

Disclaimer

The following report(s) provides findings from an FDA-initiated query using Sentinel. While Sentinel queries may be undertaken to assess potential medical product safety risks, they may also be initiated for various other reasons. Some examples include determining a rate or count of an identified health outcome of interest, examining medical product use, exploring the feasibility of future, more detailed analyses within Sentinel, and seeking to better understand Sentinel capabilities.

Data obtained through Sentinel are intended to complement other types of evidence such as preclinical studies, clinical trials, postmarket studies, and adverse event reports, all of which are used by FDA to inform regulatory decisions regarding medical product safety. The information contained in this report is provided as part of FDA's commitment to place knowledge acquired from Sentinel in the public domain as soon as possible. Any public health actions taken by FDA regarding products involved in Sentinel queries will continue to be communicated through existing channels.

FDA wants to emphasize that the fact that FDA has initiated a query involving a medical product and is reporting findings related to that query does not mean that FDA is suggesting health care practitioners should change their prescribing practices for the medical product or that patients taking the medical product should stop using it. Patients who have questions about the use of an identified medical product should contact their health care practitioners.

The following report contains a description of the request, request specifications, and results from the modular program run(s).

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Overview for cber_mpl1r_wp003_nsdv_v01, Report 2 of 2

Request ID: cber_mpl1r_wp003_nsdv_v01. This is Report 2 of 2.

Report Description: This report contains the estimated number of immunocompromised persons and the number of immunocompromised persons who have had blood transfusions in the Sentinel Distributed Database (SDD). This report also contains the number of blood transfusions among males and females for all ages.

Data Source: Data from January 1, 2008 to November 30, 2015 from 15 health plans contributing to the Sentinel Distributed Database (SDD) were included in this report. See Appendix A for a list of the latest dates of available data for each Data Partner.

Study Design: This request was designed to calculate background rates. The rates of qualifying immunocompromised persons in the SDD were calculated overall and were stratified by year.

Cohort of Interest: Immunocompromised persons, overall and among those with blood transfusions.

Cohort Eligibility Criteria: Individuals included in the cohort had no continuous enrollment requirement. Immunocompromised individuals were identified using both National Drug Codes and ICD-9 Diagnosis Codes. Please see Appendix B. Blood transfusions were identified using both National Drug Codes and procedure codes. Please see Appendix C. The program only considered the first valid immunocompromised code between January 1, 2008 and November 30, 2015 for each individual.

Please see Appendix D for the specifications of parameters used in the analyses for this request.

Limitations: Please note, this report includes information from both claims-based and integrated care delivery Sentinel data partners. The algorithm to define blood transfusions may not have identified all transfusions because they may not have resulted in a code in a claim or entered into the electronic health record system. In general, we expect under-ascertainment of inpatient transfusions at claims based sites (which generally have larger numbers of members), and more complete capture of transfusion information at integrated care delivery sites (which generally have fewer members).

Notes: Please contact the Sentinel Operations Center Query Fulfillment Team (production@mini-sentinel.org) for questions and to provide comments/suggestions for future enhancements to this document.

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Glossary of Terms for Analyses Using Cohort Identification and Descriptive Analysis (CIDA) Tool*

Amount Supplied - number of units (pills, tablets, vials) dispensed. Net amount per NDC per dispensing. This is equivalent to the "RxAmt" value in the SCDM.

Blackout Period - number of days at the beginning of a treatment episode that events are to be ignored. If an event occurs during the blackout period, the episode is excluded.

Care Setting - type of medical encounter or facility where the exposure, event, or condition code was recorded. Possible care settings include: Inpatient Hospital Stay (IP), Non-Acute Institutional Stay (IS), Emergency Department (ED), Ambulatory Visit (AV), and Other Ambulatory Visit (OA). For laboratory results, possible care settings include: Emergency department (E), Home (H), Inpatient (I), Outpatient (O), or Unknown or Missing (U). Along with the Principal Diagnosis Indicator, forms the Care Setting/PDX parameter.

Principal Diagnosis (PDX) - diagnosis or condition established to be chiefly responsible for admission of the patient to the hospital. 'P' = principal diagnosis, 'S' = secondary diagnosis, 'X' = unspecified diagnosis, '.' = blank. Along with the Care Setting values, forms the Caresetting/PDX parameter.

Cohort Definition (drug/exposure)- indicates how the cohort will be defined: (1) 01: Cohort includes only the first valid incident treatment episode during the query period; (2) 02: Cohort includes all valid incident treatment episodes during the query period; (3) 03: Cohort includes all valid incident treatment episodes during the query period until an event occurs.

Days Supplied - number of days supplied for all dispensings in qualifying treatment episodes.

Episodes - treatment episodes; length of episode is determined by days supplied in one dispensing or consecutive dispensings bridged by the episode gap.

Years at Risk - number of days supplied plus any episode gaps and exposure extension periods all divided by 365.25.

Enrollment Gap - number of days allowed between two consecutive enrollment periods without breaking a "continuously enrolled" sequence.

Episode Gap - number of days allowed between two (or more) consecutive exposures (dispensings/procedures) to be considered the same treatment episode.

Event Deduplication - specifies how events are counted by the MP algorithm: (0) 0: Counts all occurrences of an HOI during an exposure episode; (1) 1: de-duplicates occurrences of the same HOI code and code type on the same day; (2) 2: de-duplicates occurrences of the same HOI group on the same day (e.g., de-duplicates at the group level).

Exposure Extension Period - number of days post treatment period in which the outcomes/events are counted for a treatment episode.

Exposure Episode Length - number of days after exposure initiation that is considered "exposed time."

Lookback Period (pre-existing condition) - number of days wherein a member is required to have evidence of pre-existing condition (diagnosis/procedure/drug dispensing).

Minimum Days Supplied - specifies a minimum number of days in length of the days supplied for the episode to be considered.

Minimum Episode Duration - specifies a minimum number of days in length of the episode for it to be considered.

Query Period - period in which the modular program looks for exposures and outcomes of interest.

Treatment Episode Truncation Indicator - indicates whether observation of the incident query code during follow-up requires truncation of valid treatment episodes. A value of Y indicates that the treatment episodes should be truncated at the first occurrence of an incident query code. A value of N indicates that the treatment episodes should not be truncated at the occurrence of the incident query code.

