C1-001: Prevalence of rare blood cancers in Europe

28/03/2023

Version 3.2

Study Title	Prevalence of rare blood cancers in Europe
Study Report Version identifier	V3.2
Dates Study Report updates	28/03/2023
EU PAS register number	EUPAS50800
Active substance	N/A
Medicinal product	N/A
Research question and objectives	Research question What is the estimated prevalence of rare blood cancers in Europe? Study objectives Objective 1: To estimate the prevalence of follicular lymphoma between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex Objective 2: To estimate the prevalence of diffuse Large B-Cell Lymphoma between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex Objective 3: To estimate the prevalence of multiple myeloma between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex Objective 4: To estimate the prevalence of chronic lymphocytic leukaemia between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex Objective 5: To estimate the prevalence of acute myeloid leukaemia between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex Objective 6: To estimate the prevalence of acute lymphocytic leukaemia between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex
Country(-ies) of study	The Netherlands, Spain, United Kingdom, Belgium, Germany

Author	Edward Burn (edward.burn@ndorms.ox.ac.uk); Martí Català (marti.catalasabate@ndorms.ox.ac.uk)

Table of Contents

1. DESCRIPTION OF STUDY TEAM

Study team Role	Names	Organisation
Principal Investigator	Edward Burn Martí Català Sabaté	University of Oxford University of Oxford
Epidemiologist	Albert Prats-Uribe Annika Jödicke Talita Duarte-Salles	University of Oxford University of Oxford IDIAPJGol
Clinical Domain Experts	Daniel Prieto-Alhambra Katia Verhamme	University of Oxford Erasmus MC
Statistician	Maria de Ridder	Erasmus MC

2. DATA SOURCES

Country	Name of Database	Health Care setting (e.g. primary care, specialist care, hospital care)	Type of Data (EHR, claims, registries)	Number of included subjects	Calendar period covered by each data source.
The Netherlands	Integrated Primary Care Information Project (IPCI)	Primary care	EHR	2,612,850	01/01/2006 to 01/07/2022
Spain	Sistema d'Informació per al Desenvolupament de la Investigació en Atenció Primària (SIDIAP)	Primary care with hospital linkage (SIDIAP CMBD)	EHR	8,265,343	01/01/2006 to 31/06/2022
United Kingdom	The Clinical Practice Research Datalink (CPRD) GOLD database	Primary care	EHR	15,662,217	09/09/1987 to 29/06/2020

Belgium	IQVIA Belgium LPD	Outpatient specialist care	EHR	1,134,075	30/06/2022
Germany	IQVIA Germany DA	Outpatient specialist care	EHR	40,243,608	30/06/2022

3. ABSTRACT

Title

DARWIN EU: Prevalence of rare blood cancers in Europe

Rationale and background

Substantial uncertainty surrounds the prevalence of rare blood cancers. Using real-world data, brought together as part of DARWIN EU®, we aimed to estimate the prevalence of rare blood cancers.

Research question and objectives

Research question

What is the estimated prevalence of rare blood cancers in Europe?

Study objectives

Objective 1: To estimate the prevalence of follicular lymphoma (FL) between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex

Objective 2: To estimate the prevalence of diffuse Large B-Cell Lymphoma (DLBCL) between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex

Objective 3: To estimate the prevalence of multiple myeloma (MM) between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex

Objective 4: To estimate the prevalence of chronic lymphocytic leukaemia (CLL) between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex

Objective 5: To estimate the prevalence of acute myeloid leukaemia (AML) between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex

Objective 6: To estimate the prevalence of acute lymphocytic leukaemia (ALL) between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex

Study design

Population-based cohort

Setting

Data was included from the following databases: 1) Integrated Primary Care Information Project (IPCI), The Netherlands, 2) Sistema d'Informació per al Desenvolupament de la Investigació en Atenció Primària (SIDIAP), Spain, and 3) The Clinical Practice Research Datalink (CPRD) GOLD database. SIDIAP data was linked with patient-level linkage hospital discharge data (Conjunt Mínim Bàsic de Dades [CMBD]) at the patient level, 4) IQVIA Belgium LPD, and 5) IQVIA Germany DA.

Subjects and study size

All individuals in the participating databases were eligible for inclusion in the study.

Population

Included study participants needed to have some observation time during the study period and, for the primary analysis, have a year of prior history available. In sensitivity (additional) analyses the requirement for prior history was first removed, and then increased to three years.

Variables

Rare blood cancers were identified based on the presence of a relevant diagnosis. For the primary analysis, 5-year partial prevalence was estimated where individuals were considered as a prevalent case for the five years following their initial diagnosis. In additional analyses, 2-year partial prevalence and complete prevalence were also estimated. For the latter, once diagnosed, an individual was considered as a prevalent case up until their exit from the study (i.e. considering people diagnosed with malignancies to always be affected by the condition).

Data analysis

5-year point prevalence was used for the primary analysis. The prevalence of each outcome of interest was calculated on an annual basis as of the 1st January for each year, with individuals who had been diagnosed in the preceding 5 years included as a case. As additional analyses, 2-year partial and complete point prevalence were estimated. In addition, annual period prevalence was also estimated (for 2 and 5 year partial prevalence and complete prevalence). A minimum cell count of 5 was used when reporting results, with any smaller counts suppressed.

Results

A total of 35,109,377 individuals were included (CPRD GOLD: 9,192,128, IPCI: 2,157,533, IQVIA Belgium LPD: 677,667, IQVIA Germany DA: 15,542,676, and SIDIAP CMBD: 7,539,373) for the primary analysis across all study years. When calculating prevalence for 2020, the last year for which all databases contributed, 17,305,511 study participants were included (CPRD GOLD: 2,999,581, IPCI: 1,184,026, IQVIA Belgium LPD: 367,266, IQVIA Germany DA: 7,023,015, and SIDIAP CMBD: 5,731,623).

As of the 1st January 2020, 5-year partial prevalence estimates for ALL ranged between 0.44 (0.27 to 0.71) and 0.65 (0.59 to 0.71) per 10,000. Estimates for AML ranged between 0.72 (0.62 to 0.82) and 1.03 (0.95 to 1.12). Estimates for CLL ranged between 2.83 (2.34 to 3.43) and 4.13 (3.98 to 4.28). Estimates for DLBCL ranged between 0.47 (0.42 to 0.52) and 1.73 (1.62 to 1.84). Estimates for FL ranged between 0.90 (0.83 to 0.97) and 2.83 (2.70 to 2.97). Lastly, estimates for MM ranged between 2.15 (1.73 to 2.68) and 4.27 (4.12 to 4.42).

Complete prevalence was higher than partial prevalence, more than double the 5-year partial prevalence of CLL for example, while 2-year partial prevalence was substantially lower. Estimates were typically higher for older age groups except for ALL. The relationship between sex and prevalence varied depending on the study outcome. Increasing trends over calendar time were more typically seen for complete prevalence compared to partial prevalence.

Discussion

Across the databases included in the study, ALL and AML were the least prevalent diseases with the highest estimates for their 5-year partial point prevalence being 0.65 and 1.03 per 10,000, respectively. The highest estimate of prevalence of DLBCL was 1.73 per 10,000, while highest prevalence of FL was 2.83 per 10,000. Lastly, the highest estimates for prevalence of CLL and MM were 4.13 and 4.27 per 10,000, respectively. Aside from ALL which was more common in children and young people, all other cancers were more prevalent in older age. This was particularly marked for CLL and MM. Partial prevalence was consistently lower than complete prevalence for all study outcomes and databases. Upward trends in prevalence over time were more pronounced when considering complete prevalence compared to partial prevalence.

4. LIST OF ABBREVIATIONS

ALL: acute lymphocytic leukaemia

AML: acute myeloid leukaemia

CLL: chronic lymphocytic leukaemia

CMBD: Conjunt Mínim Bàsic de Dades

COMP: Committee for Orphan Medicinal Products

CPRD: Clinical Practice Research Datalink

DLBCL: diffuse Large B-Cell Lymphoma

EHR: electronic health records

EMA: European Medicines Agency

FL: follicular lymphoma

IPCI: Integrated Primary Care Information Project

MM: Multiple myeloma

SIDIAP: Sistema d'Informació per al Desenvolupament de la Investigació en Atenció Primària

SNOMED: Systematized Nomenclature of Medicine

5. AMENDMENTS AND UPDATES

None

6. MILESTONES

STUDY SPECIFIC DELIVERABLE	TIMELINE (planned)	TIMELINES (actual)
Draft Study Protocol	01/09/2022	01/09/2022
Final Study Protocol	01/11/2022	01/11/2022
Creation of Analytical code	16/12/2022	16/12/2022
Execution of Analytical Code on the data	05/01/2023	05/01/2023
Interim Study Report (if applicable)	Not applicable	Not applicable
Draft Study Report	17th January 2023	17th January 2023
Final Study Report	28th March 2023	28th March 2023

7. RATIONALE AND BACKGROUND

The Committee for Orphan Medicinal Products (COMP) is the European Medicines Agency's (EMA) committee responsible for recommending orphan designation of medicines for rare diseases. It was established in 2000 when new legislation was introduced to encourage the development of medicinal products for rare diseases. One important criterion for granting an orphan designation to a medicine is a prevalence threshold of maximum 5 in 10,000 for the associated condition at the time of application. Of the submissions to the COMP, around 35% are for oncological conditions and around 42% of designations of orphan medicinal products in oncology granted by the COMP between 2000 and 2015 related to rare haematological malignancies.[1]

Prevalence estimates, such as of rare haematological malignancies, are a frequent source of uncertainty when submissions to the COMP are being assessed.[2] In particular, limited availability of population-based epidemiological studies has often led to the use of indirect methods for calculations of prevalence which often involves various assumptions. In addition, time trends in prevalence may also be present meaning that certain conditions that previously satisfied the prevalence criterion for orphan designation in the past may no longer do so. Indeed, increased prevalence has previously been noted for a number of rare haematological malignancies, which may be explained by improved survival and aging populations.[1]

In this study the prevalence of rare blood cancers was estimated in Europe over time.

8. RESEARCH QUESTION AND OBJECTIVES

What is the estimated prevalence of rare blood cancers in Europe?

Study objectives

Objective 1: To estimate the prevalence of follicular lymphoma (FL) between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex

Objective 2: To estimate the prevalence of diffuse Large B-Cell Lymphoma (DLBCL) between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex

Objective 3: To estimate the prevalence of multiple myeloma (MM) between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex

Objective 4: To estimate the prevalence of chronic lymphocytic leukaemia (CLL) between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex

Objective 5: To estimate the prevalence of acute myeloid leukaemia (AML) between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex

Objective 6: To estimate the prevalence of acute lymphocytic leukaemia (ALL) between 1st January 2010 and the end of available data in data sources from across Europe, stratified by age and sex

9. RESEARCH METHODS

9.1 Study Type and Study Design

Population-level descriptive epidemiology within a cohort study. The study included all people in a database who, for the primary analysis, have a year of prior history available. For the primary analysis, the 5-year partial prevalence of each outcome of interest was calculated on an annual basis as of the 1st January for each year, estimated overall and stratified by age and sex. As additional analyses annual period prevalence and complete prevalence was also estimated.

9.2 Study Setting and Data Sources

Integrated Primary Care Information Project (IPCI), The Netherlands

IPCI is collected from electronic health records (EHR) of patients registered with their general practitioners (GPs) throughout the Netherlands. The selection of 374 GP practices is representative of the entire country. The database contains records from 2.5 million patients out of a Dutch population of 17M starting in 1996. The median follow-up is 4.6 years. The observation period for a patient is determined by the date of registration at the GP and the date of exit/death. The observation period start date is refined by many quality indicators, e.g. exclusion of peaks of conditions when registering at the GP. All data before the observation period is kept as history data. [3]

Information System for Research in Primary Care (SIDIAP), Spain

SIDIAP is collected from EHR records of patients receiving primary care delivered through Primary Care Teams (PCT), consisting of GPs, nurses, paediatricians, dentists, paediatric nurses, midwives and non-clinical staff. The Catalan Health Institute has a coverage of 5.8M patients, out of 7.8M people in the Catalan population (74%). The database started to collect data in 2006. The mean follow-up is 10 years. The observation period for a patient can be the start of the database (2006), or when a person is assigned to a Catalan Health Institute primary care centre. Date of exit can be when a person is transferred-out to a primary care centre that does not pertain to the Catalan Health Institute, or date of death, or date of end of follow-up in the database.[4] SIDIAP can be linked to the minimum basic set of hospital discharge data (Conjunt Mínim Bàsic de Dades [CMBD]), which includes diagnosis and procedures registered during hospital admissions. Results for SIDIAP CMBD are presented in this manuscript, with results for SIDIAP alone reported in the supplementary materials for comparison.

Clinical Practice Research Datalink GOLD, United Kingdom

The Clinical Practice Research Datalink (CPRD) is a governmental, not-for-profit research service, jointly funded by the National Institute for Health and Care Research and the Medicines and Healthcare products Regulatory Agency, a part of the Department of Health, United Kingdom (UK) (https://cprd.com). CPRD GOLD comprises computerized records of all clinical and referral events in primary care in addition to comprehensive demographic information and medication prescription data in a sample of UK patients (predominantly from Scotland (52% of practices) and Wales (28% of practices). Data are available for 20 million patients, including 3.2 million currently registered patients. [5]

Longitudinal Patient Database (LPD) Belgium, Belgium (IQVIA)

LPD Belgium is a computerised network of GPs who contribute to a centralised database of anonymised data of patients with ambulatory visits. Currently, around 300 GPs from 234 practices are contributing to the database covering 1.1M patients from a total of 11.5M Belgians (10.0%). The database covers time from 2005 through the present. Observation time is defined by the first and last consultation dates.

Disease Analyser (DA) Germany, Germany (IQVIA)

DA Germany is collected from extracts of patient management software used by GPs and specialists practicing in ambulatory care settings. Data coverage includes more than 34M distinct person records out of at total population of 80M (42.5%) in the country and collected from 2,734 providers. Patient visiting more than one provider are not cross identified for data protection reasons and therefore recorded as separate in the system. Dates of service include from 1992 through present. Observation time is defined by the first and last consultation dates. Germany has no mandatory GP system and patient have free choice of specialist. As

a result, data are collected from visits to 28.8% General, 13.4% Orthopaedic Surgery, 11.8% Otolaryngology, 11.2% Dermatology, 7.7% Obstetrics/Gynaecology, 6.2% various Neurology and Psychiatry 7.0% Paediatric, 4.6% Urology, 3.7% Cardiology, 3.5% Gastroenterology, 1.5% Pulmonary and 0.7% Rheumatology practices. Drugs are recorded as prescriptions of marketed products.

9.3 Study Period

The study period covered from 1st January 2010 until the end of available data in each of the data sources (see Section 2).

9.4 Follow-up

Study participants began contributing person time on the last date of the following: 1) study start date (1st January 2010), 2) date at which they have sufficient prior history of observation time in the database (365 days in main analysis, 0 and 1095 days in additional analyses), 3) date at which they reach a minimum age (where age strata were being considered). Participants stopped contributing person time at the earliest date of the following: 1) study end date (end of available data in each of the data sources), 2) date at which their observation period ends, 3) the last day in which they had the maximum age (where age strata are being considered).

9.5 Study Population with in and exclusion criteria

All persons in a database were eligible for inclusion in the study. For the primary analysis, study participants were required to have at least a year of prior history observed before contributing observation time. This was to ensure a minimum prior observation time to identify any ongoing outcomes at the time at which a participant entered the study. In sensitivity analyses the requirement for prior history was first removed, and then increased to three years.

9.6 Variables

9.6.1 Exposure /s (where relevant)

Not applicable as no specific drugs of interests are investigated.

9.6.2 Outcomes

Acute lymphocytic leukaemia (ALL)

Acute lymphocytic leukaemia (ALL) is a type of cancer that affects white blood cells. In acute lymphocytic leukaemia, the process of development of blood cells is faulted, with immature, non-functioning leukemic cells being released from hematopoietic progenitors in the bone marrow or lymphatic system. This leads to anaemia, granulocytopenia, and thrombocytopenia, and causes symptoms of fatigue, weakness, breathlessness, infection, and haemorrhage. Broad and narrow code lists were defined for ALL, with the broad definition including, for example, the code “Leukemic infiltration of skin (T-cell lymphoblastic leukaemia)”. In addition, code lists differed for complete and partial prevalence, with codes such as “Acute lymphoid leukaemia in remission” only included when considering complete prevalence (as such a code does not identify the initial diagnosis required for the definition of partial prevalence). The SNOMED codes used to identify ALL are reported in the appendix (with all codes used standard condition occurrence or observation codes used in the OMOP CDM). Results for narrow definitions are reported in this report, with results for the broad definition available in the supplementary materials.

Acute myeloid leukaemia (AML)

Acute myeloid leukaemia (AML) is the most common acute leukaemia in older patients. Characterised by the infiltration of blood, bone marrow and sometimes other tissues by proliferative, poorly differentiated hematopoietic cells. Mostly presenting with nonspecific symptoms that begin gradually, or abruptly, and are

the consequence of anaemia, leukocytosis, leukopenia/leukocyte dysfunction, or thrombocytopenia, typically up to 3 months before diagnosis. As with ALL, broad and a narrow code lists were defined for AML (with the code lists reported in the appendix). For complete prevalence one non-standard code was used (45581255, “Acute myeloblastic leukaemia, in remission”) as it´s mapped standard code was not sufficiently granular. Results for narrow definitions are reported in this report, with results for the broad definition available in the supplementary materials.

Chronic lymphocytic leukaemia (CLL)

Chronic lymphocytic leukaemia (CLL) is characterised by the proliferation and accumulation of lymphocytes, usually B lineage, immune-incompetent. In most cases it presents asymptomatically (incidental finding of lymphocytosis). The clinical manifestations of this disease are due to the progressive infiltration of the bone marrow, lymph nodes and other tissues by lymphocytes, and to immunological alterations. As with ALL and AML, narrow and broad definitions for CLL were defined and codes indicating remission were omitted from code lists for partial prevalence (with the code lists reported in the appendix, with all codes used were standard condition occurrence or observation codes used in the OMOP CDM). Results for narrow definitions are reported in this report, with results for the broad definition available in the supplementary materials.

Diffuse Large B-Cell Lymphoma (DLBCL)

Diffuse Large B-Cell Lymphoma (DLBCL) is the most common Non-Hodgkin lymphoma, accounting for about 1 in 3 of these conditions. DLBCL is also more common in people with a family history and in the immuno-compromised. It is common for diffuse Large B-Cell Lymphoma to be diagnosed at an advanced stage, with involvement of bone marrow, central nervous system, thyroid, liver, and/or skin. As treatment for follicular lymphoma grade 3B is that of DLBCL, two sets definitions for DLBCL were defined; one without including codes for follicular lymphoma grade 3B and the other with these codes included (see Appendix, with all codes used were standard condition occurrence or observation codes used in the OMOP CDM). Results for definitions without follicular lymphoma grade 3B are reported in this report, with results including follicular lymphoma grade 3B available in the supplementary materials.

Follicular lymphoma (FL)

Follicular lymphoma (FL) is the second leading Non-Hodgkin lymphomas and can be diagnosed accurately on morphologic findings alone: B-cell in follicular centre. Many patients are diagnosed incidentally or at a time when their lymphoma is not causing symptoms or signs of organ function impairment. The codes used to identify FL are reported in the appendix, with all codes used were standard condition occurrence or observation codes used in the OMOP CDM. As follicular lymphoma grade 3B was included in one set of DLBCL definitions, definitions of FL with and without grade 3B codes were created. Results for definitions with grade 3B included in this report, with results excluding follicular lymphoma grade 3B available in the supplementary materials.

Multiple myeloma (MM)

Multiple myeloma is a malignant uncontrolled proliferation of plasma cells derived from one single clone. Multiple myeloma can affect many organs, typically bones and calcium metabolism, kidneys, immune system, blood, and more rarely neurologic. Diagnosis is typically obtained after bone marrow biopsy, where plasma cells, monoclonal kappa or lambda light chains will be present. The most important differential diagnosis is monoclonal gammapathy of unknown significance (MGUS) or 'smoldering multiple myeloma'. The codes used to identify MM are reported in the appendix (with all codes used were standard condition occurrence or observation codes used in the OMOP CDM). Results for narrow definitions are reported in this report, with results for the broad definition available in the supplementary materials.

9.6.3 Other covariates, including confounders, effect modifiers and other variables (where relevant)

Two age groupings were used: 1) 0-9; 10-19; 20-29; 30-39; 40-49; 50-59; 60-69; 70-79; 80-89; 90-99; 100+, and 2) 0-44; 45-64; 65+. The latter, broader, age groups are reported here with the narrow age bands given in the supplementary materials. The sex (male/ female) of study participants was also identified.

9.7 Sample size

No sample size has been calculated for this Disease Epidemiology Study.

9.8 Data transformation

Analyses were conducted separately for each database. Before study initiation, test runs of the analytics were performed on a subset of the data sources or on a simulated set of patients and quality control checks were performed (see section 11). After all the tests were passed, the final package was released in the version-controlled Study Repository for execution against all the participating data sources. The data partners locally executed the analytics against the OMOP-CDM, after which they reviewed and approved the aggregated results.

9.9 Statistical Methods

9.9.1 Main Summary Measures

In this study 5-year partial prevalence was used for the primary analysis, where study participants were considered as a prevalent case for the 5 years following their first diagnosis. As sensitivity analyses, 2-year partial prevalence and complete prevalence were also estimated for each of the outcomes. For complete prevalence, study participants were considered as a prevalent case for the rest of their observed follow up after their first diagnosis. Point prevalence (as of 1st January of a calendar year) was used for the primary analysis, with annual period prevalence estimated as a additional analysis.

9.9.2 Main Statistical Methods

Point prevalence was estimated based on the proportion of people included who were in the outcome cohort at a specified time point. Period prevalence was estimated based on the proportion of people included in the denominator population who were in the outcome cohort at some point during the period of interest. Confidence intervals were calculated using the Wilson Score method.

9.9.3 Missing Values

Not applicable.

9.9.4 Sensitivity Analysis

The analyses performed are detailed below in Table 1.

Table 1. Summary of analysis settings

Analysis	**Type**	**Prevalence estimate**	**Study population: prior history required before contributing follow up time**	**Observable time required for time period (period prevalence only)**
*5-year partial prevalence**				
1	Primary	Point prevalence	365 days	N/A
2	Sensitivity	Period prevalence (annual)	365 days	One day
3	Sensitivity	Period prevalence (annual)	365 days	Full year
4	Sensitivity	Point prevalence	0 days	N/A
5	Sensitivity	Period prevalence (annual)	0 days	One day
6	Sensitivity	Period prevalence (annual)	0 days	Full year
6	Sensitivity	Point prevalence	1095 days	N/A
7	Sensitivity	Period prevalence (annual)	1095 days	One day

8	Sensitivity	Period prevalence (annual)	1095 days	Full year
2-year partial prevalence†				
9	Sensitivity	Point prevalence	365 days	N/A
10	Sensitivity	Period prevalence (annual)	365 days	One day
11	Sensitivity	Period prevalence (annual)	365 days	Full year
12	Sensitivity	Point prevalence	0 days	N/A
13	Sensitivity	Period prevalence (annual)	0 days	One day
14	Sensitivity	Period prevalence (annual)	0 days	Full year
15	Sensitivity	Point prevalence	1095 days	N/A
16	Sensitivity	Period prevalence (annual)	1095 days	One day
17	Sensitivity	Period prevalence (annual)	1095 days	Full year
Complete prevalence‡				
18	Sensitivity	Point prevalence	365 days	N/A
19	Sensitivity	Period prevalence (annual)	365 days	One day
20	Sensitivity	Period prevalence (annual)	365 days	Full year
21	Sensitivity	Point prevalence	0 days	N/A
22	Sensitivity	Period prevalence (annual)	0 days	One day
23	Sensitivity	Period prevalence (annual)	0 days	Full year
24	Sensitivity	Point prevalence	1095 days	N/A
25	Sensitivity	Period prevalence (annual)	1095 days	One day
26	Sensitivity	Period prevalence (annual)	1095 days	Full year

*For 5-year partial prevalence individuals were considered as a prevalent case if they had their first diagnosis observed in the prior 1,825 days. *For 2-year partial prevalence individuals were considered as a prevalent case if they had their first diagnosis observed in the prior 730 days. ‡For complete prevalence individuals were considered as a prevalent case if they had ever had a relevant record previously.

10. DATA MANAGEMENT

10.1 Data management

All databases have the data in the OMOP common data model. This enabled the use of standardised analytics and tools across the network since the structure of the data and the terminology system is harmonised. The OMOP CDM is developed and maintained by the Observational Health Data Sciences and Informatics (OHDSI) initiative and is described in detail on the wiki page of the CDM: https://ohdsi.github.io/CommonDataModel and in The Book of OHDSI: http://book.ohdsi.org
The analytic code for this study was written in R. Each data partner executed the study code against their database containing patient-level data and then returned the results set which only contained aggregated data. The results from each of the contributing data sites were then be combined in tables and figures for this study report.

10.2. Data storage and protection

For this study, data sources from various European countries processed personal data from individuals which was collected in national/regional electronic health record databases. Due to the sensitive nature of this personal medical data, it is important to be fully aware of ethical and regulatory aspects and to strive to take all reasonable measures to ensure compliance with ethical and regulatory issues on privacy.

All databases used in this study were already used for pharmaco-epidemiological research and have a well-developed mechanism to ensure that European and local regulations dealing with ethical use of the data and adequate privacy control are adhered to. In agreement with these regulations, rather than combining person level data and performing only a central analysis, separate local analyses were run, which generated non-identifiable aggregate summary results. Any cell counts less than 5 were obscured prior to sharing by data partners.

11. QUALITY CONTROL

General database quality control

A number of open-source quality control mechanisms for the OMOP CDM have been developed (see Chapter 15 of The Book of OHDSI http://book.ohdsi.org/DataQuality.html). In particular, all data partners had previously run the OHDSI Data Quality Dashboard tool (https://github.com/OHDSI/DataQualityDashboard). This tool provides numerous checks relating to the conformance, completeness and plausibility of the mapped data. Conformance focuses on checks that describe the compliance of the representation of data against internal or external formatting, relational, or computational definitions, completeness in the sense of data quality is solely focused on quantifying missingness, or the absence of data, while plausibility seeks to determine the believability or truthfulness of data values.[7] Each of these categories has one or more subcategories and are evaluated in two contexts: validation and verification. Validation relates to how well data align with external benchmarks with expectations derived from known true standards, while verification relates to how well data conform to local knowledge, metadata descriptions, and system assumptions.

Study specific quality control

When defining outcomes, a systematic search of possible codes for inclusion was done using CodelistGenerator R package (https://github.com/darwin-eu/CodelistGenerator). This software allows the user to define a search strategy and using this will then query the vocabulary tables of the OMOP common data model so as to find potentially relevant codes. The codes returned were then reviewed by two clinical epidemiologists to consider their relevance. In addition, the CohortDiagnostics R package (https://github.com/OHDSI/CohortDiagnostics) was run to assess the use of different codes across the databases contributing to the study and identify any codes potentially omitted in error. This allowed for a consideration of the validity of the outcome cohorts in each of the databases, and informed decisions around whether multiple definitions were required (e.g. broad and narrow definition may be defined if there are some frequently used codes that are not particularly precise).

The study code was based on an R package developed to estimate Incidence and Prevalence using the OMOP common data model. This package includes numerous automated unit tests to ensure the validity of the code, alongside software peer review and user testing.

12 RESULTS

A total of 35,109,377 study participants were included (CPRD GOLD: 9,192,128, IPCI: 2,157,533, IQVIA Belgium LPD: 677,667, IQVIA Germany DA: 15,542,676, and SIDIAP CMBD: 7,539,373) for the primary analysis across all study years. When calculating prevalence for 2020, the last year for which all databases contributed, 17,305,511 study participants were included (CPRD GOLD: 2,999,581, IPCI: 1,184,026, IQVIA Belgium LPD: 367,266, IQVIA Germany DA: 7,023,015, and SIDIAP CMBD: 5,731,623).

