



# **STATISTICAL ANALYSIS PLAN**

## **ALX0061-C203**

**A Phase II Multicenter, Open-Label Extension Study Assessing the Long-Term Efficacy and Safety of Subcutaneous ALX-0061 in Subjects with Moderate to Severe Rheumatoid Arthritis who Have Completed One of the Preceding Phase IIb Studies with ALX-0061**

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**ALX0061-C203**

## SIGNATURE PAGE

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## LIST OF ABBREVIATIONS

ADaM	Analysis data model
ACR	American college of rheumatology
ADA	Anti-drug antibody
AE	Adverse event
AIDS	Acquired immune deficiency syndrome
ALP	Alkaline phosphatase
ALT	Alanine transaminase
ANCOVA	Analysis of covariance
AST	Aspartate transaminase
CI	Confidence interval
CDAI	Clinical disease activity index
CRF	Case report form
CRP	C-reactive protein
CTCAE	Common terminology criteria for adverse events
CV	Coefficient of variation
CXCL	Chemokine (C-X-C motif) ligand
DAS28	Disease activity score using 28 joint counts
DBP	Diastolic blood pressure
DSMB	Data safety monitoring board
DT	Drug Tolerance (immunogenicity assay characteristic)
DY	Relative day
ESR	Erythrocyte sedimentation rate
EULAR	European league against rheumatism
FACIT	Functional assessment of chronic illness therapy
GGT	Gamma-glutamyl transferase
HAQ-DI	Health assessment questionnaire – disability index
ICF	Informed consent form
ICH	International Council for Harmonisation
IGRA	Interferon-gamma release assay
IL-6	Interleukin-6
ITO	Intent-to-observe

IWRS	Interactive web response system
LDA	Low disease activity
LDH	Lactate dehydrogenase
LOCF	Last observation carried forward
LS	Least squares
MedDRA	Medical Dictionary for Regulatory Activities
MMP	Matrix metalloproteinase
MTX	Methotrexate
NA	Not Analyzed
NAb	Neutralizing antibody
NR	No Result
NRI	Non-responder imputation
OC	Observed cases
OLE	Open-label extension
PD	Pharmacodynamic
PK	Pharmacokinetic
q2w	Every two weeks
q4w	Every four weeks
RA	Rheumatoid arthritis
SAP	Statistical analysis plan
SBP	Systolic blood pressure
s.c.	Subcutaneously
SD	Standard deviation
SDAI	Simplified disease activity index
SDTM	Study data tabulation model
SE	Standard error
SF-36	Short form (36) health form
SGS-LS	SGS-Life Sciences – Clinical Research
SOP	Standard operating procedure
STAT	Statistics
SJC	Swollen joint count
TB	Tuberculosis
TEAE	Treatment-emergent adverse event

TJC      Tender joint count  
VAS      Visual analogue scale  
WHO      World Health Organisation

## 1 INTRODUCTION

ALX-0061 (vobarnilizumab) has been developed by the sponsor as a new therapeutic protein neutralizing pro-inflammatory activity in the interleukin-6 (IL-6) pathway. ALX-0061 is a therapeutic protein called nanobody which inhibits the interaction between the IL-6 ligand and the receptor subunit, thereby preventing receptor signaling hence pro-inflammatory activity of IL-6. The investigator's brochure contains more detailed background information. This clinical study (ALX0061-C203) is an open-label extension of Phase IIb studies ALX0061-C201 and ALX0061-C202 and is intended to evaluate the long-term efficacy and safety of ALX-0061 administered subcutaneously (s.c.) to subjects with active rheumatoid arthritis (RA), a chronic systemic inflammatory autoimmune disease.

This statistical analysis plan (SAP) describes the final statistical analysis to be performed for the ALX0061-C203 study. This SAP covers the efficacy, safety, pharmacokinetic, and general characteristics parts of the statistical analysis. It specifies the analysis displays to be presented and describes the methods and procedures in a more elaborated way than in the statistical methods section of the protocol. The statistical analysis will process and present the results following the International Council for Harmonisation (ICH) standards, in particular the ICH-E3, ICH-E6, and ICH-E9 guidelines.

## 2 STUDY OBJECTIVES

The objective of this study is to evaluate the long-term efficacy and safety of ALX-0061 administered s.c. to subjects with active RA.

## 3 STUDY DESIGN

### 3.1 Overall Study Design

This is a multicenter, open-label extension (OLE) phase II study of ALX-0061 administered s.c. in subjects with active RA who have completed the ALX-0061 treatment and assessment period of one of the preceding Phase IIb studies with ALX-0061 (C201 or C202) and who achieved at least 20% improvement in swollen joint count (SJC) and/or tender joint count (TJC) (66/68 counts) compared to baseline at the final visit of the preceding study and for the countries where there was approval for the study.

Eligible subjects will receive ALX-0061 150 mg s.c. injections, beginning at Day 1 (Week 0) of the OLE and every 2 weeks (q2w) thereafter up to and including Week 102. Eligible subjects from study ALX0061-C201 will also continue their methotrexate (MTX) treatment. Subjects will return for 12 ambulatory visits planned at Day 1 (Week 0), and Weeks 4, 8, 12, 24, 36, 48, 60, 72, 84, 96 and 104. Subjects who received study drug up to and including Week 102, should return for the End of Treatment Visit at Week 104 and for the Follow-up Visit 12 weeks after the last study drug administration at Week 102.

In the current OLE study, maintenance of the response will be reassessed at the study visits every 12 weeks from Week 12 until Week 96. Subjects who fail to maintain response and meet efficacy discontinuation criteria (< 20% improvement in both SJC and TJC

compared to baseline of the preceding Phase IIb study) will be discontinued from the study.

The schedule of assessments can be found in [Appendix 1: Schedule of assessments](#).

As this is an OLE study, blinding is not required.

### 3.2 Sample Size

This is an extension study and is not set by statistical power. Subjects who have completed the Week 24 (study ALX0061-C201) or Week 12 (study ALX0061-C202) assessment visit in one of the preceding Phase IIb studies with ALX-0061, and who are qualified for this study per inclusion/exclusion criteria, will be invited to participate in the extension study. Up to a maximum of approximately 501 subjects are planned to participate in this OLE study.

### 3.3 Study Endpoints

The protocol does not define primary or secondary study endpoints. The following endpoints will be analyzed:

#### **Efficacy endpoints:**

- American College of Rheumatology (ACR) ACR20, ACR50, and ACR70 response rate over time (Week 0, Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96 and Week 104).
- Actual values in ACR-N index improvement over time (Week 0, Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96 and Week 104).
- Actual values and change from baseline values in Disease Activity Score using 28 joint counts (DAS28) using CRP and ESR, simplified disease activity index (SDAI) and clinical disease activity index (CDAI) over time (Week 0, Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96 and Week 104).
- Disease activity: response rate of remission and response rate of low disease activity (LDA) based on DAS28(ESR), SDAI, CDAI, Boolean (only remission) over time (Week 0, Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96 and Week 104).
- Disease activity: response rate of DAS28(CRP) < 2.6 and response rate of low disease activity (LDA) based on DAS28(CRP) over time (Week 0, Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96 and Week 104).
- Disease activity: rate of maintained remission at consecutive time points based on DAS28(ESR), SDAI, CDAI, Boolean and rate of maintained LDA at consecutive time points based on DAS28(ESR) over time (Week 0, Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96 and Week 104).
- Disease activity: rate of maintained DAS28(CRP) < 2.6 at consecutive time points and rate of maintained LDA at consecutive time points based on DAS28(CRP) over time (Week 0, Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96 and Week 104).

- European league against rheumatism (EULAR) DAS28 response rate (good, moderate, or no response) over time (Week 0, Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96 and Week 104).
- Actual values and change from baseline values in HAQ-DI over time (Week 0, Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96 and Week 104).
- HAQ-DI response rate (i.e., those who have a clinically meaningful improvement from baseline of  $\geq 0.25$  in HAQ-DI) and HAQ-DI normal physical function response rate (i.e., those who have a score of  $\leq 0.5$ ) over time (Week 0, Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96 and Week 104).
- Actual values and change from baseline values in Physical and mental component scores of SF-36 over time (Week 0, Week 24, Week 48, Week 72 and Week 104).
- Actual values and change from baseline values in FACIT-Fatigue over time (Week 0, Week 24, Week 48, Week 72 and Week 104).
- Actual values and change from baseline values in duration of morning stiffness at Week 0 and Week 104.

**Pharmacokinetic (PK) endpoints:**

- ALX-0061 serum concentration over time (Week 0, Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96 and Week 104).

**Immunogenicity endpoints:**

- Overall subject classification based on ADA/mADA assays results.
- Overall subject classification based on NAb assay results.

**Safety endpoints:**

- Number of events as well as number and percentage of subjects with treatment-emergent Adverse Events (TEAEs), treatment-related AEs, Serious Adverse Events (SAEs), non-serious AEs, treatment-related SAEs, SAEs leading to treatment discontinuation and Adverse Events of Special Interest (AESI), categorized by System Organ Class (SOC) and Preferred Term (PT) and Maximum Severity (where applicable). Note that all adverse events reported in this study are considered treatment-emergent.
- Actual values and change from baseline in clinical laboratory parameters, including blood chemistry, hematology, urinalysis, coagulation and the acute phase proteins (CRP, ESR, and fibrinogen) at Week 0, Week 4, Week 8, Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96, Week 104 and Follow-up (Week 0, Week 24, Week 48, Week 72 and Week 104 only for extended clinical laboratory analyses).
- Shift from baseline in clinical laboratory parameters with normal ranges or CTCAE grades at Week 0, Week 4, Week 8, Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96, Week 104 and Follow-up.
- Actual values and change from baseline values in vital signs measurements at Week 0, Week 4, Week 8, Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96, Week 104 and Follow-up.
- Physical examination abnormal findings at Week 0, Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96, Week 104 and Follow-up.

## 4 GENERAL ASPECTS FOR STATISTICAL ANALYSIS

### 4.1 Analysis Populations

The following populations will be considered for analysis:

#### 4.1.1 *All screened population*

The all screened population includes all subjects who signed an informed consent for participation in the ALX0061-C203 study.

#### 4.1.2 *Intent-to-observe (ITO) population*

The ITO population includes all subjects who enrolled in study ALX0061-C203 and is thus equal to the all screened population. General characteristics and efficacy will be analyzed on the ITO population.

#### 4.1.3 *Safety population*

The safety population includes all subjects who received at least 1 administration of study drug, as treated. The safety population will be used for the analysis of exposure and safety data.

#### 4.1.4 *PK population*

The PK population is a subset of the safety population and consists of all subjects who received at least 1 administration of ALX-0061 and for whom at least one ALX-0061 serum concentration has been determined.

The PK population will be used for the analysis of ALX-0061 serum concentrations.

### 4.2 Key Definitions and Labels

#### 4.2.1 *Definition of baseline and change from baseline*

The baseline value will be the baseline value of the parent study.

The absolute change from baseline will be calculated for all post-baseline time points as:  
Change from baseline at time point t = value at time point t – baseline value

For selected efficacy endpoints, the percentage change from baseline will be calculated for all post-baseline time points as: Percentage change from baseline at time point t =  $100 * (value at time point t - baseline value) / baseline value$ . As percentage change can not be calculated for subjects with a baseline value of 0, these subjects will not be included for the corresponding summary analysis (if planned) and the respective column(s) will be kept blank for the corresponding listing.