Users - number of members with exposure during the query period. Member must have no evidence of exposure(s) of interest (defined by incidence criteria) in the prior washout period. A user may only be counted once in a query period.

Washout Period (drug/exposure)** - number of days a user is required to have no evidence of prior exposure (drug dispensing/procedure) and continuous drug and medical coverage prior to an incident treatment episode.

Washout Period (event/outcome)** - number of days a user is required to have no evidence of a prior event (procedure/diagnosis) and continuous drug and medical coverage prior to an incident treatment episode.

*all terms may not be used in this report

**incident treatment episodes must be incident to both the exposure and the event



Table 1: Summary of blood transfusions among immunocompromised members of all ages (0-99 years) in the Sentinel Distributed Database (SDD) between January 1, 2008 and November 30, 2015, overall and by year*

	All Members (0-99 years)	Immunocompromised Persons	Members with Blood Transfusions	Immunocompromised Persons with Blood Transfusions
Overall	126,688,318	22,245,055	1,309,050	456,207
2008	54,580,612	4,329,015	372,858	90,099
2009	48,867,563	3,195,306	325,802	62,664
2010	44,907,397	2,811,513	325,645	62,517
2011	42,188,488	2,604,518	317,914	63,218
2012	42,775,568	2,743,977	315,206	63,201
2013	41,967,004	2,632,784	289,899	58,786
2014	43,502,114	2,784,710	207,413	47,837
2015	36,521,047	1,143,232	55,171	7,885

***There are no enrollment requirements included in this request.**

Note: The sum of years will not add up to the overall count because individuals can have episodes in multiple years.

Appendix A: Latest Date of Available Data for Each Data Partner up to Request End Date (11/30/2015)

DP ID	End Date
DP0001	12/31/2014
DP0002	6/30/2014
DP0003	4/30/2015
DP0004	3/31/2015
DP0005	10/31/2014
DP0006	10/31/2015
DP0007	2/28/2015
DP0008	9/30/2015
DP0009	9/30/2015
DP0010	7/31/2015
DP0011	6/30/2012
DP0012	7/31/2014
DP0013	11/30/2015
DP0014	11/30/2015
DP0015	4/30/2015

Appendix B. List of Codes used to define Immunocompromised Persons in this Request

Description	Code	Code Category
THIOTEPA		National Drug Code
THIOTEPA		National Drug Code
THIOPLEX		National Drug Code
THIOPLEX		National Drug Code
THIOTEPA		National Drug Code
LEUKERAN		National Drug Code
LEUKERAN		National Drug Code
LEUKERAN		National Drug Code
LEUKERAN		National Drug Code
LEUKERAN		National Drug Code
LEUKERAN		National Drug Code
LEUKERAN		National Drug Code
LEUKERAN		National Drug Code
LEUKERAN		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYTOXAN		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYTOXAN		National Drug Code
CYTOXAN		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYTOXAN		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYTOXAN		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYTOXAN		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYTOXAN		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYTOXAN		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
CYCLOPHOSPHAMIDE		National Drug Code
NEOSAR		National Drug Code
NEOSAR		National Drug Code
NEOSAR		National Drug Code
NEOSAR		National Drug Code
CYTOXAN		National Drug Code
NEOSAR		National Drug Code
NEOSAR		National Drug Code
CYTOXAN		National Drug Code
NEOSAR		National Drug Code
NEOSAR		National Drug Code
CYTOXAN		National Drug Code
NEOSAR		National Drug Code
NEOSAR		National Drug Code
CYTOXAN		National Drug Code
IFOSFAMIDE		National Drug Code
IFOSFAMIDE		National Drug Code
IFOSFAMIDE		National Drug Code
IFOSFAMIDE		National Drug Code

Appendix B. List of Codes used to define Immunocompromised Persons in this Request

Description	Code	Code Category
IFOSFAMIDE		National Drug Code
IFOSFAMIDE		National Drug Code
IFEX		National Drug Code
IFEX		National Drug Code
IFOSFAMIDE		National Drug Code
IFOSFAMIDE		National Drug Code
IFOSFAMIDE		National Drug Code
IFOSFAMIDE		National Drug Code
IFEX		National Drug Code
IFEX		National Drug Code
IFOSFAMIDE		National Drug Code
IFOSFAMIDE		National Drug Code
MUSTARGEN		National Drug Code
MUSTARGEN		National Drug Code
MUSTARGEN		National Drug Code
ALKERAN		National Drug Code
ALKERAN		National Drug Code
ALKERAN		National Drug Code
ALKERAN		National Drug Code
ALKERAN		National Drug Code
ALKERAN		National Drug Code
ALKERAN		National Drug Code
ALKERAN		National Drug Code
ALKERAN		National Drug Code
ALKERAN		National Drug Code
ALKERAN		National Drug Code
ALKERAN		National Drug Code
MELPHALAN HYDROCHLORIDE		National Drug Code
MELPHALAN HYDROCHLORIDE		National Drug Code
BICNU		National Drug Code
BICNU		National Drug Code
BICNU		National Drug Code
CEENU		National Drug Code
CEENU		National Drug Code
LOMUSTINE		National Drug Code
CEENU		National Drug Code
LOMUSTINE		National Drug Code
CEENU		National Drug Code
LOMUSTINE		National Drug Code
ZANOSAR		National Drug Code
ZANOSAR		National Drug Code
ZANOSAR		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code

Appendix B. List of Codes used to define Immunocompromised Persons in this Request

Description	Code	Code Category
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
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TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMOZOLOMIDE		National Drug Code
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TEMOZOLOMIDE		National Drug Code
TEMODAR		National Drug Code
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TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMOZOLOMIDE		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code
TEMODAR		National Drug Code

Appendix B. List of Codes used to define Immunocompromised Persons in this Request

Description	Code	Code Category
ADRIAMYCIN PFS		National Drug Code
ADRIAMYCIN PFS		National Drug Code
DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
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DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
ADRIAMYCIN		National Drug Code
ADRIAMYCIN		National Drug Code
ADRIAMYCIN		National Drug Code
ADRIAMYCIN		National Drug Code
DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
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DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
ADRIAMYCIN RDF		National Drug Code
DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
ADRIAMYCIN		National Drug Code
DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
ADRIAMYCIN RDF		National Drug Code
ADRIAMYCIN RDF		National Drug Code