Table 2: Study attrition for primary analysis including the whole study period

	CPRD GOLD N (excluded)	IPCI N (excluded)	IQVIA Belgium LPD N (excluded)	IQVIA Germany DA N (excluded)	SIDIAP N (excluded)
Database population	15,662,217	2,612,850	1,134,075	40,243,608	8,265,343
With sex available	15,662,217 (0)	2,612,850 (0)	1,134,075 (0)	40,215,065 (28,543)	8,265,343 (0)
With observation time available during study period	10,302,821 (5,359,396)	2,576,860 (35,990)	1,134,075 (0)	34,875,646 (5,339,419)	7,893,284 (372,059)
Prior history requirement fulfilled during study period	9,265,118 (1,037,703)	2,277,461 (299,399)	688,634 (445,441)	15,543,475 (19,332,171)	7,602,904 (290,380)
Observed on at least one point prevalence date (1st January)	9,192,128 (72,990)	2,157,533 (119,928)	677,667 (10,967)	15,542,676 (799)	7,539,373 (63,531)

12.2. Main Results

While CPRD, IQVIA Germany DA, and SIDIAP CMBD provided estimates for all study outcomes, DLBCL and AML were not captured in IQVIA Belgium LPD and only MM was identified in IPCI due to limitations in source coding.

Estimated prevalence per 10,000 of the study outcomes in 2020 for the primary analysis (5-year partial point prevalence, with study participants required to have at least a year of prior history) are shown below in Figure 1 and Table 3. Estimates for ALL ranged between 0.44 (0.27 to 0.71) and 0.65 (0.59 to 0.71). Estimates for AML ranged between 0.72 (0.62 to 0.82) and 1.03 (0.95 to 1.12). Estimates for CLL ranged between 2.83 (2.34 to 3.43) and 4.13 (3.98 to 4.28). Estimates for DLBCL ranged between 0.47 (0.42 to 0.52) and 1.73 (1.62 to 1.84). Estimates for FL ranged between 0.90 (0.83 to 0.97) and 2.83 (2.70 to 2.97). Lastly, estimates for MM ranged between 2.15 (1.73 to 2.68) and 4.27 (4.12 to 4.42).

Prevalence in 2020 stratified by age group is shown below in Figure 2 and Table 4 and Figure 3 and Table 5, while prevalence stratified by sex is shown in Figure 4 and Table 6. Estimates across all study years are shown in Figure 5 and Table 7.

Figure 1: Estimated 5-year partial point prevalence of study outcomes in 2020

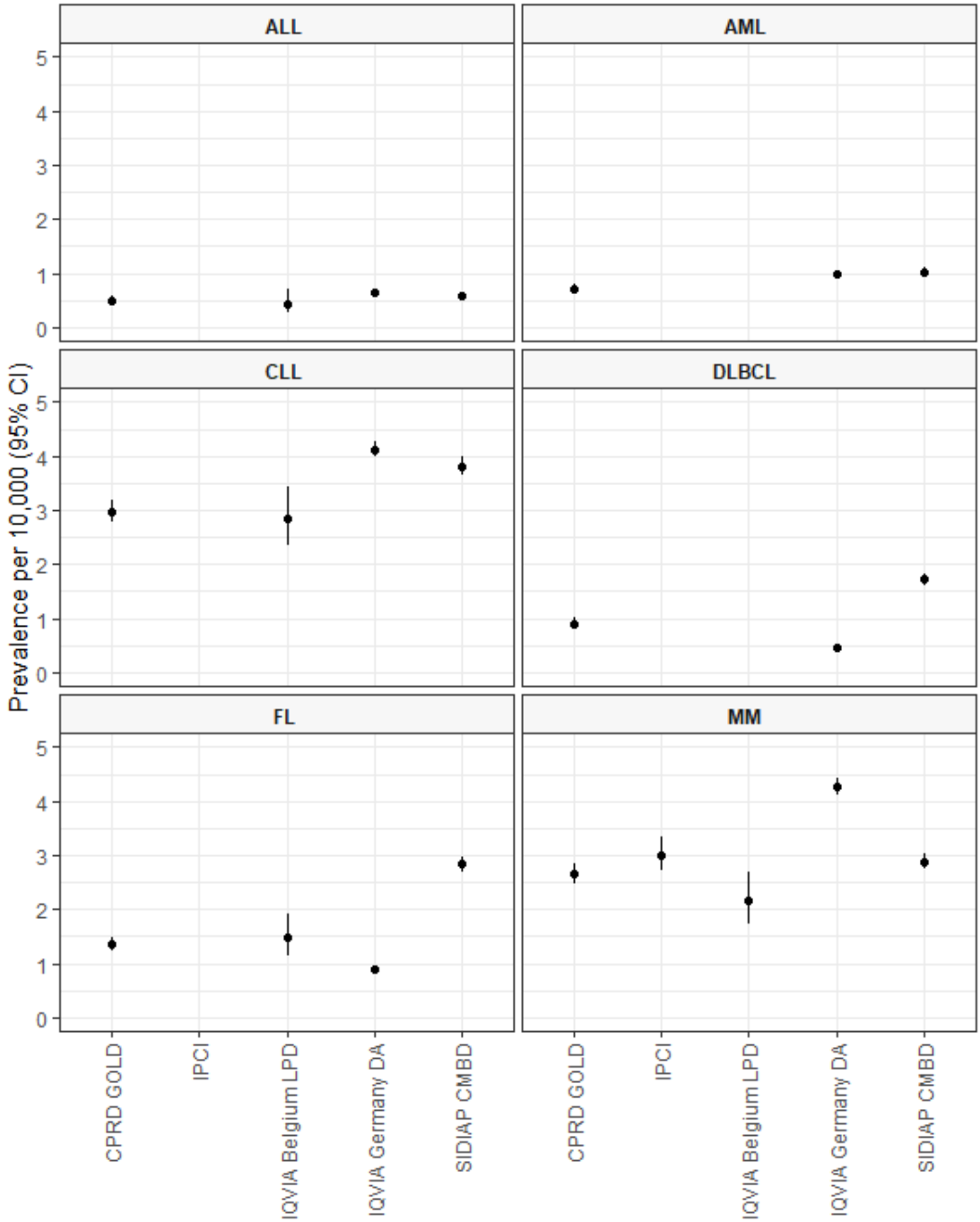


Table 3: Estimated 5-year partial prevalence of study outcomes in 2020

Disease	Database	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
ALL	CPRD GOLD	2,999,581	148	0.49 (0.42 to 0.58)
ALL	IQVIA Belgium LPD	367,266	16	0.44 (0.27 to 0.71)
ALL	IQVIA Germany DA	7,023,015	454	0.65 (0.59 to 0.71)
ALL	SIDIAP CMBD	5,731,623	328	0.57 (0.51 to 0.64)
AML	CPRD GOLD	2,999,581	215	0.72 (0.62 to 0.82)
AML	IQVIA Germany DA	7,023,015	694	0.99 (0.92 to 1.06)
AML	SIDIAP CMBD	5,731,623	592	1.03 (0.95 to 1.12)
CLL	CPRD GOLD	2,999,581	894	2.98 (2.79 to 3.18)
CLL	IQVIA Belgium LPD	367,266	104	2.83 (2.34 to 3.43)
CLL	IQVIA Germany DA	7,023,015	2900	4.13 (3.98 to 4.28)
CLL	SIDIAP CMBD	5,731,623	2187	3.82 (3.66 to 3.98)
DLBCL	CPRD GOLD	2,999,581	272	0.91 (0.80 to 1.02)
DLBCL	IQVIA Germany DA	7,023,015	331	0.47 (0.42 to 0.52)
DLBCL	SIDIAP CMBD	5,731,623	989	1.73 (1.62 to 1.84)
FL	CPRD GOLD	2,999,581	405	1.35 (1.22 to 1.49)
FL	IQVIA Belgium LPD	367,266	54	1.47 (1.13 to 1.92)
FL	IQVIA Germany DA	7,023,015	631	0.90 (0.83 to 0.97)
FL	SIDIAP CMBD	5,731,623	1623	2.83 (2.70 to 2.97)
MM	CPRD GOLD	2,999,581	800	2.67 (2.49 to 2.86)
MM	IPCI	1,184,026	357	3.02 (2.72 to 3.34)
MM	IQVIA Belgium LPD	367,266	79	2.15 (1.73 to 2.68)
MM	IQVIA Germany DA	7,023,015	2996	4.27 (4.12 to 4.42)
MM	SIDIAP CMBD	5,731,623	1658	2.89 (2.76 to 3.04)

Figure 2: Estimated 5-year partial point prevalence of study outcomes in 2020, by age group (broad)

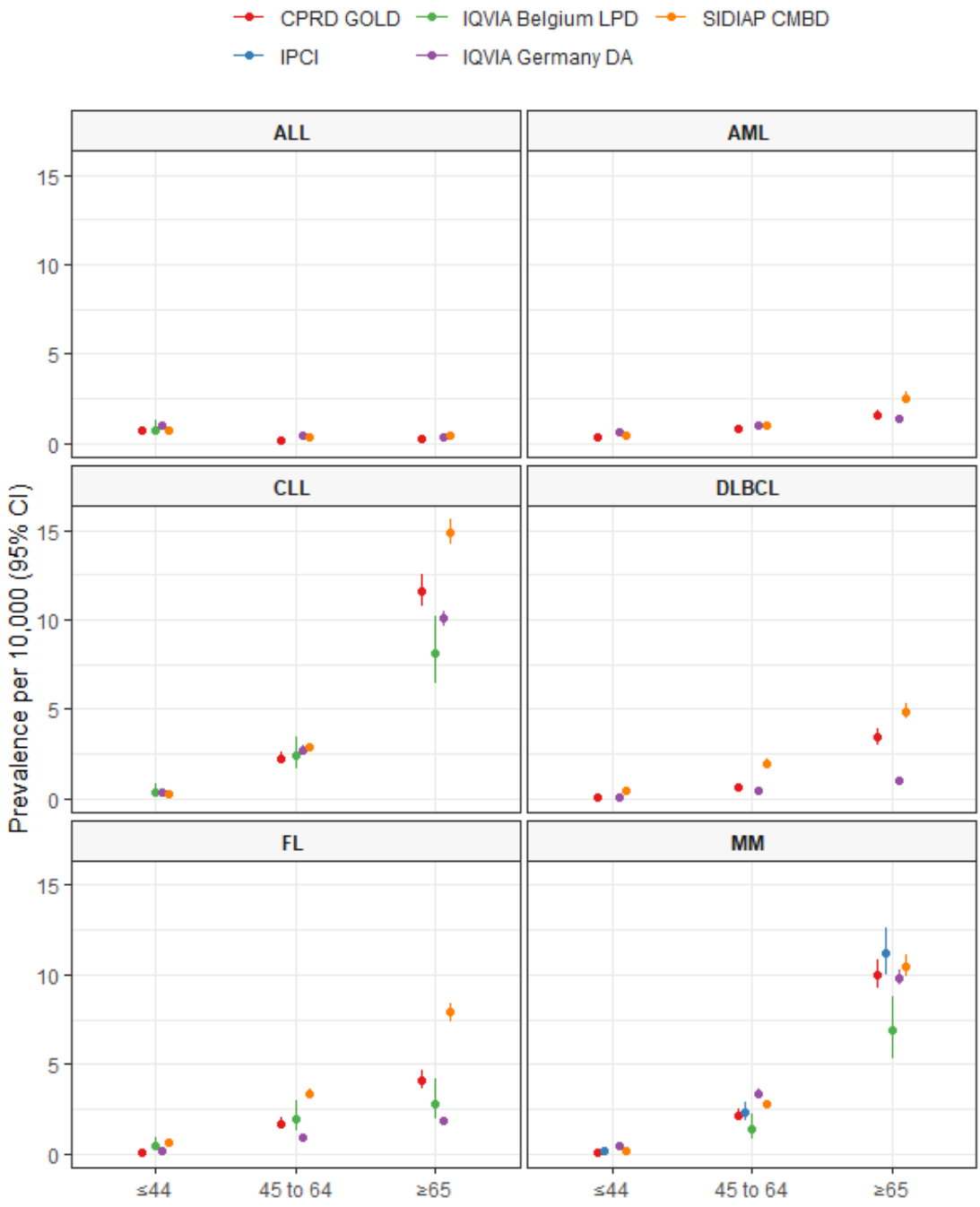


Table 4: Estimated 5-year partial prevalence of study outcomes in 2020, by age group (broad)

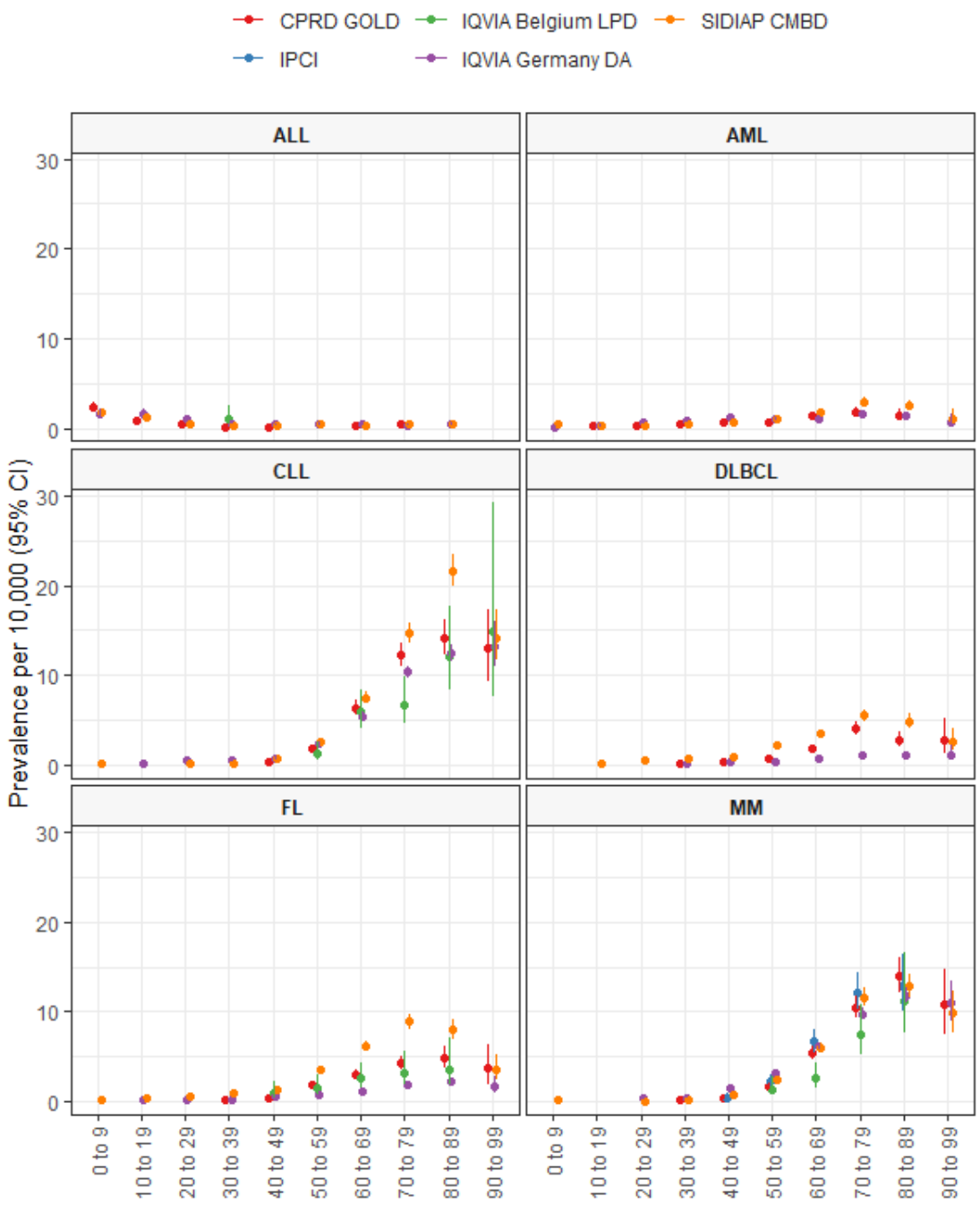
Disease	Database	Age group	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
ALL	CPRD GOLD	≤44	1,551,293	118	0.76 (0.63 to 0.90)
ALL	CPRD GOLD	45 to 64	841,736	16	0.19 (0.11 to 0.30)
ALL	CPRD GOLD	≥65	606,552	14	0.23 (0.12 to 0.37)
ALL	IQVIA Belgium LPD	≤44	168,430	12	0.71 (0.41 to 1.25)
ALL	IQVIA Belgium LPD	45 to 64	109,775	≤5	
ALL	IQVIA Belgium LPD	≥65	89,061	≤5	
ALL	IQVIA Germany DA	≤44	2,567,744	267	1.04 (0.92 to 1.17)
ALL	IQVIA Germany DA	45 to 64	2,290,234	105	0.46 (0.38 to 0.55)
ALL	IQVIA Germany DA	≥65	2,165,037	82	0.38 (0.31 to 0.47)
ALL	SIDIAP CMBD	≤44	2,974,228	217	0.73 (0.64 to 0.83)
ALL	SIDIAP CMBD	45 to 64	1,645,148	61	0.37 (0.29 to 0.48)
ALL	SIDIAP CMBD	≥65	1,112,247	50	0.45 (0.34 to 0.59)
AML	CPRD GOLD	≤44	1,551,293	49	0.32 (0.23 to 0.41)
AML	CPRD GOLD	45 to 64	841,736	71	0.84 (0.66 to 1.05)
AML	CPRD GOLD	≥65	606,552	95	1.57 (1.27 to 1.90)
AML	IQVIA Germany DA	≤44	2,567,744	156	0.61 (0.52 to 0.71)
AML	IQVIA Germany DA	45 to 64	2,290,234	240	1.05 (0.92 to 1.19)
AML	IQVIA Germany DA	≥65	2,165,037	298	1.38 (1.23 to 1.54)

Disease	Database	Age group	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
AML	SIDIAP CMBD	≤44	2,974,228	142	0.48 (0.41 to 0.56)
AML	SIDIAP CMBD	45 to 64	1,645,148	168	1.02 (0.88 to 1.19)
AML	SIDIAP CMBD	≥65	1,112,247	282	2.54 (2.26 to 2.85)
CLL	CPRD GOLD	≤44	1,551,293	≤5	
CLL	CPRD GOLD	45 to 64	841,736	187	2.22 (1.91 to 2.55)
CLL	CPRD GOLD	≥65	606,552	704	11.61 (10.77 to 12.48)
CLL	IQVIA Belgium LPD	≤44	168,430	6	0.36 (0.16 to 0.78)
CLL	IQVIA Belgium LPD	45 to 64	109,775	26	2.37 (1.62 to 3.47)
CLL	IQVIA Belgium LPD	≥65	89,061	72	8.08 (6.42 to 10.18)
CLL	IQVIA Germany DA	≤44	2,567,744	99	0.39 (0.32 to 0.47)
CLL	IQVIA Germany DA	45 to 64	2,290,234	624	2.72 (2.52 to 2.95)
CLL	IQVIA Germany DA	≥65	2,165,037	2177	10.06 (9.64 to 10.49)
CLL	SIDIAP CMBD	≤44	2,974,228	65	0.22 (0.17 to 0.28)
CLL	SIDIAP CMBD	45 to 64	1,645,148	467	2.84 (2.59 to 3.11)
CLL	SIDIAP CMBD	≥65	1,112,247	1655	14.88 (14.18 to 15.61)
DLBCL	CPRD GOLD	≤44	1,551,293	14	0.09 (0.05 to 0.15)
DLBCL	CPRD GOLD	45 to 64	841,736	51	0.61 (0.45 to 0.79)
DLBCL	CPRD GOLD	≥65	606,552	207	3.41 (2.96 to 3.89)
DLBCL	IQVIA Germany DA	≤44	2,567,744	24	0.09 (0.06 to 0.14)
DLBCL	IQVIA Germany DA	45 to 64	2,290,234	97	0.42 (0.35 to 0.52)

Disease	Database	Age group	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
DLBCL	IQVIA Germany DA	≥65	2,165,037	210	0.97 (0.85 to 1.11)
DLBCL	SIDIAP CMBD	≤44	2,974,228	130	0.44 (0.37 to 0.52)
DLBCL	SIDIAP CMBD	45 to 64	1,645,148	321	1.95 (1.75 to 2.18)
DLBCL	SIDIAP CMBD	≥65	1,112,247	538	4.84 (4.45 to 5.26)
FL	CPRD GOLD	≤44	1,551,293	13	0.08 (0.04 to 0.14)
FL	CPRD GOLD	45 to 64	841,736	142	1.69 (1.42 to 1.98)
FL	CPRD GOLD	≥65	606,552	250	4.12 (3.63 to 4.65)
FL	IQVIA Belgium LPD	≤44	168,430	8	0.47 (0.24 to 0.94)
FL	IQVIA Belgium LPD	45 to 64	109,775	21	1.91 (1.25 to 2.92)
FL	IQVIA Belgium LPD	≥65	89,061	25	2.81 (1.90 to 4.14)
FL	IQVIA Germany DA	≤44	2,567,744	44	0.17 (0.13 to 0.23)
FL	IQVIA Germany DA	45 to 64	2,290,234	199	0.87 (0.76 to 1.00)
FL	IQVIA Germany DA	≥65	2,165,037	388	1.79 (1.62 to 1.98)
FL	SIDIAP CMBD	≤44	2,974,228	192	0.65 (0.56 to 0.74)
FL	SIDIAP CMBD	45 to 64	1,645,148	553	3.36 (3.09 to 3.65)
FL	SIDIAP CMBD	≥65	1,112,247	878	7.89 (7.39 to 8.43)
MM	CPRD GOLD	≤44	1,551,293	13	0.08 (0.04 to 0.14)
MM	CPRD GOLD	45 to 64	841,736	179	2.13 (1.83 to 2.45)
MM	CPRD GOLD	≥65	606,552	608	10.02 (9.24 to 10.84)
MM	IPCI	≤44	596,540	7	0.12 (0.06 to 0.24)

Disease	Database	Age group	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
MM	IPCI	45 to 64	344,524	78	2.26 (1.81 to 2.83)
MM	IPCI	≥65	242,962	272	11.20 (9.94 to 12.61)
MM	IQVIA Belgium LPD	≤44	168,430	≤5	
MM	IQVIA Belgium LPD	45 to 64	109,775	15	1.37 (0.83 to 2.25)
MM	IQVIA Belgium LPD	≥65	89,061	61	6.85 (5.33 to 8.80)
MM	IQVIA Germany DA	≤44	2,567,744	104	0.41 (0.33 to 0.49)
MM	IQVIA Germany DA	45 to 64	2,290,234	765	3.34 (3.11 to 3.59)
MM	IQVIA Germany DA	≥65	2,165,037	2127	9.82 (9.42 to 10.25)
MM	SIDIAP CMBD	≤44	2,974,228	46	0.15 (0.12 to 0.21)
MM	SIDIAP CMBD	45 to 64	1,645,148	449	2.73 (2.49 to 2.99)
MM	SIDIAP CMBD	≥65	1,112,247	1163	10.46 (9.87 to 11.07)

Figure 3: Estimated 5-year partial point prevalence of study outcomes in 2020, by age group (narrow)



Note, age group 100 to 150 has been omitted due to small counts.

Table 5: Estimated 5-year partial prevalence of study outcomes in 2020, by age group (narrow)

Disease	Database	Age group	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
ALL	CPRD GOLD	0 to 9	295,792	70	2.37 (1.84 to 2.96)
ALL	CPRD GOLD	10 to 19	314,894	26	0.83 (0.54 to 1.18)
ALL	CPRD GOLD	20 to 29	337,053	14	0.42 (0.22 to 0.67)
ALL	CPRD GOLD	30 to 39	403,582	7	0.17 (0.06 to 0.33)
ALL	CPRD GOLD	40 to 49	406,438	6	0.15 (0.05 to 0.30)
ALL	CPRD GOLD	50 to 59	443,936	≤5	
ALL	CPRD GOLD	60 to 69	354,013	10	0.28 (0.13 to 0.49)
ALL	CPRD GOLD	70 to 79	275,624	11	0.40 (0.19 to 0.68)
ALL	CPRD GOLD	80 to 89	134,265	≤5	
ALL	CPRD GOLD	90 to 99	31,504	≤5	
ALL	CPRD GOLD	100 to 150	2,480	≤5	
ALL	IQVIA Belgium LPD	0 to 9	20,746	≤5	
ALL	IQVIA Belgium LPD	10 to 19	36,759	≤5	
ALL	IQVIA Belgium LPD	20 to 29	39,656	≤5	
ALL	IQVIA Belgium LPD	30 to 39	45,991	5	1.09 (0.46 to 2.54)
ALL	IQVIA Belgium LPD	40 to 49	51,164	≤5	
ALL	IQVIA Belgium LPD	50 to 59	56,753	≤5	
ALL	IQVIA Belgium LPD	60 to 69	51,172	≤5	
ALL	IQVIA Belgium LPD	70 to 79	37,255	≤5	
ALL	IQVIA Belgium LPD	80 to 89	22,261	≤5	
ALL	IQVIA Belgium LPD	90 to 99	5,390	≤5	
ALL	IQVIA Belgium LPD	100 to 150	119	≤5	
ALL	IQVIA Germany DA	0 to 9	371,329	61	1.64 (1.28 to 2.11)
ALL	IQVIA Germany DA	10 to 19	491,722	83	1.69 (1.36 to 2.09)
ALL	IQVIA Germany DA	20 to 29	571,943	64	1.12 (0.88 to 1.43)
ALL	IQVIA Germany DA	30 to 39	738,337	42	0.57 (0.42 to 0.77)
ALL	IQVIA Germany DA	40 to 49	822,467	34	0.41 (0.30 to 0.58)

Disease	Database	Age group	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
ALL	IQVIA Germany DA	50 to 59	1,256,181	57	0.45 (0.35 to 0.59)
ALL	IQVIA Germany DA	60 to 69	1,144,562	49	0.43 (0.32 to 0.57)
ALL	IQVIA Germany DA	70 to 79	911,623	33	0.36 (0.26 to 0.51)
ALL	IQVIA Germany DA	80 to 89	628,961	30	0.48 (0.33 to 0.68)
ALL	IQVIA Germany DA	90 to 99	85,890	≤5	
ALL	SIDIAP CMBD	0 to 9	487,254	85	1.74 (1.41 to 2.16)
ALL	SIDIAP CMBD	10 to 19	606,196	71	1.17 (0.93 to 1.48)
ALL	SIDIAP CMBD	20 to 29	593,232	24	0.40 (0.27 to 0.60)
ALL	SIDIAP CMBD	30 to 39	775,179	18	0.23 (0.15 to 0.37)
ALL	SIDIAP CMBD	40 to 49	1,002,181	31	0.31 (0.22 to 0.44)
ALL	SIDIAP CMBD	50 to 59	819,893	39	0.48 (0.35 to 0.65)
ALL	SIDIAP CMBD	60 to 69	622,525	24	0.39 (0.26 to 0.57)
ALL	SIDIAP CMBD	70 to 79	479,338	24	0.50 (0.34 to 0.75)
ALL	SIDIAP CMBD	80 to 89	272,950	11	0.40 (0.23 to 0.72)
ALL	SIDIAP CMBD	90 to 99	70,412	≤5	
ALL	SIDIAP CMBD	100 to 150	2,463	≤5	
AML	CPRD GOLD	0 to 9	295,792	≤5	
AML	CPRD GOLD	10 to 19	314,894	9	0.29 (0.12 to 0.51)
AML	CPRD GOLD	20 to 29	337,053	11	0.33 (0.16 to 0.56)
AML	CPRD GOLD	30 to 39	403,582	17	0.42 (0.24 to 0.65)
AML	CPRD GOLD	40 to 49	406,438	24	0.59 (0.38 to 0.85)
AML	CPRD GOLD	50 to 59	443,936	30	0.68 (0.45 to 0.94)
AML	CPRD GOLD	60 to 69	354,013	51	1.44 (1.07 to 1.87)
AML	CPRD GOLD	70 to 79	275,624	50	1.81 (1.34 to 2.36)
AML	CPRD GOLD	80 to 89	134,265	19	1.42 (0.84 to 2.14)
AML	CPRD GOLD	90 to 99	31,504	≤5	
AML	CPRD GOLD	100 to 150	2,480	≤5	
AML	IQVIA Germany DA	0 to 9	371,329	7	0.19 (0.09 to 0.39)
AML	IQVIA Germany DA	10 to 19	491,722	16	0.33 (0.20 to 0.53)
AML	IQVIA Germany DA	20 to 29	571,943	34	0.59 (0.43 to 0.83)
AML	IQVIA Germany DA	30 to 39	738,337	59	0.80 (0.62 to 1.03)