For the changes from baseline, only subjects with both a baseline value and a value at the post-baseline time point will be included.

Wherever in the document 'change from baseline' is mentioned, it concerns the absolute change from baseline.

#### **4.2.2 *Presentation of treatment groups***

The following treatment group labels will be used in the tables, listings and figures, unless specified otherwise:

- ALX-0061 150 mg q2w + MTX (C201 PBO + MTX)
- ALX-0061 150 mg q2w + MTX (C201 75 mg q4w + MTX)
- ALX-0061 150 mg q2w + MTX (C201 150 mg q4w + MTX)
- ALX-0061 150 mg q2w + MTX (C201 150 mg q2w + MTX)
- ALX-0061 150 mg q2w + MTX (C201 225 mg q2w + MTX)
- ALX-0061 150 mg q2w + MTX (C201 all subjects)
- ALX-0061 150 mg q2w (C202 150 mg q4w)
- ALX-0061 150 mg q2w (C202 150 mg q2w)
- ALX-0061 150 mg q2w (C202 225 mg q2w)
- ALX-0061 150 mg q2w (C202 all subjects)
- All subjects

#### **4.2.3 *Totals over groups***

Grand total, pooling all subjects, will be displayed in all tables.

#### **4.2.4 *General presentation of results***

All results will be presented per treatment group, unless specified otherwise. All listings will be ordered by treatment group, subject, and time point, unless specified otherwise.

The analysis population will always be indicated in a subtitle in the table, listing or figure.

#### **4.2.5 *Visit Windows***

The visit windows as defined in Section 12.1 will be applied to all parameters.

### **4.3 General Methods**

#### **4.3.1 *Calculation of descriptive statistics***

Continuous variables will be summarized using descriptive statistics including the number of non-missing observations (n), the arithmetic mean, the standard deviation (SD) for general characteristics and for PK summaries or standard error (SE) for efficacy, safety and immunogenicity, the median, minimum and maximum.

Descriptive statistics of efficacy will additionally include a 95% confidence interval (CI) of the mean, calculated based on the large sample normal approximation. For changes from

baseline of efficacy parameters, the least squares (LS) mean and 95% CI derived from an ANCOVA model with treatment group as factor and baseline as covariate will be shown.

Descriptive statistics of PK concentrations will additionally include 5% and 95% percentiles, coefficient of variation (CV)% of arithmetic mean, geometric mean and geometric SD.

Descriptive statistics of continuous variables will be presented when  $n \geq 2$ . When  $n=1$ , only sample size (n) and mean are shown.

Categorical variables will be summarized using frequency counts and percentages. For efficacy, a Wilson score 95% CI on the percentage in each treatment group will also be shown. When count data are presented, the percentage will be suppressed when the count is zero. Missing values will not be included in the denominator count when computing percentages. For demographics and baseline disease characteristics a 'missing' row will be included to indicate the number of missing values, without percentages.

For the graphs showing mean values of continuous variables, an SE flag will be shown, while for graphs showing percentages, this will be the Wilson score asymptotic SE on the binomial proportions.

Calculated parameters will not be rounded in the derived datasets. The rounding will be done at the reporting level. Mean, median, 95% CI limits will be presented with one decimal more than data collected. Minimum and maximum will be reported with the same precision as data collected and SD and SE with two decimals more than data collected. Percentages will be tabulated with 1 decimal.

#### ***4.3.2 Handling of values below (or above) a threshold***

Values below (above) the detection limit will be imputed by the value of the detection limit itself, unless indicated otherwise. Listings will always present the original value. Example: if the database contains values like "<0.04", then for the descriptive statistics the value of the detection limit (0.04) shall be used. A value like ">1000" will be imputed by "1000".

Individual pharmacokinetic concentrations below the limit of detection or below the quantification limit (BQL) will be reported as BQL. To compute descriptive statistics (i.e. mean (or median or geommean), SD, CV%, minimum and maximum), all BQL values will be treated as missing. When the total number of BQL values exceeds 1/3 of the total number of values at that time point, descriptive statistics will not be computed. Descriptive statistics not calculated for the above reasons will be reported as not calculated (NC).

For handling of titer values from immunogenicity analysis, see section 9.

#### ***4.3.3 Handling of outliers***

There will be no outlier detection. All measured values will be included in the analyses.

### **4.4 Software and Validation Model**

SAS version 9.4 or higher will be used for programming.

Currently valid [REDACTED] standard operating procedures (SOPs) will be followed.

ACR20 response will be validated following Model C, other efficacy endpoints, general and safety parts following validation model B:

Model B: review of the output, source code and program log by an independent person (i.e., somebody different from the developer).

Model C: review of the output, source code and program log by an independent person, plus independent programming of the parameters indicated in this SAP.

## 5 GENERAL CHARACTERISTICS

All analyses on general characteristics will be run on the ITO population, unless specified otherwise.

### 5.1 Subject Disposition

Subject disposition will be presented descriptively for the all screened population. This includes the number and percentage of subjects in each of the analysis populations defined in section 4.1. Percentages will be calculated relative to the all screening population. A disposition summary by region and country and a summary by time point will be given for the ITO population. The number and percentage of subjects who completed the study and those who prematurely discontinued from the study will be summarized, along with the primary reasons for discontinuation.

A detailed list of tables and listings can be found in section 13.1 and section 15.1, respectively.

### 5.2 Protocol Deviations and Eligibility Criteria

A protocol deviation is any change, divergence, or departure from the study design or procedures defined in the protocol. Protocol deviations are considered as major if they concern criteria and disease characteristics that are critical to define the study population and criteria that determine or influence clinical endpoints or criteria that may cause immediate hazard to the subjects (impact on subjects' rights, safety or well-being) or increase the safety risk to subjects.

The list of (potentially) major protocol deviations will be reviewed by the sponsor and finalized prior to database lock. Detailed information can be found in the trial protocol deviation criteria list.

Major protocol deviations will be tabulated according to their category. The following categories are considered:

- Selection criteria not met
- Subject not withdrawn as per protocol
- Prohibited concomitant medication
- Treatment non-compliance
- Safety assessment deviation
- Efficacy assessment deviation
- Other

Additionally, major protocol deviations will be listed including categorization and description.

A detailed list of tables and listings can be found in section 13.1 and section 15.1, respectively.

### 5.3 Demographic and Other Baseline Characteristics

Demographic data and baseline disease characteristics will be summarized descriptively by treatment group and overall on the ITO population. The following demographic parameters and baseline disease characteristics will be included in the tables and/or listings:

#### Demographic parameters:

- Sex at birth (male, female)
- Women of childbearing potential (yes, no), only listed
- Age (years): the age at baseline of the parent trial is used.
- Age categories (<65 years, ≥65 years)
- Year of birth: only listed
- Date of signing the ICF: only listed
- Race (white, black or African American, Asian, American Indian or Alaska native, native Hawaiian or other Pacific Islander, other, not allowed to ask). Specification for Asian and other race will only be listed.
- Ethnicity (Hispanic or Latino, non-Hispanic or non-Latino, not allowed to ask)
- Geographic region (Latin America, Europe):
  - Latin America: Mexico
  - Europe: Spain, Germany, Poland, Belgium, Bulgaria, Republic of Moldova, Georgia, Hungary, Romania, Macedonia and Serbia
- Height (cm)
- Weight (kg)
- Weight categories ( $\leq$ 100 kg,  $>$ 100 kg;  $\leq$ median,  $>$ median)
- Body mass index BMI = (weight in kg) / (height in m)<sup>2</sup> (kg/m<sup>2</sup>)

Age, height, weight and their derived parameters will be extracted from the parent study. Previously calculated parameters will not be recalculated.

**Baseline disease characteristics:**

Please refer to the efficacy section 12.3 for detailed definitions of the parameters. Below baseline parameters will be extracted from the parent study and calculated parameters will not be recalculated.

- Swollen joint count (SJC66): number of swollen joints out of 66 assessed joints
- Tender joint count (TJC68): number of tender joints out of 68 assessed joints
- Swollen joint count (SJC28): number of swollen joints out of 28 assessed joints used for DAS28 calculation
- Tender joint count (TJC28): number of tender joints out of 28 assessed joints used for DAS28 calculation
- Tender joint count categories (<10, 10-20, >20)
- Swollen joint count categories (<7, 7-11, >11)
- CRP (mg/dL)
- CRP categories (<= upper limit of normal range [ULN], >ULN and <=1.2xULN, >1.2xULN and <=3xULN, >3xULN)
- ESR (mm/h)
- Physician's global assessment of the disease (VAS; 0-100 mm)
- Patient's global assessment of the disease (VAS; 0-100 mm)
- Patient's assessment of pain (VAS; 0-100 mm)
- HAQ-DI (0-3)
- SF-36 Physical component summary
- SF-36 Mental component summary
- Time since first RA symptoms (years)
- Time since RA diagnosis (years)
- ACR functional class at screening (of parent trial): class I / class II / class III / class IV
- Extra-articular symptom location: any of the following: skin, eyes, gastrointestinal, heart, lung, renal, nervous system, other
- Extra-articular symptoms: only listed
- Rheumatoid factor (RF) concentration (kIU/L)
- RF category (positive [>ULN], negative [<=ULN])
- Anti-CCP category (positive [>ULN], negative [<=ULN])
- Combined RF and anti-CCP category (double positive, double negative, mixed negative and positive)
- DAS28 Score (ESR)
- DAS28 Score (CRP)
- DAS28(ESR) and DAS28(CRP) categories (<=3.2, >3.2 and <=5.1, >5.1)
- Clinical Disease Activity Index (CDAI)
- Simplified Disease Activity Index (SDAI)
- MTX use (dose)

- Corticosteroid use (prednisone equivalent dose)
- Duration of morning stiffness (minutes)
- FACIT

A detailed list of tables and listings can be found in section 13.1 and section 15.1, respectively.

#### **5.4 Exposure to Study Medication and Treatment Compliance**

Extent of exposure will be analyzed descriptively by treatment group and overall based on the safety population. Note that only exposure during the OLE will be analyzed, so this will not reflect the total exposure of a subject to ALX-0061.

The following parameters will be summarized: total treatment duration, total number of study drug doses received, cumulative dose of study drug received, compliance and home administration. The derivation of these parameters can be found in section 12.2.1. A detailed list of tables and listings can be found in section 13.1 and section 15.1, respectively.

#### **5.5 Medical history**

Medical history was listed in the parent trials.

#### **5.6 Concomitant Therapies**

Any concomitant therapy taken during the study will be recorded in the eCRF, including ongoing concomitant therapies from the parent trial. Concomitant therapies are defined as therapies with a stop date on or after date of first dose of study drug in the C203 study. Therapies stopped before the study are not recorded. Analysis of prior medications is available in the parent trials.

All therapies are coded using the latest WHO-DRUG version. No anatomical therapeutic chemical classification system (ATC) selection is performed.

Concomitant therapies will be tabulated by generic term, for RA and non-RA medications separately, by treatment group and overall using the ITO population. Multiple records of the same generic term for the same subject will be counted only once. The table will therefore present subjects, not occurrences. The tables are sorted by decreasing frequency based on all subjects.