Appendix B. List of Codes used to define Immunocompromised Persons in this Request

Description	Code	Code Category
DOXORUBICIN HCL		National Drug Code
ADRIAMYCIN		National Drug Code
ADRIAMYCIN RDF		National Drug Code
ADRIAMYCIN RDF		National Drug Code
RUBEX		National Drug Code
DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
ADRIAMYCIN		National Drug Code
DOXORUBICIN HCL		National Drug Code
DOXORUBICIN HCL		National Drug Code
ADRIAMYCIN RDF		National Drug Code
ADRIAMYCIN RDF		National Drug Code
DOXIL		National Drug Code
DOXIL		National Drug Code
DOXORUBICIN HCL LIPOSOME		National Drug Code
DOXORUBICIN HCL LIPOSOME		National Drug Code
LIPODOX		National Drug Code
LIPODOX 50		National Drug Code
DOXIL		National Drug Code
DOXIL		National Drug Code
ELLEENCE		National Drug Code
ELLEENCE		National Drug Code
EPIRUBICIN HCL		National Drug Code
EPIRUBICIN HCL		National Drug Code
EPIRUBICIN HCL		National Drug Code
EPIRUBICIN HCL		National Drug Code
EPIRUBICIN HCL		National Drug Code
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EPIRUBICIN HCL		National Drug Code
EPIRUBICIN HCL		National Drug Code
EPIRUBICIN HCL		National Drug Code
EPIRUBICIN HCL		National Drug Code
IDAMYCIN PFS		National Drug Code
IDAMYCIN PFS		National Drug Code

Appendix B. List of Codes used to define Immunocompromised Persons in this Request

Description	Code	Code Category
IDAMYCIN PFS		National Drug Code
IDAMYCIN PFS		National Drug Code
IDAMYCIN PFS		National Drug Code
IDAMYCIN PFS		National Drug Code
IDARUBICIN HCL		National Drug Code
IDARUBICIN HCL		National Drug Code
IDARUBICIN HCL		National Drug Code
IDARUBICIN HCL		National Drug Code
IDARUBICIN HCL		National Drug Code
IDARUBICIN HCL		National Drug Code
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IDARUBICIN HCL		National Drug Code
IDARUBICIN HCL		National Drug Code
IDARUBICIN HCL		National Drug Code
IDARUBICIN HCL		National Drug Code
MUTAMYCIN		National Drug Code
MITOMYCIN		National Drug Code
MITOMYCIN		National Drug Code
MITOMYCIN		National Drug Code
MUTAMYCIN		National Drug Code
MITOMYCIN		National Drug Code
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MITOMYCIN		National Drug Code
MUTAMYCIN		National Drug Code
MITOMYCIN		National Drug Code
MITOMYCIN		National Drug Code
MITOMYCIN		National Drug Code
MITOXANTRONE HCL		National Drug Code
MITOXANTRONE HCL		National Drug Code
MITOXANTRONE HCL		National Drug Code
MITOXANTRONE HCL		National Drug Code
MITOXANTRONE HCL		National Drug Code
MITOXANTRONE HCL		National Drug Code
MITOXANTRONE HCL		National Drug Code
MITOXANTRONE HCL		National Drug Code
MITOXANTRONE HCL		National Drug Code
MITOXANTRONE HCL		National Drug Code
NOVANTRONE		National Drug Code
NOVANTRONE		National Drug Code
NOVANTRONE		National Drug Code
MITOXANTRONE HCL		National Drug Code
MITOXANTRONE HCL		National Drug Code
MITOXANTRONE HCL		National Drug Code
NOVANTRONE		National Drug Code
NOVANTRONE		National Drug Code
NOVANTRONE		National Drug Code
MITOXANTRONE HCL		National Drug Code

Appendix B. List of Codes used to define Immunocompromised Persons in this Request

Description	Code	Code Category
MITOXANTRONE HCL		National Drug Code
MITOXANTRONE HCL		National Drug Code
MITOXANTRONE HCL		National Drug Code
MITOXANTRONE HCL		National Drug Code
MITOXANTRONE HCL		National Drug Code
MITHRACIN		National Drug Code
ONCASPAR		National Drug Code
ONCASPAR		National Drug Code
AZACITIDINE		National Drug Code
AZACITIDINE		National Drug Code
AZACITIDINE		National Drug Code
VIDAZA		National Drug Code
VIDAZA		National Drug Code
XELODA		National Drug Code
XELODA		National Drug Code
CAPECITABINE		National Drug Code
XELODA		National Drug Code
XELODA		National Drug Code
XELODA		National Drug Code
XELODA		National Drug Code
XELODA		National Drug Code
XELODA		National Drug Code
XELODA		National Drug Code
CAPECITABINE		National Drug Code
XELODA		National Drug Code
XELODA		National Drug Code
XELODA		National Drug Code
XELODA		National Drug Code
XELODA		National Drug Code
XELODA		National Drug Code
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XELODA		National Drug Code
XELODA		National Drug Code
XELODA		National Drug Code
XELODA		National Drug Code
XELODA		National Drug Code
CLADRIBINE		National Drug Code
CLADRIBINE		National Drug Code
CLADRIBINE		National Drug Code
CLADRIBINE		National Drug Code
LEUSTATIN		National Drug Code
CLADRIBINE		National Drug Code
CLADRIBINE		National Drug Code
CLOLAR		National Drug Code
CLOLAR		National Drug Code
CYTARABINE		National Drug Code
CYTARABINE		National Drug Code
CYTARABINEAQUEOUS		National Drug Code
CYTARABINEAQUEOUS		National Drug Code
CYTARABINEAQUEOUS		National Drug Code
CYTARABINEAQUEOUS		National Drug Code
CYTARABINE		National Drug Code
CYTARABINE		National Drug Code
CYTARABINE		National Drug Code
CYTARABINEAQUEOUS		National Drug Code
CYTARABINEAQUEOUS		National Drug Code

Appendix B. List of Codes used to define Immunocompromised Persons in this Request