Disease	Database	Age group	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
AML	IQVIA Germany DA	40 to 49	822,467	96	1.17 (0.96 to 1.43)
AML	IQVIA Germany DA	50 to 59	1,256,181	122	0.97 (0.81 to 1.16)
AML	IQVIA Germany DA	60 to 69	1,144,562	128	1.12 (0.94 to 1.33)
AML	IQVIA Germany DA	70 to 79	911,623	142	1.56 (1.32 to 1.84)
AML	IQVIA Germany DA	80 to 89	628,961	84	1.34 (1.08 to 1.65)
AML	IQVIA Germany DA	90 to 99	85,890	6	0.70 (0.32 to 1.52)
AML	SIDIAP CMBD	0 to 9	487,254	22	0.45 (0.30 to 0.68)
AML	SIDIAP CMBD	10 to 19	606,196	21	0.35 (0.23 to 0.53)
AML	SIDIAP CMBD	20 to 29	593,232	22	0.37 (0.24 to 0.56)
AML	SIDIAP CMBD	30 to 39	775,179	43	0.55 (0.41 to 0.75)
AML	SIDIAP CMBD	40 to 49	1,002,181	72	0.72 (0.57 to 0.90)
AML	SIDIAP CMBD	50 to 59	819,893	90	1.10 (0.89 to 1.35)
AML	SIDIAP CMBD	60 to 69	622,525	106	1.70 (1.41 to 2.06)
AML	SIDIAP CMBD	70 to 79	479,338	141	2.94 (2.49 to 3.47)
AML	SIDIAP CMBD	80 to 89	272,950	67	2.45 (1.93 to 3.12)
AML	SIDIAP CMBD	90 to 99	70,412	8	1.14 (0.58 to 2.24)
AML	SIDIAP CMBD	100 to 150	2,463	≤5	
CLL	CPRD GOLD	0 to 9	295,792	≤5	
CLL	CPRD GOLD	10 to 19	314,894	≤5	
CLL	CPRD GOLD	20 to 29	337,053	≤5	
CLL	CPRD GOLD	30 to 39	403,582	≤5	
CLL	CPRD GOLD	40 to 49	406,438	17	0.42 (0.24 to 0.65)
CLL	CPRD GOLD	50 to 59	443,936	82	1.85 (1.47 to 2.27)
CLL	CPRD GOLD	60 to 69	354,013	224	6.33 (5.53 to 7.19)
CLL	CPRD GOLD	70 to 79	275,624	338	12.26 (10.99 to 13.61)
CLL	CPRD GOLD	80 to 89	134,265	190	14.15 (12.21 to 16.24)
CLL	CPRD GOLD	90 to 99	31,504	41	13.01 (9.32 to 17.34)
CLL	CPRD GOLD	100 to 150	2,480	≤5	
CLL	IQVIA Belgium LPD	0 to 9	20,746	≤5	
CLL	IQVIA Belgium LPD	10 to 19	36,759	≤5	
CLL	IQVIA Belgium LPD	20 to 29	39,656	≤5	

Disease	Database	Age group	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
CLL	IQVIA Belgium LPD	30 to 39	45,991	≤5	
CLL	IQVIA Belgium LPD	40 to 49	51,164	≤5	
CLL	IQVIA Belgium LPD	50 to 59	56,753	7	1.23 (0.60 to 2.55)
CLL	IQVIA Belgium LPD	60 to 69	51,172	30	5.86 (4.11 to 8.37)
CLL	IQVIA Belgium LPD	70 to 79	37,255	25	6.71 (4.55 to 9.90)
CLL	IQVIA Belgium LPD	80 to 89	22,261	27	12.13 (8.34 to 17.64)
CLL	IQVIA Belgium LPD	90 to 99	5,390	8	14.84 (7.52 to 29.26)
CLL	IQVIA Belgium LPD	100 to 150	119	≤5	
CLL	IQVIA Germany DA	0 to 9	371,329	≤5	
CLL	IQVIA Germany DA	10 to 19	491,722	10	0.20 (0.11 to 0.37)
CLL	IQVIA Germany DA	20 to 29	571,943	26	0.45 (0.31 to 0.67)
CLL	IQVIA Germany DA	30 to 39	738,337	38	0.51 (0.37 to 0.71)
CLL	IQVIA Germany DA	40 to 49	822,467	65	0.79 (0.62 to 1.01)
CLL	IQVIA Germany DA	50 to 59	1,256,181	293	2.33 (2.08 to 2.62)
CLL	IQVIA Germany DA	60 to 69	1,144,562	623	5.44 (5.03 to 5.89)
CLL	IQVIA Germany DA	70 to 79	911,623	945	10.37 (9.73 to 11.05)
CLL	IQVIA Germany DA	80 to 89	628,961	783	12.45 (11.61 to 13.35)
CLL	IQVIA Germany DA	90 to 99	85,890	114	13.27 (11.05 to 15.94)
CLL	SIDIAP CMBD	0 to 9	487,254	7	0.14 (0.07 to 0.30)
CLL	SIDIAP CMBD	10 to 19	606,196	≤5	
CLL	SIDIAP CMBD	20 to 29	593,232	7	0.12 (0.06 to 0.24)
CLL	SIDIAP CMBD	30 to 39	775,179	15	0.19 (0.12 to 0.32)
CLL	SIDIAP CMBD	40 to 49	1,002,181	80	0.80 (0.64 to 0.99)
CLL	SIDIAP CMBD	50 to 59	819,893	218	2.66 (2.33 to 3.04)
CLL	SIDIAP CMBD	60 to 69	622,525	464	7.45 (6.81 to 8.16)
CLL	SIDIAP CMBD	70 to 79	479,338	700	14.60 (13.56 to 15.73)
CLL	SIDIAP CMBD	80 to 89	272,950	589	21.58 (19.91 to 23.39)
CLL	SIDIAP CMBD	90 to 99	70,412	100	14.20 (11.68 to 17.27)
CLL	SIDIAP CMBD	100 to 150	2,463	6	24.36 (11.17 to 53.05)
DLBCL	CPRD GOLD	0 to 9	295,792	≤5	
DLBCL	CPRD GOLD	10 to 19	314,894	≤5	

Disease	Database	Age group	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
DLBCL	CPRD GOLD	20 to 29	337,053	≤5	
DLBCL	CPRD GOLD	30 to 39	403,582	5	0.12 (0.03 to 0.27)
DLBCL	CPRD GOLD	40 to 49	406,438	14	0.34 (0.18 to 0.55)
DLBCL	CPRD GOLD	50 to 59	443,936	28	0.63 (0.42 to 0.89)
DLBCL	CPRD GOLD	60 to 69	354,013	62	1.75 (1.34 to 2.22)
DLBCL	CPRD GOLD	70 to 79	275,624	113	4.10 (3.38 to 4.89)
DLBCL	CPRD GOLD	80 to 89	134,265	37	2.76 (1.93 to 3.73)
DLBCL	CPRD GOLD	90 to 99	31,504	9	2.86 (1.24 to 5.11)
DLBCL	CPRD GOLD	100 to 150	2,480	≤5	
DLBCL	IQVIA Germany DA	0 to 9	371,329	≤5	
DLBCL	IQVIA Germany DA	10 to 19	491,722	≤5	
DLBCL	IQVIA Germany DA	20 to 29	571,943	≤5	
DLBCL	IQVIA Germany DA	30 to 39	738,337	8	0.11 (0.05 to 0.21)
DLBCL	IQVIA Germany DA	40 to 49	822,467	27	0.33 (0.23 to 0.48)
DLBCL	IQVIA Germany DA	50 to 59	1,256,181	45	0.36 (0.27 to 0.48)
DLBCL	IQVIA Germany DA	60 to 69	1,144,562	73	0.64 (0.51 to 0.80)
DLBCL	IQVIA Germany DA	70 to 79	911,623	94	1.03 (0.84 to 1.26)
DLBCL	IQVIA Germany DA	80 to 89	628,961	69	1.10 (0.87 to 1.39)
DLBCL	IQVIA Germany DA	90 to 99	85,890	10	1.16 (0.63 to 2.14)
DLBCL	SIDIAP CMBD	0 to 9	487,254	≤5	
DLBCL	SIDIAP CMBD	10 to 19	606,196	15	0.25 (0.15 to 0.41)
DLBCL	SIDIAP CMBD	20 to 29	593,232	31	0.52 (0.37 to 0.74)
DLBCL	SIDIAP CMBD	30 to 39	775,179	50	0.65 (0.49 to 0.85)
DLBCL	SIDIAP CMBD	40 to 49	1,002,181	83	0.83 (0.67 to 1.03)
DLBCL	SIDIAP CMBD	50 to 59	819,893	177	2.16 (1.86 to 2.50)
DLBCL	SIDIAP CMBD	60 to 69	622,525	214	3.44 (3.01 to 3.93)
DLBCL	SIDIAP CMBD	70 to 79	479,338	263	5.49 (4.86 to 6.19)
DLBCL	SIDIAP CMBD	80 to 89	272,950	134	4.91 (4.15 to 5.81)
DLBCL	SIDIAP CMBD	90 to 99	70,412	18	2.56 (1.62 to 4.04)
DLBCL	SIDIAP CMBD	100 to 150	2,463	≤5	
FL	CPRD GOLD	0 to 9	295,792	≤5	

Disease	Database	Age group	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
FL	CPRD GOLD	10 to 19	314,894	≤5	
FL	CPRD GOLD	20 to 29	337,053	≤5	
FL	CPRD GOLD	30 to 39	403,582	7	0.17 (0.06 to 0.33)
FL	CPRD GOLD	40 to 49	406,438	16	0.39 (0.22 to 0.62)
FL	CPRD GOLD	50 to 59	443,936	82	1.85 (1.47 to 2.27)
FL	CPRD GOLD	60 to 69	354,013	105	2.97 (2.43 to 3.56)
FL	CPRD GOLD	70 to 79	275,624	116	4.21 (3.48 to 5.01)
FL	CPRD GOLD	80 to 89	134,265	65	4.84 (3.73 to 6.10)
FL	CPRD GOLD	90 to 99	31,504	12	3.81 (1.91 to 6.34)
FL	CPRD GOLD	100 to 150	2,480	≤5	
FL	IQVIA Belgium LPD	0 to 9	20,746	≤5	
FL	IQVIA Belgium LPD	10 to 19	36,759	≤5	
FL	IQVIA Belgium LPD	20 to 29	39,656	≤5	
FL	IQVIA Belgium LPD	30 to 39	45,991	≤5	
FL	IQVIA Belgium LPD	40 to 49	51,164	5	0.98 (0.42 to 2.29)
FL	IQVIA Belgium LPD	50 to 59	56,753	9	1.59 (0.83 to 3.01)
FL	IQVIA Belgium LPD	60 to 69	51,172	13	2.54 (1.48 to 4.35)
FL	IQVIA Belgium LPD	70 to 79	37,255	12	3.22 (1.84 to 5.63)
FL	IQVIA Belgium LPD	80 to 89	22,261	8	3.59 (1.82 to 7.09)
FL	IQVIA Belgium LPD	90 to 99	5,390	≤5	
FL	IQVIA Belgium LPD	100 to 150	119	≤5	
FL	IQVIA Germany DA	0 to 9	371,329	≤5	
FL	IQVIA Germany DA	10 to 19	491,722	7	0.14 (0.07 to 0.29)
FL	IQVIA Germany DA	20 to 29	571,943	8	0.14 (0.07 to 0.28)
FL	IQVIA Germany DA	30 to 39	738,337	14	0.19 (0.11 to 0.32)
FL	IQVIA Germany DA	40 to 49	822,467	48	0.58 (0.44 to 0.77)
FL	IQVIA Germany DA	50 to 59	1,256,181	94	0.75 (0.61 to 0.92)
FL	IQVIA Germany DA	60 to 69	1,144,562	133	1.16 (0.98 to 1.38)
FL	IQVIA Germany DA	70 to 79	911,623	171	1.88 (1.61 to 2.18)
FL	IQVIA Germany DA	80 to 89	628,961	141	2.24 (1.90 to 2.64)

Disease	Database	Age group	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
FL	IQVIA Germany DA	90 to 99	85,890	14	1.63 (0.97 to 2.74)
FL	SIDIAP CMBD	0 to 9	487,254	6	0.12 (0.06 to 0.27)
FL	SIDIAP CMBD	10 to 19	606,196	24	0.40 (0.27 to 0.59)
FL	SIDIAP CMBD	20 to 29	593,232	39	0.66 (0.48 to 0.90)
FL	SIDIAP CMBD	30 to 39	775,179	77	0.99 (0.79 to 1.24)
FL	SIDIAP CMBD	40 to 49	1,002,181	136	1.36 (1.15 to 1.61)
FL	SIDIAP CMBD	50 to 59	819,893	292	3.56 (3.18 to 3.99)
FL	SIDIAP CMBD	60 to 69	622,525	381	6.12 (5.54 to 6.77)
FL	SIDIAP CMBD	70 to 79	479,338	426	8.89 (8.08 to 9.77)
FL	SIDIAP CMBD	80 to 89	272,950	217	7.95 (6.96 to 9.08)
FL	SIDIAP CMBD	90 to 99	70,412	25	3.55 (2.41 to 5.24)
FL	SIDIAP CMBD	100 to 150	2,463	≤5	
MM	CPRD GOLD	0 to 9	295,792	≤5	
MM	CPRD GOLD	10 to 19	314,894	≤5	
MM	CPRD GOLD	20 to 29	337,053	≤5	
MM	CPRD GOLD	30 to 39	403,582	8	0.20 (0.08 to 0.37)
MM	CPRD GOLD	40 to 49	406,438	14	0.34 (0.18 to 0.55)
MM	CPRD GOLD	50 to 59	443,936	75	1.69 (1.33 to 2.10)
MM	CPRD GOLD	60 to 69	354,013	189	5.34 (4.60 to 6.13)
MM	CPRD GOLD	70 to 79	275,624	288	10.45 (9.28 to 11.69)
MM	CPRD GOLD	80 to 89	134,265	188	14.00 (12.07 to 16.08)
MM	CPRD GOLD	90 to 99	31,504	34	10.79 (7.45 to 14.76)
MM	CPRD GOLD	100 to 150	2,480	≤5	
MM	IPCI	0 to 9	112,015	≤5	
MM	IPCI	10 to 19	140,350	≤5	
MM	IPCI	20 to 29	136,892	≤5	
MM	IPCI	30 to 39	137,181	≤5	
MM	IPCI	40 to 49	153,559	7	0.46 (0.22 to 0.94)
MM	IPCI	50 to 59	181,482	40	2.20 (1.62 to 3.00)
MM	IPCI	60 to 69	149,812	100	6.68 (5.49 to 8.12)

Disease	Database	Age group	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
MM	IPCI	70 to 79	114,824	139	12.11 (10.25 to 14.29)
MM	IPCI	80 to 89	49,636	64	12.89 (10.10 to 16.46)
MM	IPCI	90 to 99	8,129	≤5	
MM	IPCI	100 to 150	146	≤5	
MM	IQVIA Belgium LPD	0 to 9	20,746	≤5	
MM	IQVIA Belgium LPD	10 to 19	36,759	≤5	
MM	IQVIA Belgium LPD	20 to 29	39,656	≤5	
MM	IQVIA Belgium LPD	30 to 39	45,991	≤5	
MM	IQVIA Belgium LPD	40 to 49	51,164	≤5	
MM	IQVIA Belgium LPD	50 to 59	56,753	8	1.41 (0.71 to 2.78)
MM	IQVIA Belgium LPD	60 to 69	51,172	13	2.54 (1.48 to 4.35)
MM	IQVIA Belgium LPD	70 to 79	37,255	28	7.52 (5.20 to 10.86)
MM	IQVIA Belgium LPD	80 to 89	22,261	25	11.23 (7.61 to 16.57)
MM	IQVIA Belgium LPD	90 to 99	5,390	≤5	
MM	IQVIA Belgium LPD	100 to 150	119	≤5	
MM	IQVIA Germany DA	0 to 9	371,329	≤5	
MM	IQVIA Germany DA	10 to 19	491,722	≤5	
MM	IQVIA Germany DA	20 to 29	571,943	22	0.38 (0.25 to 0.58)
MM	IQVIA Germany DA	30 to 39	738,337	34	0.46 (0.33 to 0.64)
MM	IQVIA Germany DA	40 to 49	822,467	117	1.42 (1.19 to 1.70)
MM	IQVIA Germany DA	50 to 59	1,256,181	389	3.10 (2.80 to 3.42)
MM	IQVIA Germany DA	60 to 69	1,144,562	704	6.15 (5.71 to 6.62)
MM	IQVIA Germany DA	70 to 79	911,623	889	9.75 (9.13 to 10.41)
MM	IQVIA Germany DA	80 to 89	628,961	740	11.77 (10.95 to 12.64)
MM	IQVIA Germany DA	90 to 99	85,890	94	10.94 (8.94 to 13.39)
MM	SIDIAP CMBD	0 to 9	487,254	6	0.12 (0.06 to 0.27)
MM	SIDIAP CMBD	10 to 19	606,196	≤5	
MM	SIDIAP CMBD	20 to 29	593,232	5	0.08 (0.04 to 0.20)
MM	SIDIAP CMBD	30 to 39	775,179	15	0.19 (0.12 to 0.32)
MM	SIDIAP CMBD	40 to 49	1,002,181	78	0.78 (0.62 to 0.97)

Disease	Database	Age group	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
MM	SIDIAP CMBD	50 to 59	819,893	203	2.48 (2.16 to 2.84)
MM	SIDIAP CMBD	60 to 69	622,525	369	5.93 (5.35 to 6.56)
MM	SIDIAP CMBD	70 to 79	479,338	558	11.64 (10.71 to 12.65)
MM	SIDIAP CMBD	80 to 89	272,950	350	12.82 (11.55 to 14.24)
MM	SIDIAP CMBD	90 to 99	70,412	69	9.80 (7.74 to 12.40)
MM	SIDIAP CMBD	100 to 150	2,463	≤5	

Figure 4: Estimated 5-year partial point prevalence of study outcomes in 2020, by sex

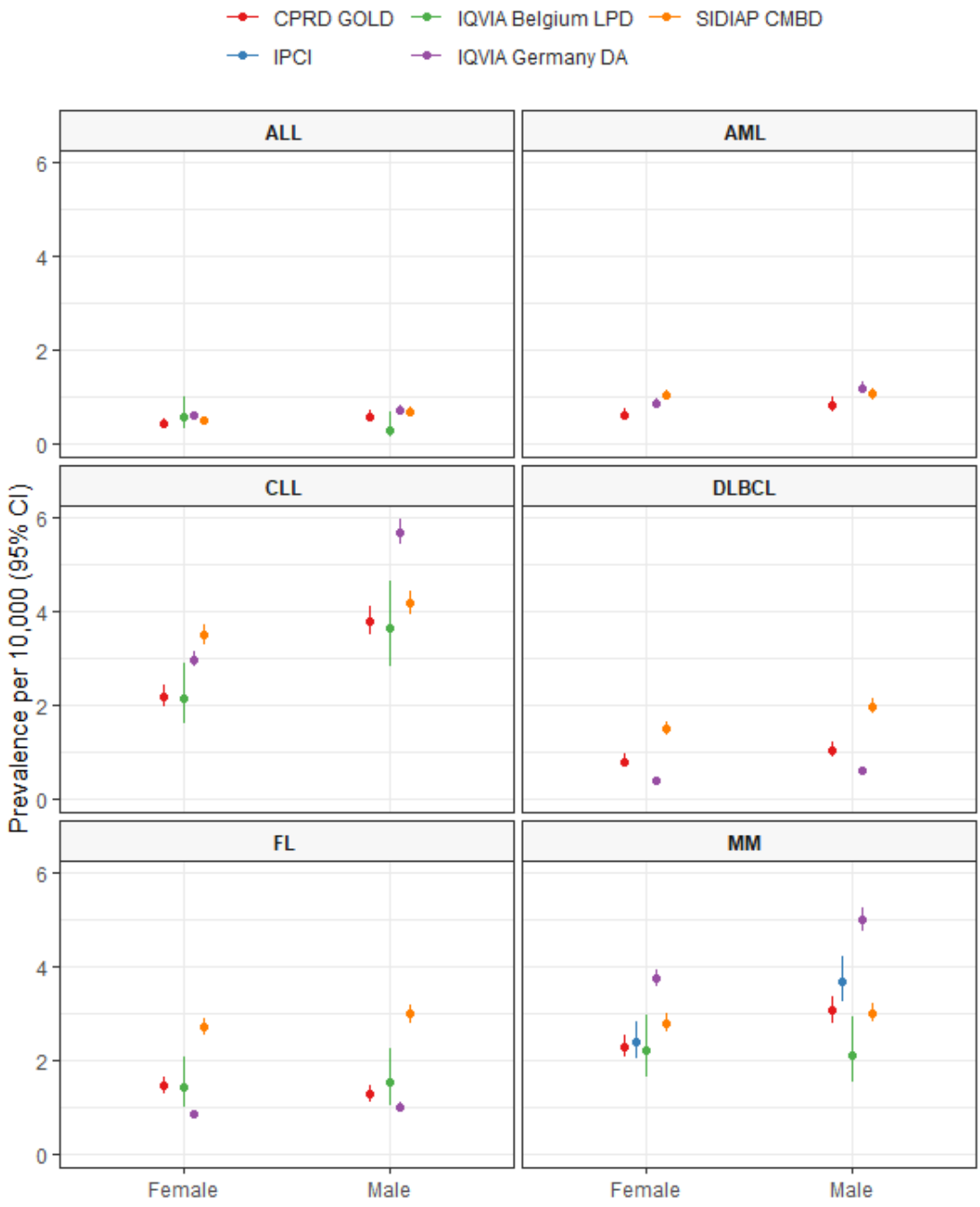


Table 6: Estimated 5-year partial prevalence of study outcomes in 2020, by sex

Disease	Database	Sex	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
ALL	CPRD GOLD	Female	1,507,658	64	0.42 (0.33 to 0.54)
ALL	CPRD GOLD	Male	1,491,923	84	0.56 (0.45 to 0.69)
ALL	IQVIA Belgium LPD	Female	195,979	11	0.56 (0.31 to 1.01)
ALL	IQVIA Belgium LPD	Male	171,287	5	0.29 (0.12 to 0.68)
ALL	IQVIA Germany DA	Female	4,012,625	239	0.60 (0.52 to 0.68)
ALL	IQVIA Germany DA	Male	3,010,390	215	0.71 (0.62 to 0.82)
ALL	SIDIAP CMBD	Female	2,905,592	139	0.48 (0.41 to 0.56)
ALL	SIDIAP CMBD	Male	2,826,031	189	0.67 (0.58 to 0.77)
AML	CPRD GOLD	Female	1,507,658	92	0.61 (0.49 to 0.74)
AML	CPRD GOLD	Male	1,491,923	123	0.82 (0.69 to 0.98)
AML	IQVIA Germany DA	Female	4,012,625	342	0.85 (0.77 to 0.95)
AML	IQVIA Germany DA	Male	3,010,390	352	1.17 (1.05 to 1.30)
AML	SIDIAP CMBD	Female	2,905,592	296	1.02 (0.91 to 1.14)
AML	SIDIAP CMBD	Male	2,826,031	296	1.05 (0.93 to 1.17)
CLL	CPRD GOLD	Female	1,507,658	329	2.18 (1.95 to 2.42)
CLL	CPRD GOLD	Male	1,491,923	565	3.79 (3.48 to 4.11)
CLL	IQVIA Belgium LPD	Female	195,979	42	2.14 (1.59 to 2.90)
CLL	IQVIA Belgium LPD	Male	171,287	62	3.62 (2.82 to 4.64)
CLL	IQVIA Germany DA	Female	4,012,625	1190	2.97 (2.80 to 3.14)
CLL	IQVIA Germany DA	Male	3,010,390	1710	5.68 (5.42 to 5.96)
CLL	SIDIAP CMBD	Female	2,905,592	1012	3.48 (3.27 to 3.70)
CLL	SIDIAP CMBD	Male	2,826,031	1175	4.16 (3.93 to 4.40)
DLBCL	CPRD GOLD	Female	1,507,658	119	0.79 (0.65 to 0.94)
DLBCL	CPRD GOLD	Male	1,491,923	153	1.03 (0.87 to 1.20)
DLBCL	IQVIA Germany DA	Female	4,012,625	153	0.38 (0.33 to 0.45)
DLBCL	IQVIA Germany DA	Male	3,010,390	178	0.59 (0.51 to 0.68)
DLBCL	SIDIAP CMBD	Female	2,905,592	434	1.49 (1.36 to 1.64)
DLBCL	SIDIAP CMBD	Male	2,826,031	555	1.96 (1.81 to 2.13)
FL	CPRD GOLD	Female	1,507,658	217	1.44 (1.25 to 1.64)
FL	CPRD GOLD	Male	1,491,923	188	1.26 (1.09 to 1.45)

Disease	Database	Sex	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
FL	IQVIA Belgium LPD	Female	195,979	28	1.43 (0.99 to 2.06)
FL	IQVIA Belgium LPD	Male	171,287	26	1.52 (1.04 to 2.22)
FL	IQVIA Germany DA	Female	4,012,625	333	0.83 (0.75 to 0.92)
FL	IQVIA Germany DA	Male	3,010,390	298	0.99 (0.88 to 1.11)
FL	SIDIAP CMBD	Female	2,905,592	784	2.70 (2.52 to 2.89)
FL	SIDIAP CMBD	Male	2,826,031	839	2.97 (2.77 to 3.18)
MM	CPRD GOLD	Female	1,507,658	343	2.28 (2.04 to 2.52)
MM	CPRD GOLD	Male	1,491,923	457	3.06 (2.79 to 3.35)
MM	IPCI	Female	602,440	143	2.37 (2.02 to 2.80)
MM	IPCI	Male	581,586	214	3.68 (3.22 to 4.21)
MM	IQVIA Belgium LPD	Female	195,979	43	2.19 (1.63 to 2.96)
MM	IQVIA Belgium LPD	Male	171,287	36	2.10 (1.52 to 2.91)
MM	IQVIA Germany DA	Female	4,012,625	1495	3.73 (3.54 to 3.92)
MM	IQVIA Germany DA	Male	3,010,390	1501	4.99 (4.74 to 5.24)
MM	SIDIAP CMBD	Female	2,905,592	810	2.79 (2.60 to 2.99)
MM	SIDIAP CMBD	Male	2,826,031	848	3.00 (2.81 to 3.21)