Systemic corticosteroids are selected as steroid RA-therapy with intravenous or intramuscular administration (not intra articular)

A detailed list of tables and listings can be found in section 13.1 and section 15.1, respectively.

## 6 EFFICACY

### 6.1 Main Efficacy Analysis

No inferential statistical analyses will be performed. All tables will be presented by treatment group and overall, including treatment groups defined by previous dosing regimen of the parent trial (cfr. section 4.2.2). All analyses will be run on the ITO. The main analysis will be on observed cases (OC).

Continuous efficacy endpoints will be summarized as follows:

- Actual values: descriptive statistics (mean, 95% CI on the mean [normal approximation], SE, median, minimum, and maximum) per endpoint and time point. The baseline value from the parent trial will be included to the summary, if applicable.
- Changes from baseline: baseline adjusted LS means and 95% CI from an ANCOVA model with treatment as factor and baseline as covariate, median, minimum and maximum per endpoint and post-baseline time point.

This will be done for the following parameters: ACR-N, DAS28(CRP), DAS28(ESR), SDAI, CDAI, HAQ-DI, SF-36 physical and mental component scores, FACIT-Fatigue, duration of morning stiffness, patient's assessment of pain (VAS-scale), patient's global assessment of disease activity (VAS-scale), physician's global assessment of disease activity (VAS-scale), CRP, ESR, TJC68, TJC28, SJC68, SJC28, MTX dose, corticosteroids dose. Different types of systemic corticosteroids will be converted to Prednisolone equivalent doses before calculating the cumulative dose of corticosteroids. The cumulative dose will be given in mg/day (Please refer to Appendix 2 section 16.2 for more details).

Categorical efficacy endpoints will be presented using a frequency tabulation of the parameter at each time point, including a Wilson score 95% CI on the percentage of subjects in the category of interest. The baseline value from the parent trial will be included to the summary, if applicable. This will be done for the following parameters: ACR20, ACR50, ACR70, EULAR response (including EULAR good response), DAS28(ESR) low disease activity / remission / maintained remission / maintained low disease activity, DAS28(CRP) low disease activity / DAS(CRP) < 2.6 / maintained DAS(CRP) < 2.6 / maintained low disease activity, SDAI low disease activity / remission / maintained remission, CDAI low disease activity / remission / maintained remission, Boolean remission / maintained remission, HAQ-DI clinically meaningful improvement, HAQ-DI normal physical function, MTX dose reduction rate, MTX discontinuation rate.

All 95% CIs will be two-sided.

In addition, line plots of the mean actual values per time point, including SE bars, for continuous endpoints, and line plots of the response rates (in percentage) per time point, including SE bars, for categorical endpoints, will be provided.

Definitions and calculation of efficacy parameters are detailed in section 12.3.

A detailed list of tables, figures and listings can be found in section 13.2, section 14 and section 15.2, respectively.

## 6.2 Other Efficacy Analyses

The sensitivity of results to missing data will be assessed by conducting a sensitivity analysis using LOCF imputed cases. Missing post-baseline values are imputed by the last non-missing preceding post-baseline value. Baseline itself is not imputed.

The sensitivity analysis will be done for the following efficacy endpoints:

- ACR20/50/70
- DAS28(ESR) actual values and changes from baseline
- DAS28(ESR) remission/low disease activity
- DAS28(CRP) actual values and changes from baseline
- DAS28(CRP) < 2.6/low disease activity

A second sensitivity analysis will be done using NRI imputed cases. Missing post-baseline ACR values are imputed with the value corresponding to that of non-responders.

This sensitivity analysis will be done for the following efficacy endpoints:

- ACR20/50/70
- DAS28(ESR) remission/low disease activity
- DAS28(CRP) < 2.6/low disease activity

In addition, for the same efficacy endpoints, a subgroup analysis will be conducted on the observed cases.

The following subgroups will be considered:

- Age category (<65 yrs at baseline, >= 65 yrs at baseline)
- Geographic region
- If any subcategory has less than 10% of the total number of patients then the subgroup analysis will not be produced.

A detailed list of tables can be found in section 13.2.

## 7 SAFETY

### 7.1 Adverse Events

All safety summaries will be based on the safety population and presented by treatment group (see section 4.2.2). As study drug treatment is not interrupted between the parent study and this study, all adverse events reported in this study are considered treatment-emergent. However, unless specified otherwise, only adverse events that started after the first dose of C203 will be considered in the tables.

All adverse events will be coded and classified by System Organ Class (SOC) and Preferred Term (PT) using the medical dictionary for regulatory activity (MedDRA) that is current at the time of database lock.

A TEAE will be categorized as study drug-related if the relationship to study drug is reported to be 'possibly related' or 'related', or missing. In tabulations this categorization

will be used, but in the listings the original reported relationship will be presented. If the relationship is reported to be 'not applicable', it will not be considered in the tabulations.

A TEAE is reported as related to study procedure or not related to study procedure. Missing study procedure relationship will be considered as related.

A general summary table with AE events starting after first dose of C203 only will be produced to report the number and percentage of subjects with at least one event, the number of events and the incidence per 100 patient years, which will be calculated as:  $100 \times (\text{Number of subjects with AE}) / (\text{Total number of years observed while on C203, summed for all subjects})$ . Percentages will be calculated out of the number of subjects in the relevant treatment group.

The following categories will be included in the summary table:

- TEAE
- serious TEAE
- TEAE leading to death
- severe TEAE as classified by the investigator
- TEAE for which the study drug was interrupted
- TEAE for which the study drug was discontinued
- study drug-related TEAE
- serious study drug-related TEAE
- injection-site reaction.

Note that the TEAE here refers to the AEs starting after first dose of study drug in C203 study.

A similar summary table will be produced for all TEAEs including those of the parent trials (C201 and C202). Any event happening either on parent trial or on the current trial will be considered for deriving the number and percentage of subjects with at least one event, and the number of events. The incidence per 100 patient years will be calculated as:  $100 \times (\text{Number of subjects with AE}) / (\text{Total number of years observed starting from the first dose in parent trial, summed for all subjects})$ .

Another summary table will be presented selecting adverse events of special interest. Search criteria for these adverse events can be found in section 16.5.

The following categories will be included in the summary table:

- infection
- serious infection (requiring hospitalization or i.v. antimicrobial treatment)
- opportunistic infection, excluding TB
- active TB infection
- latent TB infection
- Herpes zoster infection
- malignancy
- hypersensitivity reaction (including anaphylaxis and angioedema)
- hypersensitivity reaction (including anaphylaxis and angioedema) leading to withdrawal
- GI perforation
- demyelinating disorder
- MACE

This table will represent events which occurs only after the first dose of study drug in C203 study.

One more summary table for AEs of special interest will be produced including events from the parent trials as well. Any event happening either on parent trial or on the current trial will be considered for deriving the number and percentage of subjects with at least one event, and the number of events. The incidence per 100 patient years will be calculated as:  $100 \times (\text{Number of AEs}) / (\text{Total number of years observed starting from the first dose in parent trial, summed for all subjects})$ .

Tables by SOC and PT will report the number and percentage of subjects with at least one event, occurring only after the first dose of study drug on C203 study. Percentages will be calculated out of the number of subjects in the relevant treatment group.

These tables will be prepared for the following selections of AEs:

- TEAEs
- TEAEs by severity (Mild, Moderate, Severe)
- TEAEs with an incidence of at least 3%
- serious TEAEs
- non-serious TEAEs
- study drug-related TEAEs
- study procedure-related TEAEs
- TEAE for which the study or the study drug were discontinued

The tables by SOC and PT will be sorted in descending order starting from the SOC with the highest incidence in the all subjects group. If the total incidence for any two or more SOCs is equal, the SOCs will be presented in alphabetical order. Within each SOC, the PTs will be presented in the same manner as the SOCs. At each level of subject summarization, a subject is counted once if the subject reported one or more events. In the summary table by severity, if a subject reported multiple occurrences of the same TEAE, only the most severe will be presented. TEAEs with missing severity will be presented in a separate 'Missing' category.

The AE onset day and the AE duration will not be presented in the tabulations, but will be listed. Their derivation is provided in section 12.4.1.

A detailed list of tables and listings can be found in section 13.4 and section 15.4, respectively.

## 7.2 Laboratory Evaluations

The following laboratory parameters will be summarized and displayed at the scheduled time points:

- **Biochemistry:** total bilirubin, alkaline phosphatase, gamma-glutamyltransferase, AST, ALT, lactate dehydrogenase, creatinine, urea, total protein, albumin, glucose, inorganic phosphate, sodium, potassium, calcium, and chloride. In the extended clinical laboratory analysis, fasting serum lipids will be included as well (i.e. total cholesterol, HDL-cholesterol, LDL-cholesterol, LDL/HDL cholesterol ratio (calculated as LDL/HDL) and triglycerides)
- **Hematology:** leukocytes, erythrocytes, hemoglobin, hematocrit, thrombocytes, partial automated differentiation (lymphocytes, monocytes, eosinophils, basophils, neutrophils and neutrophils segmented), mean corpuscular volume, mean corpuscular hemoglobin, and mean corpuscular hemoglobin concentration.
- **Acute phase proteins:** fibrinogen, CRP, and ESR.
- **Urinalysis:** erythrocytes/blood, urobilinogen, ketones, glucose, protein, pH, and leukocytes.
- **Coagulation:** activated partial prothrombin time, prothrombin time, and INR (the latter for subjects on warfarin only).

For lab tests with numeric values, tables showing descriptive statistics (mean, median, standard error, minimum, and maximum) per lab test category (hematology, biochemistry, acute phase proteins, urinalysis, coagulation), lab test and unit and time point by treatment group and using the safety population will be prepared for:

- actual values
- absolute changes from baseline (definition in section 4.2.1)

Urinalysis results will be presented in a frequency table per lab test and time point.

The statistical summary will only present results in Standard International (SI) units. Other units will not be presented. In the tables, the number of significant digits of the original values will be used to determine the number of decimals that will be printed.

All values will be compared to their matching normal ranges (low, normal, high). For both values and normal ranges the SI units will be considered to determine abnormalities. Additionally, for key hematology and biochemistry parameters, toxicities will be derived according to the common terminology criteria for adverse events (CTCAE, see appendix 16.2) grading, version 4.03 (ALT, AST, total bilirubin, gamma-glutamyltransferase, leukocytes, neutrophils, thrombocytes, fibrinogen and cholesterol). Details for derivation of classification based on normal ranges of laboratory parameters can be found in section 12.4.2.

Cross-tabulations per lab test category (hematology, biochemistry, acute phase proteins, urinalysis, coagulation), lab test and time point will show the shift at each post-baseline time point versus the baseline.

The following types of cross-tabulations will be prepared:

- for all tests with normal ranges: shift in abnormality (L/N/H)
- for ALT, AST, total bilirubin, GGT, leukocytes, neutrophils, thrombocytes, fibrinogen and lipids test results only: shift in CTCAE toxicity grades (grade 1 to 4)

Longitudinal box plots will be prepared for the following variables: neutrophils, platelets, ALT, AST and LDL/HDL ratio.

A detailed list of tables, figures and listings can be found in section 13.4, section 14 and section 15.4, respectively.

