

LIVER,
BILIARY
BOTH SEXES

TABLE 6A. -- Characteristics of persons reported to the Danish Cancer Registry with an initial cancer of the liver or biliary, 1943-80+

Category	Male	Female	Total
No. with first primary cancer*	1,642	2,811	4,453
No. who developed a second primary cancer	16	29	45
Average age at diagnosis of first cancer, yr	65	68	67
Average yr of diagnosis of first cancer	1967	1966	1966
Person-yr of follow-up	1,536	2,760	4,296
Average follow-up, yr	1.0	1.0	1.0
Percent given radiotherapy for first cancer	3	4	4

+ ICD-7 code = 155.

* Number excludes all persons who survived less than 2 mo after the diagnosis of their first primary cancer or who developed a simultaneous cancer during this period. First primary cancers diagnosed only at autopsy or by death certificate are also excluded as are in situ cancers.

TABLE 6B. -- Microscopic confirmation among persons who developed second primary cancers after an initial cancer of the liver or biliary in Denmark, 1943-80

Microscopically confirmed	No.	Percent+
Both first and second cancers	36	80.0
Only the first cancer	4	8.9
Only the second cancer	5	11.1
Neither first nor second cancer	0	0.0
Total second primary cancers	45	100.0

+ Minor discrepancies between table entries, and row and column sums in this and subsequent tables are due to rounding.

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TABLE 6C. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the liver or biliary among males and females in Denmark, 1943-80+

Second primary cancer site	Yr after first primary cancer diagnosis														
	<1 yr			1-4 yr			5-9 yr			10+ yr			Total		
	No. starting interval	4,453		864			153			74			4,453		
Person-yr in interval	2,087		1,268			510			432			4,297			
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
All second cancers	17	23.04	0.7	16	14.76	1.1	6	6.12	1.0	6	6.00	1.0	45	49.92	0.9
All excluding site of initial cancer	17	22.40	0.8	14	14.33	1.0	5	5.92	0.8	6	5.80	1.0	42	48.44	0.9
Buccal cavity, pharynx	1	0.47	2.1	0	0.30	0.0	1	0.12	8.3	0	0.12	0.0	2	1.01	2.0
Lip	0	0.19	0.0	0	0.12	0.0	1	0.04	25.0	0	0.04	0.0	1	0.39	2.6
Tongue	0	0.05	0.0	0	0.03	0.0	0	0.01	0.0	0	0.01	0.0	0	0.12	0.0
Salivary gland	1	0.06	16.7	0	0.03	0.0	0	0.01	0.0	0	0.01	0.0	1	0.13	7.7
Gum, other mouth	0	0.09	0.0	0	0.07	0.0	0	0.03	0.0	0	0.03	0.0	0	0.22	0.0
Pharynx	0	0.08	0.0	0	0.05	0.0	0	0.02	0.0	0	0.02	0.0	0	0.16	0.0