Figure 5: Estimated 5-year partial point prevalence by calendar year

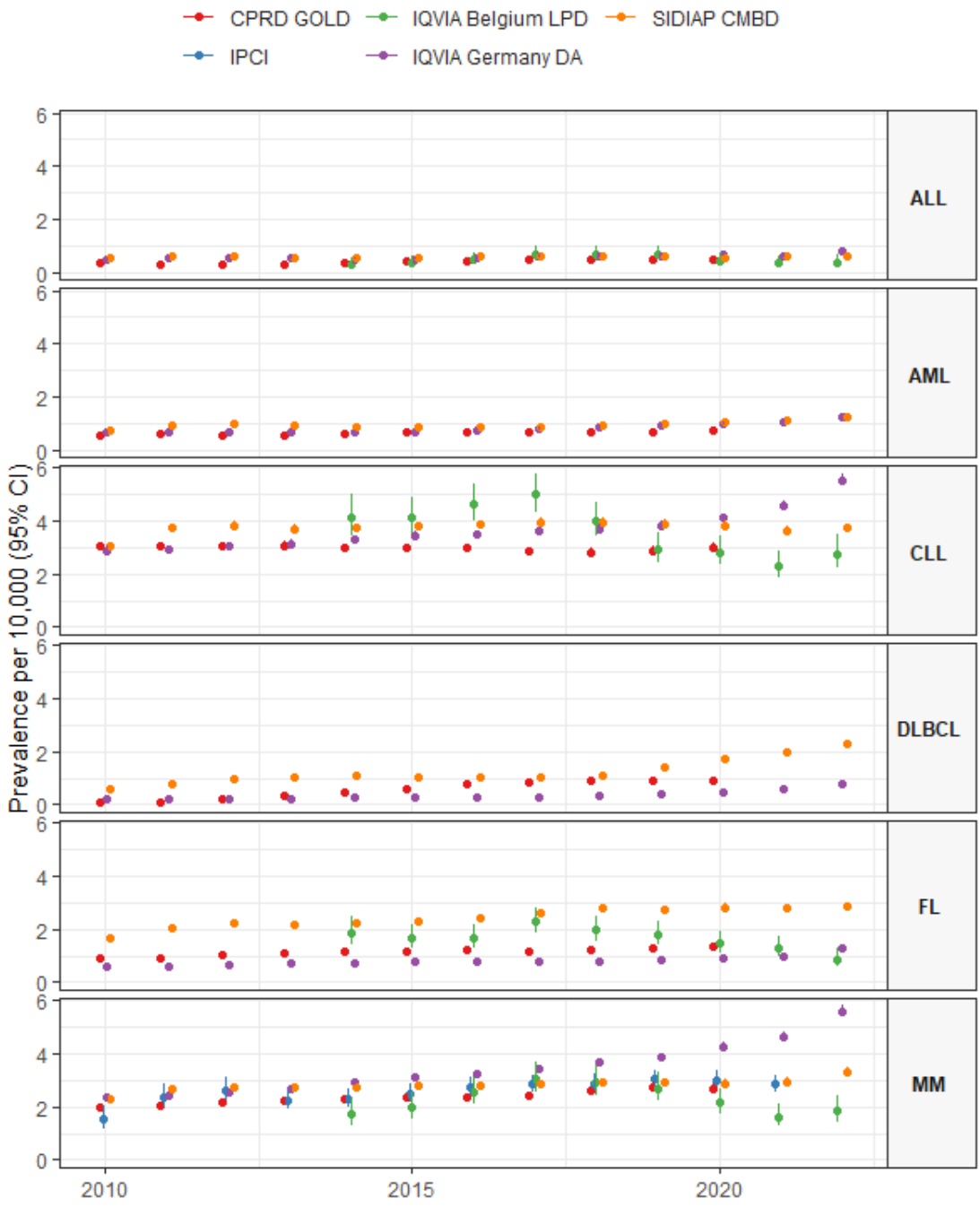


Table 7: Estimated 5-year partial prevalence by calendar year

Disease	Database	Date	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
ALL	CPRD GOLD	2010-01-01	5,993,236	193	0.32 (0.28 to 0.37)
ALL	CPRD GOLD	2011-01-01	5,880,257	176	0.30 (0.26 to 0.35)
ALL	CPRD GOLD	2012-01-01	5,770,395	172	0.30 (0.26 to 0.34)
ALL	CPRD GOLD	2013-01-01	5,678,319	169	0.30 (0.25 to 0.34)
ALL	CPRD GOLD	2014-01-01	5,355,712	195	0.36 (0.31 to 0.42)
ALL	CPRD GOLD	2015-01-01	4,863,458	187	0.38 (0.33 to 0.44)
ALL	CPRD GOLD	2016-01-01	4,134,836	175	0.42 (0.36 to 0.49)
ALL	CPRD GOLD	2017-01-01	3,658,655	164	0.45 (0.38 to 0.52)
ALL	CPRD GOLD	2018-01-01	3,368,632	172	0.51 (0.44 to 0.59)
ALL	CPRD GOLD	2019-01-01	3,224,845	162	0.50 (0.43 to 0.58)
ALL	CPRD GOLD	2020-01-01	2,999,581	148	0.49 (0.42 to 0.58)
ALL	IQVIA Belgium LPD	2014-01-01	256,574	7	0.27 (0.13 to 0.56)
ALL	IQVIA Belgium LPD	2015-01-01	332,659	12	0.36 (0.21 to 0.63)
ALL	IQVIA Belgium LPD	2016-01-01	359,065	17	0.47 (0.30 to 0.76)
ALL	IQVIA Belgium LPD	2017-01-01	373,467	24	0.64 (0.43 to 0.96)
ALL	IQVIA Belgium LPD	2018-01-01	371,965	24	0.65 (0.43 to 0.96)
ALL	IQVIA Belgium LPD	2019-01-01	369,636	25	0.68 (0.46 to 1.00)
ALL	IQVIA Belgium LPD	2020-01-01	367,266	16	0.44 (0.27 to 0.71)
ALL	IQVIA Belgium LPD	2021-01-01	368,737	13	0.35 (0.21 to 0.60)
ALL	IQVIA Belgium LPD	2022-01-01	273,751	10	0.37 (0.20 to 0.67)
ALL	IQVIA Germany DA	2010-01-01	4,211,351	207	0.49 (0.43 to 0.56)
ALL	IQVIA Germany DA	2011-01-01	4,757,356	251	0.53 (0.47 to 0.60)
ALL	IQVIA Germany DA	2012-01-01	5,258,202	276	0.52 (0.47 to 0.59)
ALL	IQVIA Germany DA	2013-01-01	5,814,845	313	0.54 (0.48 to 0.60)
ALL	IQVIA Germany DA	2014-01-01	6,298,269	316	0.50 (0.45 to 0.56)
ALL	IQVIA Germany DA	2015-01-01	6,706,442	342	0.51 (0.46 to 0.57)
ALL	IQVIA Germany DA	2016-01-01	7,011,588	390	0.56 (0.50 to 0.61)
ALL	IQVIA Germany DA	2017-01-01	7,203,967	436	0.61 (0.55 to 0.66)
ALL	IQVIA Germany DA	2018-01-01	7,514,201	465	0.62 (0.57 to 0.68)
ALL	IQVIA Germany DA	2019-01-01	7,480,944	471	0.63 (0.58 to 0.69)

Disease	Database	Date	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
ALL	IQVIA Germany DA	2020-01-01	7,023,015	454	0.65 (0.59 to 0.71)
ALL	IQVIA Germany DA	2021-01-01	6,431,485	406	0.63 (0.57 to 0.70)
ALL	IQVIA Germany DA	2022-01-01	4,585,529	364	0.79 (0.72 to 0.88)
ALL	SIDIAP CMBD	2010-01-01	5,764,047	295	0.51 (0.46 to 0.57)
ALL	SIDIAP CMBD	2011-01-01	5,804,713	342	0.59 (0.53 to 0.66)
ALL	SIDIAP CMBD	2012-01-01	5,818,895	338	0.58 (0.52 to 0.65)
ALL	SIDIAP CMBD	2013-01-01	5,751,759	313	0.54 (0.49 to 0.61)
ALL	SIDIAP CMBD	2014-01-01	5,742,237	300	0.52 (0.47 to 0.59)
ALL	SIDIAP CMBD	2015-01-01	5,696,947	325	0.57 (0.51 to 0.64)
ALL	SIDIAP CMBD	2016-01-01	5,669,891	332	0.59 (0.53 to 0.65)
ALL	SIDIAP CMBD	2017-01-01	5,682,480	338	0.59 (0.53 to 0.66)
ALL	SIDIAP CMBD	2018-01-01	5,684,797	334	0.59 (0.53 to 0.65)
ALL	SIDIAP CMBD	2019-01-01	5,693,415	341	0.60 (0.54 to 0.67)
ALL	SIDIAP CMBD	2020-01-01	5,731,623	328	0.57 (0.51 to 0.64)
ALL	SIDIAP CMBD	2021-01-01	5,770,177	336	0.58 (0.52 to 0.65)
ALL	SIDIAP CMBD	2022-01-01	5,745,982	347	0.60 (0.54 to 0.67)
AML	CPRD GOLD	2010-01-01	5,993,236	337	0.56 (0.50 to 0.62)
AML	CPRD GOLD	2011-01-01	5,880,257	349	0.59 (0.53 to 0.66)
AML	CPRD GOLD	2012-01-01	5,770,395	328	0.57 (0.51 to 0.63)
AML	CPRD GOLD	2013-01-01	5,678,319	309	0.54 (0.49 to 0.61)
AML	CPRD GOLD	2014-01-01	5,355,712	317	0.59 (0.53 to 0.66)
AML	CPRD GOLD	2015-01-01	4,863,458	312	0.64 (0.57 to 0.71)
AML	CPRD GOLD	2016-01-01	4,134,836	274	0.66 (0.59 to 0.74)
AML	CPRD GOLD	2017-01-01	3,658,655	233	0.64 (0.56 to 0.72)
AML	CPRD GOLD	2018-01-01	3,368,632	216	0.64 (0.56 to 0.73)
AML	CPRD GOLD	2019-01-01	3,224,845	219	0.68 (0.59 to 0.77)
AML	CPRD GOLD	2020-01-01	2,999,581	215	0.72 (0.62 to 0.82)
AML	IQVIA Germany DA	2010-01-01	4,211,351	268	0.64 (0.56 to 0.72)
AML	IQVIA Germany DA	2011-01-01	4,757,356	304	0.64 (0.57 to 0.71)
AML	IQVIA Germany DA	2012-01-01	5,258,202	337	0.64 (0.58 to 0.71)
AML	IQVIA Germany DA	2013-01-01	5,814,845	382	0.66 (0.59 to 0.73)

Disease	Database	Date	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
AML	IQVIA Germany DA	2014-01-01	6,298,269	417	0.66 (0.60 to 0.73)
AML	IQVIA Germany DA	2015-01-01	6,706,442	444	0.66 (0.60 to 0.73)
AML	IQVIA Germany DA	2016-01-01	7,011,588	492	0.70 (0.64 to 0.77)
AML	IQVIA Germany DA	2017-01-01	7,203,967	549	0.76 (0.70 to 0.83)
AML	IQVIA Germany DA	2018-01-01	7,514,201	647	0.86 (0.80 to 0.93)
AML	IQVIA Germany DA	2019-01-01	7,480,944	668	0.89 (0.83 to 0.96)
AML	IQVIA Germany DA	2020-01-01	7,023,015	694	0.99 (0.92 to 1.06)
AML	IQVIA Germany DA	2021-01-01	6,431,485	687	1.07 (0.99 to 1.15)
AML	IQVIA Germany DA	2022-01-01	4,585,529	578	1.26 (1.16 to 1.37)
AML	SIDIAP CMBD	2010-01-01	5,764,047	429	0.74 (0.68 to 0.82)
AML	SIDIAP CMBD	2011-01-01	5,804,713	517	0.89 (0.82 to 0.97)
AML	SIDIAP CMBD	2012-01-01	5,818,895	570	0.98 (0.90 to 1.06)
AML	SIDIAP CMBD	2013-01-01	5,751,759	538	0.94 (0.86 to 1.02)
AML	SIDIAP CMBD	2014-01-01	5,742,237	505	0.88 (0.81 to 0.96)
AML	SIDIAP CMBD	2015-01-01	5,696,947	500	0.88 (0.80 to 0.96)
AML	SIDIAP CMBD	2016-01-01	5,669,891	491	0.87 (0.79 to 0.95)
AML	SIDIAP CMBD	2017-01-01	5,682,480	473	0.83 (0.76 to 0.91)
AML	SIDIAP CMBD	2018-01-01	5,684,797	519	0.91 (0.84 to 0.99)
AML	SIDIAP CMBD	2019-01-01	5,693,415	541	0.95 (0.87 to 1.03)
AML	SIDIAP CMBD	2020-01-01	5,731,623	592	1.03 (0.95 to 1.12)
AML	SIDIAP CMBD	2021-01-01	5,770,177	649	1.12 (1.04 to 1.21)
AML	SIDIAP CMBD	2022-01-01	5,745,982	710	1.24 (1.15 to 1.33)
CLL	CPRD GOLD	2010-01-01	5,993,236	1830	3.05 (2.92 to 3.20)
CLL	CPRD GOLD	2011-01-01	5,880,257	1792	3.05 (2.91 to 3.19)
CLL	CPRD GOLD	2012-01-01	5,770,395	1771	3.07 (2.93 to 3.21)
CLL	CPRD GOLD	2013-01-01	5,678,319	1749	3.08 (2.94 to 3.23)
CLL	CPRD GOLD	2014-01-01	5,355,712	1602	2.99 (2.85 to 3.14)
CLL	CPRD GOLD	2015-01-01	4,863,458	1445	2.97 (2.82 to 3.13)
CLL	CPRD GOLD	2016-01-01	4,134,836	1234	2.98 (2.82 to 3.15)
CLL	CPRD GOLD	2017-01-01	3,658,655	1043	2.85 (2.68 to 3.03)
CLL	CPRD GOLD	2018-01-01	3,368,632	955	2.83 (2.66 to 3.02)

Disease	Database	Date	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
CLL	CPRD GOLD	2019-01-01	3,224,845	921	2.86 (2.67 to 3.04)
CLL	CPRD GOLD	2020-01-01	2,999,581	894	2.98 (2.79 to 3.18)
CLL	IQVIA Belgium LPD	2014-01-01	256,574	106	4.13 (3.42 to 5.00)
CLL	IQVIA Belgium LPD	2015-01-01	332,659	137	4.12 (3.48 to 4.87)
CLL	IQVIA Belgium LPD	2016-01-01	359,065	167	4.65 (4.00 to 5.41)
CLL	IQVIA Belgium LPD	2017-01-01	373,467	187	5.01 (4.34 to 5.78)
CLL	IQVIA Belgium LPD	2018-01-01	371,965	150	4.03 (3.44 to 4.73)
CLL	IQVIA Belgium LPD	2019-01-01	369,636	109	2.95 (2.44 to 3.56)
CLL	IQVIA Belgium LPD	2020-01-01	367,266	104	2.83 (2.34 to 3.43)
CLL	IQVIA Belgium LPD	2021-01-01	368,737	86	2.33 (1.89 to 2.88)
CLL	IQVIA Belgium LPD	2022-01-01	273,751	76	2.78 (2.22 to 3.47)
CLL	IQVIA Germany DA	2010-01-01	4,211,351	1222	2.90 (2.74 to 3.07)
CLL	IQVIA Germany DA	2011-01-01	4,757,356	1396	2.93 (2.78 to 3.09)
CLL	IQVIA Germany DA	2012-01-01	5,258,202	1608	3.06 (2.91 to 3.21)
CLL	IQVIA Germany DA	2013-01-01	5,814,845	1831	3.15 (3.01 to 3.30)
CLL	IQVIA Germany DA	2014-01-01	6,298,269	2071	3.29 (3.15 to 3.43)
CLL	IQVIA Germany DA	2015-01-01	6,706,442	2320	3.46 (3.32 to 3.60)
CLL	IQVIA Germany DA	2016-01-01	7,011,588	2463	3.51 (3.38 to 3.65)
CLL	IQVIA Germany DA	2017-01-01	7,203,967	2617	3.63 (3.50 to 3.77)
CLL	IQVIA Germany DA	2018-01-01	7,514,201	2799	3.72 (3.59 to 3.87)
CLL	IQVIA Germany DA	2019-01-01	7,480,944	2875	3.84 (3.71 to 3.99)
CLL	IQVIA Germany DA	2020-01-01	7,023,015	2900	4.13 (3.98 to 4.28)
CLL	IQVIA Germany DA	2021-01-01	6,431,485	2938	4.57 (4.41 to 4.74)
CLL	IQVIA Germany DA	2022-01-01	4,585,529	2537	5.53 (5.32 to 5.75)
CLL	SIDIAP CMBD	2010-01-01	5,764,047	1756	3.05 (2.91 to 3.19)
CLL	SIDIAP CMBD	2011-01-01	5,804,713	2166	3.73 (3.58 to 3.89)
CLL	SIDIAP CMBD	2012-01-01	5,818,895	2229	3.83 (3.67 to 3.99)
CLL	SIDIAP CMBD	2013-01-01	5,751,759	2132	3.71 (3.55 to 3.87)
CLL	SIDIAP CMBD	2014-01-01	5,742,237	2155	3.75 (3.60 to 3.91)
CLL	SIDIAP CMBD	2015-01-01	5,696,947	2162	3.80 (3.64 to 3.96)
CLL	SIDIAP CMBD	2016-01-01	5,669,891	2195	3.87 (3.71 to 4.04)

Disease	Database	Date	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
CLL	SIDIAP CMBD	2017-01-01	5,682,480	2252	3.96 (3.80 to 4.13)
CLL	SIDIAP CMBD	2018-01-01	5,684,797	2252	3.96 (3.80 to 4.13)
CLL	SIDIAP CMBD	2019-01-01	5,693,415	2210	3.88 (3.72 to 4.05)
CLL	SIDIAP CMBD	2020-01-01	5,731,623	2187	3.82 (3.66 to 3.98)
CLL	SIDIAP CMBD	2021-01-01	5,770,177	2095	3.63 (3.48 to 3.79)
CLL	SIDIAP CMBD	2022-01-01	5,745,982	2149	3.74 (3.59 to 3.90)
DLBCL	CPRD GOLD	2010-01-01	5,993,236	51	0.09 (0.06 to 0.11)
DLBCL	CPRD GOLD	2011-01-01	5,880,257	63	0.11 (0.08 to 0.14)
DLBCL	CPRD GOLD	2012-01-01	5,770,395	119	0.21 (0.17 to 0.25)
DLBCL	CPRD GOLD	2013-01-01	5,678,319	189	0.33 (0.29 to 0.38)
DLBCL	CPRD GOLD	2014-01-01	5,355,712	249	0.46 (0.41 to 0.52)
DLBCL	CPRD GOLD	2015-01-01	4,863,458	293	0.60 (0.54 to 0.67)
DLBCL	CPRD GOLD	2016-01-01	4,134,836	313	0.76 (0.68 to 0.84)
DLBCL	CPRD GOLD	2017-01-01	3,658,655	310	0.85 (0.76 to 0.94)
DLBCL	CPRD GOLD	2018-01-01	3,368,632	302	0.90 (0.80 to 1.00)
DLBCL	CPRD GOLD	2019-01-01	3,224,845	287	0.89 (0.79 to 1.00)
DLBCL	CPRD GOLD	2020-01-01	2,999,581	272	0.91 (0.80 to 1.02)
DLBCL	IQVIA Germany DA	2010-01-01	4,211,351	88	0.21 (0.17 to 0.26)
DLBCL	IQVIA Germany DA	2011-01-01	4,757,356	97	0.20 (0.17 to 0.25)
DLBCL	IQVIA Germany DA	2012-01-01	5,258,202	124	0.24 (0.20 to 0.28)
DLBCL	IQVIA Germany DA	2013-01-01	5,814,845	136	0.23 (0.20 to 0.28)
DLBCL	IQVIA Germany DA	2014-01-01	6,298,269	161	0.26 (0.22 to 0.30)
DLBCL	IQVIA Germany DA	2015-01-01	6,706,442	187	0.28 (0.24 to 0.32)
DLBCL	IQVIA Germany DA	2016-01-01	7,011,588	199	0.28 (0.25 to 0.33)
DLBCL	IQVIA Germany DA	2017-01-01	7,203,967	204	0.28 (0.25 to 0.32)
DLBCL	IQVIA Germany DA	2018-01-01	7,514,201	247	0.33 (0.29 to 0.37)
DLBCL	IQVIA Germany DA	2019-01-01	7,480,944	289	0.39 (0.34 to 0.43)
DLBCL	IQVIA Germany DA	2020-01-01	7,023,015	331	0.47 (0.42 to 0.52)
DLBCL	IQVIA Germany DA	2021-01-01	6,431,485	371	0.58 (0.52 to 0.64)
DLBCL	IQVIA Germany DA	2022-01-01	4,585,529	358	0.78 (0.70 to 0.87)
DLBCL	SIDIAP CMBD	2010-01-01	5,764,047	333	0.58 (0.52 to 0.64)

Disease	Database	Date	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
DLBCL	SIDIAP CMBD	2011-01-01	5,804,713	471	0.81 (0.74 to 0.89)
DLBCL	SIDIAP CMBD	2012-01-01	5,818,895	568	0.98 (0.90 to 1.06)
DLBCL	SIDIAP CMBD	2013-01-01	5,751,759	581	1.01 (0.93 to 1.10)
DLBCL	SIDIAP CMBD	2014-01-01	5,742,237	619	1.08 (1.00 to 1.17)
DLBCL	SIDIAP CMBD	2015-01-01	5,696,947	606	1.06 (0.98 to 1.15)
DLBCL	SIDIAP CMBD	2016-01-01	5,669,891	604	1.07 (0.98 to 1.15)
DLBCL	SIDIAP CMBD	2017-01-01	5,682,480	603	1.06 (0.98 to 1.15)
DLBCL	SIDIAP CMBD	2018-01-01	5,684,797	624	1.10 (1.01 to 1.19)
DLBCL	SIDIAP CMBD	2019-01-01	5,693,415	796	1.40 (1.30 to 1.50)
DLBCL	SIDIAP CMBD	2020-01-01	5,731,623	989	1.73 (1.62 to 1.84)
DLBCL	SIDIAP CMBD	2021-01-01	5,770,177	1134	1.97 (1.85 to 2.08)
DLBCL	SIDIAP CMBD	2022-01-01	5,745,982	1330	2.31 (2.19 to 2.44)
FL	CPRD GOLD	2010-01-01	5,993,236	533	0.89 (0.82 to 0.97)
FL	CPRD GOLD	2011-01-01	5,880,257	545	0.93 (0.85 to 1.01)
FL	CPRD GOLD	2012-01-01	5,770,395	582	1.01 (0.93 to 1.09)
FL	CPRD GOLD	2013-01-01	5,678,319	612	1.08 (0.99 to 1.16)
FL	CPRD GOLD	2014-01-01	5,355,712	605	1.13 (1.04 to 1.22)
FL	CPRD GOLD	2015-01-01	4,863,458	577	1.19 (1.09 to 1.29)
FL	CPRD GOLD	2016-01-01	4,134,836	496	1.20 (1.10 to 1.31)
FL	CPRD GOLD	2017-01-01	3,658,655	434	1.19 (1.08 to 1.30)
FL	CPRD GOLD	2018-01-01	3,368,632	403	1.20 (1.08 to 1.32)
FL	CPRD GOLD	2019-01-01	3,224,845	409	1.27 (1.15 to 1.39)
FL	CPRD GOLD	2020-01-01	2,999,581	405	1.35 (1.22 to 1.49)
FL	IQVIA Belgium LPD	2014-01-01	256,574	48	1.87 (1.41 to 2.48)
FL	IQVIA Belgium LPD	2015-01-01	332,659	55	1.65 (1.27 to 2.15)
FL	IQVIA Belgium LPD	2016-01-01	359,065	60	1.67 (1.30 to 2.15)
FL	IQVIA Belgium LPD	2017-01-01	373,467	85	2.28 (1.84 to 2.81)
FL	IQVIA Belgium LPD	2018-01-01	371,965	73	1.96 (1.56 to 2.47)
FL	IQVIA Belgium LPD	2019-01-01	369,636	67	1.81 (1.43 to 2.30)
FL	IQVIA Belgium LPD	2020-01-01	367,266	54	1.47 (1.13 to 1.92)
FL	IQVIA Belgium LPD	2021-01-01	368,737	48	1.30 (0.98 to 1.73)

Disease	Database	Date	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
FL	IQVIA Belgium LPD	2022-01-01	273,751	24	0.88 (0.59 to 1.30)
FL	IQVIA Germany DA	2010-01-01	4,211,351	242	0.57 (0.51 to 0.65)
FL	IQVIA Germany DA	2011-01-01	4,757,356	289	0.61 (0.54 to 0.68)
FL	IQVIA Germany DA	2012-01-01	5,258,202	355	0.68 (0.61 to 0.75)
FL	IQVIA Germany DA	2013-01-01	5,814,845	410	0.71 (0.64 to 0.78)
FL	IQVIA Germany DA	2014-01-01	6,298,269	463	0.74 (0.67 to 0.81)
FL	IQVIA Germany DA	2015-01-01	6,706,442	521	0.78 (0.71 to 0.85)
FL	IQVIA Germany DA	2016-01-01	7,011,588	534	0.76 (0.70 to 0.83)
FL	IQVIA Germany DA	2017-01-01	7,203,967	560	0.78 (0.72 to 0.84)
FL	IQVIA Germany DA	2018-01-01	7,514,201	610	0.81 (0.75 to 0.88)
FL	IQVIA Germany DA	2019-01-01	7,480,944	633	0.85 (0.78 to 0.91)
FL	IQVIA Germany DA	2020-01-01	7,023,015	631	0.90 (0.83 to 0.97)
FL	IQVIA Germany DA	2021-01-01	6,431,485	629	0.98 (0.90 to 1.06)
FL	IQVIA Germany DA	2022-01-01	4,585,529	593	1.29 (1.19 to 1.40)
FL	SIDIAP CMBD	2010-01-01	5,764,047	945	1.64 (1.54 to 1.75)
FL	SIDIAP CMBD	2011-01-01	5,804,713	1181	2.03 (1.92 to 2.15)
FL	SIDIAP CMBD	2012-01-01	5,818,895	1286	2.21 (2.09 to 2.33)
FL	SIDIAP CMBD	2013-01-01	5,751,759	1235	2.15 (2.03 to 2.27)
FL	SIDIAP CMBD	2014-01-01	5,742,237	1299	2.26 (2.14 to 2.39)
FL	SIDIAP CMBD	2015-01-01	5,696,947	1311	2.30 (2.18 to 2.43)
FL	SIDIAP CMBD	2016-01-01	5,669,891	1381	2.44 (2.31 to 2.57)
FL	SIDIAP CMBD	2017-01-01	5,682,480	1484	2.61 (2.48 to 2.75)
FL	SIDIAP CMBD	2018-01-01	5,684,797	1589	2.80 (2.66 to 2.94)
FL	SIDIAP CMBD	2019-01-01	5,693,415	1553	2.73 (2.60 to 2.87)
FL	SIDIAP CMBD	2020-01-01	5,731,623	1623	2.83 (2.70 to 2.97)
FL	SIDIAP CMBD	2021-01-01	5,770,177	1619	2.81 (2.67 to 2.95)
FL	SIDIAP CMBD	2022-01-01	5,745,982	1655	2.88 (2.74 to 3.02)
MM	CPRD GOLD	2010-01-01	5,993,236	1178	1.97 (1.85 to 2.08)
MM	CPRD GOLD	2011-01-01	5,880,257	1215	2.07 (1.95 to 2.18)
MM	CPRD GOLD	2012-01-01	5,770,395	1249	2.16 (2.05 to 2.29)
MM	CPRD GOLD	2013-01-01	5,678,319	1262	2.22 (2.10 to 2.35)