### 7.3 Physical Examination

Abnormal physical examination findings will be listed (see section 15.4). No summaries will be provided.

### 7.4 Vital Signs

The following parameters will be analysed: weight, systolic and diastolic blood pressure, pulse rate and body temperature.

Tables showing descriptive statistics (mean, median, standard error, minimum, and maximum) per vital sign test and unit and time point by treatment group and using the safety population will be prepared for:

- actual values
- absolute change from baseline

A detailed list of tables and listings can be found in section 13.4 and section 15.4, respectively.

## 8 ANALYSIS OF PHARMACOKINETICS

All analyses will be run on the PK population.

Drug concentration will be analyzed descriptively (n, arithmetic mean, SD and SE, median, minimum and maximum, 5% and 95% percentiles, CV% of arithmetic mean, geometric mean and geometric SD) by treatment group and timepoint.

Individual pharmacokinetic concentrations will be reported in  $\mu\text{g/mL}$ . Concentrations in  $\text{ng/mL}$  will be converted. Values BQL will be handled as detailed in section 4.3.2.

Pharmacokinetic concentrations and descriptive statistics will be reported to 3 significant digits for values up to, but not including 1000. Values equal to and above 1000 will be reported as the value without decimal signs. In case the actual sampling time deviates more than allowed per study protocol from the nominal time, these samples will not be included in the calculation of descriptive statistics.

A detailed list of tables and listings can be found in section 13.3 and section 15.4, respectively.

## 9 ANALYSIS OF IMMUNOGENICITY

### 9.1 Available parameters

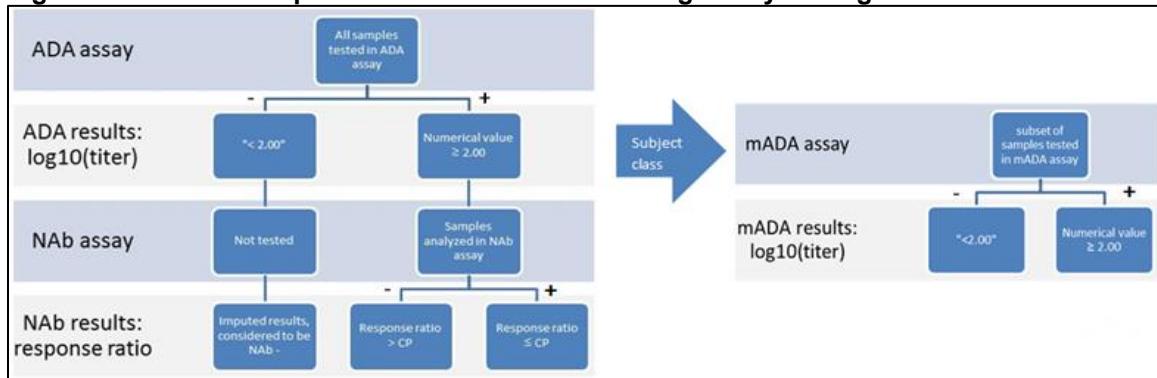
Immunogenicity is assessed via a tiered sample analysis approach (illustrated in Figure 1). In a first step all samples will be analyzed in the conventional anti-drug antibody (ADA) assay and only samples from subjects classified as 'Pre-Ab Pos – Equivocal' will be further analyzed in the mADA assay. This assay is a characterization assay and has been developed to enable detection of TE ADA in presence of (high) pre-existing antibody (pre-Ab) levels. Furthermore, positive ADA samples will be evaluated for their neutralizing potential in the neutralizing antibody (NAb) assay.

As such, the available parameters per sample are:

- ADA log10(titer) (no data imputation)
- mADA log10(titer) (for subset of subjects only, no data imputation)
- NAb normalized response (for subset of samples only, data imputation required for ADA negative samples)

Additional provided information needed for data interpretation is:

- ADA Minimum Significance Ratio (MSR): MSR is an assay parameter reflecting precision of titer assessments and is needed to interpret the treatment emergent (TE) response for subjects presenting with pre-Ab. In such cases, pre- and post-dose titers will be compared. The titer is considered to be significantly increased post-dose, if the highest post-dose titer compared to the highest pre-dose titer is higher than the MSR value. The increase of the log10(titer) post- versus pre-dose should be  $> \log_{10}(\text{MSR})$ .
- mADA MSR: MSR value determined in the mADA assay, similar application as described above, but applied to mADA titers.
- NAb assay cutpoint (CP): cut-off value to determine if a sample is negative or positive. Since the NAb assay is an inhibition assay, samples equal to or below the CP will be considered positive.

**Figure 1: Schematic representation of tiered immunogenicity testing**


**Table 1** provides clarification on when the reported value of a sample needs to be categorized as “negative”, “positive” or “missing” in each of the respective assays. Samples scoring negative in the ADA or mADA assay are not titrated and the respective log10(titer) is reported as <log10(Minimal required dilution [MRD]) with MRD=100, i.e. log10(titer) <2.00. The latter will not to be included in descriptive statistics on titers; but they will be included in the individual line plot, set arbitrarily to 1.80. Similarly, NAb negative results should not be included in descriptive statistics on response ratios, but will be included in the individual line plot, set arbitrarily to 1.00.

**Table 1: Reported values in each assay and corresponding data interpretation**

Reported value				Data interpretation
ADA: log10(titer)	mADA: log10(titer)	NAb data from parent trial: neutralizing response <sup>1</sup>	NAb data C203 post-baseline visits <sup>2</sup> : response ratio	
“< 2.00”	“< 2.00”	“Y”	Numeric value > CP <sup>3</sup>	<b>NEGATIVE (NEG) (ISORRES)</b>
Numeric value ≥ 2.00	Numeric value ≥ 2.00	“N”	Numeric value ≤ CP <sup>3</sup>	<b>POSITIVE (POS) (ISORRES)</b>
“NA” or “NR”	“NA” or “NR”	“NA” or “NR”	“NA” or “NR”	<b>MISSING (COVAL)</b>

<sup>1</sup> Parent trial screening and baseline visit as well as OLE baseline visit (corresponding to w24/w12 for C201/C202 respectively)

<sup>2</sup> NAb results reporting strategy has been adapted for study C203 compared to parent trial: NAb data are reported as response ratios, in contrast to C201/C202 results, which were reported as Y/N in the clinical database

<sup>3</sup> CP will be reported along with actual sample results

The immunogenicity status prior to drug administration will be derived from the parent trial (ALX0061-C201 or ALX0061-202) screening and baseline sample results (see further). The TE/post-dose response will be evaluated based on samples collected within ALX0061-C203 (OLE) at following timepoints according to schedule of assessment: Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96, Week 104 and

FU or ET visit. In all immunogenicity TFLs organized per timepoint, both parent screening & baseline as well as Week 0 need to be included.

## 9.2 Missing results and data imputation

The mADA assay will only be performed on a subset of samples ('Pre-Ab Pos – Equivocal'). In case no mADA results are reported for a given subject, the corresponding fields in the listing will remain empty and no data imputation is to be done.

The NAb assay will only be performed on a subset of samples (ADA positive samples). In case no NAb results are reported (empty field), the following imputations will be made (imputed values will be followed by “\*\*” in listings):

- No NAb record and corresponding ADA result NEGATIVE: these samples will be considered NEGATIVE and should appear as “NEG\*\*” in listings
- No NAb record and corresponding ADA result Not Analyzed (NA): these samples will be considered “NA” and should appear as “NA\*\*” in listings
- No NAb record and corresponding ADA result POSITIVE or No Result (NR): these samples will be considered “NR” and should appear as “NR\*\*” in listings

## 9.3 Subject classifications (derived parameters)

Subject classification on immunogenicity results (ADA, mADA and NAb) will be based on the assay results (titers or response ratios outlined in [9.1](#)). Subject classifications will be attributed based on all available data for each subject.

One subject will either have three or four subject classifications:

- an ADA subject classification (mandatory)
- a mADA subject classification (optional, only for subjects with ADA classification “Pre-Ab positive – Equivocal”)
- an overall subject classification (combining results of ADA and mADA analysis)
- a NAb subject classification (mandatory, derived from reported and/or imputed results)

Subjects will be classified based on their pre-dose status (i.e. screening and baseline) and treatment-emergent (TE) status (post-dose response). The immunogenicity status prior to drug administration will be derived from the parent trial (ALX0061-C201 or ALX0061-C202) screening and baseline sample results. The TE/post-dose response will be evaluated based on samples collected within ALX0061-C203 at following time points: Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96, Week 104 and FU or ET visit.

### 9.3.1 ADA subject classification

All available ADA assay results (positive or negative) per subject will be evaluated and subjects will be classified based on a combined statement on pre-Ab status (pre-Ab neg or pre-Ab pos, to be derived from parent trial) and the TE ADA response (TE neg, TE pos, Equivocal (EQ) or inconclusive) as outlined in [Table 2](#).

For each subject, one ADA subject classification will be determined. This implies that in the listing subject classification will be identical for all ADA visits of the given subject.

**Table 2: ADA subject classification**

ADA subject class	Evaluation based on all ADA assay results (titer) of the respective subject	
	Pre-Ab status evaluated on screening and baseline sample of parent trial	TE ADA Response evaluated based on Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96, Week 104 and FU or ET visit
PRE-AB NEG - TE ADA NEG	All pre-dose samples negative	All post-dose samples ADA negative
PRE-AB NEG - TE ADA POS	All pre-dose samples negative	At least one positive ADA sample(s) post-dose
PRE-AB NEG - TE ADA INCONCLUSIVE	All pre-dose samples negative	All post-dose samples(/results) are missing
PRE-AB POS - TE ADA NEG	One or more of the pre-dose samples is positive	All post-dose samples are ADA negative
PRE-AB POS - TE ADA POS	One or more of the pre-dose samples is positive	Significant increase in titer post-dose versus pre-dose*
PRE-AB POS - EQ	One or more of the pre-dose samples is positive	Positive ADA sample(s) post-dose and no significant increase in titer post-dose versus pre-dose*
PRE-AB POS - TE ADA INCONCLUSIVE	One or more of the pre-dose samples is positive	All post-dose samples(/results) are missing
MISSING	No pre-dose samples are available	N/A

\* The titer is considered to be significantly increased post-dose, if the highest post-dose titer compared to the highest pre-dose titer is higher than the ADA MSR value: the increase of the  $\log_{10}(\text{titer})$  post- versus pre-dose should be  $> \log_{10}(\text{MSR})$ .

### 9.3.2 mADA subject classification

All available mADA assay results (positive or negative) per subject will be evaluated and subjects will be classified based on a combined statement on pre-Ab status (pre-Ab neg or pre-Ab pos, to be derived from parent trial) and the TE ADA response (TE neg, TE pos, EQ or inconclusive) as outlined in Table 3.

For each subject tested in the mADA assay (i.e. "PRE-AB POS - EQ" subjects based on ADA assessment), one mADA subject classification will be determined. This implies that in the listing this will be identical for all ADA visits of the given subject. In case the subject was not tested in the mADA assay, corresponding fields in the listing will remain empty.

