

UK Biobank

Cancer data: a report on the number of prevalent and incident cases

<http://www.ukbiobank.ac.uk/>
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This report details the number of prevalent and incident cases of cancer within the UK Biobank cohort, as identified through linkage to national cancer registries.

1. Introduction

This report details the number of prevalent and incident cases of cancer within the UK Biobank cohort, as identified through linkage to national cancer registries. Data on cancer diagnoses is provided to UK Biobank by the Health & Social Care Information Centre (HSCIC) for participants residing in England and Wales, and the NHS Central Register (NHSCR) for participants residing in Scotland. Cancer registries acquire information on cancer diagnoses from a variety of sources including hospitals, cancer centres and treatment centres, hospices and nursing homes, private hospitals, cancer screening programmes, other cancer registers, general practices, death certificates, and Hospital Episode Statistics (HES) and Cancer Waiting Time (CWT) data. (In many instances, more than one source of information is available to cancer registries from a single organisation, for example hospital patient information systems, pathology laboratories, medical records departments and radiotherapy databases).

2. Aim

The aim of this report is to provide researchers with an indication of the numbers of prevalent and incident cases of cancers in the UK Biobank Resource, in order to guide timings for submitting cancer-related research applications. Please see **Table 1**.

- **Prevalent cases** of cancer are defined as those diagnosed prior to the recruitment date into UK Biobank. **Incident cases** of cancer are defined as those diagnosed after the recruitment date into UK Biobank.
- Cancers identified from sources other than the cancer registry are not included here (i.e. self-reported cancer, primary care records, hospital records, etc.)
- The numbers of cases of cancers is provided by broad cancer groupings (according to ICD-10 chapters), as well as the numbers for individual sub-sites of most interest to researchers. Please contact the Access Team if you wish to enquire about the numbers of cases of a specific cancer site(s) (i.e. ICD-10 code(s)) not included in this report).
- The earliest record of cancer diagnosis in the UK Biobank cohort is **20 September 1957**. Cancers diagnosed prior to this date are not included here (as this is the earliest date to which cancer registry data is available).
- This report includes the complete cancer follow-up up the current UK Biobank censoring date.
- Only the first occurrence of cancer for an individual participant is included in this report.
- The numbers of cases of benign neoplasms (ICD-10 D10-D36) may be under-estimated because not all benign neoplasms are routinely registered by cancer registries. Currently, ICD-10 D32-D33, D35.2-D35.4, D00-D09 and D37-D48 are mandatory registerable benign conditions.
- The contents of this document will be updated periodically, as and when follow-up data is incorporated into the UK Biobank Resource.

Table 1. Number of prevalent and incident cancers available from cancer registry data

Number of prevalent and incident cancers available from cancer registry data

Each participant only appears once in the entire table:

- If a participant was diagnosed with cancer before and after baseline, only the prevalent case is counted

- If a participant was diagnosed several times with cancer in the same site, only the first one is counted

- If a participant was diagnosed with cancer in different sites, only the first one is counted

	Prevalent	Incident
Malignant neoplasms of lip, oral cavity and pharynx	529	384
Lip	24	11
Base of tongue	40	55
Other and unspecified parts of tongue	111	68
Gum	17	21
Floor of mouth	29	17
Palate	35	20
Other and unspecified parts of mouth	27	23
Parotid gland	68	20
Other and unspecified major salivary glands	19	8
Tonsil	103	95
Oropharynx	10	15
Nasopharynx	25	12
Pyriiform sinus	10	5
Hypopharynx	3	8
Other and ill-defined sites in the lip, oral cavity and pharynx	8	6
Malignant neoplasms of digestive organs	2836	3727
Oesophagus	136	365
Stomach	148	256
Small intestine	53	75
Colon	1339	1507
Rectosigmoid junction	232	154
Rectum	713	614
Anus and anal canal	79	67
Liver and intrahepatic bile ducts	37	184
Gallbladder	7	40
Other and unspecified parts of biliary tract	32	61
Pancreas	54	387
Other and ill-defined digestive organs	6	17
Malignant neoplasms of respiratory and intrathoracic organs	513	1465
Nasal cavity and middle ear	16	16
Accessory sinuses	9	4
Larynx	180	74
Trachea	4	1
Bronchus and lung	285	1351