Disease	Database	Date	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
MM	CPRD GOLD	2014-01-01	5,355,712	1231	2.30 (2.17 to 2.43)
MM	CPRD GOLD	2015-01-01	4,863,458	1154	2.37 (2.24 to 2.51)
MM	CPRD GOLD	2016-01-01	4,134,836	976	2.36 (2.21 to 2.51)
MM	CPRD GOLD	2017-01-01	3,658,655	879	2.40 (2.25 to 2.56)
MM	CPRD GOLD	2018-01-01	3,368,632	873	2.59 (2.42 to 2.77)
MM	CPRD GOLD	2019-01-01	3,224,845	888	2.75 (2.58 to 2.94)
MM	CPRD GOLD	2020-01-01	2,999,581	800	2.67 (2.49 to 2.86)
MM	IPCI	2010-01-01	303,562	47	1.55 (1.16 to 2.06)
MM	IPCI	2011-01-01	448,323	107	2.39 (1.98 to 2.88)
MM	IPCI	2012-01-01	566,611	149	2.63 (2.24 to 3.09)
MM	IPCI	2013-01-01	712,845	159	2.23 (1.91 to 2.61)
MM	IPCI	2014-01-01	705,958	161	2.28 (1.95 to 2.66)
MM	IPCI	2015-01-01	781,344	196	2.51 (2.18 to 2.89)
MM	IPCI	2016-01-01	947,940	261	2.75 (2.44 to 3.11)
MM	IPCI	2017-01-01	1,115,449	316	2.83 (2.54 to 3.16)
MM	IPCI	2018-01-01	1,155,953	334	2.89 (2.60 to 3.22)
MM	IPCI	2019-01-01	1,191,312	362	3.04 (2.74 to 3.37)
MM	IPCI	2020-01-01	1,184,026	357	3.02 (2.72 to 3.34)
MM	IPCI	2021-01-01	1,188,421	337	2.84 (2.55 to 3.15)
MM	IQVIA Belgium LPD	2014-01-01	256,574	44	1.71 (1.28 to 2.30)
MM	IQVIA Belgium LPD	2015-01-01	332,659	66	1.98 (1.56 to 2.52)
MM	IQVIA Belgium LPD	2016-01-01	359,065	92	2.56 (2.09 to 3.14)
MM	IQVIA Belgium LPD	2017-01-01	373,467	114	3.05 (2.54 to 3.67)
MM	IQVIA Belgium LPD	2018-01-01	371,965	109	2.93 (2.43 to 3.53)
MM	IQVIA Belgium LPD	2019-01-01	369,636	100	2.71 (2.22 to 3.29)
MM	IQVIA Belgium LPD	2020-01-01	367,266	79	2.15 (1.73 to 2.68)
MM	IQVIA Belgium LPD	2021-01-01	368,737	60	1.63 (1.26 to 2.09)
MM	IQVIA Belgium LPD	2022-01-01	273,751	50	1.83 (1.39 to 2.41)
MM	IQVIA Germany DA	2010-01-01	4,211,351	982	2.33 (2.19 to 2.48)
MM	IQVIA Germany DA	2011-01-01	4,757,356	1154	2.43 (2.29 to 2.57)
MM	IQVIA Germany DA	2012-01-01	5,258,202	1332	2.53 (2.40 to 2.67)

Disease	Database	Date	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
MM	IQVIA Germany DA	2013-01-01	5,814,845	1558	2.68 (2.55 to 2.82)
MM	IQVIA Germany DA	2014-01-01	6,298,269	1837	2.92 (2.79 to 3.05)
MM	IQVIA Germany DA	2015-01-01	6,706,442	2080	3.10 (2.97 to 3.24)
MM	IQVIA Germany DA	2016-01-01	7,011,588	2274	3.24 (3.11 to 3.38)
MM	IQVIA Germany DA	2017-01-01	7,203,967	2465	3.42 (3.29 to 3.56)
MM	IQVIA Germany DA	2018-01-01	7,514,201	2761	3.67 (3.54 to 3.81)
MM	IQVIA Germany DA	2019-01-01	7,480,944	2908	3.89 (3.75 to 4.03)
MM	IQVIA Germany DA	2020-01-01	7,023,015	2996	4.27 (4.12 to 4.42)
MM	IQVIA Germany DA	2021-01-01	6,431,485	2983	4.64 (4.47 to 4.81)
MM	IQVIA Germany DA	2022-01-01	4,585,529	2562	5.59 (5.38 to 5.81)
MM	SIDIAP CMBD	2010-01-01	5,764,047	1328	2.30 (2.18 to 2.43)
MM	SIDIAP CMBD	2011-01-01	5,804,713	1546	2.66 (2.53 to 2.80)
MM	SIDIAP CMBD	2012-01-01	5,818,895	1599	2.75 (2.62 to 2.89)
MM	SIDIAP CMBD	2013-01-01	5,751,759	1572	2.73 (2.60 to 2.87)
MM	SIDIAP CMBD	2014-01-01	5,742,237	1577	2.75 (2.61 to 2.89)
MM	SIDIAP CMBD	2015-01-01	5,696,947	1583	2.78 (2.65 to 2.92)
MM	SIDIAP CMBD	2016-01-01	5,669,891	1580	2.79 (2.65 to 2.93)
MM	SIDIAP CMBD	2017-01-01	5,682,480	1623	2.86 (2.72 to 3.00)
MM	SIDIAP CMBD	2018-01-01	5,684,797	1648	2.90 (2.76 to 3.04)
MM	SIDIAP CMBD	2019-01-01	5,693,415	1649	2.90 (2.76 to 3.04)
MM	SIDIAP CMBD	2020-01-01	5,731,623	1658	2.89 (2.76 to 3.04)
MM	SIDIAP CMBD	2021-01-01	5,770,177	1705	2.95 (2.82 to 3.10)
MM	SIDIAP CMBD	2022-01-01	5,745,982	1908	3.32 (3.17 to 3.47)

12.3. Additional Analysis

In the primary analysis 5-year partial prevalence was estimated. Estimates for 2-year partial prevalence and complete prevalence are compared below in Figure 6 and Figure 7. In addition, in the primary analysis study participants were required to have a year of prior observation time available. The impact of removing this requirement or increasing it to 5 years is shown in Figure 8.

Figure 6: Estimated 2-year partial point prevalence, 5-year partial point prevalence, and complete point prevalence of study outcomes in 2020

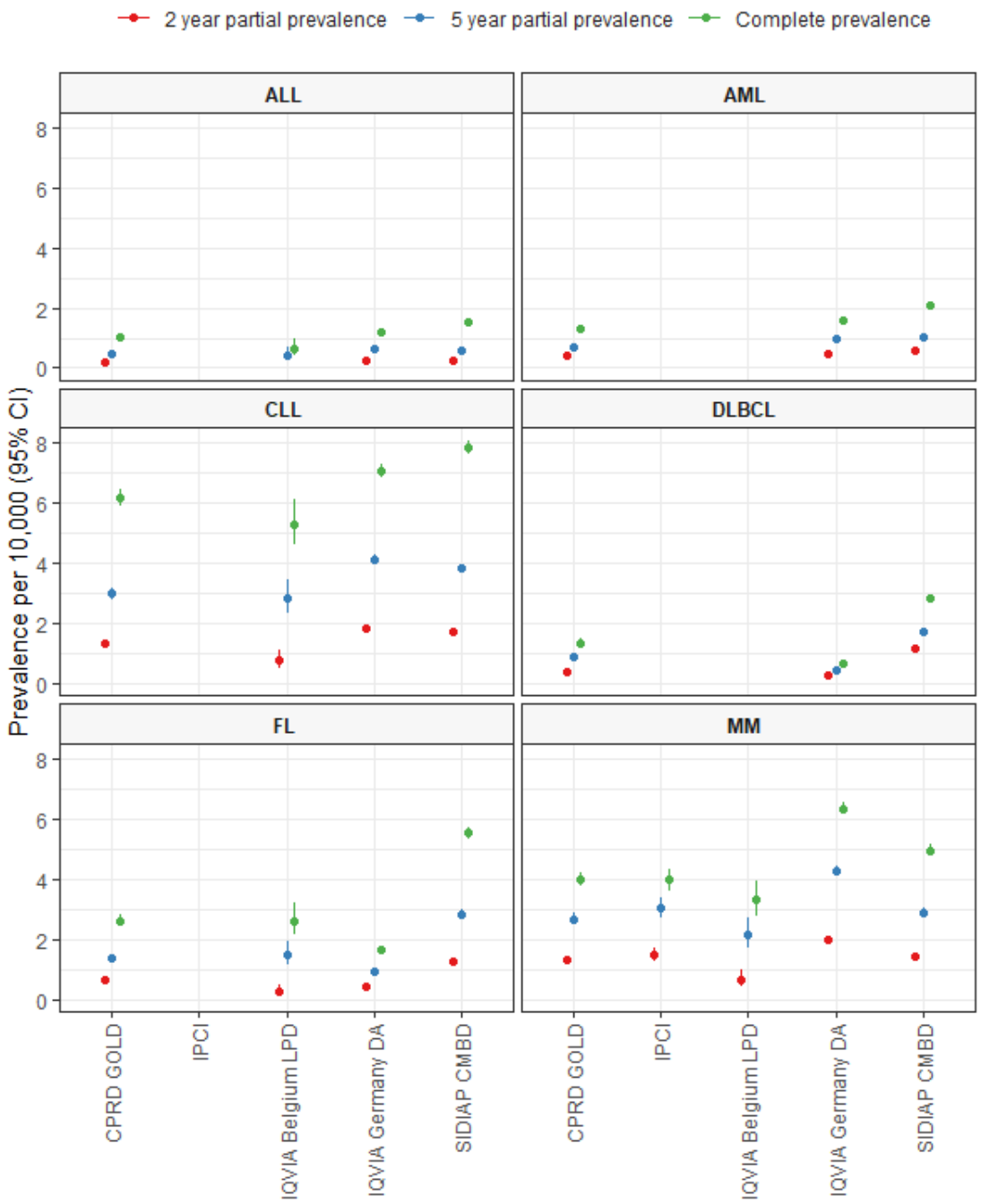


Table 8: Estimated 2-year partial prevalence, 5-year partial prevalence, and complete prevalence of study outcomes in 2020

Disease	Database	Type	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
ALL	CPRD GOLD	2 year partial prevalence	2,999,581	63	0.21 (0.16 to 0.27)
ALL	IQVIA Belgium LPD	2 year partial prevalence	367,266	≤5	
ALL	IQVIA Germany DA	2 year partial prevalence	7,023,015	182	0.26 (0.22 to 0.30)
ALL	SIDIAP CMBD	2 year partial prevalence	5,731,623	146	0.25 (0.22 to 0.30)
ALL	CPRD GOLD	5 year partial prevalence	2,999,581	148	0.49 (0.42 to 0.58)
ALL	IQVIA Belgium LPD	5 year partial prevalence	367,266	16	0.44 (0.27 to 0.71)
ALL	IQVIA Germany DA	5 year partial prevalence	7,023,015	454	0.65 (0.59 to 0.71)
ALL	SIDIAP CMBD	5 year partial prevalence	5,731,623	328	0.57 (0.51 to 0.64)
ALL	CPRD GOLD	Complete prevalence	2,999,581	313	1.04 (0.93 to 1.16)
ALL	IQVIA Belgium LPD	Complete prevalence	367,266	24	0.65 (0.44 to 0.97)
ALL	IQVIA Germany DA	Complete prevalence	7,023,015	839	1.19 (1.12 to 1.28)
ALL	SIDIAP CMBD	Complete prevalence	5,731,623	882	1.54 (1.44 to 1.64)
AML	CPRD GOLD	2 year partial prevalence	2,999,581	133	0.44 (0.37 to 0.52)
AML	IQVIA Germany DA	2 year partial prevalence	7,023,015	330	0.47 (0.42 to 0.52)
AML	SIDIAP CMBD	2 year partial prevalence	5,731,623	345	0.60 (0.54 to 0.67)
AML	CPRD GOLD	5 year partial prevalence	2,999,581	215	0.72 (0.62 to 0.82)
AML	IQVIA Germany DA	5 year partial prevalence	7,023,015	694	0.99 (0.92 to 1.06)
AML	SIDIAP CMBD	5 year partial prevalence	5,731,623	592	1.03 (0.95 to 1.12)
AML	CPRD GOLD	Complete prevalence	2,999,581	392	1.31 (1.18 to 1.44)
AML	IQVIA Germany DA	Complete prevalence	7,023,015	1123	1.60 (1.51 to 1.70)
AML	SIDIAP CMBD	Complete prevalence	5,731,623	1189	2.07 (1.96 to 2.20)
CLL	CPRD GOLD	2 year partial prevalence	2,999,581	401	1.34 (1.21 to 1.47)
CLL	IQVIA Belgium LPD	2 year partial prevalence	367,266	28	0.76 (0.53 to 1.10)
CLL	IQVIA Germany DA	2 year partial prevalence	7,023,015	1298	1.85 (1.75 to 1.95)
CLL	SIDIAP CMBD	2 year partial prevalence	5,731,623	982	1.71 (1.61 to 1.82)
CLL	CPRD GOLD	5 year partial prevalence	2,999,581	894	2.98 (2.79 to 3.18)
CLL	IQVIA Belgium LPD	5 year partial prevalence	367,266	104	2.83 (2.34 to 3.43)
CLL	IQVIA Germany DA	5 year partial prevalence	7,023,015	2900	4.13 (3.98 to 4.28)

Disease	Database	Type	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
CLL	SIDIAP CMBD	5 year partial prevalence	5,731,623	2187	3.82 (3.66 to 3.98)
CLL	CPRD GOLD	Complete prevalence	2,999,581	1857	6.19 (5.91 to 6.48)
CLL	IQVIA Belgium LPD	Complete prevalence	367,266	195	5.31 (4.61 to 6.11)
CLL	IQVIA Germany DA	Complete prevalence	7,023,015	4960	7.06 (6.87 to 7.26)
CLL	SIDIAP CMBD	Complete prevalence	5,731,623	4504	7.86 (7.63 to 8.09)
DLBCL	CPRD GOLD	2 year partial prevalence	2,999,581	123	0.41 (0.34 to 0.49)
DLBCL	IQVIA Germany DA	2 year partial prevalence	7,023,015	182	0.26 (0.22 to 0.30)
DLBCL	SIDIAP CMBD	2 year partial prevalence	5,731,623	663	1.16 (1.07 to 1.25)
DLBCL	CPRD GOLD	5 year partial prevalence	2,999,581	272	0.91 (0.80 to 1.02)
DLBCL	IQVIA Germany DA	5 year partial prevalence	7,023,015	331	0.47 (0.42 to 0.52)
DLBCL	SIDIAP CMBD	5 year partial prevalence	5,731,623	989	1.73 (1.62 to 1.84)
DLBCL	CPRD GOLD	Complete prevalence	2,999,581	407	1.36 (1.23 to 1.49)
DLBCL	IQVIA Germany DA	Complete prevalence	7,023,015	482	0.69 (0.63 to 0.75)
DLBCL	SIDIAP CMBD	Complete prevalence	5,731,623	1618	2.82 (2.69 to 2.96)
FL	CPRD GOLD	2 year partial prevalence	2,999,581	190	0.63 (0.55 to 0.73)
FL	IQVIA Belgium LPD	2 year partial prevalence	367,266	9	0.25 (0.13 to 0.47)
FL	IQVIA Germany DA	2 year partial prevalence	7,023,015	294	0.42 (0.37 to 0.47)
FL	SIDIAP CMBD	2 year partial prevalence	5,731,623	706	1.23 (1.14 to 1.33)
FL	CPRD GOLD	5 year partial prevalence	2,999,581	405	1.35 (1.22 to 1.49)
FL	IQVIA Belgium LPD	5 year partial prevalence	367,266	54	1.47 (1.13 to 1.92)
FL	IQVIA Germany DA	5 year partial prevalence	7,023,015	631	0.90 (0.83 to 0.97)
FL	SIDIAP CMBD	5 year partial prevalence	5,731,623	1623	2.83 (2.70 to 2.97)
FL	CPRD GOLD	Complete prevalence	2,999,581	782	2.61 (2.43 to 2.79)
FL	IQVIA Belgium LPD	Complete prevalence	367,266	96	2.61 (2.14 to 3.19)
FL	IQVIA Germany DA	Complete prevalence	7,023,015	1157	1.65 (1.56 to 1.75)
FL	SIDIAP CMBD	Complete prevalence	5,731,623	3162	5.52 (5.33 to 5.71)
MM	CPRD GOLD	2 year partial prevalence	2,999,581	394	1.31 (1.19 to 1.45)
MM	IPCI	2 year partial prevalence	1,184,026	175	1.48 (1.27 to 1.71)
MM	IQVIA Belgium LPD	2 year partial prevalence	367,266	24	0.65 (0.44 to 0.97)
MM	IQVIA Germany DA	2 year partial prevalence	7,023,015	1375	1.96 (1.86 to 2.06)
MM	SIDIAP CMBD	2 year partial prevalence	5,731,623	826	1.44 (1.35 to 1.54)

Disease	Database	Type	Population (N)	Cases (N)	Prevalence per 10,000 (95% CI)
MM	CPRD GOLD	5 year partial prevalence	2,999,581	800	2.67 (2.49 to 2.86)
MM	IPCI	5 year partial prevalence	1,184,026	357	3.02 (2.72 to 3.34)
MM	IQVIA Belgium LPD	5 year partial prevalence	367,266	79	2.15 (1.73 to 2.68)
MM	IQVIA Germany DA	5 year partial prevalence	7,023,015	2996	4.27 (4.12 to 4.42)
MM	SIDIAP CMBD	5 year partial prevalence	5,731,623	1658	2.89 (2.76 to 3.04)
MM	CPRD GOLD	Complete prevalence	2,999,581	1198	3.99 (3.77 to 4.22)
MM	IPCI	Complete prevalence	1,184,026	469	3.96 (3.62 to 4.34)
MM	IQVIA Belgium LPD	Complete prevalence	367,266	121	3.29 (2.76 to 3.94)
MM	IQVIA Germany DA	Complete prevalence	7,023,015	4443	6.33 (6.14 to 6.52)
MM	SIDIAP CMBD	Complete prevalence	5,731,623	2835	4.95 (4.77 to 5.13)

Figure 7: Estimated 2-year partial point prevalence, 5-year partial point prevalence, and complete point prevalence of study outcomes by calendar year

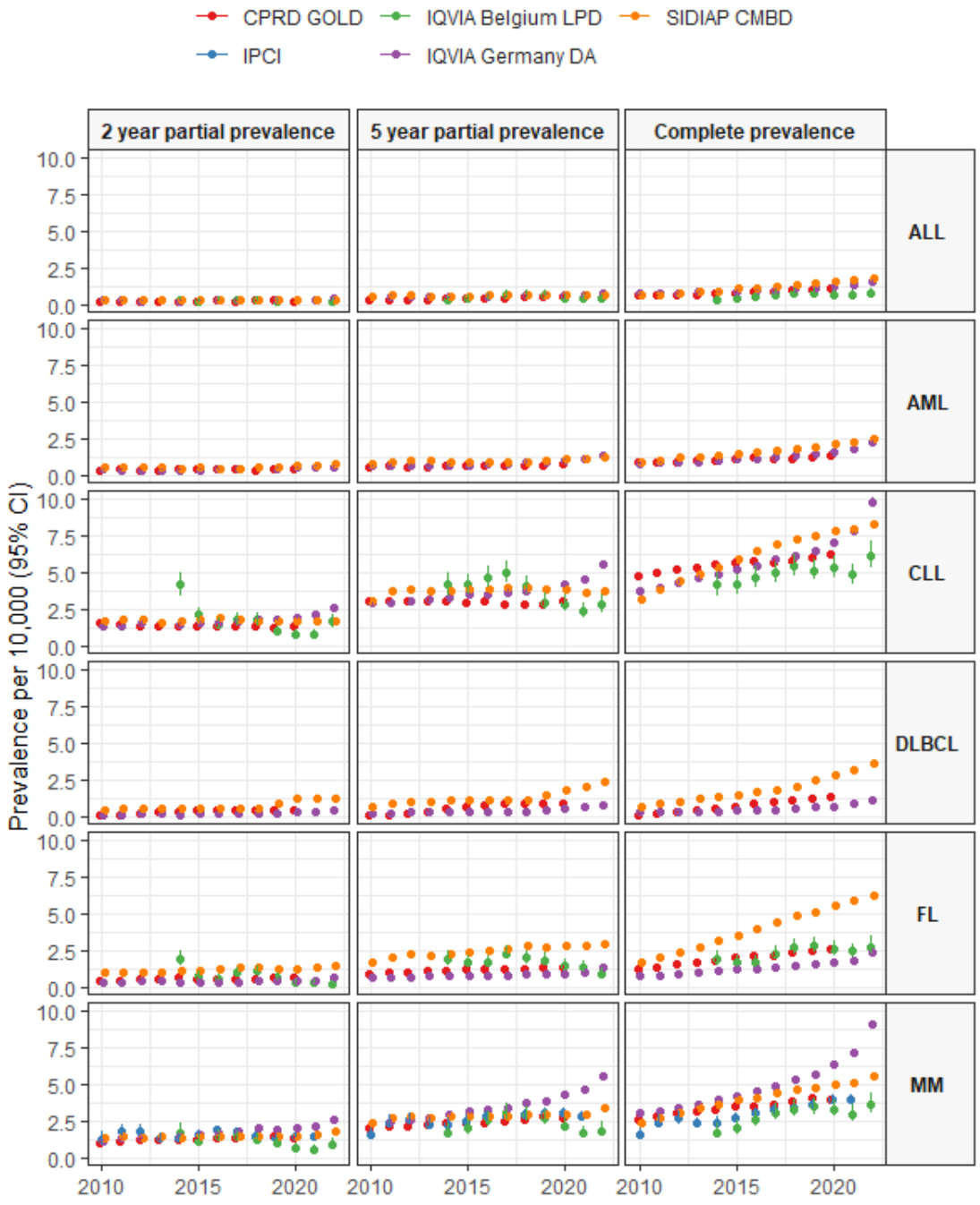
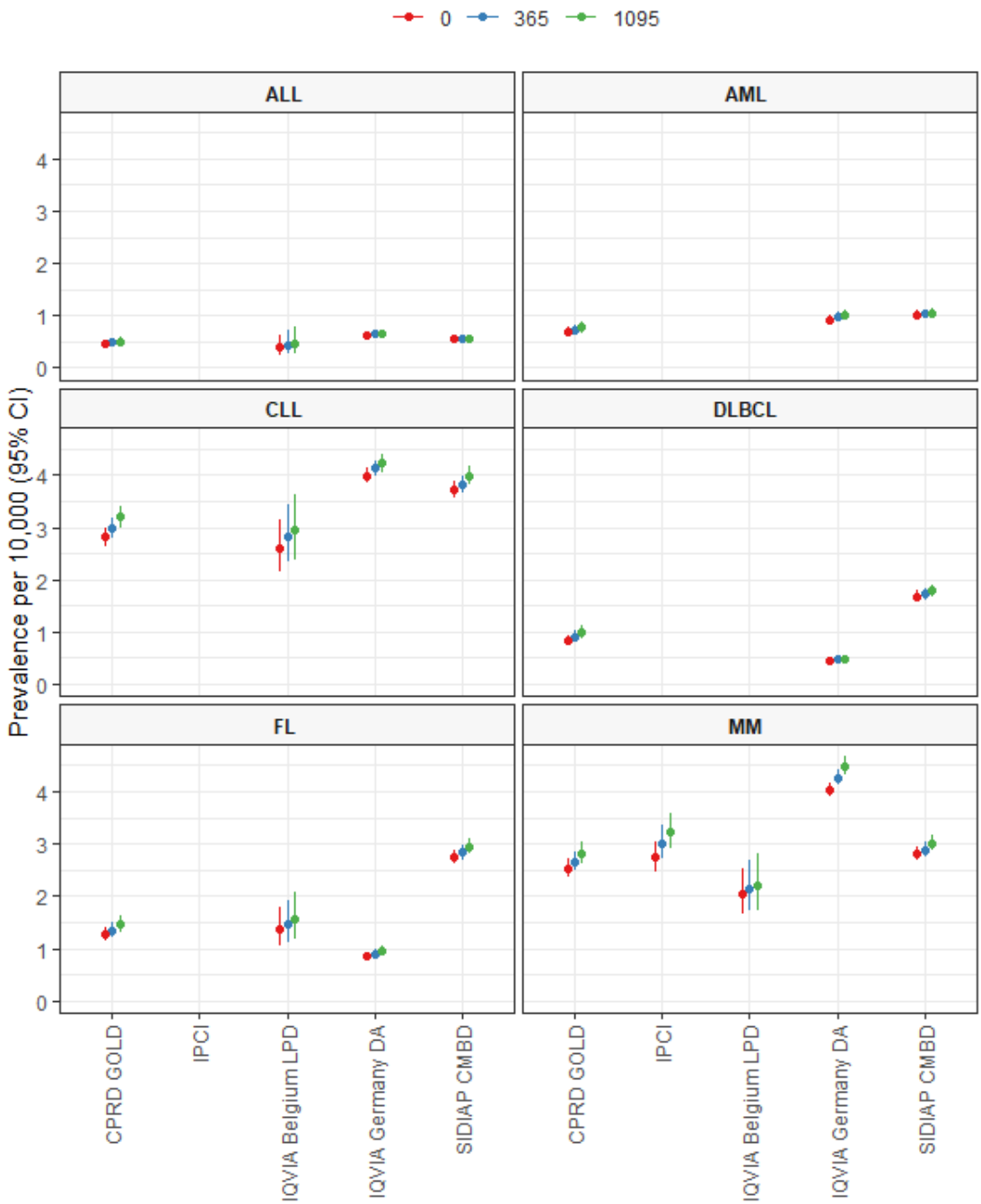


Figure 8: Estimated 5-year partial point prevalence in 2020 by prior history requirement



All study results are available in an interactive application: https://data-dev.darwin-eu.org/EUPAS50800/

13 MANAGEMENT AND REPORTING OF ADVERSE EVENTS/ADVERSE REACTIONS

According to the guideline on good pharmacovigilance practice (EMA/873138/2011 Rev 2*) there is no requirement for expedited reporting of adverse drug reactions from studies with secondary use of data (such as electronic health care databases).

14 DISCUSSION

14.1 Key results

Across the included databases, the 5-year partial point prevalence of ALL and AML, as of the 1st January 2020, was less than 1 per 10,000. Meanwhile, prevalence DLBCL was less than 2 per 10,000 and prevalence of FL was below 3 per 10,000. Lastly, prevalence of CLL and MM were below 5 per 10,000. Partial prevalence was lower than complete prevalence for all study outcomes and databases. Upward trends in prevalence over time were more pronounced for complete prevalence compared to partial prevalence.

14.2 Limitations of the research methods

The results from this study have been informed by routinely collected health care data and so data quality issues must be considered. In particular, although the strength of the databases included is their capture of appropriate denominator populations, the outcome events of interested could be underreported. Reassuringly results for SIDIAP CMBD, which included patient-level hospital linkage, and other databases, which did not, were broadly comparable. IPCI did not though capture any outcomes other that MM due to a lack of granularity in their source (ICPC) coding system. The databases used are each long established and have been used for numerous epidemiologic studies,[3,4,5,6]. Moreover, a study comparing cancer diagnoses captured in SIDIAP with those being reported in the cancer registries for Catalonia found that SIDIAP CMDB had good capture of cancer diagnoses with sensitivity of 83% for multiple myeloma, for example.[7]

Another more general limitation is around uncertainty in outcome definitions, in particular the duration over which a person is considered as a prevalent case following their diagnosis. Previous studies have demonstrated the substantial differences between partial and complete prevalence,[8] with the difference between these estimates largely driven by the severity of disease and typical age at diagnosis. We considered 2-year partial prevalence, 5-year partial prevalence (the primary analysis), and complete prevalence. Consistent with the previous literature, this choice between partial prevalence (and the duration for which it was defined) and complete prevalence had a substantial impact on estimates. Moreover, in our study an upward trend over calendar years was more often seen when considering complete prevalence compared to partial prevalence, likely explained by improvements in patient survival over time.

14.3 Interpretation

In line with our findings, the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute (NCI) estimated the 5-year partial prevalence of ALL to be 5.2 per 100,000 with prevalence of AML as 8.1 per 100,000 as of January 1, 2019. Their estimate for CLL was somewhat lower, at 17.6 per 100,000. For Non-Hodgkin Lymphoma, of which DLBLC and FL are the most common subtypes, 5-year partial prevalence was estimated as 80.8 per 100,000. Meanwhile, 5-year partial prevalence of myeloma was 27.7 per 100,000. Consistent with our results, their estimates for complete prevalence were more than double the 5-year partial prevalence.[9]

Our estimates were also generally in line with estimates from Haematological Malignancy Research Network (HMRN) in the UK, where prevalence of ALL is estimated as 4.5 per 100,000, AML as 5.8 per 100,000, CLL as 29.5 per 100,000, FL as 16.2 per 100,000, and MM as 24.1 per 100,000. In HMRN, however, prevalence of DLBCL is higher than in our study, at 22.5 per 100,000.[10] Lastly, estimates of 5-year partial prevalence of multiple myeloma for Spain, The Netherlands, and the UK from GLOBOCAN range from 18.3 to 26.0 per 100,000.[11] This again is broadly in line with our findings.