**Table 3: mADA subject classification**

mADA subject class	Evaluation based on all mADA assay results (titer) of the respective subject	
	Pre-Ab status evaluated on screening and baseline of parent trial	TE ADA Response evaluated based on Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96, Week 104 and FU or ET visit
PRE-AB NEG - TE ADA NEG	All pre-dose samples negative	All post-dose samples ADA negative
PRE-AB NEG - TE ADA POS	All pre-dose samples negative	At least one positive ADA sample(s) post-dose
PRE-AB NEG - TE ADA INCONCLUSIVE	All pre-dose samples negative	All post-dose samples(/results) are missing

PRE-AB POS - TE ADA NEG	One or more of the pre-dose samples is positive	All post-dose samples ADA negative
PRE-AB POS - TE ADA POS	One or more of the pre-dose samples is positive	Significant increase in titer post-dose versus pre-dose*
PRE-AB POS - EQ	One or more of the pre-dose samples is positive	Positive ADA sample(s) post-dose and no significant increase in titer post-dose versus pre-dose*
PRE-AB POS - TE ADA INCONCLUSIVE	One or more of the pre-dose samples is positive	All post-dose samples(/results) are missing
MISSING	No pre-dose samples are available	N/A

\* The titer is considered to be significantly increased post-dose, if the highest post-dose titer compared to the highest pre-dose titer is higher than the mADA MSR value: the increase of the  $\log_{10}(\text{titer})$  post- versus pre-dose should be  $> \log_{10}(\text{MSR})$ .

### 9.3.3 Overall subject classification

Overall subject classification will be determined based on the combined results of ADA and/or mADA analysis. The classification is identical to the ADA subject classification, except for subjects classified as "pre-Ab pos - EQ" based on ADA assay results which are further evaluated in the mADA assay. For those subjects, a re-classification is done based on combined ADA and mADA assay. This is illustrated in [Table 4](#). For each subject, one overall subject classification is to be assigned. This implies that in the listing the overall subject classification will be identical for all ADA visits of the given subject.

**Table 4: ADA, mADA and Overall subject classification**

ADA subject classification	mADA subject classification	Overall subject classification
Missing	-	Missing
PRE-AB NEG - TE ADA NEG	-	PRE-AB NEG - TE ADA NEG
PRE-AB NEG - TE ADA POS	-	PRE-AB NEG - TE ADA POS
PRE-AB NEG - TE ADA INCONCLUSIVE	-	PRE-AB NEG - TE ADA INCONCLUSIVE
PRE-AB POS - TE ADA NEG	-	PRE-AB POS - TE ADA NEG
PRE-AB POS - TE ADA POS	-	PRE-AB POS - TE ADA POS
PRE-AB POS - TE ADA INCONCLUSIVE	-	PRE-AB POS - TE ADA INCONCLUSIVE
PRE-AB POS - EQ	Missing	PRE-AB POS - EQ
	PRE-AB NEG - TE ADA NEG	PRE-AB POS - EQ
	PRE-AB NEG - TE ADA POS	PRE-AB POS - TE ADA POS
	PRE-AB NEG - TE ADA INCONCLUSIVE	PRE-AB POS - EQ
	PRE-AB POS - TE ADA POS	PRE-AB POS - TE ADA POS
	PRE-AB POS - TE ADA INCONCLUSIVE	PRE-AB POS - EQ
	PRE-AB POS - TE ADA NEG	PRE-AB POS - EQ
	PRE-AB POS - EQ	PRE-AB POS - EQ

### 9.3.4 NAb subject class

All available NAb assay results (\*) (positive or (imputed) negative) per subject will be evaluated and subjects will be classified based on a combined statement on pre-dose status (pre-dose neg or pre-dose pos, to be derived from parent trial) and the post-dose response (negative, positive or inconclusive) as outlined in [Table 5](#).

(\*) Note that for the pre-dose Nab results (screening and baseline) from the parent trials (ALX0061-C201 or ALX0061-C202) 'Y' (Yes) should be imputed to POS and 'N' (No) should be imputed to NEG.

For each subject, one NAb subject classification is to be determined. This implies that in the listing this will be identical for all NAb visits of the given subject. For subjects with no positive ADA samples, the NAb results were imputed as "NEG\*", and the NAb subject class will be "PRE-DOSE NEG - NEG ON TREATMENT". The latter also has to appear in the Listing.

**Table 5: NAb subject classification**

NAb subject class	Evaluation based on all NAb assay results (titer) of the respective subject	
	Pre-dose status evaluated on screening and baseline of parent trial	Response on treatment evaluated based on Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96, Week 104 and FU or ET visit
PRE-DOSE NEG - NEG ON TREATMENT	All pre-dose samples negative (reported or imputed)	All post-dose samples are negative (reported or imputed)
PRE-DOSE NEG - POS ON TREATMENT	All pre-dose samples negative (reported or imputed)	At least one positive sample(s) post-dose
PRE-DOSE POS - NEG ON TREATMENT	One or more of the pre-dose samples is positive	All post-dose samples are negative (reported or imputed)
PRE-DOSE POS - POS ON TREATMENT	One or more of the pre-dose samples is positive	At least one positive sample(s) post-dose
PRE-DOSE NEG - INCONCLUSIVE	All pre-dose samples negative (reported or imputed)	All post-dose samples(/results) are missing
PRE-DOSE POS - INCONCLUSIVE	One or more of the pre-dose samples is positive	All post-dose samples(/results) are missing
MISSING	No pre-dose (and/or post-dose) samples are available	No pre-dose (and/or post-dose) samples are available

## 9.4 Pre-Ab prevalence and TE ADA Incidence calculations

### 9.4.1 Incidence of ADA and derived sets

The following subject categories (1-8) and derived sets (9-15) will be used in the ADA incidence tables:

1. PRE-AB NEG - TE ADA NEG
2. PRE-AB NEG - TE ADA POS
3. PRE-AB NEG - TE ADA INCONCLUSIVE
4. PRE-AB POS - TE ADA NEG
5. PRE-AB POS - TE ADA POS
6. PRE-AB POS - EQ
7. PRE-AB POS - TE ADA INCONCLUSIVE

8. MISSING
9. TOTAL PRE-AB NEG (equals 1 + 2 + 3)
10. TOTAL PRE-AB POS (equals 4 + 5 + 6 + 7)
11. TOTAL TE ADA NEG (equals 1 + 4)
12. TOTAL TE ADA POS (equals 2 + 5)
13. TOTAL TE INCONCLUSIVE (3 + 7)
14. TE POS within PRE-AB NEG POPULATION (equals 2/9)
15. TE POS within PRE-AB POS POPULATION (equals 5/10)

Incidences will be shown per treatment group. The number of subjects (s) in each subject category or derived set (excluding 14-15) is divided by the number of subjects (n) within each treatment group, excluding the subjects who are classified as missing. Incidences are shown as s/n (%), with the calculated percentage added in between brackets.

#### **9.4.2 *Incidence of mADA subject classes and derived sets***

The same subject categories (1-8) and derived sets (9-15) as shown above in [9.4.1](#) will be presented in the mADA incidence table, but the denominator to calculate incidences differs.

Incidences will be shown per treatment group. The number of subjects (s) in each subject category or derived set (excluding 14-15) is divided by the number of subjects (n) within each treatment group which were characterized in mADA assay (i.e. “PRE-AB POS – EQ” in ADA assay), excluding the subjects who are classified as missing. Incidences are shown as s/n (%), with the calculated percentage added in between brackets.

#### **9.4.3 *Incidence of overall subject classification (ADA, mADA results) and derived sets***

The following subject categories (1-8) and derived sets (9-13) will be used in the overall incidence tables:

1. PRE-AB NEG - TE ADA NEG
2. PRE-AB NEG - TE ADA POS
3. PRE-AB NEG - TE ADA INCONCLUSIVE
4. PRE-AB POS - TE ADA NEG
5. PRE-AB POS - TE ADA POS
6. PRE-AB POS - EQ
7. PRE-AB POS – TE ADA INCONCLUSIVE
8. MISSING
9. TOTAL PRE-AB NEG (equals 1 + 2 + 3)
10. TOTAL PRE-AB POS (equals 4 + 5 + 6 + 7)
11. TOTAL TE ADA NEG (equals 1 + 4)
12. TOTAL TE ADA POS (equals 2 + 5)
13. TOTAL TE INCONCLUSIVE (3 + 7)
14. TE POS within PRE-AB NEG POPULATION (equals 2/9)
15. TE POS within PRE-AB POS POPULATION (equals 5/10)

Incidences will be shown per treatment group. The number of subjects (s) in each subject category or derived set (excluding 14-15) is divided by the number of subjects (n) within each treatment group, excluding the subjects who are classified as missing. Incidences are shown as s/n (%), with the calculated percentage added in between brackets.

#### **9.4.4 Incidence of NAb subject classes and derived sets**

The following subject categories (1-7) and derived sets (8-14) will be used in the mADA incidence tables:

1. PRE-DOSE NEG - NEG ON TREATMENT
2. PRE-DOSE NEG - POS ON TREATMENT
3. PRE-DOSE POS - NEG ON TREATMENT
4. PRE-DOSE POS - POS ON TREATMENT
5. PRE-DOSE NEG - INCONCLUSIVE
6. PRE-DOSE POS - INCONCLUSIVE
7. MISSING
8. TOTAL PRE-DOSE NEG (equals 1 + 2 + 5)
9. TOTAL PRE-DOSE POS (equals 3 + 4 + 6)
10. TOTAL NEG ON TREATMENT (equals 1 + 3)
11. TOTAL POS ON TREATMENT (equals 2 + 4)
12. TOTAL INCONCLUSIVE (5 + 6)
13. POS ON TREATMENT within PRE-DOSE NEG POPULATION (equals 2/8)
14. POS ON TREATMENT within PRE-DOSE POS POPULATION (equals 4/9)

Incidences will be shown per treatment group. The number of subjects (s) in each subject category or derived set (excluding 13-14) is divided by the number of subjects (n) within each treatment group, excluding the subjects who are classified as missing. Incidences are shown as s/n (%), with the calculated percentage added in between brackets.

#### **9.4.5 Safety subgroup analysis**

For the following subgroups, the incidence rates will be determined of the different overall subject classifications (1-8) as listed in 9.4.3.

- Injection-site reaction
  - No injection-site reaction
  - At least 1 injection-site reaction
- Hypersensitivity reaction
  - No hypersensitivity reaction
  - At least 1 hypersensitivity reaction

#### **9.4.6 ADA and NAb incidence over time**

For ADA and NAb data, incidence of positive samples over time will be calculated. Positivity needs to be deducted based on reported titer values (ADA) or response ratio (NAb), as clarified in [Table 1](#). Incidence calculation should account for subject drop-out: for each visit, the number of positive samples is divided by the available results for the given visit (positive + negative samples (reported and/or imputed), excluding missing values (NA & NR)). The latter should be clarified in a footnote of the concerning tables.

## **10 INTERIM ANALYSES**

No interim analysis are foreseen.

## **11 CHANGE FROM ANALYSIS PLANNED IN PROTOCOL**

The subgroup analysis for efficacy according to the protocol included demographics (including weight and region), baseline disease characteristics, and baseline and prior medications, but will be limited to age category and geographic region.

A second sensitivity analysis will be done for efficacy based on NRI for the categorical endpoints analysed in the first sensitivity analysis.

The protocol mentions a subgroup analysis for safety which will not be performed.