Digestive system	4	8.47	0.5	8	5.42	1.5	2	2.31	0.9	1	2.30	0.4	15	18.51	0.8
Esophagus	0	0.29	0.0	0	0.18	0.0	0	0.08	0.0	0	0.07	0.0	0	0.63	0.0
Stomach	0	2.35	0.0	1	1.42	0.7	0	0.58	0.0	0	0.57	0.0	1	4.92	0.2
Colon	2	2.36	0.8	3	1.57	1.9	1	0.70	1.4	1	0.71	1.4	7	5.33	1.3
Rectum	0	1.64	0.0	0	1.03	0.0	0	0.42	0.0	0	0.42	0.0	0	3.52	0.0
Liver, biliary	0	0.64	0.0	2	0.43	4.7	1	0.20	5.0	0	0.20	0.0	3	1.48	2.0
Pancreas	2	0.89	2.2	2	0.59	3.4	0	0.26	0.0	0	0.26	0.0	4	1.99	2.0
Respiratory system	2	2.72	0.7	0	1.78	0.0	1	0.65	1.5	2	0.61	3.3	5	5.75	0.9
Nasal cavities, sinuses	0	0.05	0.0	0	0.03	0.0	0	0.02	0.0	0	0.01	0.0	0	0.10	0.0
Larynx	0	0.16	0.0	0	0.11	0.0	0	0.04	0.0	1	0.03	33.3	1	0.33	3.0
Trachea, bronchus, lung	2	2.37	0.8	0	1.55	0.0	1	0.56	1.8	1	0.53	1.9	4	4.99	0.8
Female breast	2	2.67	0.7	1	1.71	0.6	0	0.82	0.0	0	0.75	0.0	3	5.95	0.5
Female genital tract	3	2.30	1.3	5	1.42	3.5*	1	0.64	1.6	1	0.58	1.7	10	4.94	2.0
Cervix uteri	0	0.65	0.0	0	0.39	0.0	0	0.16	0.0	1	0.15	6.9	1	1.34	0.7
Corpus uteri	0	0.70	0.0	3	0.43	7.0*	0	0.19	0.0	0	0.17	0.0	3	1.49	2.0
Uterus, NOS	0	0.06	0.0	0	0.04	0.0	0	0.02	0.0	0	0.02	0.0	0	0.13	0.0
Ovary, fallopian tubes	3	0.73	4.1	1	0.46	2.2	1	0.21	4.8	0	0.19	0.0	5	1.58	3.2*
Prostate gland	0	1.33	0.0	1	0.86	1.2	0	0.26	0.0	1	0.35	2.9	2	2.80	0.7
Testis	0	0.03	0.0	1	0.02	53.9	0	0.01	0.0	0	0.00	0.0	1	0.06	16.7
Kidney, renal pelvis, ureter	2	0.69	2.9	0	0.44	0.0	0	0.18	0.0	0	0.18	0.0	2	1.49	1.3
Bladder, other urinary	1	1.20	0.8	0	0.80	0.0	1	0.31	3.2	0	0.31	0.0	2	2.61	0.8
Melanoma of the skin	0	0.24	0.0	0	0.16	0.0	0	0.07	0.0	0	0.06	0.0	0	0.52	0.0
Eye	0	0.07	0.0	0	0.04	0.0	0	0.02	0.0	0	0.02	0.0	0	0.14	0.0
Brain, central nervous system	0	0.38	0.0	0	0.25	0.0	0	0.09	0.0	1	0.09	11.1	1	0.81	1.2
Thyroid gland	1	0.12	8.3	0	0.08	0.0	0	0.04	0.0	0	0.04	0.0	1	0.28	3.6
Bone	0	0.04	0.0	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	0	0.08	0.0
Connective tissue	1	0.07	14.3	0	0.05	0.0	0	0.02	0.0	0	0.02	0.0	1	0.15	6.7
Lymphatic, hematopoietic system	0	1.37	0.0	0	0.89	0.0	0	0.37	0.0	0	0.37	0.0	0	3.00	0.0
Non-Hodgkin's lymphoma	0	0.38	0.0	0	0.25	0.0	0	0.10	0.0	0	0.10	0.0	0	0.84	0.0
Hodgkin's disease	0	0.09	0.0	0	0.06	0.0	0	0.02	0.0	0	0.02	0.0	0	0.20	0.0
Multiple myeloma	0	0.27	0.0	0	0.18	0.0	0	0.07	0.0	0	0.08	0.0	0	0.59	0.0
Leukemias	0	0.61	0.0	0	0.40	0.0	0	0.17	0.0	0	0.17	0.0	0	1.34	0.0
Chronic lymphocytic	0	0.31	0.0	0	0.20	0.0	0	0.08	0.0	0	0.09	0.0	0	0.68	0.0
Acute nonlymphocytic	0	0.16	0.0	0	0.11	0.0	0	0.04	0.0	0	0.05	0.0	0	0.36	0.0