Description	Code	Code Category
AFINITOR		National Drug Code
AFINITOR		National Drug Code
AFINITOR		National Drug Code
AFINITOR		National Drug Code
AFINITOR		National Drug Code
AFINITOR		National Drug Code
AFINITOR		National Drug Code
AFINITOR DISPERZ		National Drug Code
AFINITOR DISPERZ		National Drug Code
AFINITOR DISPERZ		National Drug Code
AFINITOR DISPERZ		National Drug Code
AFINITOR DISPERZ		National Drug Code
AFINITOR DISPERZ		National Drug Code
SPRYCEL		National Drug Code
SPRYCEL		National Drug Code
SPRYCEL		National Drug Code
SPRYCEL		National Drug Code
SPRYCEL		National Drug Code
SPRYCEL		National Drug Code
SPRYCEL		National Drug Code
TARCEVA		National Drug Code
TARCEVA		National Drug Code
TARCEVA		National Drug Code
TARCEVA		National Drug Code
TARCEVA		National Drug Code
TARCEVA		National Drug Code
TARCEVA		National Drug Code
IRESSA		National Drug Code
IMBRUVICA		National Drug Code
IMBRUVICA		National Drug Code
GLEEVEC		National Drug Code
GLEEVEC		National Drug Code
GLEEVEC		National Drug Code
GLEEVEC		National Drug Code
GLEEVEC		National Drug Code
GLEEVEC		National Drug Code
GLEEVEC		National Drug Code
GLEEVEC		National Drug Code
GLEEVEC		National Drug Code
GLEEVEC		National Drug Code
GLEEVEC		National Drug Code
GLEEVEC		National Drug Code
GLEEVEC		National Drug Code
GLEEVEC		National Drug Code
GLEEVEC		National Drug Code
GLEEVEC		National Drug Code
GLEEVEC		National Drug Code
TYKERB		National Drug Code
TASIGNA		National Drug Code
TASIGNA		National Drug Code
TASIGNA		National Drug Code
TASIGNA		National Drug Code
ICLUSIG		National Drug Code
ICLUSIG		National Drug Code
VELCADE		National Drug Code

Appendix B. List of Codes used to define Immunocompromised Persons in this Request

Description	Code	Code Category
ETANERCEPT SUBCUTANEOUS INJ 50 MG/ML		National Drug Code
ETANERCEPT SUBCUTANEOUS INJ 50 MG/ML		National Drug Code
ETANERCEPT SUBCUTANEOUS INJ 50 MG/ML		National Drug Code
ETANERCEPT SUBCUTANEOUS INJ 50 MG/ML		National Drug Code
ETANERCEPT SUBCUTANEOUS INJ 50 MG/ML		National Drug Code
ETANERCEPT SUBCUTANEOUS INJ 50 MG/ML		National Drug Code
ETANERCEPT FOR SUBCUTANEOUS INJ KIT 25 MG		National Drug Code
ETANERCEPT FOR SUBCUTANEOUS INJ KIT 25 MG		National Drug Code
ETANERCEPT FOR SUBCUTANEOUS INJ KIT 25 MG		National Drug Code
ABATACEPT SUBCUTANEOUS INJ 125 MG/ML		National Drug Code
ABATACEPT SUBCUTANEOUS INJ 125 MG/ML		National Drug Code
ABATACEPT FOR IV SOLN 250 MG		National Drug Code
RILONACEPT FOR INJ 220 MG		National Drug Code
CANAKINUMAB FOR INJ 180 MG		National Drug Code
TOCILIZUMAB IV INJ 20 MG/ML		National Drug Code
TOCILIZUMAB IV INJ 20 MG/ML		National Drug Code
TOCILIZUMAB IV INJ 20 MG/ML		National Drug Code
TOCILIZUMAB SUBCUTANEOUS SOLN PREFILLED SYRINGE 162 MG/0.9ML		National Drug Code
TOFACITINIB CITRATE TAB 5 MG (BASE EQUIVALENT)		National Drug Code
PENICILLAMINE CAP 125 MG		National Drug Code
PENICILLAMINE CAP 250 MG		National Drug Code
PENICILLAMINE CAP 250 MG		National Drug Code
PENICILLAMINE TAB 250 MG		National Drug Code
CERTOLIZUMAB PEGOL FOR INJ KIT 2 X 200 MG		National Drug Code
CERTOLIZUMAB PEGOL INJ KIT 2 X 200 MG/ML		National Drug Code
CERTOLIZUMAB PEGOL INJ KIT 6 X 200 MG/ML		National Drug Code
INFLIXIMAB FOR IV INJ 100 MG		National Drug Code
THALIDOMIDE CAP 50 MG		National Drug Code
THALIDOMIDE CAP 50 MG		National Drug Code
THALIDOMIDE CAP 50 MG		National Drug Code
THALIDOMIDE CAP 50 MG		National Drug Code
THALIDOMIDE CAP 50 MG		National Drug Code
THALIDOMIDE CAP 50 MG		National Drug Code
THALIDOMIDE CAP 50 MG		National Drug Code
THALIDOMIDE CAP 50 MG		National Drug Code
THALIDOMIDE CAP 100 MG		National Drug Code
THALIDOMIDE CAP 100 MG		National Drug Code
THALIDOMIDE CAP 150 MG		National Drug Code
THALIDOMIDE CAP 150 MG		National Drug Code
THALIDOMIDE CAP 200 MG		National Drug Code
THALIDOMIDE CAP 200 MG		National Drug Code
LENALIDOMIDE CAPS 2.5 MG		National Drug Code
LENALIDOMIDE CAPS 2.5 MG		National Drug Code
LENALIDOMIDE CAP 5 MG		National Drug Code
LENALIDOMIDE CAP 5 MG		National Drug Code
LENALIDOMIDE CAP 5 MG		National Drug Code
LENALIDOMIDE CAP 10 MG		National Drug Code
LENALIDOMIDE CAP 10 MG		National Drug Code
LENALIDOMIDE CAP 10 MG		National Drug Code
LENALIDOMIDE CAP 15 MG		National Drug Code
LENALIDOMIDE CAP 15 MG		National Drug Code
LENALIDOMIDE CAP 20 MG		National Drug Code
LENALIDOMIDE CAP 20 MG		National Drug Code
LENALIDOMIDE CAP 25 MG		National Drug Code
LENALIDOMIDE CAP 25 MG		National Drug Code

Appendix B. List of Codes used to define Immunocompromised Persons in this Request