The protocol states descriptive statistics will be used to summarize changes from baseline, but model-based, baseline-adjusted LS means and 95% CI will be used for efficacy endpoints.

## **12 CONVENTIONS**

### **12.1 Analysis Phases and Visit Windows**

#### ***12.1.1 Algorithm of allocating visits to time windows***

All assessments (including unscheduled assessments) will be placed into time windows according to their relative day (DY) in the study, according to the following allocation table:

Time point label	Target day	Interval lower bound	Interval upper bound
Week 4	29	1	43
Week 8	57	44	71
Week 12	85	72	126
Week 24	169	141	197
Week 36	253	225	281

Time point label	Target day	Interval lower bound	Interval upper bound
Week 48	337	309	365
Week 60	421	393	449
Week 72	505	477	533
Week 84	589	561	617
Week 96	673	645	700
Week 104	729	701	Week 102 visit date + 28 days
Follow-up		Last treatment date + 29 days	+INF

The definition of the time window for “Follow-up” implies that for Week 4 to Week 104 assessments, if the assessment or sample date is more than 28 days after the last dose of treatment, the assessment will be mapped to the Follow-up visit. If the assessment or sample date is less than or equal to 28 days after the last dose of treatment (including for assessments or samples taken at the early termination visit, if this condition holds), the assessment will be mapped to the corresponding analysis visit, in case it falls within the interval lower and upper bound for this analysis visit.

Baseline is defined in section 4.2.1.

Tables, figures and listings will present the time points as defined above, not the case report form (CRF) visits.

### **12.1.2 Selection of visits**

It is possible that more than one visit gets allocated into the same time window. In that case, only one visit will be selected for analysis tables and figures. The nonselected visit(s) will only be listed. In case an assessment gets allocated to a time window at which the assessment was not scheduled as per protocol, this assessment will not be shown in the tables or figures but will only be listed.

The visit with a DY closest to the target day will be selected. In case of ties on the same day with time not available, the assessment linked with the CRF visit will be selected for analysis.

In case more than one parameter is measured per time point (e.g. for lab), the selection is performed per parameter and per time point, not per “sample” and per time point. Missing values are removed before the selection is made.

## 12.2 General characteristics

### 12.2.1 Derivation of exposure parameters

The following exposure parameters will be derived:

- Total treatment duration = date of last study drug administration – date of first study drug administration in C203 + 14 days
- Total number of study drug doses received during C203
- Cumulative dose of study drug received: total dose of study drug in mg administered during C203
- Compliance =  $100 * (\text{total number of study drug doses actually received during C203}) / (\text{expected number of study drug doses during C203})$

Where the expected number of study drug doses is calculated as follows:

- For subjects completing the study: 52
- For subjects prematurely discontinuing the study: 1 baseline dose + integer of  $(\text{date of last study drug administration} - \text{date of first study drug administration in C203}) / 14$

## 12.3 Efficacy

The following assessments will be used to derive the efficacy parameters:

- Physician's assessment of tender/painful and swollen joint count: 68 joints are assessed for tenderness (TJC) and 66 joints are assessed for swelling (SJC). Joints that underwent intra-articular (IA) corticosteroid injection during the last 4 weeks will be considered as swollen and tender. Only joints that were ticked 'Yes' will be taken into account. Left and right will be summed to obtain one overall joint count.
- Physician's assessment of tender/painful and swollen joint count, selected: a selection of 28 joints are assessed for tenderness (TJC28) and for swelling (SJC28)
- Average duration of morning stiffness
- Patient's assessment of pain (100 mm) (VAS)
- Patient's global assessment of disease activity (100 mm) (VASPA)
- Physician's global assessment of disease activity (100 mm) (VASPHA)
- C-reactive protein concentration (mg/L) (CRP)
- Erythrocyte sedimentation rate (mm/h) (ESR)

- HAQ-DI (/60): 20-question instrument to assess the degree of difficulty to accomplish tasks in 8 functional areas (dressing and grooming, hygiene, arising, reach, eating, grip, walking, common daily activities) over the previous week. Responses for each question range from 0 (no difficulty) to 3 (unable to do). The score is calculated in 3 steps:
  - Derivation of the 8 category scores, by selecting the highest sub-category score
  - Adjusting for use of aids/devices and/or help from another person: scores of 0 or 1 will then be increased to 2
  - Calculating the mean of the category scores. In case less than 6 category scores are available, the HAQ-DI score will not be computed.
- SF-36 questionnaire: 36 item questionnaire that can be summarized into 8 domains (physical functioning, role limitations due to physical health problems, bodily pain, general health, vitality, social functioning, role limitations due to emotional problems, mental health) and into 2 summary measures (physical component and mental component). Version 2 of the questionnaire was used (see Section 16.6. Appendix 6)
- FACIT-F: quality of life (QOL) questionnaire consisting of 40 questions ranging from 0 to 4, grouped in 5 domains (physical well-being, social/family well-being, emotional well-being, functional well-being and fatigue). Scoring guidelines to derive subscores and total scores can be found in section 16.4.

Based on the above assessments, the following parameters will be derived:

- ACR20 response:
  - YES if ALL of the following criteria are fulfilled:
    - % improvement relative to baseline in tender/painful joint count  $\geq 20\%$
    - % improvement relative to baseline in swollen joint count  $\geq 20\%$
    - % improvement relative to baseline  $\geq 20\%$  for at least 3 of the following assessments: patient's assessment of pain, patient's global assessment of disease activity, physician's global assessment of disease activity, HAQ-DI, CRP
  - NO if not all of the above criteria are fulfilled
  - Handling of missing values:
    - if TJC or SJC are missing, ACR response will be missing
    - if any of patient's assessment of pain, patient's global assessment of disease activity, physician's global assessment of disease activity, HAQ-DI or CRP are missing, but at least 3 have a change from baseline  $\geq 20\%$  or at least 3 have a change from baseline  $< 20\%$ , ACR response can be derived, otherwise it will be missing.
- ACR50 response: definition similar to ACR20 response, but using 50% as cut-off
- ACR70 response: definition similar to ACR20 response, but using 70% as cut-off

- ACR-N index of improvement: minimum of the following 3 criteria:
  - % improvement relative to baseline in tender/painful joint count
  - % improvement relative to baseline in swollen joint count
  - Median % improvement relative to baseline of the following assessments: patient's assessment of pain, patient's global assessment of disease activity, physician's global assessment of disease activity, HAQ-DI, CRP
- $DAS28(ESR) = (0.56 \times \sqrt{TJC28}) + (0.28 \times \sqrt{SJC28}) + (0.70 \times \ln[ESR]) + (0.014 \times VASPA)$ , with VASPA measured in mm
- $DAS28(CRP) = (0.56 \times \sqrt{TJC28}) + (0.28 \times \sqrt{SJC28}) + (0.36 \times \ln[CRP + 1]) + (0.014 \times VASPA) + 0.96$ , with VASPA measured in mm and CRP in mg/L
- EULAR response is defined as follows based on the actual value of DAS28 (DAS28) in both ESR and CRP and the change from baseline in DAS28 ( $\Delta DAS28$ ) in both ESR and CRP:
  - Good response:  $\Delta DAS28 > 1.2 \text{ AND } DAS28 \leq 3.2$
  - Moderate response ( $\Delta DAS28 > 1.2 \text{ AND } DAS28 > 3.2$ ) OR ( $0.6 < \Delta DAS28 \leq 1.2 \text{ AND } DAS28 \leq 5.1$ )
  - No response ( $\Delta DAS28 \leq 0.6$ ) OR ( $0.6 < \Delta DAS28 \leq 1.2 \text{ AND } DAS28 > 5.1$ )
  - Pooled category Moderate+Good will be shown as well.
- Disease activity is defined as follows based on the actual value of DAS28(ESR):
  - Remission:  $DAS28(ESR) < 2.6$
  - Low disease activity:  $2.6 \leq DAS28(ESR) \leq 3.2$
  - Moderate disease activity:  $3.2 < DAS28(ESR) \leq 5.1$
  - High disease activity:  $DAS28(ESR) > 5.1$
  - Pooled category Remission + Low disease activity will be shown as well
- Disease activity is defined as follows based on the actual value of DAS28(CRP):
  - $DAS28(CRP) < 2.6$
  - Low disease activity:  $2.6 \leq DAS28(CRP) \leq 3.2$
  - Moderate disease activity:  $3.2 < DAS28(CRP) \leq 5.1$
  - High disease activity:  $DAS28(CRP) > 5.1$
  - Pooled category  $DAS28(CRP) < 2.6$  + Low disease activity will be shown as well
- Boolean remission is defined as follows:
  - Yes:  $TJC28 \leq 1 \text{ AND } SJC28 \leq 1 \text{ AND } VASPA \leq 1 \text{ cm AND } CRP \leq 1 \text{ mg/dL}$
  - No: else
- Clinically meaningful improvement in HAQ-DI (clinically meaningful improvement from baseline – absolute change) is defined as follows:
  - Yes:  $\Delta HAQDI \geq 0.25$
  - No:  $\Delta HAQDI < 0.25$

- Normal physical function based on HAQ-DI is defined as follows:
  - Yes:  $HAQDI \leq 0.5$
  - No:  $HAQDI > 0.5$
- CDAI score = TJC28 + SJC28 + VASPA (cm) + VASPHA (cm)
- CDAI classification:
  - Remission:  $CDAI \leq 2.8$
  - Low disease activity:  $2.8 < CDAI \leq 10$
  - Moderate disease activity:  $10 < CDAI \leq 22$
  - High disease activity:  $22 < CDAI$
  - Pooled category Remission+Low disease activity will be shown as well
- SDAI score = TJC28 + SJC28 + VASPA (cm) + VASPHA (cm) + CRP (mg/dL)
- SDAI classification:
  - Remission:  $SDAI \leq 3.3$
  - Low disease activity:  $3.3 < SDAI \leq 11$
  - Moderate disease activity:  $11 < SDAI \leq 26$
  - High disease activity:  $26 < SDAI$
  - Pooled category Remission+Low disease activity will be shown as well
- Maintained remission at Week x: remission at Week x and all consecutive time points.

MTX and corticosteroid dose related endpoints will be derived as follows:

- MTX dose decrease from baseline at W0, W48 and W104:
  - Yes: daily dose at Week 0/ Week 48 / Week 104 visit < baseline dose
  - No: else
- Discontinuation of MTX dose at W0, W48 and W104:
  - Yes: daily dose at Week 0/ Week 48 / Week 104 visit = 0
  - No: else
- Change from baseline of MTX dose at Week 0/ Week 48 / Week 104
- Change from baseline of corticosteroid dose at Week 0/ Week 48 / Week 104

## 12.4 Safety

### 12.4.1 Adverse events

AE onset day and AE duration are defined as follows:

AE onset day

- AE start date – date of first study drug intake in C203 + 1 day (when the AE start date is completely known)
- missing (when the AE start date is incomplete or unknown).

#### AE duration

- AE stop date – AE start date + 1 day (when both dates are completely known)
- trial termination date – AE start date + 1 day (when the AE start date is fully known but the AE is not resolved at the end of the trial): in this case the duration will be presented as “>x days” in the listing rather than “x days”
- missing (when the AE start date is incomplete or unknown, or when the AE has resolved but with an incomplete or unknown end date).

