C26.9, C48.2
Respiratory System			
Lung and Bronchus	C34.1, C34.2, C34.3, C34.8, C34.9	8010, 8012, 8013, 8041, 8046, 8070, 8071, 8073, 8140, 8250, 8480	C34
Melanoma	C44.3, C44.5, C44.6, C44.7, C44.9	8720, 8742, 8743, 8772	NA
Breast among females	C50.3, C50.4, C50.5, C50.8, C50.9	8500	C50.0, C50.9
Prostate	C61.9	8140	C61
Urinary System			
Urinary Bladder	NA	NA	C67.9
Kidney and Renal Pelvis	C64.9	8000, 8255, 8260, 8310, 8312	C64
Brain and Other Nervous System	C70.1, C71.1, C71.2, C71.4, C71.9	9391, 9401, 9440, 9441	NA
Thyroid	C73.9	8260, 8290	NA
Lymphoid and Related Tissue			
Non-Hodgkin Lymphoma	C09.1, C17.0, C22.0, C42.0, C42.2, C44.5, C69.0, C71.9, C73.9, C76.2	9590, 9591, 9670, 9671, 9680, 9684, 9691, 9699, 9761	C83.0, C83.7, C85.1, C85.9
Leukemia	C42.1	9801, 9820, 9823, 9831, 9836, 9891, 9896	C91.0, C91.9, C92.0, C95.0, C95.9
Unknown Primary and Unspecified	C80.9	8000, 8010, 8046, 8070, 8140	C76.3, C78.0, C78.7, C79.5, C79.9, C80

*Cancers with 5 or more observed cases

†International Classification of Diseases for Oncology, 3rd Revision codes and corresponding morphology codes, specifying cancer site and histological diagnosis, were used to generate SEER-recode variables for comparison to SEER*Stat generated SEER Registry SEER-recode variables.

‡International Classification of Diseases, 10th Revision was used for mortality comparisons between CHeCS and MCOB.