Description	Code	Code Category
MYCOPHENOLATE MOFETIL TAB 500 MG		National Drug Code
MYCOPHENOLATE MOFETIL TAB 500 MG		National Drug Code
MYCOPHENOLATE MOFETIL TAB 500 MG		National Drug Code
MYCOPHENOLATE MOFETIL TAB 500 MG		National Drug Code
MYCOPHENOLATE MOFETIL TAB 500 MG		National Drug Code
MYCOPHENOLATE MOFETIL TAB 500 MG		National Drug Code
MYCOPHENOLATE MOFETIL TAB 500 MG		National Drug Code
MYCOPHENOLATE MOFETIL TAB 500 MG		National Drug Code
MYCOPHENOLATE MOFETIL FOR ORAL SUSP 200 MG/ML		National Drug Code
MYCOPHENOLATE MOFETIL HCL FOR IV SOLN 500 MG (BASE EQUIV)		National Drug Code
MYCOPHENOLATE SODIUM TAB DR 180 MG (MYCOPHENOLIC ACID EQUIV)		National Drug Code
MYCOPHENOLATE SODIUM TAB DR 180 MG (MYCOPHENOLIC ACID EQUIV)		National Drug Code
MYCOPHENOLATE SODIUM TAB DR 180 MG (MYCOPHENOLIC ACID EQUIV)		National Drug Code
MYCOPHENOLATE SODIUM TAB DR 180 MG (MYCOPHENOLIC ACID EQUIV)		National Drug Code
MYCOPHENOLATE SODIUM TAB DR 180 MG (MYCOPHENOLIC ACID EQUIV)		National Drug Code
MYCOPHENOLATE SODIUM TAB DR 180 MG (MYCOPHENOLIC ACID EQUIV)		National Drug Code
MYCOPHENOLATE SODIUM TAB DR 360 MG (MYCOPHENOLIC ACID EQUIV)		National Drug Code
MYCOPHENOLATE SODIUM TAB DR 360 MG (MYCOPHENOLIC ACID EQUIV)		National Drug Code
MYCOPHENOLATE SODIUM TAB DR 360 MG (MYCOPHENOLIC ACID EQUIV)		National Drug Code
MYCOPHENOLATE SODIUM TAB DR 360 MG (MYCOPHENOLIC ACID EQUIV)		National Drug Code
EVEROLIMUS TAB 0.25 MG		National Drug Code
EVEROLIMUS TAB 0.25 MG		National Drug Code
EVEROLIMUS TAB 0.5 MG		National Drug Code
EVEROLIMUS TAB 0.5 MG		National Drug Code
EVEROLIMUS TAB 0.75 MG		National Drug Code
EVEROLIMUS TAB 0.75 MG		National Drug Code
SIROLIMUS TAB 0.5 MG		National Drug Code
SIROLIMUS TAB 0.5 MG		National Drug Code
SIROLIMUS TAB 0.5 MG		National Drug Code
SIROLIMUS TAB 0.5 MG		National Drug Code
SIROLIMUS TAB 1 MG		National Drug Code
SIROLIMUS TAB 1 MG		National Drug Code
SIROLIMUS TAB 1 MG		National Drug Code
SIROLIMUS TAB 1 MG		National Drug Code
SIROLIMUS TAB 1 MG		National Drug Code
SIROLIMUS TAB 1 MG		National Drug Code
SIROLIMUS TAB 2 MG		National Drug Code
SIROLIMUS TAB 2 MG		National Drug Code
SIROLIMUS ORAL SOLN 1 MG/ML		National Drug Code
SIROLIMUS ORAL SOLN 1 MG/ML		National Drug Code
TACROLIMUS CAP 0.5 MG		National Drug Code
TACROLIMUS CAP 0.5 MG		National Drug Code
TACROLIMUS CAP 0.5 MG		National Drug Code
TACROLIMUS CAP 0.5 MG		National Drug Code
TACROLIMUS CAP 0.5 MG		National Drug Code
TACROLIMUS CAP 0.5 MG		National Drug Code
TACROLIMUS CAP 0.5 MG		National Drug Code
TACROLIMUS CAP 0.5 MG		National Drug Code
TACROLIMUS CAP 0.5 MG		National Drug Code
TACROLIMUS CAP 0.5 MG		National Drug Code
TACROLIMUS CAP 0.5 MG		National Drug Code
TACROLIMUS CAP 0.5 MG		National Drug Code
TACROLIMUS CAP 0.5 MG		National Drug Code
TACROLIMUS CAP 0.5 MG		National Drug Code
TACROLIMUS CAP 0.5 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code

Appendix B. List of Codes used to define Immunocompromised Persons in this Request

Description	Code	Code Category
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 1 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS CAP 5 MG		National Drug Code
TACROLIMUS INJ 5 MG/ML		National Drug Code
TACROLIMUS CAP SR 24HR 0.5 MG		National Drug Code
TACROLIMUS CAP SR 24HR 1 MG		National Drug Code
TACROLIMUS CAP SR 24HR 5 MG		National Drug Code
BASILIXIMAB FOR IV SOLN 10 MG		National Drug Code
BASILIXIMAB FOR IV SOLN 20 MG		National Drug Code
DACLIZUMAB FOR IV INJ CONC 25 MG/5ML		National Drug Code
DACLIZUMAB FOR IV INJ CONC 25 MG/5ML		National Drug Code
MUROMONAB CD3 INJ 1 MG/ML		National Drug Code
BELATACEPT FOR IV INFUSION 250 MG		National Drug Code
BELIMUMAB FOR IV SOLN 120 MG		National Drug Code
BELIMUMAB FOR IV SOLN 400 MG		National Drug Code
AZATHIOPRINE TAB 50 MG		National Drug Code
AZATHIOPRINE TAB 50 MG		National Drug Code
AZATHIOPRINE TAB 50 MG		National Drug Code
AZATHIOPRINE TAB 50 MG		National Drug Code

Appendix B. List of Codes used to define Immunocompromised Persons in this Request