#### 12.4.2 Laboratory

Values will be scored as abnormally low (L), normal (N) or abnormally high (H). A value is classified as abnormally low when the value < lower limit of the normal range. A value is classified as abnormally high when the value > upper limit of the normal range. Tests without normal ranges will not be scored.

An original value like “<X” where X equals the lower limit of the normal range will be classified as abnormally low (L). An original value like “>X” where X equals the upper limit of the normal range will be classified as abnormally high (H).

Urinalysis tests for which a normal range is available, will also be categorized as L, N, or H. If there is doubt on whether the result is within normal range or not, the worst-case will be taken. E.g., when the test result equals “4 to 6” and the normal range is 0-5, then the test result will be classified as abnormally high (H) if it is a post-baseline visit, and will be classified as normal (N) if it is a baseline visit. In such cases, the original urinalysis test result will not be used for the tables, but will only be listed. Urinalysis tests for which no normal range is available, will be tabulated separately as categorical data.

All nonmissing post-baseline values (including unscheduled measurements and follow-up measurements) will be used to derive the following worst-case abnormalities for each parameter:

- H = abnormally high: at least one postdose measurement is above the normal range, and there are no values below the normal range.
- L = abnormally low: at least one postdose measurement is below the normal range, and there are no values above the normal range.
- H+L = abnormally high and low: at least one postdose measurement is above the normal range, and at least one other postdose measurement is below the normal range.
- N = normal: all postdose measurements are within normal limits.

### 13 INDEX OF TABLES

#### 13.1 General

##### **Table 14.1.1.1: Subject disposition: Tabulation by analysis population**

Tabulation of the number of subjects in each of the analysis populations defined in section 4.1.

Population: all screened population.

**Table 14.1.1.2: Subject disposition: Tabulation by region and country**

Tabulation of the number of subjects per region and country.

Population: ITO population.

**Table 14.1.1.3: Subject disposition: Tabulation by time point**

Tabulation of the number of subjects per time point.

Population: ITO population.

**Table 14.1.1.4: Trial termination: Tabulation**

Tabulation of study completion / study discontinuations and the primary reason for discontinuation.

Population: ITO population.

**Table 14.1.1.5: Major protocol deviations: Tabulation**

Tabulation of the major protocol deviations per category including Selection criteria not met / Subject not withdrawn as per protocol / Prohibited concomitant medication / Treatment non-compliance / Safety assessment deviation / Efficacy assessment deviation / Other.

Population: ITO population.

**Table 14.1.2.1: Demographic data: Tabulation and descriptive statistics**

Descriptive statistics for continuous parameters and frequency tabulation for categorical parameters.

Population: ITO population.

**Table 14.1.2.2: Baseline disease characteristics: Tabulation and descriptive statistics**

Descriptive statistics for continuous parameters and frequency tabulation for categorical parameters.

Population: ITO population.

**Table 14.1.2.3: Tabulation of RA related concomitant therapies by generic term**

Tabulation of the generic terms of RA related concomitant therapies.

Population: safety population.

**Table 14.1.2.4: Tabulation of non-RA related concomitant therapies by generic term**

Tabulation of the generic terms of non-RA related concomitant therapies.

Population: safety population.

**Table 14.1.2.5: Exposure to study medication: Descriptive statistics**

Descriptive statistics of exposure parameters except home administration, including compliance.

Population: safety population.

**Table 14.1.2.6: Exposure to study medication: Home administration**

Tabulation of any study drug administration received at home (yes/no) and of all study drug administrations received at home, except those received during a scheduled study visit (yes/no).

Population: safety population.

## 13.2 Efficacy

### **Table 14.2.1.1.1: ACR response - ACR20 response**

Frequency tabulation of the ACR20 response at each time point, including a Wilson score 95% CI on the percentage of subjects achieving ACR20 response.

Population: ITO.

### **Table 14.2.1.1.2: ACR response - ACR50 response**

Frequency tabulation of the ACR50 response at each time point, including a Wilson score 95% CI on the percentage of subjects achieving ACR50 response.

Population: ITO.

### **Table 14.2.1.1.3: ACR response - ACR70 response**

Frequency tabulation of the ACR70 response at each time point, including a Wilson score 95% CI on the percentage of subjects achieving ACR70 response.

Population: ITO.

### **Table 14.2.1.1.4: ACR response - ACR-N index of improvement**

Descriptive statistics of the ACR-N index actual values at each time point.

Population: ITO.

### **Table 14.2.1.2.1: DAS28 Score – Actual values and change from baseline**

Descriptive statistics of the DAS28(CRP) and the DAS28(ESR) score actual values and change from baseline at each time point. Additionally, the change from baseline at each time point will be modelled using an ANCOVA model with treatment group and baseline DAS28 score as covariates and the LS means with 95% CI will be reported.

Population: ITO.

### **Table 14.2.1.2.2: DAS28 Score – EULAR (using CRP and using ESR) response**

Frequency tabulation of the EULAR response, based on the DAS28(CRP) and the DAS28(ESR) score at each time point, including a Wilson score 95% CI on the percentage of subjects achieving EULAR response.

Population: ITO.

### **Table 14.2.1.2.3: DAS28 Score – Disease activity (ESR)**

Frequency tabulation of the disease activity, based on the DAS28(ESR) score at each time point, including a Wilson score 95% CI on the percentage of subjects achieving LDA/remission, remission and maintained remission.

Population: ITO.

### **Table 14.2.1.2.4: DAS28 Score – Disease activity (CRP)**

Frequency tabulation of the disease activity, based on the DAS28(CRP) score at each time point, including a Wilson score 95% CI on the percentage of subjects achieving DAS28(CRP)  $\leq 3.2$ , DAS28(CRP)  $< 2.6$  and maintained DAS28(CRP)  $< 2.6$ .

Population: ITO.

**Table 14.2.1.3.1: Boolean disease remission definition**

Frequency tabulation of the disease remission, based on the Boolean definition at each time point, including a Wilson score 95% CI on the percentage of subjects achieving remission and maintained remission.

Population: ITO.

**Table 14.2.1.4.1: CDAI Score – Actual values and change from baseline**

Descriptive statistics of the CDAI score actual values and change from baseline at each time point. Additionally, the change from baseline at each time point will be modelled using an ANCOVA model with treatment group and baseline CDAI score as covariates and the LS means with 95% CI will be reported.

Population: ITO.

**Table 14.2.1.4.2: CDAI Score – Disease activity**

Frequency tabulation of the disease activity, based on the CDAI score at each time point, including a Wilson score 95% CI on the percentage of subjects achieving LDA/remission, remission and maintained remission.

Population: ITO.

**Table 14.2.1.5.1: SDAI Score – Actual values and change from baseline**

Descriptive statistics of the SDAI score actual values and change from baseline at each time point. Additionally, the change from baseline at each time point will be modelled using an ANCOVA model with treatment group and baseline SDAI score as covariates and the LS means with 95% CI will be reported.

Population: ITO.

**Table 14.2.1.5.2: SDAI Score – Disease activity**

Frequency tabulation of the disease activity, based on the SDAI score at each time point, including a Wilson score 95% CI on the percentage of subjects achieving LDA/remission, remission and maintained remission.

Population: ITO.

**Table 14.2.1.6.1: HAQ-DI Score – Actual values and change from baseline**

Descriptive statistics of the HAQ-DI score actual values and change from baseline at each time point. Additionally, the change from baseline at each time point will be modelled using an ANCOVA model with treatment group and baseline HAQ-DI score as covariates and the LS means with 95% CI will be reported.

Population: ITO.

**Table 14.2.1.6.2: HAQ-DI Score – Clinically meaningful improvement**

Frequency tabulation of the clinically meaningful improvement, based on the HAQ-DI score ( $\Delta HAQDI \geq 0.25$ ) at each time point, including a Wilson score 95% CI on the percentage of subjects with HAQ-DI response.

Population: ITO.

**Table 14.2.1.6.3: HAQ-DI Score – Normal physical function**

Frequency tabulation of normal physical function, based on the HAQ-DI score ( $HAQDI \leq 0.5$ ) at each time point, including a Wilson score 95% CI on the percentage of subjects achieving normal physical function.

Population: ITO.

**Table 14.2.1.7.1: SF-36 – Physical and mental component scores - Actual values and change from baseline**

Descriptive statistics of the physical and mental component scores actual values and change from baseline at each time point. Additionally, the change from baseline at each time point will be modelled using an ANCOVA model with treatment group and baseline score as covariates and the LS means with 95% CI will be reported.

Population: ITO.

**Table 14.2.1.8.1: FACIT-F – Actual values and change from baseline**

Descriptive statistics of the FACIT-F total score and scores of subscales actual values and change from baseline at each time point. Additionally, the change from baseline at each time point will be modelled using an ANCOVA model with treatment group and baseline FACIT-F score as covariates and the LS means with 95% CI will be reported.

Population: ITO.

**Table 14.2.1.9.1: Duration of morning stiffness – Actual values and change from baseline**

Descriptive statistics of the duration of morning stiffness actual values and change from baseline at each time point. Additionally, the change from baseline at each time point will be modelled using an ANCOVA model with treatment group and baseline duration as covariates and the LS means with 95% CI will be reported.

Population: ITO.

**Table 14.2.1.10.1: VAS scales – Actual values and change from baseline**

Descriptive statistics of the patient's assessment of pain VAS, patient's global assessment of disease activity VAS and the physician's global assessment of disease activity VAS actual values and change from baseline at each time point. Additionally, the change from baseline at each time point will be modelled using an ANCOVA model with treatment group and baseline VAS as covariates and the LS means with 95% CI will be reported.

Population: ITO.

**Table 14.2.1.11.1: CRP and ESR – Actual values and change from baseline**

Descriptive statistics of CRP and ESR concentrations actual values and change from baseline at each time point. Additionally, the change from baseline at each time point will be modelled using an ANCOVA model with treatment group and baseline CRP/ESR as covariates and the LS means with 95% CI will be reported.

Population: ITO.

**Table 14.2.1.12.1: TJC and SJC – Actual values and change from baseline**

Descriptive statistics of tender joint counts and swollen joint counts actual values and change from baseline at each time point. Additionally, the change from baseline at each

time point will be modelled using an ANCOVA model with treatment group and baseline TJC/SJC count as covariates and the LS means with 95% CI will be reported.

Population: ITO.

**Table 14.2.1.13.1: RA therapy reduction – MTX dose reduction**

Frequency tabulation of MTX dose reduction at 1 and 2 years, including a Wilson score 95% CI on the percentage of subjects achieving MTX dose reduction.

Population: ITO.

**Table 14.2.1.13.2: RA therapy reduction – MTX discontinuation**

Frequency tabulation of MTX discontinuation at 1 and 2 years, including a Wilson score 95% CI on the percentage of subjects discontinuing MTX.

Population: ITO.

**Table 14.2.1.13.3: RA therapy reduction – Actual values and change from baseline in MTX dose**

Descriptive statistics of the actual values and change from baseline in MTX dose at 1 and 2 years. Additionally, the change from baseline at each time point will be modelled using an ANCOVA model with treatment group and baseline MTX dose as covariates and the LS means with 95% CI will be reported.

Population: ITO.