+ ICD-7 code = 155.

* P<.05.

LIVER,
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MALES

TABLE 6D. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the liver or biliary among males in Denmark, 1943-80+

Second primary cancer site	Yr after first primary cancer diagnosis														
	<1 yr			1-4 yr			5-9 yr			10+ yr			Total		
	No. starting interval Person-yr in interval			345 472			48 159			24 123			1,642 1,536		
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
All second cancers	5	9.60	0.5	4	6.08	0.7	2	1.89	1.1	5	2.09	2.4	16	19.66	0.8
All excluding site of initial cancer	5	9.40	0.5	4	5.95	0.7	2	1.85	1.1	5	2.04	2.5	16	19.23	0.8
Buccal cavity, pharynx	1	0.29	3.4	0	0.18	0.0	1	0.06	17.4	0	0.06	0.0	2	0.59	3.4
Lip	0	0.16	0.0	0	0.10	0.0	1	0.03	32.8	0	0.03	0.0	1	0.32	3.2
Tongue	0	0.02	0.0	0	0.01	0.0	0	0.00	0.0	0	0.00	0.0	0	0.04	0.0
Salivary gland	1	0.02	41.1	0	0.01	0.0	0	0.00	0.0	0	0.00	0.0	1	0.05	20.7
Gum, other mouth	0	0.04	0.0	0	0.03	0.0	0	0.01	0.0	0	0.01	0.0	0	0.09	0.0
Pharynx	0	0.05	0.0	0	0.03	0.0	0	0.01	0.0	0	0.01	0.0	0	0.09	0.0
Digestive system	0	3.52	0.0	2	2.17	0.9	0	0.66	0.0	1	0.77	1.3	3	7.13	0.4
Esophagus	0	0.15	0.0	0	0.09	0.0	0	0.03	0.0	0	0.03	0.0	0	0.30	0.0
Stomach	0	1.07	0.0	0	0.62	0.0	0	0.19	0.0	0	0.22	0.0	0	2.10	0.0
Colon	0	0.82	0.0	1	0.53	1.9	0	0.16	0.0	1	0.20	4.9	2	1.71	1.2
Rectum	0	0.79	0.0	0	0.48	0.0	0	0.15	0.0	0	0.17	0.0	0	1.59	0.0
Liver, biliary	0	0.20	0.0	0	0.13	0.0	0	0.04	0.0	0	0.05	0.0	0	0.43	0.0
Pancreas	0	0.38	0.0	1	0.25	4.1	0	0.08	0.0	0	0.09	0.0	1	0.79	1.3
Respiratory system	1	2.02	0.5	0	1.32	0.0	0	0.42	0.0	2	0.40	5.0	3	4.16	0.7
Nasal cavities, sinuses	0	0.03	0.0	0	0.02	0.0	0	0.01	0.0	0	0.00	0.0	0	0.05	0.0
Larynx	0	0.13	0.0	0	0.09	0.0	0	0.03	0.0	1	0.02	40.4	1	0.27	3.6
Trachea, bronchus, lung	1	1.78	0.6	0	1.16	0.0	0	0.37	0.0	1	0.35	2.9	2	3.65	0.5
Prostate gland	0	1.33	0.0	1	0.86	1.2	0	0.26	0.0	1	0.35	2.9	2	2.80	0.7
Testis	0	0.03	0.0	1	0.02	53.9	0	0.01	0.0	0	0.00	0.0	1	0.06	16.7
Kidney, renal pelvis, ureter	1	0.32	3.2	0	0.20	0.0	0	0.06	0.0	0	0.07	0.0	1	0.66	1.5
Bladder, other urinary	1	0.80	1.2	0	0.53	0.0	1	0.17	6.0	0	0.18	0.0	2	1.68	1.2
Melanoma of the skin	0	0.08	0.0	0	0.05	0.0	0	0.02	0.0	0	0.02	0.0	0	0.16	0.0
Eye	0	0.03	0.0	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	0	0.06	0.0
Brain, central nervous system	0	0.15	0.0	0	0.10	0.0	0	0.03	0.0	1	0.03	39.8	1	0.31	3.2
Thyroid gland	0	0.03	0.0	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	0	0.06	0.0
Bone	0	0.02	0.0	0	0.01	0.0	0	0.00	0.0	0	0.00	0.0	0	0.03	0.0
Connective tissue	1	0.03	32.3	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	1	0.06	16.2
Lymphatic, hematopoietic system	0	0.63	0.0	0	0.40	0.0	0	0.12	0.0	0	0.14	0.0	0	1.29	0.0
Non-Hodgkin's lymphoma	0	0.16	0.0	0	0.10	0.0	0	0.03	0.0	0	0.03	0.0	0	0.33	0.0
Hodgkin's disease	0	0.04	0.0	0	0.03	0.0	0	0.01	0.0	0	0.01	0.0	0	0.09	0.0
Multiple myeloma	0	0.12	0.0	0	0.08	0.0	0	0.02	0.0	0	0.03	0.0	0	0.24	0.0
Leukemias	0	0.30	0.0	0	0.19	0.0	0	0.06	0.0	0	0.07	0.0	0	0.61	0.0
Chronic lymphocytic	0	0.17	0.0	0	0.10	0.0	0	0.03	0.0	0	0.04	0.0	0	0.34	0.0
Acute nonlymphocytic	0	0.07	0.0	0	0.05	0.0	0	0.01	0.0	0	0.02	0.0	0	0.15	0.0

+ ICD-7 code = 155.

* P<.05.

LIVER,
BILIARY
FEMALES

TABLE 6E. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the liver or biliary among females in Denmark, 1943-80+