14.4 Generalisability

The databases included here were primary care databases with denominator populations representative of the populations of the countries/ regions they were drawn from (Catalonia, the Netherlands, United Kingdom). Prevalence of the study outcomes in other European countries may though vary depending on various factors, both related to patient and health system factors.

15 CONCLUSION

Across the included databases, ALL and AML were the blood cancers with the lowest prevalence, with a 5-year partial point prevalence at less than 1 per 10,000. DLBCL and FL were slightly more common, with estimated prevalence of less than 2 per 10,000 and less than 3 per 10,000, respectively. Lastly, 5-year partial point prevalence as of 1st January 2020 of CLL and MM was also below 5 per 10,000. Differences in analytic settings, in particular whether using partial or complete prevalence, had a meaningful impact on estimates of prevalence. Prevalence also varied substantially across age groups.

16 REFERENCES

1. Polsinelli B, Tsigkos S, Naumann-Winter F, Mariz S, Sepodes B. Evolving prevalence of haematological malignancies in orphan designation procedures in the European Union. *Orphanet Journal of Rare Diseases*. 2017;12(1):17. doi:10.1186/s13023-017-0567-7

2. Tsigkos S, Hofer MP, Sheean ME, et al. Establishing rarity in the context of orphan medicinal product designation in the European Union. *Drug Discovery Today*. 2018;23(3):681-686. doi:10.1016/j.drudis.2017.06.003

3. Burn E, Li X, Kostka K, et al. Background rates of five thrombosis with thrombocytopenia syndromes of special interest for COVID-19 vaccine safety surveillance: Incidence between 2017 and 2019 and patient profiles from 38.6 million people in six European countries. *Pharmacoepidemiology and Drug Safety*. 2022;31(5):495-510. doi:10.1002/pds.5419

4. Li X, Ostropolets A, Makadia R, et al. Characterising the background incidence rates of adverse events of special interest for covid-19 vaccines in eight countries: multinational network cohort study. *BMJ*. 2021;373:n1435. doi:10.1136/bmj.n1435

5. Broers MC, de Wilde M, Lingsma HF, van der Lei J, Verhamme KMC, Jacobs BC. Epidemiology of chronic inflammatory demyelinating polyradiculoneuropathy in The Netherlands. *Journal of the Peripheral Nervous System*. 2022;27(3):182-188. doi:10.1111/jns.12502

6. Hawley S, Shaw NJ, Delmestri A, et al. Prevalence and Mortality of Individuals With X-Linked Hypophosphatemia: A United Kingdom Real-World Data Analysis. *The Journal of Clinical Endocrinology & Metabolism*. 2020;105(3):e871-e878. doi:10.1210/clinem/dgz203

7. Recalde M, Manzano-Salgado CB, Díaz Y, Puente D, Garcia-Gil MDM, Marcos-Gragera R, Ribes-Puig J, Galceran J, Posso M, Macià F, Duarte-Salles T. Validation Of Cancer Diagnoses In Electronic Health Records: Results From The Information System For Research In Primary Care (SIDIAP) In Northeast Spain. *Clin Epidemiol*. 2019;(11):1015-1024.

8. Li J, Smith A, Crouch S, Oliver S, Roman E. Estimating the prevalence of hematological malignancies and precursor conditions using data from Haematological Malignancy Research Network (HMRN). *Cancer Causes & Control*. 2016;27(8):1019-1026. doi:10.1007/s10552-016-0780-z

9. SEER*Explorer: An interactive website for SEER cancer statistics [Internet]. Surveillance Research Program, National Cancer Institute. Accessed January 14, 2023. https://seer.cancer.gov/statistics-network/explorer

10. Haematological Malignancy Research Network (HMRN) Prevalence statistics 2022. Accessed January 16, 2023. https://hmrn.org/statistics/prevalence

11. IARC. Cancer Today. Accessed January 16, 2023. https://gco.iarc.fr/today/home

17 ANNEXES

Appendix I: Code lists for study outcomes

ALL – partial prevalence - narrow

Id	Name
4081867	Acute biphenotypic leukemia
4189936	Acute lymphoblastic leukemia - category
4153344	Acute lymphoblastic leukemia, transitional pre-B-cell
134305	Acute lymphoid leukemia
36712834	Acute lymphoid leukemia relapse
4094550	Adult T-cell leukemia
4003188	Adult T-cell leukemia/lymphoma
4300174	Adult T-cell leukemia/lymphoma
36717161	Aggressive natural killer-cell leukemia
4173963	B-cell acute lymphoblastic leukemia
37204838	B-lymphoblastic leukemia lymphoma BCR-ABL1-like
42872925	B lymphoblastic leukemia / lymphoma - category
42872954	B lymphoblastic leukemia lymphoma, no ICD-O subtype
3654653	B lymphoblastic leukemia lymphoma with hyperdiploidy
42872958	B lymphoblastic leukemia lymphoma with hyperdiploidy
3654651	B lymphoblastic leukemia lymphoma with hypodiploidy
42872959	B lymphoblastic leukemia lymphoma with hypodiploidy (Hypodiploid ALL)
37206196	B lymphoblastic leukemia lymphoma with iAMP21
42872961	B lymphoblastic leukemia lymphoma with t(1;19)(q23;p13.3); E2A-PBX1 (TCF3-PBX1)
3654650	B lymphoblastic leukemia lymphoma with t(1;19)(Q23;P13.3); E2A-PBX1 (TCF3/PBX1)
3654649	B lymphoblastic leukemia lymphoma with t(12;21) (p13;q22); TEL/AML1 (ETV6-RUNX1)
42872957	B lymphoblastic leukemia lymphoma with t(12;21)(p13;q22); TEL-AML1 (ETV6-RUNX1)
42872960	B lymphoblastic leukemia lymphoma with t(5;14)(q31;q32); IL3-IGH
3654647	B lymphoblastic leukemia lymphoma with t(5;14)(q31;q32); IL3-IGH
42872955	B lymphoblastic leukemia lymphoma with t(9;22)(q34;q11.2); BCR-ABL1
37109936	B lymphoblastic leukemia lymphoma with t(9:22) (q34;q11.2); BCR-ABL 1
42872956	B lymphoblastic leukemia lymphoma with t(v;11q23); MLL rearranged
3654648	B lymphoblastic leukemia lymphoma with t(v;11q23); MLL rearranged
4079280	Common acute lymphoblastic leukemia
37204662	NK-lymphoblastic leukemia/lymphoma
4079281	Null cell acute lymphoblastic leukemia
37017893	Philadelphia chromosome-negative precursor B-cell acute lymphoblastic leukemia
4143821	Philadelphia chromosome-positive acute lymphoblastic leukemia
4138008	Philadelphia chromosome-positive acute lymphoblastic leukemia

4082461	Precursor B-cell acute lymphoblastic leukemia
4029662	Precursor B-cell lymphoblastic leukemia
4264448	Precursor B-lymphoblastic leukemia/lymphoblastic lymphoma
4030260	Precursor cell lymphoblastic leukemia
4030261	Precursor T-cell lymphoblastic leukemia
4221907	Precursor T cell lymphoblastic leukemia/lymphoblastic lymphoma
4288091	Precursor T cell lymphoblastic leukemia/lymphoblastic lymphoma
4227963	Precursor T-cell lymphoblastic lymphoma
36712835	Refractory acute lymphoid leukemia
4082462	T-cell acute lymphoblastic leukemia
45766617	T lymphoblastic leukemia/lymphoma

ALL – complete prevalence - narrow

Id	Name
4081867	Acute biphenotypic leukemia
4189936	Acute lymphoblastic leukemia - category
4153344	Acute lymphoblastic leukemia, transitional pre-B-cell
134305	Acute lymphoid leukemia
141816	Acute lymphoid leukemia in remission
36712834	Acute lymphoid leukemia relapse
4094550	Adult T-cell leukemia
4003188	Adult T-cell leukemia/lymphoma
4300174	Adult T-cell leukemia/lymphoma
36717161	Aggressive natural killer-cell leukemia
4173963	B-cell acute lymphoblastic leukemia
37204838	B-lymphoblastic leukemia lymphoma BCR-ABL1-like
42872925	B lymphoblastic leukemia / lymphoma - category
42872954	B lymphoblastic leukemia lymphoma, no ICD-O subtype
3654653	B lymphoblastic leukemia lymphoma with hyperdiploidy
42872958	B lymphoblastic leukemia lymphoma with hyperdiploidy
3654651	B lymphoblastic leukemia lymphoma with hypodiploidy
42872959	B lymphoblastic leukemia lymphoma with hypodiploidy (Hypodiploid ALL)
37206196	B lymphoblastic leukemia lymphoma with iAMP21
42872961	B lymphoblastic leukemia lymphoma with t(1;19)(q23;p13.3); E2A-PBX1 (TCF3-PBX1)
3654650	B lymphoblastic leukemia lymphoma with t(1;19)(Q23;P13.3); E2A-PBX1 (TCF3/PBX1)
3654649	B lymphoblastic leukemia lymphoma with t(12;21) (p13;q22); TEL/AML1 (ETV6-RUNX1)
42872957	B lymphoblastic leukemia lymphoma with t(12;21)(p13;q22); TEL-AML1 (ETV6-RUNX1)
3654647	B lymphoblastic leukemia lymphoma with t(5;14)(q31;q32); IL3-IGH
42872960	B lymphoblastic leukemia lymphoma with t(5;14)(q31;q32); IL3-IGH

42872955	B lymphoblastic leukemia lymphoma with t(9;22)(q34;q11.2); BCR-ABL1
37109936	B lymphoblastic leukemia lymphoma with t(9:22) (q34;q11.2); BCR-ABL 1
3654648	B lymphoblastic leukemia lymphoma with t(v;11q23); MLL rearranged
42872956	B lymphoblastic leukemia lymphoma with t(v;11q23); MLL rearranged
4079280	Common acute lymphoblastic leukemia
134596	Lymphoid leukemia in remission
37204662	NK-lymphoblastic leukemia/lymphoma
4079281	Null cell acute lymphoblastic leukemia
37017893	Philadelphia chromosome-negative precursor B-cell acute lymphoblastic leukemia
4143821	Philadelphia chromosome-positive acute lymphoblastic leukemia
4138008	Philadelphia chromosome-positive acute lymphoblastic leukemia
4082461	Precursor B-cell acute lymphoblastic leukemia
4138752	Precursor B-cell acute lymphoblastic leukemia in remission
4029662	Precursor B-cell lymphoblastic leukemia
4264448	Precursor B-lymphoblastic leukemia/lymphoblastic lymphoma
4030260	Precursor cell lymphoblastic leukemia
4030261	Precursor T-cell lymphoblastic leukemia
4288091	Precursor T cell lymphoblastic leukemia/lymphoblastic lymphoma
4221907	Precursor T cell lymphoblastic leukemia/lymphoblastic lymphoma
4227963	Precursor T-cell lymphoblastic lymphoma
36712835	Refractory acute lymphoid leukemia
4082462	T-cell acute lymphoblastic leukemia
4143997	T-cell acute lymphoblastic leukemia in remission
45766617	T lymphoblastic leukemia/lymphoma

ALL – partial prevalence - broad

Id	Name
4081867	Acute biphenotypic leukemia
4189936	Acute lymphoblastic leukemia - category
4153344	Acute lymphoblastic leukemia, transitional pre-B-cell
134305	Acute lymphoid leukemia
36712834	Acute lymphoid leukemia relapse
4094550	Adult T-cell leukemia
4003188	Adult T-cell leukemia/lymphoma
4300174	Adult T-cell leukemia/lymphoma
36717161	Aggressive natural killer-cell leukemia
4173963	B-cell acute lymphoblastic leukemia
37204838	B-lymphoblastic leukemia lymphoma BCR-ABL1-like

42872925	B lymphoblastic leukemia / lymphoma - category
42872954	B lymphoblastic leukemia lymphoma, no ICD-O subtype
3654653	B lymphoblastic leukemia lymphoma with hyperdiploidy
42872958	B lymphoblastic leukemia lymphoma with hyperdiploidy
3654651	B lymphoblastic leukemia lymphoma with hypodiploidy
42872959	B lymphoblastic leukemia lymphoma with hypodiploidy (Hypodiploid ALL)
37206196	B lymphoblastic leukemia lymphoma with iAMP21
42872961	B lymphoblastic leukemia lymphoma with t(1;19)(q23;p13.3); E2A-PBX1 (TCF3-PBX1)
3654650	B lymphoblastic leukemia lymphoma with t(1;19)(Q23;P13.3); E2A-PBX1 (TCF3/PBX1)
3654649	B lymphoblastic leukemia lymphoma with t(12;21) (p13;q22); TEL/AML1 (ETV6-RUNX1)
42872957	B lymphoblastic leukemia lymphoma with t(12;21)(p13;q22); TEL-AML1 (ETV6-RUNX1)
42872960	B lymphoblastic leukemia lymphoma with t(5;14)(q31;q32); IL3-IGH
3654647	B lymphoblastic leukemia lymphoma with t(5;14)(q31;q32); IL3-IGH
42872955	B lymphoblastic leukemia lymphoma with t(9;22)(q34;q11.2); BCR-ABL1
37109936	B lymphoblastic leukemia lymphoma with t(9:22) (q34;q11.2); BCR-ABL 1
42872956	B lymphoblastic leukemia lymphoma with t(v;11q23); MLL rearranged
3654648	B lymphoblastic leukemia lymphoma with t(v;11q23); MLL rearranged
4079280	Common acute lymphoblastic leukemia
37018869	Disorder of central nervous system co-occurrent and due to acute lymphoid leukemia
4299143	Leukemic infiltration of skin (T-cell lymphoblastic leukemia)
37204662	NK-lymphoblastic leukemia/lymphoma
4079281	Null cell acute lymphoblastic leukemia
37017893	Philadelphia chromosome-negative precursor B-cell acute lymphoblastic leukemia
4143821	Philadelphia chromosome-positive acute lymphoblastic leukemia
4138008	Philadelphia chromosome-positive acute lymphoblastic leukemia
4082461	Precursor B-cell acute lymphoblastic leukemia
4029662	Precursor B-cell lymphoblastic leukemia
4264448	Precursor B-lymphoblastic leukemia/lymphoblastic lymphoma
4030260	Precursor cell lymphoblastic leukemia
4030261	Precursor T-cell lymphoblastic leukemia
4221907	Precursor T cell lymphoblastic leukemia/lymphoblastic lymphoma
4288091	Precursor T cell lymphoblastic leukemia/lymphoblastic lymphoma
4227963	Precursor T-cell lymphoblastic lymphoma
36712835	Refractory acute lymphoid leukemia
4082462	T-cell acute lymphoblastic leukemia
45766617	T lymphoblastic leukemia/lymphoma

ALL – complete prevalence - broad

Id	Name
4081867	Acute biphenotypic leukemia
4189936	Acute lymphoblastic leukemia - category
4153344	Acute lymphoblastic leukemia, transitional pre-B-cell
134305	Acute lymphoid leukemia
141816	Acute lymphoid leukemia in remission
36712834	Acute lymphoid leukemia relapse
4094550	Adult T-cell leukemia
4300174	Adult T-cell leukemia/lymphoma
4003188	Adult T-cell leukemia/lymphoma
36717161	Aggressive natural killer-cell leukemia
4173963	B-cell acute lymphoblastic leukemia
37204838	B-lymphoblastic leukemia lymphoma BCR-ABL1-like
42872925	B lymphoblastic leukemia / lymphoma - category
42872954	B lymphoblastic leukemia lymphoma, no ICD-O subtype
3654653	B lymphoblastic leukemia lymphoma with hyperdiploidy
42872958	B lymphoblastic leukemia lymphoma with hyperdiploidy
3654651	B lymphoblastic leukemia lymphoma with hypodiploidy
42872959	B lymphoblastic leukemia lymphoma with hypodiploidy (Hypodiploid ALL)
37206196	B lymphoblastic leukemia lymphoma with iAMP21
42872961	B lymphoblastic leukemia lymphoma with t(1;19)(q23;p13.3); E2A-PBX1 (TCF3-PBX1)
3654650	B lymphoblastic leukemia lymphoma with t(1;19)(Q23;P13.3); E2A-PBX1 (TCF3/PBX1)
3654649	B lymphoblastic leukemia lymphoma with t(12;21) (p13;q22); TEL/AML1 (ETV6-RUNX1)
42872957	B lymphoblastic leukemia lymphoma with t(12;21)(p13;q22); TEL-AML1 (ETV6-RUNX1)
3654647	B lymphoblastic leukemia lymphoma with t(5;14)(q31;q32); IL3-IGH
42872960	B lymphoblastic leukemia lymphoma with t(5;14)(q31;q32); IL3-IGH
42872955	B lymphoblastic leukemia lymphoma with t(9;22)(q34;q11.2); BCR-ABL1
37109936	B lymphoblastic leukemia lymphoma with t(9:22) (q34;q11.2); BCR-ABL 1
42872956	B lymphoblastic leukemia lymphoma with t(v;11q23); MLL rearranged
3654648	B lymphoblastic leukemia lymphoma with t(v;11q23); MLL rearranged
4079280	Common acute lymphoblastic leukemia
37018869	Disorder of central nervous system co-occurrent and due to acute lymphoid leukemia
37018868	Disorder of central nervous system co-occurrent and due to acute lymphoid leukemia in remission
4299143	Leukemic infiltration of skin (T-cell lymphoblastic leukemia)
134596	Lymphoid leukemia in remission
37204662	NK-lymphoblastic leukemia/lymphoma
4079281	Null cell acute lymphoblastic leukemia
37017893	Philadelphia chromosome-negative precursor B-cell acute lymphoblastic leukemia
4143821	Philadelphia chromosome-positive acute lymphoblastic leukemia

4138008	Philadelphia chromosome-positive acute lymphoblastic leukemia
4082461	Precursor B-cell acute lymphoblastic leukemia
4138752	Precursor B-cell acute lymphoblastic leukemia in remission
4029662	Precursor B-cell lymphoblastic leukemia
4264448	Precursor B-lymphoblastic leukemia/lymphoblastic lymphoma
4030260	Precursor cell lymphoblastic leukemia
4030261	Precursor T-cell lymphoblastic leukemia
4288091	Precursor T cell lymphoblastic leukemia/lymphoblastic lymphoma
4221907	Precursor T cell lymphoblastic leukemia/lymphoblastic lymphoma
4227963	Precursor T-cell lymphoblastic lymphoma
36712835	Refractory acute lymphoid leukemia
4082462	T-cell acute lymphoblastic leukemia
4143997	T-cell acute lymphoblastic leukemia in remission
45766617	T lymphoblastic leukemia/lymphoma

AML – partial prevalence - narrow

Id	Name
4289318	Acute basophilic leukemia
4173970	Acute eosinophilic leukemia
4180418	Acute megakaryoblastic leukemia
4079686	Acute megakaryoblastic leukemia
4082485	Acute monoblastic leukemia
135768	Acute monocytic leukemia
4189938	Acute monocytic/monoblastic leukemia
44807009	Acute myeloid leukaemia with 11q23 abnormality
4184848	Acute myeloid leukemia
4029663	Acute myeloid leukemia, 11q23 abnormalities
35623630	Acute myeloid leukemia and myelodysplastic syndrome related to alkylating agent
35623633	Acute myeloid leukemia and myelodysplastic syndrome related to radiation
35623631	Acute myeloid leukemia and myelodysplastic syndrome related to topoisomerase type 2 inhibitor
140352	Acute myeloid leukemia, disease
36715587	Acute myeloid leukemia due to recurrent genetic abnormality
4031360	Acute myeloid leukemia, M6 type
42872942	Acute myeloid leukemia (megakaryoblastic) with t(1;22)(p13;q13); RBM15-MKL1
4304199	Acute myeloid leukemia, minimal differentiation
4233531	Acute myeloid leukemia, minimal differentiation, FAB M0
4073533	Acute myeloid leukemia, no ICD-O subtype
4028713	Acute myeloid leukemia, t(8;21) (q22;q22)
4304355	Acute myeloid leukemia with abnormal marrow eosinophils
37204375	Acute myeloid leukemia with BCR-ABL1
37312067	Acute myeloid leukemia with biallelic mutation of CEBPA (CCAAT enhancer binding protein alpha) gene
35622696	Acute myeloid leukemia with CEBPA somatic mutations
42535969	Acute myeloid leukemia with FMS-like tyrosine kinase-3 mutation
42539431	Acute myeloid leukemia with FMS-like tyrosine kinase-3 mutation
3654662	Acute myeloid leukemia with inv(16)(p13.1q22) or t(16;16)(p13.1;q22) CBFB-MYH11
42872934	Acute myeloid leukemia with inv(3)(q21q26.2) or t(3;3)(q21;q26.2); RPN1-EVI1
36683269	Acute myeloid leukemia with inv(3)(q21q26.2) or t(3;3)(q21;q26.2); RPN1-EVI1
4304051	Acute myeloid leukemia with maturation
4234749	Acute myeloid leukemia with maturation, FAB M2
4264447	Acute myeloid leukemia with multilineage dysplasia following a myelodysplastic syndrome or myelodysplastic syndrome/myeloproliferative disorder
4288090	Acute myeloid leukemia with multilineage dysplasia without antecedent myelodysplastic syndrome
45766616	Acute myeloid leukemia with mutated NPM1

37204557	Acute myeloid leukemia with mutated RUNX1
45771384	Acute myeloid leukemia with mutation of CEBPA (CCAAT enhancer binding protein alpha) gene
40483761	Acute myeloid leukemia with myelodysplasia-related changes
4029177	Acute myeloid leukemia with myelodysplasia-related changes
35622003	Acute myeloid leukemia with NPM1 somatic mutation
4304356	Acute myeloid leukemia without maturation
4230253	Acute myeloid leukemia without maturation, FAB M1
4265011	Acute myeloid leukemia with recurrent genetic abnormality
42872933	Acute myeloid leukemia with t(6;9)(p23;q34); DEK-NUP214
37116722	Acute myeloid leukemia with t(6;9)(p23;q34) translocation
37110871	Acute myeloid leukemia with t(8;16)(p11;p13) translocation
37110870	Acute myeloid leukemia with t(8;16)(p11;p13) translocation
40481524	Acute myeloid leukemia with t(9:11)(p22;q23); MLLT3-MLL
4116880	Acute myelomonocytic leukemia - eosinophilic variant
4003187	Acute myelomonocytic leukemia, FAB M4
4213196	Acute panmyelosis with myelofibrosis
4003184	Acute panmyelosis with myelofibrosis
4002497	Acute promyelocytic leukemia, FAB M3
4112803	Acute promyelocytic leukemia - hypogranular variant
4144191	Basophilic leukemia
45765495	Core binding factor acute myeloid leukemia
45766268	Cytogenetically normal acute myeloid leukemia
138099	Erythroleukemia, FAB M6
4175688	Hypergranular promyelocytic leukemia
35622760	Inherited acute myeloid leukemia
4300784	Leukemic infiltration of skin in acute myeloid leukemia
35607963	Megakaryoblastic acute myeloid leukemia with t(1;22)(p13;q13)
313159	Megakaryocytic leukemia
42872921	Mixed phenotype acute leukemia B/myeloid
42872922	Mixed phenotype acute leukemia T/myeloid
3572256	Refractory acute myeloid leukemia
3572249	Relapsing acute myeloid leukemia
4326339	Smoldering chronic lymphocytic leukemia
36717461	Therapy related acute myeloid leukemia and myelodysplastic syndrome
4030263	Therapy-related acute myeloid leukemia and myelodysplastic syndrome
4287472	Therapy-related acute myeloid leukemia and myelodysplastic syndrome, alkylating agent-related type
4265012	Therapy-related acute myeloid leukemia and myelodysplastic syndrome, topoisomerase type II inhibitor-related type

42538579	Therapy related acute myeloid leukemia due to and following administration of antineoplastic agent

AML – complete prevalence - narrow

Id	Name
4289318	Acute basophilic leukemia
4173970	Acute eosinophilic leukemia
4079686	Acute megakaryoblastic leukemia
4180418	Acute megakaryoblastic leukemia
4082485	Acute monoblastic leukemia
44784490	Acute monoblastic leukemia in remission
135768	Acute monocytic leukemia
140672	Acute monocytic leukemia in remission
4189938	Acute monocytic/monoblastic leukemia
44807009	Acute myeloid leukaemia with 11q23 abnormality
4184848	Acute myeloid leukemia
4029663	Acute myeloid leukemia, 11q23 abnormalities
35623630	Acute myeloid leukemia and myelodysplastic syndrome related to alkylating agent
35623633	Acute myeloid leukemia and myelodysplastic syndrome related to radiation
35623631	Acute myeloid leukemia and myelodysplastic syndrome related to topoisomerase type 2 inhibitor
140352	Acute myeloid leukemia, disease
36715587	Acute myeloid leukemia due to recurrent genetic abnormality
135762	Acute myeloid leukemia in remission
4031360	Acute myeloid leukemia, M6 type
42872942	Acute myeloid leukemia (megakaryoblastic) with t(1;22)(p13;q13); RBM15-MKL1
4304199	Acute myeloid leukemia, minimal differentiation
4233531	Acute myeloid leukemia, minimal differentiation, FAB M0
764781	Acute myeloid leukemia, minimal differentiation, FAB M0 in remission
4073533	Acute myeloid leukemia, no ICD-O subtype
4028713	Acute myeloid leukemia, t(8;21) (q22;q22)
4304355	Acute myeloid leukemia with abnormal marrow eosinophils
37204375	Acute myeloid leukemia with BCR-ABL1
37312067	Acute myeloid leukemia with biallelic mutation of CEBPA (CCAAT enhancer binding protein alpha) gene
35622696	Acute myeloid leukemia with CEBPA somatic mutations
42539431	Acute myeloid leukemia with FMS-like tyrosine kinase-3 mutation
42535969	Acute myeloid leukemia with FMS-like tyrosine kinase-3 mutation
3654662	Acute myeloid leukemia with inv(16)(p13.1q22) or t(16;16)(p13.1;q22) CBFB-MYH11
42872934	Acute myeloid leukemia with inv(3)(q21q26.2) or t(3;3)(q21;q26.2); RPN1-EVI1

36683269	Acute myeloid leukemia with inv(3)(q21q26.2) or t(3;3)(q21;q26.2); RPN1-EVI1
4304051	Acute myeloid leukemia with maturation
4234749	Acute myeloid leukemia with maturation, FAB M2
4138903	Acute myeloid leukemia with maturation, FAB M2, in remission
4264447	Acute myeloid leukemia with multilineage dysplasia following a myelodysplastic syndrome or myelodysplastic syndrome/myeloproliferative disorder
4288090	Acute myeloid leukemia with multilineage dysplasia without antecedent myelodysplastic syndrome
45766616	Acute myeloid leukemia with mutated NPM1
37204557	Acute myeloid leukemia with mutated RUNX1
45771384	Acute myeloid leukemia with mutation of CEBPA (CCAAT enhancer binding protein alpha) gene
4029177	Acute myeloid leukemia with myelodysplasia-related changes
40483761	Acute myeloid leukemia with myelodysplasia-related changes
35622003	Acute myeloid leukemia with NPM1 somatic mutation
4304356	Acute myeloid leukemia without maturation
4230253	Acute myeloid leukemia without maturation, FAB M1
764782	Acute myeloid leukemia without maturation, FAB M1 in remission
4265011	Acute myeloid leukemia with recurrent genetic abnormality
42872933	Acute myeloid leukemia with t(6;9)(p23;q34); DEK-NUP214
37116722	Acute myeloid leukemia with t(6;9)(p23;q34) translocation
37110871	Acute myeloid leukemia with t(8;16)(p11;p13) translocation
37110870	Acute myeloid leukemia with t(8;16)(p11;p13) translocation
40481524	Acute myeloid leukemia with t(9:11)(p22;q23); MLLT3-MLL
4116880	Acute myelomonocytic leukemia - eosinophilic variant
4003187	Acute myelomonocytic leukemia, FAB M4
4142105	Acute myelomonocytic leukemia, FAB M4, in remission
4003184	Acute panmyelosis with myelofibrosis
4213196	Acute panmyelosis with myelofibrosis
4002497	Acute promyelocytic leukemia, FAB M3
4137687	Acute promyelocytic leukemia, FAB M3, in remission
4112803	Acute promyelocytic leukemia - hypogranular variant
4144191	Basophilic leukemia
45765495	Core binding factor acute myeloid leukemia
45766268	Cytogenetically normal acute myeloid leukemia
138099	Erythroleukemia, FAB M6
4139358	Erythroleukemia, FAB M6 in remission
4175688	Hypergranular promyelocytic leukemia
35622760	Inherited acute myeloid leukemia
4300784	Leukemic infiltration of skin in acute myeloid leukemia
35607963	Megakaryoblastic acute myeloid leukemia with t(1;22)(p13;q13)