Description	Code	Code Category
Hodgkins Disease	201.0	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.00	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.01	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.02	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.03	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.04	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.05	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.06	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.07	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.08	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.10	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.11	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.12	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.13	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.14	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.15	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.16	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.17	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.18	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.20	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.21	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.22	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.23	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.24	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.25	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.26	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.27	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.28	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.40	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.41	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.42	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.43	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.44	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.45	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.46	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.47	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.48	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.50	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.51	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.52	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.53	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.54	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.55	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.56	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.57	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.58	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.60	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.61	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.62	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.63	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.64	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.65	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.66	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.67	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.68	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.70	ICD-9-CM Diagnosis Code

Appendix B. List of Codes used to define Immunocompromised Persons in this Request

Description	Code	Code Category
Hodgkins Disease	201.71	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.72	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.73	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.74	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.75	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.76	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.77	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.78	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.90	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.91	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.92	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.93	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.94	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.95	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.96	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.97	ICD-9-CM Diagnosis Code
Hodgkins Disease	201.98	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.77	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.78	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.8	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.80	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.81	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.82	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.83	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.84	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.85	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.86	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.87	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.88	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.9	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.90	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.91	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.92	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.93	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.94	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.95	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.96	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.97	ICD-9-CM Diagnosis Code
non hodgkins lymphoma	202.98	ICD-9-CM Diagnosis Code
leukemia	202.4	ICD-9-CM Diagnosis Code
leukemia	202.40	ICD-9-CM Diagnosis Code
leukemia	202.41	ICD-9-CM Diagnosis Code
leukemia	202.42	ICD-9-CM Diagnosis Code
leukemia	202.43	ICD-9-CM Diagnosis Code
leukemia	202.44	ICD-9-CM Diagnosis Code
leukemia	202.45	ICD-9-CM Diagnosis Code
leukemia	202.46	ICD-9-CM Diagnosis Code
leukemia	202.47	ICD-9-CM Diagnosis Code
leukemia	202.48	ICD-9-CM Diagnosis Code
leukemia	203.1	ICD-9-CM Diagnosis Code
leukemia	203.10	ICD-9-CM Diagnosis Code
leukemia	203.11	ICD-9-CM Diagnosis Code
leukemia	203.12	ICD-9-CM Diagnosis Code
leukemia	204	ICD-9-CM Diagnosis Code
leukemia	204.0	ICD-9-CM Diagnosis Code
leukemia	204.00	ICD-9-CM Diagnosis Code

Appendix B. List of Codes used to define Immunocompromised Persons in this Request

Description	Code	Code Category
leukemia	204.01	ICD-9-CM Diagnosis Code
leukemia	204.02	ICD-9-CM Diagnosis Code
leukemia	204.1	ICD-9-CM Diagnosis Code
leukemia	204.10	ICD-9-CM Diagnosis Code
leukemia	204.11	ICD-9-CM Diagnosis Code
leukemia	204.12	ICD-9-CM Diagnosis Code
leukemia	204.2	ICD-9-CM Diagnosis Code
leukemia	204.20	ICD-9-CM Diagnosis Code
leukemia	204.21	ICD-9-CM Diagnosis Code
leukemia	204.22	ICD-9-CM Diagnosis Code
leukemia	204.8	ICD-9-CM Diagnosis Code
leukemia	204.80	ICD-9-CM Diagnosis Code
leukemia	204.81	ICD-9-CM Diagnosis Code
leukemia	204.82	ICD-9-CM Diagnosis Code
leukemia	204.9	ICD-9-CM Diagnosis Code
leukemia	204.90	ICD-9-CM Diagnosis Code
leukemia	204.91	ICD-9-CM Diagnosis Code
leukemia	204.92	ICD-9-CM Diagnosis Code
leukemia	205	ICD-9-CM Diagnosis Code
leukemia	205.0	ICD-9-CM Diagnosis Code
leukemia	205.00	ICD-9-CM Diagnosis Code
leukemia	205.01	ICD-9-CM Diagnosis Code
leukemia	205.02	ICD-9-CM Diagnosis Code
leukemia	205.1	ICD-9-CM Diagnosis Code
leukemia	205.10	ICD-9-CM Diagnosis Code
leukemia	205.11	ICD-9-CM Diagnosis Code
leukemia	205.12	ICD-9-CM Diagnosis Code
leukemia	205.2	ICD-9-CM Diagnosis Code
leukemia	205.20	ICD-9-CM Diagnosis Code
leukemia	205.21	ICD-9-CM Diagnosis Code
leukemia	205.22	ICD-9-CM Diagnosis Code
leukemia	205.3	ICD-9-CM Diagnosis Code
leukemia	205.30	ICD-9-CM Diagnosis Code
leukemia	205.31	ICD-9-CM Diagnosis Code
leukemia	205.32	ICD-9-CM Diagnosis Code
leukemia	205.8	ICD-9-CM Diagnosis Code
leukemia	205.80	ICD-9-CM Diagnosis Code
leukemia	205.81	ICD-9-CM Diagnosis Code
leukemia	205.82	ICD-9-CM Diagnosis Code
leukemia	205.9	ICD-9-CM Diagnosis Code
leukemia	205.90	ICD-9-CM Diagnosis Code
leukemia	205.91	ICD-9-CM Diagnosis Code
leukemia	205.92	ICD-9-CM Diagnosis Code
leukemia	206	ICD-9-CM Diagnosis Code
leukemia	206.0	ICD-9-CM Diagnosis Code
leukemia	206.00	ICD-9-CM Diagnosis Code
leukemia	206.01	ICD-9-CM Diagnosis Code
leukemia	206.02	ICD-9-CM Diagnosis Code
leukemia	206.1	ICD-9-CM Diagnosis Code
leukemia	206.10	ICD-9-CM Diagnosis Code
leukemia	206.11	ICD-9-CM Diagnosis Code
leukemia	206.12	ICD-9-CM Diagnosis Code
leukemia	206.2	ICD-9-CM Diagnosis Code
leukemia	206.20	ICD-9-CM Diagnosis Code
leukemia	206.21	ICD-9-CM Diagnosis Code
leukemia	206.22	ICD-9-CM Diagnosis Code

Appendix B. List of Codes used to define Immunocompromised Persons in this Request