Second primary cancer site	Yr after first primary cancer diagnosis														
	<1 yr			1-4 yr			5-9 yr			10+ yr			Total		
	No. starting interval	2,811		519			105			50			2,811		
Person-yr in interval	1,305		796			351			309			2,760			
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
All second cancers	12	13.44	0.9	12	8.68	1.4	4	4.23	0.9	1	3.91	0.3	29	30.26	1.0
All excluding site of initial cancer	12	13.00	0.9	10	8.38	1.2	3	4.07	0.7	1	3.76	0.3	26	29.21	0.9
Buccal cavity, pharynx	0	0.18	0.0	0	0.12	0.0	0	0.06	0.0	0	0.06	0.0	0	0.42	0.0
Lip	0	0.03	0.0	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	0	0.07	0.0
Tongue	0	0.03	0.0	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	0	0.08	0.0
Salivary gland	0	0.04	0.0	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	0	0.08	0.0
Gum, other mouth	0	0.05	0.0	0	0.04	0.0	0	0.02	0.0	0	0.02	0.0	0	0.13	0.0
Pharynx	0	0.03	0.0	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	0	0.07	0.0
Digestive system	4	4.95	0.8	6	3.25	1.8	2	1.65	1.2	0	1.53	0.0	12	11.38	1.1
Esophagus	0	0.14	0.0	0	0.09	0.0	0	0.05	0.0	0	0.04	0.0	0	0.33	0.0
Stomach	0	1.28	0.0	1	0.80	1.2	0	0.39	0.0	0	0.35	0.0	1	2.82	0.4
Colon	2	1.54	1.3	2	1.04	1.9	1	0.54	1.9	0	0.51	0.0	5	3.62	1.4
Rectum	0	0.85	0.0	0	0.55	0.0	0	0.27	0.0	0	0.25	0.0	0	1.93	0.0
Liver, biliary	0	0.44	0.0	2	0.30	6.6	1	0.16	6.3	0	0.15	0.0	3	1.05	2.9
Pancreas	2	0.51	3.9	1	0.34	2.9	0	0.18	0.0	0	0.17	0.0	3	1.20	2.5
Respiratory system	1	0.70	1.4	0	0.46	0.0	1	0.23	4.4	0	0.21	0.0	2	1.59	1.3
Nasal cavities, sinuses	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	0	0.05	0.0
Larynx	0	0.03	0.0	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	0	0.06	0.0
Trachea, bronchus, lung	1	0.59	1.7	0	0.39	0.0	1	0.19	5.3	0	0.18	0.0	2	1.34	1.5
Female breast	2	2.67	0.7	1	1.71	0.6	0	0.82	0.0	0	0.75	0.0	3	5.95	0.5
Female genital tract	3	2.30	1.3	5	1.42	3.5*	1	0.64	1.6	1	0.58	1.7	10	4.94	2.0
Cervix uteri	0	0.65	0.0	0	0.39	0.0	0	0.16	0.0	1	0.15	6.9	1	1.34	0.7
Corpus uteri	0	0.70	0.0	3	0.43	7.0*	0	0.19	0.0	0	0.17	0.0	3	1.49	2.0
Uterus, NOS	0	0.06	0.0	0	0.04	0.0	0	0.02	0.0	0	0.02	0.0	0	0.13	0.0
Ovary, fallopian tubes	3	0.73	4.1	1	0.46	2.2	1	0.21	4.8	0	0.19	0.0	5	1.58	3.2*
Kidney, renal pelvis, ureter	1	0.37	2.7	0	0.24	0.0	0	0.12	0.0	0	0.11	0.0	1	0.83	1.2
Bladder, other urinary	0	0.40	0.0	0	0.27	0.0	0	0.14	0.0	0	0.13	0.0	0	0.93	0.0
Melanoma of the skin	0	0.16	0.0	0	0.11	0.0	0	0.05	0.0	0	0.04	0.0	0	0.36	0.0
Eye	0	0.04	0.0	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	0	0.08	0.0
Brain, central nervous system	0	0.23	0.0	0	0.15	0.0	0	0.06	0.0	0	0.06	0.0	0	0.50	0.0
Thyroid gland	1	0.09	10.5	0	0.06	0.0	0	0.03	0.0	0	0.03	0.0	1	0.22	4.6
Bone	0	0.02	0.0	0	0.01	0.0	0	0.01	0.0	0	0.01	0.0	0	0.05	0.0
Connective tissue	0	0.04	0.0	0	0.03	0.0	0	0.01	0.0	0	0.01	0.0	0	0.09	0.0
Lymphatic, hematopoietic system	0	0.74	0.0	0	0.49	0.0	0	0.25	0.0	0	0.23	0.0	0	1.71	0.0
Non-Hodgkin's lymphoma	0	0.22	0.0	0	0.15	0.0	0	0.07	0.0	0	0.07	0.0	0	0.51	0.0
Hodgkin's disease	0	0.05	0.0	0	0.03	0.0	0	0.01	0.0	0	0.01	0.0	0	0.11	0.0
Multiple myeloma	0	0.15	0.0	0	0.10	0.0	0	0.05	0.0	0	0.05	0.0	0	0.35	0.0
Leukemias	0	0.31	0.0	0	0.21	0.0	0	0.11	0.0	0	0.10	0.0	0	0.73	0.0
Chronic lymphocytic	0	0.14	0.0	0	0.10	0.0	0	0.05	0.0	0	0.05	0.0	0	0.34	0.0
Acute nonlymphocytic	0	0.09	0.0	0	0.06	0.0	0	0.03	0.0	0	0.03	0.0	0	0.21	0.0

+ ICD-7 code = 155.

* P<.05.