313159	Megakaryocytic leukemia
136930	Megakaryocytic leukemia in remission
42872921	Mixed phenotype acute leukemia B/myeloid
42872922	Mixed phenotype acute leukemia T/myeloid
132850	Myeloid leukemia in remission
3572256	Refractory acute myeloid leukemia
3572249	Relapsing acute myeloid leukemia
4326339	Smoldering chronic lymphocytic leukemia
36717461	Therapy related acute myeloid leukemia and myelodysplastic syndrome
4030263	Therapy-related acute myeloid leukemia and myelodysplastic syndrome
4287472	Therapy-related acute myeloid leukemia and myelodysplastic syndrome, alkylating agent-related type
4265012	Therapy-related acute myeloid leukemia and myelodysplastic syndrome, topoisomerase type II inhibitor-related type
42538579	Therapy related acute myeloid leukemia due to and following administration of antineoplastic agent
45581255*	Acute myeloblastic leukemia, in remission

*Non-standard code

AML – partial prevalence - broad

Id	Name
4289318	Acute basophilic leukemia
4173970	Acute eosinophilic leukemia
4180418	Acute megakaryoblastic leukemia
4079686	Acute megakaryoblastic leukemia
4082485	Acute monoblastic leukemia
135768	Acute monocytic leukemia
4189938	Acute monocytic/monoblastic leukemia
44807009	Acute myeloid leukaemia with 11q23 abnormality
4184848	Acute myeloid leukemia
4029663	Acute myeloid leukemia, 11q23 abnormalities
35623630	Acute myeloid leukemia and myelodysplastic syndrome related to alkylating agent
35623633	Acute myeloid leukemia and myelodysplastic syndrome related to radiation
35623631	Acute myeloid leukemia and myelodysplastic syndrome related to topoisomerase type 2 inhibitor
140352	Acute myeloid leukemia, disease
36715587	Acute myeloid leukemia due to recurrent genetic abnormality
4031360	Acute myeloid leukemia, M6 type
42872942	Acute myeloid leukemia (megakaryoblastic) with t(1;22)(p13;q13); RBM15-MKL1
4304199	Acute myeloid leukemia, minimal differentiation

4233531	Acute myeloid leukemia, minimal differentiation, FAB M0
4073533	Acute myeloid leukemia, no ICD-O subtype
4028713	Acute myeloid leukemia, t(8;21) (q22;q22)
4304355	Acute myeloid leukemia with abnormal marrow eosinophils
37204375	Acute myeloid leukemia with BCR-ABL1
37312067	Acute myeloid leukemia with biallelic mutation of CEBPA (CCAAT enhancer binding protein alpha) gene
35622696	Acute myeloid leukemia with CEBPA somatic mutations
42535969	Acute myeloid leukemia with FMS-like tyrosine kinase-3 mutation
42539431	Acute myeloid leukemia with FMS-like tyrosine kinase-3 mutation
3654662	Acute myeloid leukemia with inv(16)(p13.1q22) or t(16;16)(p13.1;q22) CBFB-MYH11
42872934	Acute myeloid leukemia with inv(3)(q21q26.2) or t(3;3)(q21;q26.2); RPN1-EVI1
36683269	Acute myeloid leukemia with inv(3)(q21q26.2) or t(3;3)(q21;q26.2); RPN1-EVI1
4304051	Acute myeloid leukemia with maturation
4234749	Acute myeloid leukemia with maturation, FAB M2
4264447	Acute myeloid leukemia with multilineage dysplasia following a myelodysplastic syndrome or myelodysplastic syndrome/myeloproliferative disorder
4288090	Acute myeloid leukemia with multilineage dysplasia without antecedent myelodysplastic syndrome
45766616	Acute myeloid leukemia with mutated NPM1
37204557	Acute myeloid leukemia with mutated RUNX1
45771384	Acute myeloid leukemia with mutation of CEBPA (CCAAT enhancer binding protein alpha) gene
40483761	Acute myeloid leukemia with myelodysplasia-related changes
4029177	Acute myeloid leukemia with myelodysplasia-related changes
35622003	Acute myeloid leukemia with NPM1 somatic mutation
4304356	Acute myeloid leukemia without maturation
4230253	Acute myeloid leukemia without maturation, FAB M1
4265011	Acute myeloid leukemia with recurrent genetic abnormality
42872933	Acute myeloid leukemia with t(6;9)(p23;q34); DEK-NUP214
37116722	Acute myeloid leukemia with t(6;9)(p23;q34) translocation
37110871	Acute myeloid leukemia with t(8;16)(p11;p13) translocation
37110870	Acute myeloid leukemia with t(8;16)(p11;p13) translocation
40481524	Acute myeloid leukemia with t(9:11)(p22;q23); MLLT3-MLL
4116880	Acute myelomonocytic leukemia - eosinophilic variant
4003187	Acute myelomonocytic leukemia, FAB M4
4213196	Acute panmyelosis with myelofibrosis
4003184	Acute panmyelosis with myelofibrosis
4002497	Acute promyelocytic leukemia, FAB M3
4112803	Acute promyelocytic leukemia - hypogranular variant
4144191	Basophilic leukemia

45765495	Core binding factor acute myeloid leukemia
45766268	Cytogenetically normal acute myeloid leukemia
138099	Erythroleukemia, FAB M6
46273391	History of acute myeloid leukemia
4175688	Hypergranular promyelocytic leukemia
35622760	Inherited acute myeloid leukemia
4300784	Leukemic infiltration of skin in acute myeloid leukemia
35607963	Megakaryoblastic acute myeloid leukemia with t(1;22)(p13;q13)
313159	Megakaryocytic leukemia
42872921	Mixed phenotype acute leukemia B/myeloid
42872922	Mixed phenotype acute leukemia T/myeloid
3572256	Refractory acute myeloid leukemia
3572249	Relapsing acute myeloid leukemia
4326339	Smoldering chronic lymphocytic leukemia
36717461	Therapy related acute myeloid leukemia and myelodysplastic syndrome
4030263	Therapy-related acute myeloid leukemia and myelodysplastic syndrome
4287472	Therapy-related acute myeloid leukemia and myelodysplastic syndrome, alkylating agent-related type
4265012	Therapy-related acute myeloid leukemia and myelodysplastic syndrome, topoisomerase type II inhibitor-related type
42538579	Therapy related acute myeloid leukemia due to and following administration of antineoplastic agent

AML – complete prevalence - broad

Id	Name
4289318	Acute basophilic leukemia
4173970	Acute eosinophilic leukemia
4180418	Acute megakaryoblastic leukemia
4079686	Acute megakaryoblastic leukemia
4082485	Acute monoblastic leukemia
135768	Acute monocytic leukemia
4189938	Acute monocytic/monoblastic leukemia
44807009	Acute myeloid leukaemia with 11q23 abnormality
4184848	Acute myeloid leukemia
4029663	Acute myeloid leukemia, 11q23 abnormalities
35623630	Acute myeloid leukemia and myelodysplastic syndrome related to alkylating agent
35623633	Acute myeloid leukemia and myelodysplastic syndrome related to radiation
35623631	Acute myeloid leukemia and myelodysplastic syndrome related to topoisomerase type 2 inhibitor
140352	Acute myeloid leukemia, disease

36715587	Acute myeloid leukemia due to recurrent genetic abnormality
4031360	Acute myeloid leukemia, M6 type
42872942	Acute myeloid leukemia (megakaryoblastic) with t(1;22)(p13;q13); RBM15-MKL1
4304199	Acute myeloid leukemia, minimal differentiation
4233531	Acute myeloid leukemia, minimal differentiation, FAB M0
4073533	Acute myeloid leukemia, no ICD-O subtype
4028713	Acute myeloid leukemia, t(8;21) (q22;q22)
4304355	Acute myeloid leukemia with abnormal marrow eosinophils
37204375	Acute myeloid leukemia with BCR-ABL1
37312067	Acute myeloid leukemia with biallelic mutation of CEBPA (CCAAT enhancer binding protein alpha) gene
35622696	Acute myeloid leukemia with CEBPA somatic mutations
42535969	Acute myeloid leukemia with FMS-like tyrosine kinase-3 mutation
42539431	Acute myeloid leukemia with FMS-like tyrosine kinase-3 mutation
3654662	Acute myeloid leukemia with inv(16)(p13.1q22) or t(16;16)(p13.1;q22) CBFB-MYH11
42872934	Acute myeloid leukemia with inv(3)(q21q26.2) or t(3;3)(q21;q26.2); RPN1-EVI1
36683269	Acute myeloid leukemia with inv(3)(q21q26.2) or t(3;3)(q21;q26.2); RPN1-EVI1
4304051	Acute myeloid leukemia with maturation
4234749	Acute myeloid leukemia with maturation, FAB M2
4264447	Acute myeloid leukemia with multilineage dysplasia following a myelodysplastic syndrome or myelodysplastic syndrome/myeloproliferative disorder
4288090	Acute myeloid leukemia with multilineage dysplasia without antecedent myelodysplastic syndrome
45766616	Acute myeloid leukemia with mutated NPM1
37204557	Acute myeloid leukemia with mutated RUNX1
45771384	Acute myeloid leukemia with mutation of CEBPA (CCAAT enhancer binding protein alpha) gene
40483761	Acute myeloid leukemia with myelodysplasia-related changes
4029177	Acute myeloid leukemia with myelodysplasia-related changes
35622003	Acute myeloid leukemia with NPM1 somatic mutation
4304356	Acute myeloid leukemia without maturation
4230253	Acute myeloid leukemia without maturation, FAB M1
4265011	Acute myeloid leukemia with recurrent genetic abnormality
42872933	Acute myeloid leukemia with t(6;9)(p23;q34); DEK-NUP214
37116722	Acute myeloid leukemia with t(6;9)(p23;q34) translocation
37110871	Acute myeloid leukemia with t(8;16)(p11;p13) translocation
37110870	Acute myeloid leukemia with t(8;16)(p11;p13) translocation
40481524	Acute myeloid leukemia with t(9:11)(p22;q23); MLLT3-MLL
4116880	Acute myelomonocytic leukemia - eosinophilic variant
4003187	Acute myelomonocytic leukemia, FAB M4
4213196	Acute panmyelosis with myelofibrosis

4003184	Acute panmyelosis with myelofibrosis
4002497	Acute promyelocytic leukemia, FAB M3
4112803	Acute promyelocytic leukemia - hypogranular variant
4144191	Basophilic leukemia
45765495	Core binding factor acute myeloid leukemia
45766268	Cytogenetically normal acute myeloid leukemia
138099	Erythroleukemia, FAB M6
46273391	History of acute myeloid leukemia
4175688	Hypergranular promyelocytic leukemia
35622760	Inherited acute myeloid leukemia
4300784	Leukemic infiltration of skin in acute myeloid leukemia
35607963	Megakaryoblastic acute myeloid leukemia with t(1;22)(p13;q13)
313159	Megakaryocytic leukemia
42872921	Mixed phenotype acute leukemia B/myeloid
42872922	Mixed phenotype acute leukemia T/myeloid
3572256	Refractory acute myeloid leukemia
3572249	Relapsing acute myeloid leukemia
4326339	Smoldering chronic lymphocytic leukemia
36717461	Therapy related acute myeloid leukemia and myelodysplastic syndrome
4030263	Therapy-related acute myeloid leukemia and myelodysplastic syndrome
4287472	Therapy-related acute myeloid leukemia and myelodysplastic syndrome, alkylating agent-related type
4265012	Therapy-related acute myeloid leukemia and myelodysplastic syndrome, topoisomerase type II inhibitor-related type
42538579	Therapy related acute myeloid leukemia due to and following administration of antineoplastic agent
45581255*	Acute myeloblastic leukemia, in remission

*Non-standard code

CLL – partial prevalence - narrow

Id	Name
4139554	Atypical hairy cell leukemia
4082311	B-cell chronic lymphocytic leukemia
4173824	B-cell chronic lymphocytic leukemia variant
4173974	B-cell prolymphocytic leukemia
4180093	Chronic lymphocytic leukemia
37110902	Chronic lymphocytic leukemia genetic mutation variant
4082338	Chronic lymphocytic prolymphocytic leukemia syndrome
4186899	Chronic lymphoid leukemia - category
138379	Chronic lymphoid leukemia, disease
760935	Chronic lymphoid leukemia in relapse
44811227	Clinical stage A chronic lymphocytic leukaemia
44811228	Clinical stage B chronic lymphocytic leukaemia
44814026	Clinical stage C chronic lymphocytic leukaemia
4182216	Hairy cell leukemia
4038845	Hairy cell leukemia (clinical)
4245460	Hairy cell leukemia of spleen
4082459	Hairy cell leukemia variant
4082460	Large granular lymphocytic leukemia
4299151	Leukemic infiltration of skin in hairy-cell leukemia
193429	Leukemic reticuloendotheliosis of intra-abdominal lymph nodes
132570	Leukemic reticuloendotheliosis of lymph nodes of head, face and neck
4173962	Lymphoma with spill
37206728	Monoclonal B-cell lymphocytosis chronic lymphocytic leukemia-type
37312112	Monoclonal B-cell lymphocytosis chronic lymphocytic leukemia-type
37312109	Monoclonal B-cell lymphocytosis non-chronic lymphocytic leukemia type
37204530	Non-chronic lymphocytic leukemia monoclonal B-cell lymphocytosis
4029800	Prolymphocytic leukemia
4001331	Prolymphocytic leukemia (clinical)
4173956	Richter's syndrome
4326339	Smoldering chronic lymphocytic leukemia
4173957	Splenic lymphoma with villous lymphocytes
44783718	T-cell large granular lymphocytic leukemia
4079683	T-cell prolymphocytic leukemia

CLL – complete prevalence - narrow

Id	Name

4139554	Atypical hairy cell leukemia
4082311	B-cell chronic lymphocytic leukemia
4173824	B-cell chronic lymphocytic leukemia variant
4173974	B-cell prolymphocytic leukemia
37312023	B-cell prolymphocytic leukemia in remission
4180093	Chronic lymphocytic leukemia
37110902	Chronic lymphocytic leukemia genetic mutation variant
4082338	Chronic lymphocytic prolymphocytic leukemia syndrome
4186899	Chronic lymphoid leukemia - category
138379	Chronic lymphoid leukemia, disease
760935	Chronic lymphoid leukemia in relapse
133438	Chronic lymphoid leukemia in remission
44811227	Clinical stage A chronic lymphocytic leukaemia
44811228	Clinical stage B chronic lymphocytic leukaemia
44814026	Clinical stage C chronic lymphocytic leukaemia
4182216	Hairy cell leukemia
4038845	Hairy cell leukemia (clinical)
4245460	Hairy cell leukemia of spleen
4082459	Hairy cell leukemia variant
4082460	Large granular lymphocytic leukemia
4299151	Leukemic infiltration of skin in hairy-cell leukemia
193429	Leukemic reticuloendotheliosis of intra-abdominal lymph nodes
132570	Leukemic reticuloendotheliosis of lymph nodes of head, face and neck
4173962	Lymphoma with spill
37206728	Monoclonal B-cell lymphocytosis chronic lymphocytic leukemia-type
37312112	Monoclonal B-cell lymphocytosis chronic lymphocytic leukemia-type
37312109	Monoclonal B-cell lymphocytosis non-chronic lymphocytic leukemia type
37204530	Non-chronic lymphocytic leukemia monoclonal B-cell lymphocytosis
4029800	Prolymphocytic leukemia
4001331	Prolymphocytic leukemia (clinical)
4173956	Richter's syndrome
4326339	Smoldering chronic lymphocytic leukemia
4173957	Splenic lymphoma with villous lymphocytes
44783718	T-cell large granular lymphocytic leukemia
4079683	T-cell prolymphocytic leukemia

CLL – partial prevalence - broad

Id	Name

4139554	Atypical hairy cell leukemia
4082311	B-cell chronic lymphocytic leukemia
4173824	B-cell chronic lymphocytic leukemia variant
4173974	B-cell prolymphocytic leukemia
4180093	Chronic lymphocytic leukemia
37110902	Chronic lymphocytic leukemia genetic mutation variant
4082338	Chronic lymphocytic prolymphocytic leukemia syndrome
4186899	Chronic lymphoid leukemia - category
138379	Chronic lymphoid leukemia, disease
760935	Chronic lymphoid leukemia in relapse
4188973	Chronic myeloid leukemia in lymphoid blast crisis
44811227	Clinical stage A chronic lymphocytic leukaemia
44811228	Clinical stage B chronic lymphocytic leukaemia
44814026	Clinical stage C chronic lymphocytic leukaemia
4182216	Hairy cell leukemia
4038845	Hairy cell leukemia (clinical)
4245460	Hairy cell leukemia of spleen
4082459	Hairy cell leukemia variant
46270567	History of chronic lymphocytic leukemia
4082460	Large granular lymphocytic leukemia
4297353	Leukemic infiltration of skin (chronic T-cell lymphocytic leukemia)
4299151	Leukemic infiltration of skin in hairy-cell leukemia
132852	Leukemic reticuloendotheliosis of extranodal AND/OR solid organ site
193429	Leukemic reticuloendotheliosis of intra-abdominal lymph nodes
196650	Leukemic reticuloendotheliosis of intrapelvic lymph nodes
442095	Leukemic reticuloendotheliosis of intrathoracic lymph nodes
439269	Leukemic reticuloendotheliosis of lymph nodes of axilla and upper limb
132570	Leukemic reticuloendotheliosis of lymph nodes of head, face and neck
439268	Leukemic reticuloendotheliosis of lymph nodes of inguinal region and lower limb
318989	Leukemic reticuloendotheliosis of lymph nodes of multiple sites
4173962	Lymphoma with spill
37312112	Monoclonal B-cell lymphocytosis chronic lymphocytic leukemia-type
37206728	Monoclonal B-cell lymphocytosis chronic lymphocytic leukemia-type
37312109	Monoclonal B-cell lymphocytosis non-chronic lymphocytic leukemia type
37204530	Non-chronic lymphocytic leukemia monoclonal B-cell lymphocytosis
4029800	Prolymphocytic leukemia
4001331	Prolymphocytic leukemia (clinical)
4173956	Richter's syndrome
4326339	Smoldering chronic lymphocytic leukemia

4173957	Splenic lymphoma with villous lymphocytes
44783718	T-cell large granular lymphocytic leukemia
4079683	T-cell prolymphocytic leukemia

CLL – complete prevalence - broad

Id	Name
4139554	Atypical hairy cell leukemia
4082311	B-cell chronic lymphocytic leukemia
4173824	B-cell chronic lymphocytic leukemia variant
4173974	B-cell prolymphocytic leukemia
37312023	B-cell prolymphocytic leukemia in remission
4180093	Chronic lymphocytic leukemia
37110902	Chronic lymphocytic leukemia genetic mutation variant
4082338	Chronic lymphocytic prolymphocytic leukemia syndrome
4186899	Chronic lymphoid leukemia - category
138379	Chronic lymphoid leukemia, disease
760935	Chronic lymphoid leukemia in relapse
133438	Chronic lymphoid leukemia in remission
4188973	Chronic myeloid leukemia in lymphoid blast crisis
44811227	Clinical stage A chronic lymphocytic leukaemia
44811228	Clinical stage B chronic lymphocytic leukaemia
44814026	Clinical stage C chronic lymphocytic leukaemia
4182216	Hairy cell leukemia
4038845	Hairy cell leukemia (clinical)
4245460	Hairy cell leukemia of spleen
4082459	Hairy cell leukemia variant
46270567	History of chronic lymphocytic leukemia
4082460	Large granular lymphocytic leukemia
4297353	Leukemic infiltration of skin (chronic T-cell lymphocytic leukemia)
4299151	Leukemic infiltration of skin in hairy-cell leukemia
132852	Leukemic reticuloendotheliosis of extranodal AND/OR solid organ site
193429	Leukemic reticuloendotheliosis of intra-abdominal lymph nodes
196650	Leukemic reticuloendotheliosis of intrapelvic lymph nodes
442095	Leukemic reticuloendotheliosis of intrathoracic lymph nodes
439269	Leukemic reticuloendotheliosis of lymph nodes of axilla and upper limb
132570	Leukemic reticuloendotheliosis of lymph nodes of head, face and neck
439268	Leukemic reticuloendotheliosis of lymph nodes of inguinal region and lower limb
318989	Leukemic reticuloendotheliosis of lymph nodes of multiple sites

4173962	Lymphoma with spill
37312112	Monoclonal B-cell lymphocytosis chronic lymphocytic leukemia-type
37206728	Monoclonal B-cell lymphocytosis chronic lymphocytic leukemia-type
37312109	Monoclonal B-cell lymphocytosis non-chronic lymphocytic leukemia type
37204530	Non-chronic lymphocytic leukemia monoclonal B-cell lymphocytosis
4029800	Prolymphocytic leukemia
4001331	Prolymphocytic leukemia (clinical)
4173956	Richter's syndrome
4326339	Smoldering chronic lymphocytic leukemia
4173957	Splenic lymphoma with villous lymphocytes
44783718	T-cell large granular lymphocytic leukemia
4079683	T-cell prolymphocytic leukemia

DLBLC – partial prevalence – without FL3B

Id	Name
36716774	B-cell lymphoma unclassifiable with features intermediate between Burkitt lymphoma and diffuse large B-cell lymphoma
36716775	B-cell lymphoma unclassifiable with features intermediate between classical Hodgkin lymphoma and diffuse large B-cell lymphoma
36712836	B-cell lymphoma, unclassifiable, with features intermediate between diffuse large B-cell lymphoma and Burkitt lymphoma
36712837	B-cell lymphoma, unclassifiable, with features intermediate between diffuse large B-cell lymphoma and Hodgkin lymphoma
37117038	B-cell lymphoma with features intermediate between diffuse large B-cell lymphoma and Burkitt lymphoma
44808122	Diffuse large B-cell lymphoma
37206914	Diffuse large B-cell lymphoma activated B-cell subtype
37116992	Diffuse large B-cell lymphoma associated with chronic inflammation
4189146	Diffuse large B-cell lymphoma - category
37110401	Diffuse large B-cell lymphoma co-occurrent with chronic inflammation caused by Epstein-Barr virus
37206933	Diffuse large B-cell lymphoma germinal center B-cell subtype
4300704	Diffuse large B-cell lymphoma (nodal/systemic with skin involvement)
37116982	Diffuse large B-cell lymphoma of central nervous system
3654886	Diffuse large B-cell lymphoma of small intestine
3654887	Diffuse large B-cell lymphoma of stomach
4121330	Diffuse malignant lymphoma - centroblastic
4144199	Diffuse malignant lymphoma - centroblastic-centrocytic
4079293	Diffuse malignant lymphoma - centroblastic polymorphic
4173978	Diffuse malignant lymphoma - large cleaved cell
4079291	Diffuse malignant lymphoma - large non-cleaved cell
432574	Diffuse non-Hodgkin's lymphoma, large cell (clinical)
764839	Diffuse non-Hodgkin's lymphoma Lugano stage I
37396838	Epstein-Barr virus positive diffuse large B-cell lymphoma of elderly
37399015	Epstein-Barr virus positive diffuse large B-cell lymphoma of elderly
4205271	Follicular lymphoma
4230587	Follicular lymphoma, grade 3
40481357	Large cell lymphoma of intrapelvic lymph nodes
4146630	Malignant lymphoma, centroblastic-centrocytic, follicular
4141258	Malignant lymphoma, centroblastic type, follicular
42872963	Malignant lymphoma, diffuse large B-cell, immunoblastic
4262918	Malignant lymphoma, large B-cell, diffuse
4178883	Malignant lymphoma, mixed small and large cell, diffuse
440058	Malignant lymphoma of extranodal AND/OR solid organ site

4301669	Primary cutaneous anaplastic large cell B-cell lymphoma
4297358	Primary cutaneous diffuse large cell B-cell lymphoma
42539527	Primary cutaneous diffuse large cell B-cell lymphoma of lower extremity

DLBLC – complete prevalence - without FL3B

Id	Name
36716774	B-cell lymphoma unclassifiable with features intermediate between Burkitt lymphoma and diffuse large B-cell lymphoma
36716775	B-cell lymphoma unclassifiable with features intermediate between classical Hodgkin lymphoma and diffuse large B-cell lymphoma
36712836	B-cell lymphoma, unclassifiable, with features intermediate between diffuse large B-cell lymphoma and Burkitt lymphoma
36712837	B-cell lymphoma, unclassifiable, with features intermediate between diffuse large B-cell lymphoma and Hodgkin lymphoma
37117038	B-cell lymphoma with features intermediate between diffuse large B-cell lymphoma and Burkitt lymphoma
44808122	Diffuse large B-cell lymphoma
37206914	Diffuse large B-cell lymphoma activated B-cell subtype
37116992	Diffuse large B-cell lymphoma associated with chronic inflammation
4189146	Diffuse large B-cell lymphoma - category
37110401	Diffuse large B-cell lymphoma co-occurrent with chronic inflammation caused by Epstein-Barr virus
37206933	Diffuse large B-cell lymphoma germinal center B-cell subtype
4300704	Diffuse large B-cell lymphoma (nodal/systemic with skin involvement)
37116982	Diffuse large B-cell lymphoma of central nervous system
3654886	Diffuse large B-cell lymphoma of small intestine
3654887	Diffuse large B-cell lymphoma of stomach
4121330	Diffuse malignant lymphoma - centroblastic
4144199	Diffuse malignant lymphoma - centroblastic-centrocytic
4079293	Diffuse malignant lymphoma - centroblastic polymorphic
4173978	Diffuse malignant lymphoma - large cleaved cell
4079291	Diffuse malignant lymphoma - large non-cleaved cell
432574	Diffuse non-Hodgkin's lymphoma, large cell (clinical)
764839	Diffuse non-Hodgkin's lymphoma Lugano stage I
37396838	Epstein-Barr virus positive diffuse large B-cell lymphoma of elderly
37399015	Epstein-Barr virus positive diffuse large B-cell lymphoma of elderly
4205271	Follicular lymphoma
4230587	Follicular lymphoma, grade 3
40481357	Large cell lymphoma of intrapelvic lymph nodes
4146630	Malignant lymphoma, centroblastic-centrocytic, follicular
4141258	Malignant lymphoma, centroblastic type, follicular

42872963	Malignant lymphoma, diffuse large B-cell, immunoblastic
4262918	Malignant lymphoma, large B-cell, diffuse
4178883	Malignant lymphoma, mixed small and large cell, diffuse
440058	Malignant lymphoma of extranodal AND/OR solid organ site
4301669	Primary cutaneous anaplastic large cell B-cell lymphoma
4297358	Primary cutaneous diffuse large cell B-cell lymphoma
42539527	Primary cutaneous diffuse large cell B-cell lymphoma of lower extremity