Thymus	12	10
Heart, mediastinum and pleura	7	7
Other and ill-defined sites in the respiratory system and intrathoracic organs	0	2
Malignant neoplasms of bone and articular cartilage	65	18
Bone and articular cartilage of limbs	36	9
Bone and articular cartilage of other and unspecified sites	29	9
Melanoma and other malignant neoplasms of skin	11734	7886
Malignant melanoma of skin	2041	992
Other malignant neoplasms of skin	9693	6894
Malignant neoplasms of mesothelial and soft tissue	252	351
Mesothelioma	8	172
Kaposi's sarcoma	12	3
Peripheral nerves and autonomic nervous system	13	3
Retroperitoneum and peritoneum	31	74
Other connective and soft tissue	188	99
Malignant neoplasm of breast	9047	3978
Breast	9047	3978
Malignant neoplasms of female genital organs	2545	1203
Vulva	70	49
Vagina	12	10
Cervix uteri	918	49
Corpus uteri	849	628
Uterus, part unspecified	30	17
Ovary	618	414
Other and unspecified female genital organs	24	36
Placenta	24	0
Malignant neoplasms of male genital organs	3787	4155
Penis	35	23
Prostate	3036	4078
Testis	704	50
Other and unspecified male genital organs	12	4
Malignant neoplasms of urinary tract	1103	984
Kidney, except renal pelvis	478	494
Renal pelvis	16	33
Ureter	11	21
Bladder	593	429
Other and unspecified urinary organs	5	7
Malignant neoplasms of eye, brain and other parts of central nervous system	263	352
Eye and adnexa	101	41
Meninges	8	5
Brain	135	302
Spinal cord, cranial nerves and other parts of central nervous system	19	4
Malignant neoplasms of thyroid and other endocrine glands	451	179
Thyroid gland	410	170
Adrenal gland	16	6

Other endocrine glands and related structures	25	3
Malignant neoplasms of ill-defined, secondary and unspecified sites	180	288
Other and ill-defined sites	27	14
Secondary and unspecified malignant neoplasm of lymph nodes	76	40
Secondary malignant neoplasm of respiratory and digestive organs	20	89
Secondary malignant neoplasm of other sites	18	34
Malignant neoplasm without specification of site	39	111
Malignant neoplasms, stated or presumed to be primary, of lymphoid, haematopoietic and related tissue	2098	1640
Hodgkin's disease	383	64
Follicular [nodular] non-Hodgkin's lymphoma	261	194
Diffuse non-Hodgkin's lymphoma	363	383
Peripheral and cutaneous T-cell lymphomas	178	69
Other and unspecified types of non-Hodgkin's lymphoma	203	159
Malignant immunoproliferative diseases	8	21
Multiple myeloma and malignant plasma cell neoplasms	182	287
Lymphoid leukaemia	303	288
Myeloid leukaemia	190	149
Monocytic leukaemia	4	4
Other leukaemias of specified cell type	10	2
Leukaemia of unspecified cell type	9	8
Other and unspecified malignant neoplasms of lymphoid, haematopoietic and related tissue	4	12
Malignant neoplasms of independent (primary) multiple sites	0	1
Malignant neoplasms of independent (primary) multiple sites	0	1
In situ neoplasms	8727	2491
Oral cavity, oesophagus and stomach	20	33
Other and unspecified digestive organs	79	147
Middle ear and respiratory system	30	22
Melanoma in situ	474	435
Skin	687	397
Breast	1325	756
Cervix uteri	5218	234
Other and unspecified genital organs	289	216
Other and unspecified sites	605	251
Benign neoplasms	772	237
Mouth and pharynx	1	0
Major salivary glands	45	0
Colon, rectum, anus and anal canal	4	0
Other and ill-defined parts of digestive system	0	1
Other and unspecified intrathoracic organs	0	3
Bone and articular cartilage	2	0
Haemangioma and lymphangioma, any site	4	0
Other benign neoplasms of connective and other soft tissue	4	1
Ovary	3	0
Urinary organs	7	0

Meninges	286	124
Brain and other parts of central nervous system	198	49
Thyroid gland	4	0
Other and unspecified endocrine glands	210	59
Other and unspecified sites	4	0
Neoplasms of uncertain or unknown behaviour	1498	955
Oral cavity and digestive organs	239	128
Middle ear and respiratory and intrathoracic organs	25	9
Female genital organs	252	30
Male genital organs	30	6
Urinary organs	352	363
Meninges	10	9
Brain and central nervous system	49	18
Endocrine glands	58	18
Polycythaemia vera	121	48
Myelodysplastic syndromes	30	77
Other neoplasms of uncertain or unknown behaviour of lymphoid, haematopoietic and related tissue	174	173
Other and unspecified sites	158	76

Counts last generated: 13 September 2016