Description	Code	Code Category
leukemia	206.8	ICD-9-CM Diagnosis Code
leukemia	206.80	ICD-9-CM Diagnosis Code
leukemia	206.81	ICD-9-CM Diagnosis Code
leukemia	206.82	ICD-9-CM Diagnosis Code
leukemia	206.9	ICD-9-CM Diagnosis Code
leukemia	206.90	ICD-9-CM Diagnosis Code
leukemia	206.91	ICD-9-CM Diagnosis Code
leukemia	206.92	ICD-9-CM Diagnosis Code
leukemia	207	ICD-9-CM Diagnosis Code
leukemia	207.0	ICD-9-CM Diagnosis Code
leukemia	207.00	ICD-9-CM Diagnosis Code
leukemia	207.01	ICD-9-CM Diagnosis Code
leukemia	207.02	ICD-9-CM Diagnosis Code
leukemia	207.1	ICD-9-CM Diagnosis Code
leukemia	207.10	ICD-9-CM Diagnosis Code
leukemia	207.11	ICD-9-CM Diagnosis Code
leukemia	207.12	ICD-9-CM Diagnosis Code
leukemia	207.2	ICD-9-CM Diagnosis Code
leukemia	207.20	ICD-9-CM Diagnosis Code
leukemia	207.21	ICD-9-CM Diagnosis Code
leukemia	207.22	ICD-9-CM Diagnosis Code
leukemia	207.8	ICD-9-CM Diagnosis Code
leukemia	207.80	ICD-9-CM Diagnosis Code
leukemia	207.81	ICD-9-CM Diagnosis Code
leukemia	207.82	ICD-9-CM Diagnosis Code
leukemia	208	ICD-9-CM Diagnosis Code
leukemia	208.0	ICD-9-CM Diagnosis Code
leukemia	208.00	ICD-9-CM Diagnosis Code
leukemia	208.01	ICD-9-CM Diagnosis Code
leukemia	208.02	ICD-9-CM Diagnosis Code
leukemia	208.1	ICD-9-CM Diagnosis Code
leukemia	208.10	ICD-9-CM Diagnosis Code
leukemia	208.11	ICD-9-CM Diagnosis Code
leukemia	208.12	ICD-9-CM Diagnosis Code
leukemia	208.2	ICD-9-CM Diagnosis Code
leukemia	208.20	ICD-9-CM Diagnosis Code
leukemia	208.21	ICD-9-CM Diagnosis Code
leukemia	208.22	ICD-9-CM Diagnosis Code
leukemia	208.8	ICD-9-CM Diagnosis Code
leukemia	208.80	ICD-9-CM Diagnosis Code
leukemia	208.81	ICD-9-CM Diagnosis Code
leukemia	208.82	ICD-9-CM Diagnosis Code
leukemia	208.9	ICD-9-CM Diagnosis Code
leukemia	208.90	ICD-9-CM Diagnosis Code
leukemia	208.91	ICD-9-CM Diagnosis Code
leukemia	208.92	ICD-9-CM Diagnosis Code
multi myeloma	203.0	ICD-9-CM Diagnosis Code
multi myeloma	203.00	ICD-9-CM Diagnosis Code
multi myeloma	203.01	ICD-9-CM Diagnosis Code
multi myeloma	203.02	ICD-9-CM Diagnosis Code
neoplasm	203.8	ICD-9-CM Diagnosis Code
neoplasm	203.80	ICD-9-CM Diagnosis Code
neoplasm	203.81	ICD-9-CM Diagnosis Code
neoplasm	203.82	ICD-9-CM Diagnosis Code
neoplasm	238.6	ICD-9-CM Diagnosis Code
neoplasm	238.72	ICD-9-CM Diagnosis Code

Appendix B. List of Codes used to define Immunocompromised Persons in this Request

Description	Code	Code Category
neoplasm	238.73	ICD-9-CM Diagnosis Code
neoplasm	238.74	ICD-9-CM Diagnosis Code
neoplasm	238.75	ICD-9-CM Diagnosis Code
neoplasm	238.76	ICD-9-CM Diagnosis Code
neoplasm	238.77	ICD-9-CM Diagnosis Code
neoplasm	238.79	ICD-9-CM Diagnosis Code
immune disorder	279.00	ICD-9-CM Diagnosis Code
immune disorder	279.01	ICD-9-CM Diagnosis Code
immune disorder	279.02	ICD-9-CM Diagnosis Code
immune disorder	279.03	ICD-9-CM Diagnosis Code
immune disorder	279.04	ICD-9-CM Diagnosis Code
immune disorder	279.05	ICD-9-CM Diagnosis Code
immune disorder	279.06	ICD-9-CM Diagnosis Code
immune disorder	279.09	ICD-9-CM Diagnosis Code
immune disorder	279.2	ICD-9-CM Diagnosis Code
immune disorder	279.3	ICD-9-CM Diagnosis Code
immune disorder	279.4	ICD-9-CM Diagnosis Code
immune disorder	279.41	ICD-9-CM Diagnosis Code
immune disorder	279.49	ICD-9-CM Diagnosis Code
immune disorder	279.5	ICD-9-CM Diagnosis Code
immune disorder	279.50	ICD-9-CM Diagnosis Code
immune disorder	279.51	ICD-9-CM Diagnosis Code
immune disorder	279.52	ICD-9-CM Diagnosis Code
immune disorder	279.53	ICD-9-CM Diagnosis Code
immune disorder	279.8	ICD-9-CM Diagnosis Code
immune disorder	279.9	ICD-9-CM Diagnosis Code
white blood cell disease	279.10	ICD-9-CM Diagnosis Code
white blood cell disease	279.11	ICD-9-CM Diagnosis Code
white blood cell disease	279.12	ICD-9-CM Diagnosis Code
white blood cell disease	279.13	ICD-9-CM Diagnosis Code
white blood cell disease	279.19	ICD-9-CM Diagnosis Code
white blood cell disease	284.09	ICD-9-CM Diagnosis Code
white blood cell disease	284.89	ICD-9-CM Diagnosis Code
white blood cell disease	288.01	ICD-9-CM Diagnosis Code
white blood cell disease	288.02	ICD-9-CM Diagnosis Code
white blood cell disease	288.1	ICD-9-CM Diagnosis Code
white blood cell disease	288.2	ICD-9-CM Diagnosis Code
white blood cell disease	288.4	ICD-9-CM Diagnosis Code
white blood cell disease	288.50	ICD-9-CM Diagnosis Code
white blood cell disease	288.64	ICD-9-CM Diagnosis Code
white blood cell disease	288.8	ICD-9-CM Diagnosis Code
white blood cell disease	289.53	ICD-9-CM Diagnosis Code
other hema dx	289.50	ICD-9-CM Diagnosis Code
other hema dx	289.59	ICD-9-CM Diagnosis Code
other hema dx	289.8	ICD-9-CM Diagnosis Code
other hema dx	289.83	ICD-9-CM Diagnosis Code
other hema dx	289.89	ICD-9-CM Diagnosis Code
other hema dx	289.9	ICD-9-CM Diagnosis Code