DLBLC – partial prevalence - with FL3B

Id	Name
36716774	B-cell lymphoma unclassifiable with features intermediate between Burkitt lymphoma and diffuse large B-cell lymphoma
36716775	B-cell lymphoma unclassifiable with features intermediate between classical Hodgkin lymphoma and diffuse large B-cell lymphoma
36712836	B-cell lymphoma, unclassifiable, with features intermediate between diffuse large B-cell lymphoma and Burkitt lymphoma
36712837	B-cell lymphoma, unclassifiable, with features intermediate between diffuse large B-cell lymphoma and Hodgkin lymphoma
37117038	B-cell lymphoma with features intermediate between diffuse large B-cell lymphoma and Burkitt lymphoma
44808122	Diffuse large B-cell lymphoma
37206914	Diffuse large B-cell lymphoma activated B-cell subtype
37116992	Diffuse large B-cell lymphoma associated with chronic inflammation
4189146	Diffuse large B-cell lymphoma - category
37110401	Diffuse large B-cell lymphoma co-occurrent with chronic inflammation caused by Epstein-Barr virus
37206933	Diffuse large B-cell lymphoma germinal center B-cell subtype
4300704	Diffuse large B-cell lymphoma (nodal/systemic with skin involvement)
37116982	Diffuse large B-cell lymphoma of central nervous system
3654886	Diffuse large B-cell lymphoma of small intestine
3654887	Diffuse large B-cell lymphoma of stomach
4121330	Diffuse malignant lymphoma - centroblastic
4144199	Diffuse malignant lymphoma - centroblastic-centrocytic
4079293	Diffuse malignant lymphoma - centroblastic polymorphic
4173978	Diffuse malignant lymphoma - large cleaved cell
4079291	Diffuse malignant lymphoma - large non-cleaved cell
432574	Diffuse non-Hodgkin's lymphoma, large cell (clinical)
764839	Diffuse non-Hodgkin's lymphoma Lugano stage I
37396838	Epstein-Barr virus positive diffuse large B-cell lymphoma of elderly
37399015	Epstein-Barr virus positive diffuse large B-cell lymphoma of elderly
4205271	Follicular lymphoma

4230587	Follicular lymphoma, grade 3
44808118	Follicular lymphoma grade 3b
40481357	Large cell lymphoma of intrapelvic lymph nodes
4146630	Malignant lymphoma, centroblastic-centrocytic, follicular
4141258	Malignant lymphoma, centroblastic type, follicular
42872963	Malignant lymphoma, diffuse large B-cell, immunoblastic
4262918	Malignant lymphoma, large B-cell, diffuse
4178883	Malignant lymphoma, mixed small and large cell, diffuse
440058	Malignant lymphoma of extranodal AND/OR solid organ site
4301669	Primary cutaneous anaplastic large cell B-cell lymphoma
4297358	Primary cutaneous diffuse large cell B-cell lymphoma
42539527	Primary cutaneous diffuse large cell B-cell lymphoma of lower extremity

DLBLC – complete prevalence - with FL3B

Id	Name
36716774	B-cell lymphoma unclassifiable with features intermediate between Burkitt lymphoma and diffuse large B-cell lymphoma
36716775	B-cell lymphoma unclassifiable with features intermediate between classical Hodgkin lymphoma and diffuse large B-cell lymphoma
36712836	B-cell lymphoma, unclassifiable, with features intermediate between diffuse large B-cell lymphoma and Burkitt lymphoma
36712837	B-cell lymphoma, unclassifiable, with features intermediate between diffuse large B-cell lymphoma and Hodgkin lymphoma
37117038	B-cell lymphoma with features intermediate between diffuse large B-cell lymphoma and Burkitt lymphoma
44808122	Diffuse large B-cell lymphoma
37206914	Diffuse large B-cell lymphoma activated B-cell subtype
37116992	Diffuse large B-cell lymphoma associated with chronic inflammation
4189146	Diffuse large B-cell lymphoma - category
37110401	Diffuse large B-cell lymphoma co-occurrent with chronic inflammation caused by Epstein-Barr virus
37206933	Diffuse large B-cell lymphoma germinal center B-cell subtype
4300704	Diffuse large B-cell lymphoma (nodal/systemic with skin involvement)
37116982	Diffuse large B-cell lymphoma of central nervous system
3654886	Diffuse large B-cell lymphoma of small intestine
3654887	Diffuse large B-cell lymphoma of stomach
4121330	Diffuse malignant lymphoma - centroblastic
4144199	Diffuse malignant lymphoma - centroblastic-centrocytic
4079293	Diffuse malignant lymphoma - centroblastic polymorphic
4173978	Diffuse malignant lymphoma - large cleaved cell
4079291	Diffuse malignant lymphoma - large non-cleaved cell

432574	Diffuse non-Hodgkin's lymphoma, large cell (clinical)
764839	Diffuse non-Hodgkin's lymphoma Lugano stage I
37396838	Epstein-Barr virus positive diffuse large B-cell lymphoma of elderly
37399015	Epstein-Barr virus positive diffuse large B-cell lymphoma of elderly
4205271	Follicular lymphoma
4230587	Follicular lymphoma, grade 3
44808118	Follicular lymphoma grade 3b
40481357	Large cell lymphoma of intrapelvic lymph nodes
4146630	Malignant lymphoma, centroblastic-centrocytic, follicular
4141258	Malignant lymphoma, centroblastic type, follicular
42872963	Malignant lymphoma, diffuse large B-cell, immunoblastic
4262918	Malignant lymphoma, large B-cell, diffuse
4178883	Malignant lymphoma, mixed small and large cell, diffuse
440058	Malignant lymphoma of extranodal AND/OR solid organ site
4301669	Primary cutaneous anaplastic large cell B-cell lymphoma
4297358	Primary cutaneous diffuse large cell B-cell lymphoma
42539527	Primary cutaneous diffuse large cell B-cell lymphoma of lower extremity

FL – partial prevalence - with FL3B

Id	Name
40486171	Diffuse follicle center lymphoma
4144199	Diffuse malignant lymphoma - centroblastic-centrocytic
4299152	Follicular center B-cell lymphoma (nodal/systemic with skin involvement)
4079288	Follicular low grade B-cell lymphoma
4200880	Follicular low grade B-cell lymphoma morphology
4205271	Follicular lymphoma
4265301	Follicular lymphoma, cutaneous follicle center sub-type
35610325	Follicular lymphoma, cutaneous follicle centre
4288232	Follicular lymphoma, diffuse follicle center cell sub-type, grade 2
4265735	Follicular lymphoma, diffuse follicle center sub-type, grade 1
44808015	Follicular lymphoma grade 1
4188203	Follicular lymphoma, grade 1
44814156	Follicular lymphoma grade 2
4204524	Follicular lymphoma, grade 2
44808028	Follicular lymphoma grade 3
4230587	Follicular lymphoma, grade 3
44808117	Follicular lymphoma grade 3a
44806990	Follicular lymphoma grade 3a
44808118	Follicular lymphoma grade 3b
36715795	Follicular lymphoma of small intestine
4173977	Follicular malignant lymphoma - mixed cell type
4079289	Follicular malignant lymphoma - small cleaved cell
4147411	Follicular non-Hodgkin's lymphoma
45765919	Follicular non-Hodgkin's lymphoma diffuse follicle center cell sub-type grade 2
45765770	Follicular non-Hodgkin's lymphoma diffuse follicle center sub-type grade 1
4003833	Follicular non-Hodgkin's lymphoma, large cell (clinical)
4001329	Follicular non-Hodgkin's lymphoma, mixed small cleaved cell and large cell (clinical)
40490991	Follicular non-Hodgkin's lymphoma of bone
40492940	Follicular non-Hodgkin's lymphoma of central nervous system
40490467	Follicular non-Hodgkin's lymphoma of extranodal site
40487142	Follicular non-Hodgkin's lymphoma of intestine
40490998	Follicular non-Hodgkin's lymphoma of lung
36684826	Follicular non-Hodgkin's lymphoma of lymph nodes of multiple sites
40486169	Follicular non-Hodgkin's lymphoma of nasopharynx
40488917	Follicular non-Hodgkin's lymphoma of nose
40493017	Follicular non-Hodgkin's lymphoma of oral cavity
40486654	Follicular non-Hodgkin's lymphoma of ovary

40488901	Follicular non-Hodgkin's lymphoma of prostate
40492018	Follicular non-Hodgkin's lymphoma of skin
40489407	Follicular non-Hodgkin's lymphoma of soft tissue
40486173	Follicular non-Hodgkin's lymphoma of stomach
40487141	Follicular non-Hodgkin's lymphoma of testis
40493011	Follicular non-Hodgkin's lymphoma of tonsil
40493012	Follicular non-Hodgkin's lymphoma of uterine cervix
4002357	Follicular non-Hodgkin's lymphoma, small cleaved cell (clinical)
4097572	Follicular non-Hodgkin's mixed small cleaved and large cell lymphoma
37205181	Follicular T-cell lymphoma
4146630	Malignant lymphoma, centroblastic-centrocytic, follicular
4141258	Malignant lymphoma, centroblastic type, follicular
4146024	Malignant lymphoma - centrocytic
4017277	Malignant lymphoma, follicular AND/OR nodular
4123298	Malignant lymphoma, follicular center cell
4121853	Malignant lymphoma, follicular center cell, cleaved
4121970	Malignant lymphoma, follicular center cell, non-cleaved
4146031	Malignant lymphoma, lymphocytic, poorly differentiated, nodular
4146027	Malignant lymphoma, mixed lymphocytic-histiocytic, nodular
440058	Malignant lymphoma of extranodal AND/OR solid organ site
435753	Malignant lymphoma of intrathoracic lymph nodes
438698	Malignant lymphoma of lymph nodes of head, face AND/OR neck
37203899	Nodal peripheral T-cell lymphoma with T follicular helper phenotype
194878	Nodular lymphoma of extranodal AND/OR solid organ site
198088	Nodular lymphoma of intrapelvic lymph nodes
320347	Nodular lymphoma of lymph nodes of multiple sites
4121331	Nodular malignant lymphoma, lymphocytic - intermediate differentiation
4119131	Nodular malignant lymphoma, lymphocytic - well differentiated
42537145	Pediatric follicular lymphoma
37116892	Pediatric follicular lymphoma
4301668	Primary cutaneous follicular center B-cell lymphoma

FL – complete prevalence - with FL3B

Id	Name
40486171	Diffuse follicle center lymphoma
4144199	Diffuse malignant lymphoma - centroblastic-centrocytic
4299152	Follicular center B-cell lymphoma (nodal/systemic with skin involvement)
4079288	Follicular low grade B-cell lymphoma
4200880	Follicular low grade B-cell lymphoma morphology

4205271	Follicular lymphoma
4265301	Follicular lymphoma, cutaneous follicle center sub-type
35610325	Follicular lymphoma, cutaneous follicle centre
4288232	Follicular lymphoma, diffuse follicle center cell sub-type, grade 2
4265735	Follicular lymphoma, diffuse follicle center sub-type, grade 1
44808015	Follicular lymphoma grade 1
4188203	Follicular lymphoma, grade 1
44814156	Follicular lymphoma grade 2
4204524	Follicular lymphoma, grade 2
44808028	Follicular lymphoma grade 3
4230587	Follicular lymphoma, grade 3
44808117	Follicular lymphoma grade 3a
44806990	Follicular lymphoma grade 3a
44808118	Follicular lymphoma grade 3b
36715795	Follicular lymphoma of small intestine
4173977	Follicular malignant lymphoma - mixed cell type
4079289	Follicular malignant lymphoma - small cleaved cell
4147411	Follicular non-Hodgkin's lymphoma
45765919	Follicular non-Hodgkin's lymphoma diffuse follicle center cell sub-type grade 2
45765770	Follicular non-Hodgkin's lymphoma diffuse follicle center sub-type grade 1
4003833	Follicular non-Hodgkin's lymphoma, large cell (clinical)
4001329	Follicular non-Hodgkin's lymphoma, mixed small cleaved cell and large cell (clinical)
40490991	Follicular non-Hodgkin's lymphoma of bone
40492940	Follicular non-Hodgkin's lymphoma of central nervous system
40490467	Follicular non-Hodgkin's lymphoma of extranodal site
40487142	Follicular non-Hodgkin's lymphoma of intestine
40490998	Follicular non-Hodgkin's lymphoma of lung
36684826	Follicular non-Hodgkin's lymphoma of lymph nodes of multiple sites
40486169	Follicular non-Hodgkin's lymphoma of nasopharynx
40488917	Follicular non-Hodgkin's lymphoma of nose
40493017	Follicular non-Hodgkin's lymphoma of oral cavity
40486654	Follicular non-Hodgkin's lymphoma of ovary
40488901	Follicular non-Hodgkin's lymphoma of prostate
40492018	Follicular non-Hodgkin's lymphoma of skin
40489407	Follicular non-Hodgkin's lymphoma of soft tissue
40486173	Follicular non-Hodgkin's lymphoma of stomach
40487141	Follicular non-Hodgkin's lymphoma of testis
40493011	Follicular non-Hodgkin's lymphoma of tonsil
40493012	Follicular non-Hodgkin's lymphoma of uterine cervix

4002357	Follicular non-Hodgkin's lymphoma, small cleaved cell (clinical)
4097572	Follicular non-Hodgkin's mixed small cleaved and large cell lymphoma
37205181	Follicular T-cell lymphoma
4146630	Malignant lymphoma, centroblastic-centrocytic, follicular
4141258	Malignant lymphoma, centroblastic type, follicular
4146024	Malignant lymphoma - centrocytic
4017277	Malignant lymphoma, follicular AND/OR nodular
4123298	Malignant lymphoma, follicular center cell
4121853	Malignant lymphoma, follicular center cell, cleaved
4121970	Malignant lymphoma, follicular center cell, non-cleaved
4146031	Malignant lymphoma, lymphocytic, poorly differentiated, nodular
4146027	Malignant lymphoma, mixed lymphocytic-histiocytic, nodular
440058	Malignant lymphoma of extranodal AND/OR solid organ site
435753	Malignant lymphoma of intrathoracic lymph nodes
438698	Malignant lymphoma of lymph nodes of head, face AND/OR neck
37203899	Nodal peripheral T-cell lymphoma with T follicular helper phenotype
194878	Nodular lymphoma of extranodal AND/OR solid organ site
198088	Nodular lymphoma of intrapelvic lymph nodes
320347	Nodular lymphoma of lymph nodes of multiple sites
4121331	Nodular malignant lymphoma, lymphocytic - intermediate differentiation
4119131	Nodular malignant lymphoma, lymphocytic - well differentiated
42537145	Pediatric follicular lymphoma
37116892	Pediatric follicular lymphoma
4301668	Primary cutaneous follicular center B-cell lymphoma

FL – partial prevalence – without FL3B

Id	Name
40486171	Diffuse follicle center lymphoma
4144199	Diffuse malignant lymphoma - centroblastic-centrocytic
4299152	Follicular center B-cell lymphoma (nodal/systemic with skin involvement)
4079288	Follicular low grade B-cell lymphoma
4200880	Follicular low grade B-cell lymphoma morphology
4205271	Follicular lymphoma
4265301	Follicular lymphoma, cutaneous follicle center sub-type
35610325	Follicular lymphoma, cutaneous follicle centre
4288232	Follicular lymphoma, diffuse follicle center cell sub-type, grade 2
4265735	Follicular lymphoma, diffuse follicle center sub-type, grade 1
44808015	Follicular lymphoma grade 1
4188203	Follicular lymphoma, grade 1

44814156	Follicular lymphoma grade 2
4204524	Follicular lymphoma, grade 2
44808028	Follicular lymphoma grade 3
4230587	Follicular lymphoma, grade 3
44808117	Follicular lymphoma grade 3a
44806990	Follicular lymphoma grade 3a
36715795	Follicular lymphoma of small intestine
4173977	Follicular malignant lymphoma - mixed cell type
4079289	Follicular malignant lymphoma - small cleaved cell
4147411	Follicular non-Hodgkin's lymphoma
45765919	Follicular non-Hodgkin's lymphoma diffuse follicle center cell sub-type grade 2
45765770	Follicular non-Hodgkin's lymphoma diffuse follicle center sub-type grade 1
4003833	Follicular non-Hodgkin's lymphoma, large cell (clinical)
4001329	Follicular non-Hodgkin's lymphoma, mixed small cleaved cell and large cell (clinical)
40490991	Follicular non-Hodgkin's lymphoma of bone
40492940	Follicular non-Hodgkin's lymphoma of central nervous system
40490467	Follicular non-Hodgkin's lymphoma of extranodal site
40487142	Follicular non-Hodgkin's lymphoma of intestine
40490998	Follicular non-Hodgkin's lymphoma of lung
36684826	Follicular non-Hodgkin's lymphoma of lymph nodes of multiple sites
40486169	Follicular non-Hodgkin's lymphoma of nasopharynx
40488917	Follicular non-Hodgkin's lymphoma of nose
40493017	Follicular non-Hodgkin's lymphoma of oral cavity
40486654	Follicular non-Hodgkin's lymphoma of ovary
40488901	Follicular non-Hodgkin's lymphoma of prostate
40492018	Follicular non-Hodgkin's lymphoma of skin
40489407	Follicular non-Hodgkin's lymphoma of soft tissue
40486173	Follicular non-Hodgkin's lymphoma of stomach
40487141	Follicular non-Hodgkin's lymphoma of testis
40493011	Follicular non-Hodgkin's lymphoma of tonsil
40493012	Follicular non-Hodgkin's lymphoma of uterine cervix
4002357	Follicular non-Hodgkin's lymphoma, small cleaved cell (clinical)
4097572	Follicular non-Hodgkin's mixed small cleaved and large cell lymphoma
37205181	Follicular T-cell lymphoma
4146630	Malignant lymphoma, centroblastic-centrocytic, follicular
4141258	Malignant lymphoma, centroblastic type, follicular
4146024	Malignant lymphoma - centrocytic
4017277	Malignant lymphoma, follicular AND/OR nodular
4123298	Malignant lymphoma, follicular center cell

4121853	Malignant lymphoma, follicular center cell, cleaved
4121970	Malignant lymphoma, follicular center cell, non-cleaved
4146031	Malignant lymphoma, lymphocytic, poorly differentiated, nodular
4146027	Malignant lymphoma, mixed lymphocytic-histiocytic, nodular
440058	Malignant lymphoma of extranodal AND/OR solid organ site
435753	Malignant lymphoma of intrathoracic lymph nodes
438698	Malignant lymphoma of lymph nodes of head, face AND/OR neck
37203899	Nodal peripheral T-cell lymphoma with T follicular helper phenotype
194878	Nodular lymphoma of extranodal AND/OR solid organ site
198088	Nodular lymphoma of intrapelvic lymph nodes
320347	Nodular lymphoma of lymph nodes of multiple sites
4121331	Nodular malignant lymphoma, lymphocytic - intermediate differentiation
4119131	Nodular malignant lymphoma, lymphocytic - well differentiated
42537145	Pediatric follicular lymphoma
37116892	Pediatric follicular lymphoma
4301668	Primary cutaneous follicular center B-cell lymphoma

FL – complete prevalence - without FL3B

Id	Name
40486171	Diffuse follicle center lymphoma
4144199	Diffuse malignant lymphoma - centroblastic-centrocytic
4299152	Follicular center B-cell lymphoma (nodal/systemic with skin involvement)
4079288	Follicular low grade B-cell lymphoma
4200880	Follicular low grade B-cell lymphoma morphology
4205271	Follicular lymphoma
4265301	Follicular lymphoma, cutaneous follicle center sub-type
35610325	Follicular lymphoma, cutaneous follicle centre
4288232	Follicular lymphoma, diffuse follicle center cell sub-type, grade 2
4265735	Follicular lymphoma, diffuse follicle center sub-type, grade 1
44808015	Follicular lymphoma grade 1
4188203	Follicular lymphoma, grade 1
44814156	Follicular lymphoma grade 2
4204524	Follicular lymphoma, grade 2
44808028	Follicular lymphoma grade 3
4230587	Follicular lymphoma, grade 3
44808117	Follicular lymphoma grade 3a
44806990	Follicular lymphoma grade 3a
36715795	Follicular lymphoma of small intestine
4173977	Follicular malignant lymphoma - mixed cell type

4079289	Follicular malignant lymphoma - small cleaved cell
4147411	Follicular non-Hodgkin's lymphoma
45765919	Follicular non-Hodgkin's lymphoma diffuse follicle center cell sub-type grade 2
45765770	Follicular non-Hodgkin's lymphoma diffuse follicle center sub-type grade 1
4003833	Follicular non-Hodgkin's lymphoma, large cell (clinical)
4001329	Follicular non-Hodgkin's lymphoma, mixed small cleaved cell and large cell (clinical)
40490991	Follicular non-Hodgkin's lymphoma of bone
40492940	Follicular non-Hodgkin's lymphoma of central nervous system
40490467	Follicular non-Hodgkin's lymphoma of extranodal site
40487142	Follicular non-Hodgkin's lymphoma of intestine
40490998	Follicular non-Hodgkin's lymphoma of lung
36684826	Follicular non-Hodgkin's lymphoma of lymph nodes of multiple sites
40486169	Follicular non-Hodgkin's lymphoma of nasopharynx
40488917	Follicular non-Hodgkin's lymphoma of nose
40493017	Follicular non-Hodgkin's lymphoma of oral cavity
40486654	Follicular non-Hodgkin's lymphoma of ovary
40488901	Follicular non-Hodgkin's lymphoma of prostate
40492018	Follicular non-Hodgkin's lymphoma of skin
40489407	Follicular non-Hodgkin's lymphoma of soft tissue
40486173	Follicular non-Hodgkin's lymphoma of stomach
40487141	Follicular non-Hodgkin's lymphoma of testis
40493011	Follicular non-Hodgkin's lymphoma of tonsil
40493012	Follicular non-Hodgkin's lymphoma of uterine cervix
4002357	Follicular non-Hodgkin's lymphoma, small cleaved cell (clinical)
4097572	Follicular non-Hodgkin's mixed small cleaved and large cell lymphoma
37205181	Follicular T-cell lymphoma
4146630	Malignant lymphoma, centroblastic-centrocytic, follicular
4141258	Malignant lymphoma, centroblastic type, follicular
4146024	Malignant lymphoma - centrocytic
4017277	Malignant lymphoma, follicular AND/OR nodular
4123298	Malignant lymphoma, follicular center cell
4121853	Malignant lymphoma, follicular center cell, cleaved
4121970	Malignant lymphoma, follicular center cell, non-cleaved
4146031	Malignant lymphoma, lymphocytic, poorly differentiated, nodular
4146027	Malignant lymphoma, mixed lymphocytic-histiocytic, nodular
440058	Malignant lymphoma of extranodal AND/OR solid organ site
435753	Malignant lymphoma of intrathoracic lymph nodes
438698	Malignant lymphoma of lymph nodes of head, face AND/OR neck
37203899	Nodal peripheral T-cell lymphoma with T follicular helper phenotype

194878	Nodular lymphoma of extranodal AND/OR solid organ site
198088	Nodular lymphoma of intrapelvic lymph nodes
320347	Nodular lymphoma of lymph nodes of multiple sites
4121331	Nodular malignant lymphoma, lymphocytic - intermediate differentiation
4119131	Nodular malignant lymphoma, lymphocytic - well differentiated
42537145	Pediatric follicular lymphoma
37116892	Pediatric follicular lymphoma
4301668	Primary cutaneous follicular center B-cell lymphoma

MM – partial prevalence - narrow

Id	Name
4258135	Asymptomatic multiple myeloma
4094548	Extramedullary plasmacytoma
4111355	IgA myeloma
4112310	IgD myeloma
4111356	IgG myeloma
4259972	Indolent multiple myeloma
4188299	Kappa light chain myeloma
4197600	Lambda light chain myeloma
4082464	Light chain myeloma
4210177	Multiple myeloma
437233	Multiple myeloma
4214660	Multiple solitary plasmacytomas
4019477	Myeloma-associated amyloidosis
4079684	Non-secretory myeloma
4137510	Osteosclerotic myeloma
133154	Plasma cell leukemia
4028859	Plasma cell leukemia
760936	Plasma cell leukemia in relapse
4190641	Plasma cell myeloma - category
4190642	Plasma cell myeloma/plasmacytoma
4163558	Plasma cell myeloma/plasmacytoma
4024874	Plasmacytoma
4216139	Plasmacytoma
4300702	Primary cutaneous plasmacytoma
764229	Relapse multiple myeloma
4184985	Smoldering myeloma

MM – complete prevalence - narrow

Id	Name
4258135	Asymptomatic multiple myeloma
4094548	Extramedullary plasmacytoma
4111355	IgA myeloma
4112310	IgD myeloma
4111356	IgG myeloma
4259972	Indolent multiple myeloma
4188299	Kappa light chain myeloma
4197600	Lambda light chain myeloma

4082464	Light chain myeloma
4210177	Multiple myeloma
437233	Multiple myeloma
436059	Multiple myeloma in remission
4214660	Multiple solitary plasmacytomas
4019477	Myeloma-associated amyloidosis
4079684	Non-secretory myeloma
4137510	Osteosclerotic myeloma
133154	Plasma cell leukemia
4028859	Plasma cell leukemia
760936	Plasma cell leukemia in relapse
133158	Plasma cell leukemia in remission
4190641	Plasma cell myeloma - category
4190642	Plasma cell myeloma/plasmacytoma
4163558	Plasma cell myeloma/plasmacytoma
4024874	Plasmacytoma
4216139	Plasmacytoma
4300702	Primary cutaneous plasmacytoma
764229	Relapse multiple myeloma
4184985	Smoldering myeloma

MM – partial prevalence - broad

Id	Name
4224628	Amyloid light chain amyloidosis due to multiple myeloma
4258135	Asymptomatic multiple myeloma
4043447	Bone marrow: myeloma cells
4094548	Extramedullary plasmacytoma
46270015	History of multiple myeloma
37209514	Hypogammaglobulinemia due to multiple myeloma
4111355	IgA myeloma
4112310	IgD myeloma
4111356	IgG myeloma
4259972	Indolent multiple myeloma
4188299	Kappa light chain myeloma
4197600	Lambda light chain myeloma
4082464	Light chain myeloma
37016161	Light chain nephropathy due to multiple myeloma
437233	Multiple myeloma
4210177	Multiple myeloma

4214660	Multiple solitary plasmacytomas
4019477	Myeloma-associated amyloidosis
4137433	Myeloma kidney
4043713	Neuropathy due to multiple myeloma
4079684	Non-secretory myeloma
42538151	Osteoporosis co-occurrent and due to multiple myeloma
4137510	Osteosclerotic myeloma
133154	Plasma cell leukemia
4028859	Plasma cell leukemia
760936	Plasma cell leukemia in relapse
4190641	Plasma cell myeloma - category
4190642	Plasma cell myeloma/plasmacytoma
4163558	Plasma cell myeloma/plasmacytoma
4216139	Plasmacytoma
4024874	Plasmacytoma
4300702	Primary cutaneous plasmacytoma
764229	Relapse multiple myeloma
4184985	Smoldering myeloma
4145040	Solitary osseous myeloma

MM – complete prevalence - broad

Id	Name
4224628	Amyloid light chain amyloidosis due to multiple myeloma
4258135	Asymptomatic multiple myeloma
4043447	Bone marrow: myeloma cells
4094548	Extramedullary plasmacytoma
46270015	History of multiple myeloma
37209514	Hypogammaglobulinemia due to multiple myeloma
4111355	IgA myeloma
4112310	IgD myeloma
4111356	IgG myeloma
4259972	Indolent multiple myeloma
4188299	Kappa light chain myeloma
4197600	Lambda light chain myeloma
4082464	Light chain myeloma
37016161	Light chain nephropathy due to multiple myeloma
437233	Multiple myeloma
4210177	Multiple myeloma
436059	Multiple myeloma in remission

4214660	Multiple solitary plasmacytomas
4019477	Myeloma-associated amyloidosis
4137433	Myeloma kidney
4043713	Neuropathy due to multiple myeloma
4079684	Non-secretory myeloma
42538151	Osteoporosis co-occurrent and due to multiple myeloma
4137510	Osteosclerotic myeloma
133154	Plasma cell leukemia
4028859	Plasma cell leukemia
760936	Plasma cell leukemia in relapse
133158	Plasma cell leukemia in remission
4190641	Plasma cell myeloma - category
4190642	Plasma cell myeloma/plasmacytoma
4163558	Plasma cell myeloma/plasmacytoma
4216139	Plasmacytoma
4024874	Plasmacytoma
4300702	Primary cutaneous plasmacytoma
764229	Relapse multiple myeloma
4184985	Smoldering myeloma
4145040	Solitary osseous myeloma