Appendix B. List of Codes used to define Blood Transfusions in this Request

Description	Code	Code Type
Blood Transfusions		
PERIOPER AUTO TRANSFUS BLD/BLD COMP	9900	ICD-9-CM Procedure Code
EXCHANGE TRANSFUSION	9901	ICD-9-CM Procedure Code
OTHER TRANSFUSION OF WHOLE BLOOD	9903	ICD-9-CM Procedure Code
TRANSFUSION OF PACKED CELLS	9904	ICD-9-CM Procedure Code
TRANSFUSION OF PLATELETS	9905	ICD-9-CM Procedure Code
TRANSFUSION OF COAGULATION FACTORS	9906	ICD-9-CM Procedure Code
TRANSFUSION OF OTHER SERUM	9907	ICD-9-CM Procedure Code
Red Blood Cells		
General Codes	P9021	Healthcare Common Procedure Code
General Codes	P9022	Healthcare Common Procedure Code
General Codes	P9039	Healthcare Common Procedure Code
Irradiated	P9038	Healthcare Common Procedure Code
Leukocytes reduced	C1010	Healthcare Common Procedure Code
Leukocytes reduced	C1016	Healthcare Common Procedure Code
Leukocytes reduced	C1020	Healthcare Common Procedure Code
Leukocytes reduced	P9016	Healthcare Common Procedure Code
Leukocytes reduced	P9051	Healthcare Common Procedure Code
Leukocytes reduced	P9054	Healthcare Common Procedure Code
Leukocytes reduced	P9057	Healthcare Common Procedure Code
Leukoreduced and irradiated	C1021	Healthcare Common Procedure Code
Leukoreduced and irradiated	P9040	Healthcare Common Procedure Code
Leukoreduced and irradiated	P9058	Healthcare Common Procedure Code
Platelets		
General Codes	96965	Current Procedural Terminology
General Codes	C9501	Healthcare Common Procedure Code
General Codes	P9019	Healthcare Common Procedure Code
General Codes	P9020	Healthcare Common Procedure Code
General Codes	P9034	Healthcare Common Procedure Code
Irradiated	C9500	Healthcare Common Procedure Code
Irradiated	C9502	Healthcare Common Procedure Code
Irradiated	P9032	Healthcare Common Procedure Code
Irradiated	P9036	Healthcare Common Procedure Code
Leukocytes reduced	C1011	Healthcare Common Procedure Code
Leukocytes reduced	C1013	Healthcare Common Procedure Code
Leukocytes reduced	C1014	Healthcare Common Procedure Code
Leukocytes reduced	C1015	Healthcare Common Procedure Code
Leukocytes reduced	C1017	Healthcare Common Procedure Code
Leukocytes reduced	P9031	Healthcare Common Procedure Code
Leukocytes reduced	P9035	Healthcare Common Procedure Code
Leuko reduced and irradiated	C1012	Healthcare Common Procedure Code
Leuko reduced and irradiated	C1019	Healthcare Common Procedure Code
Leuko reduced and irradiated	P9033	Healthcare Common Procedure Code
Leuko reduced and irradiated	P9037	Healthcare Common Procedure Code



Appendix B. List of Codes used to define Blood Transfusions in this Request

Description	Code	Code Type
Blood Transfusions		
Therapeutic Erythrocyta-pheresis	9973	ICD-9-CM Procedure Code
Cryoprecipitated Antihemophilic Factor		
Cryoprecipitated Antihemophilic Factor	P9012	Healthcare Common Procedure Code
Plasma		
General Codes	C1009	Healthcare Common Procedure Code
General Codes	C1022	Healthcare Common Procedure Code
General Codes	C9503	Healthcare Common Procedure Code
General Codes	P9017	Healthcare Common Procedure Code
General Codes	P9020	Healthcare Common Procedure Code
General Codes	P9023	Healthcare Common Procedure Code
General Codes	P9044	Healthcare Common Procedure Code
General Codes	P9059	Healthcare Common Procedure Code
General Codes	P9060	Healthcare Common Procedure Code
PLASMA HUMAN, BLOOD GROUP A		National Drug Code
PLASMA HUMAN, BLOOD GROUP B		National Drug Code
PLASMA HUMAN, BLOOD GROUP AB		National Drug Code
PLASMA HUMAN, BLOOD GROUP O		National Drug Code
PLASMA HUMAN, BLOOD GROUP A		National Drug Code
PLASMA HUMAN, BLOOD GROUP B		National Drug Code
PLASMA HUMAN, BLOOD GROUP AB		National Drug Code
PLASMA HUMAN, BLOOD GROUP O		National Drug Code
Plasma	9907	ICD-9-CM Procedure Code
Therapeutic Plasmapheresis	9971	ICD-9-CM Procedure Code

Appendix D: Specifications for cber_mpl1r_wp003_nsdv01- Blood transfusions- Part 2 (Blood transfusions among Immunocompromised population)

FDA requested use of the CIDA Tool to examine frequency distributions of the immunocompromised population in the Sentinel database, and blood transfusions among the immunocompromised population in the Sentinel database.

Enrollment Gap 45 days
 Age Groups 00-99
 Query Period January 1, 2008- November 30, 2015
 Coverage Requirement Medical and Drug Coverage
 Enrollment Requirement 0 days

Diagnosis

Scenario	Incident Diagnosis	Incident w/ respect to:	Washout (days)	Cohort Definition**	Care Setting	Inclusion/Exclusion Criteria	Include or Exclude	Lookback Start	Lookback End
1	Immunocompromised Code	Immunocompromised Code	0	01	Any	N/A	N/A	N/A	N/A
2	Immunocompromised Code	Immunocompromised Code	0	01	Any	Blood Transfusion	Include	0	365

** Cohort includes first valid incident treatment episodes during the query period;