**Table 14.2.1.13.4: RA therapy reduction – Actual values and change from baseline in corticosteroids dose**

Descriptive statistics of the actual values and change from baseline in prednisolone equivalent corticosteroids dose at 1 and 2 years. Additionally, the change from baseline at each time point will be modelled using an ANCOVA model with treatment group and baseline prednisolone equivalent corticosteroids dose as covariates and the LS means with 95% CI will be reported.

Population: ITO.

**Table 14.2.2.1.1: ACR response - ACR20 response – Last observation carried forward (LOCF)**

Frequency tabulation of the ACR20 response at each time point, including a Wilson score 95% CI on the percentage of subjects achieving ACR20 response.

Population: ITO.

**Table 14.2.2.1.2: ACR response - ACR50 response – Last observation carried forward (LOCF)**

Frequency tabulation of the ACR50 response at each time point, including a Wilson score 95% CI on the percentage of subjects achieving ACR50 response.

Population: ITO.

**Table 14.2.2.1.3: ACR response - ACR70 response – Last observation carried forward (LOCF)**

Frequency tabulation of the ACR70 response at each time point, including a Wilson score 95% CI on the percentage of subjects achieving ACR70 response.

Population: ITO.

**Table 14.2.2.2.1: DAS28 Score – Actual values and change from baseline – Last observation carried forward (LOCF)**

Descriptive statistics of the DAS28(CRP) and the DAS28(ESR) score actual values and change from baseline at each time point. Additionally, the change from baseline at each time point will be modelled using an ANCOVA model with treatment group and baseline DAS28 score as covariates and the LS means with 95% CI will be reported.

Population: ITO.

**Table 14.2.2.2.2: DAS28 Score – Disease activity (ESR) – Last observation carried forward (LOCF)**

Frequency tabulation of the disease activity, based on the DAS28(ESR) score at each time point, including a Wilson score 95% CI on the percentage of subjects achieving LDA/remission, remission and maintained remission.

Population: ITO.

**Table 14.2.2.2.3: DAS28 Score – Disease activity (CRP) – Last observation carried forward (LOCF)**

Frequency tabulation of the disease activity, based on the DAS28(CRP) score at each time point, including a Wilson score 95% CI on the percentage of subjects achieving DAS28(CRP)  $\leq$  3.2, DAS28(CRP)  $<$  2.6 and maintained DAS28(CRP)  $<$  2.6.

Population: ITO.

**Table 14.2.3.1.1: ACR response - ACR20 response – Non-responder imputation (NRI)**

Frequency tabulation of the ACR20 response at each time point, including a Wilson score 95% CI on the percentage of subjects achieving ACR20 response.

Population: ITO.

**Table 14.2.3.1.2: ACR response - ACR50 response – Non-responder imputation (NRI)**

Frequency tabulation of the ACR50 response at each time point, including a Wilson score 95% CI on the percentage of subjects achieving ACR50 response.

Population: ITO.

**Table 14.2.3.1.3: ACR response - ACR70 response – Non-responder imputation (NRI)**

Frequency tabulation of the ACR70 response at each time point, including a Wilson score 95% CI on the percentage of subjects achieving ACR70 response.

Population: ITO.

**Table 14.2.3.2.1: DAS28 Score – Disease activity (ESR) – Non-responder imputation (NRI)**

Frequency tabulation of the disease activity, based on the DAS28(ESR) score at each time point, including a Wilson score 95% CI on the percentage of subjects achieving LDA/remission, remission and maintained remission.

Population: ITO.

**Table 14.2.3.2.2: DAS28 Score – Disease activity (CRP) – Non-responder imputation (NRI)**

Frequency tabulation of the disease activity, based on the DAS28(CRP) score at each time point, including a Wilson score 95% CI on the percentage of subjects achieving DAS28(CRP)  $\leq$  3.2, DAS28(CRP)  $<$  2.6 and maintained DAS28(CRP)  $<$  2.6.

Population: ITO.

**Table 14.2.4.1.1: ACR response - ACR20 response by age category**

Frequency tabulation of the ACR20 response by age category, including a Wilson score 95% CI on the percentage of subjects achieving ACR20 response for each treatment group.

Population: ITO.

**Table 14.2.4.1.2: ACR response - ACR50 response by age category**

Frequency tabulation of the ACR50 response by age category, including a Wilson score 95% CI on the percentage of subjects achieving ACR50 response for each treatment group.

Population: ITO.

**Table 14.2.4.1.3: ACR response - ACR70 response by age category**

Frequency tabulation of the ACR70 response by age category, including a Wilson score 95% CI on the percentage of subjects achieving ACR70 response for each treatment group.

Population: ITO.

**Table 14.2.4.2.1: DAS28 Score – Actual values and change from baseline by age category**

Descriptive statistics of the DAS28(CRP) and the DAS28(ESR) score actual values and change from baseline at each time point by age category.

Population: ITO.

**Table 14.2.4.2.2: DAS28 Score – Disease activity (ESR) by age category**

Frequency tabulation of the disease activity, based on the DAS28(ESR) score by age category at each time point, including a Wilson score 95% CI on the percentage of subjects achieving LDA/remission, remission and maintained remission.

Population: ITO.

**Table 14.2.4.2.3: DAS28 Score – Disease activity (CRP) by age category**

Frequency tabulation of the disease activity, based on the DAS28(CRP) score by age category at each time point, including a Wilson score 95% CI on the percentage of subjects achieving DAS28(CRP)  $\leq$  3.2, DAS28(CRP)  $<$  2.6 and maintained DAS28(CRP)  $<$  2.6.

Population: ITO.

**Table 14.2.5.1.1: ACR response - ACR20 response by region**

Frequency tabulation of the ACR20 response by region, including a Wilson score 95% CI on the percentage of subjects achieving ACR20 response for each treatment group.

Population: ITO.

**Table 14.2.5.1.2: ACR response - ACR50 response by region**

Frequency tabulation of the ACR50 response by region, including a Wilson score 95% CI on the percentage of subjects achieving ACR50 response for each treatment group.

Population: ITO.

**Table 14.2.5.1.3: ACR response - ACR70 response by region**

Frequency tabulation of the ACR70 response by region, including a Wilson score 95% CI on the percentage of subjects achieving ACR70 response for each treatment group.

Population: ITO.

**Table 14.2.5.2.1: DAS28 Score – Actual values and change from baseline by region**

Descriptive statistics of the DAS28(CRP) and the DAS28(ESR) score actual values and change from baseline at each time point by region.

Population: ITO.

**Table 14.2.5.2.2: DAS28 Score – Disease activity (ESR) by region**

Frequency tabulation of the disease activity, based on the DAS28(ESR) score by region at each time point, including a Wilson score 95% CI on the percentage of subjects achieving LDA/remission, remission and maintained remission.

Population: ITO.

**Table 14.2.5.2.3: DAS28 Score – Disease activity (CRP) by region**

Frequency tabulation of the disease activity, based on the DAS28(CRP) score by region at each time point, including a Wilson score 95% CI on the percentage of subjects achieving DAS28(CRP)  $\leq$  3.2, DAS28(CRP)  $<$  2.6 and maintained DAS28(CRP)  $<$  2.6.

Population: ITO.

### 13.3 Pharmacokinetics

**Table 14.2.6.1: PK: Descriptive statistics of drug concentrations**

Descriptive statistics of drug concentrations by scheduled sampling time and treatment group.

Population: PK population.

### 13.4 Safety

**Table 14.3.1.1: Treatment-emergent adverse events: Summary table**

Summary table of TEAEs presenting the number of events, the number and percentage of subjects and the incidence per 100 patient years.

Population: safety population.

**Table 14.3.1.2: Treatment-emergent adverse events: Summary table including TEAEs from the parent trials**

Summary table of TEAEs including TEAEs from the parent trials presenting the number of events, the number and percentage of subjects and the incidence per 100 patient years.

Population: safety population.

**Table 14.3.1.3: Treatment-emergent adverse events: Incidence of adverse events of special interest**

Summary table of TEAEs of special interest presenting the number and percentage of subjects, the number of events and the incidence per 100 patient years.

Population: safety population.

**Table 14.3.1.4: Treatment-emergent adverse events: Incidence of adverse events of special interest including TEAEs from the parent trials**

Summary table of TEAEs of special interest including TEAEs from the parent trials presenting the number and percentage of subjects, the number of events and the incidence per 100 patient years.

Population: safety population.

**Table 14.3.1.5: Treatment-emergent adverse events: Tabulation of all adverse events**

Tabulation of TEAE preferred terms per system organ class and preferred term.

Population: safety population.

**Table 14.3.1.6: Treatment-emergent adverse events: Tabulation of all adverse events by severity**

Tabulation of TEAE preferred terms per system organ class and preferred term by severity.

Population: safety population.

**Table 14.3.1.7: Treatment-emergent adverse events: Tabulation of adverse events with an incidence of at least 3%**

Tabulation of TEAE preferred terms per system organ class. The incidence cut-off of 3% is to be calculated by treatment group.

Population: safety population.

**Table 14.3.1.8: Treatment-emergent adverse events: Tabulation of serious adverse events**

Tabulation of serious TEAE preferred terms per system organ class and preferred term.

Population: safety population.

**Table 14.3.1.9: Treatment-emergent adverse events: Tabulation of non-serious adverse events**

Tabulation of non-serious TEAE preferred terms per system organ class and preferred term.

Population: safety population.

**Table 14.3.1.10: Treatment-emergent adverse events: Tabulation of study drug-related adverse events**

Tabulation of TEAE preferred terms per system organ class and preferred term, selecting only the TEAEs that were study drug-related (as defined in section 7.1).

Population: safety population.

**Table 14.3.1.11: Treatment-emergent adverse events: Tabulation of adverse events related to study procedures**

Tabulation of TEAE preferred terms per system organ class and preferred term, selecting only the TEAEs that were related to study procedures.

Population: safety population.

**Table 14.3.1.12: Treatment-emergent adverse events: Tabulation of the adverse events for which the trial or the study medication were discontinued**

Tabulation of TEAE preferred terms per system organ class. Selecting only the TEAEs for which the study treatment was permanently discontinued, or for which the study was discontinued.

Population: safety population.

**Table 14.3.2.1: Laboratory data: Descriptive statistics of the actual values and change from baseline per time point**

Descriptive statistics per lab test category (hematology, biochemistry, acute phase proteins, urinalysis, coagulation), lab test and unit and time point.

Population: safety population.

**Table 14.3.2.2: Laboratory data: Frequency table of urinalysis results per time point**

Frequency-tabulation per lab test and time point. The table will present the categorical results of urinalysis tests without normal range at each time point.

Population: safety population.

**Table 14.3.2.3: Laboratory data: Cross-tabulation of the abnormalities per time point**

Cross-tabulation per lab test category (hematology, biochemistry, acute phase proteins, urinalysis, coagulation), lab test and time point.

Population: safety population.

**Table 14.3.2.4: Laboratory data: Cross-tabulation of the CTCAE toxicity per time point for key hematology and biochemistry parameters**

Cross-tabulation per lab test category, lab test and time point.

Population: safety population.

**Table 14.3.2.5: Laboratory data: Cross-tabulation of the worst-case abnormalities**

Cross-tabulation per lab test category (hematology, biochemistry, acute phase proteins, urinalysis, coagulation) and lab test.

Population: safety population.

**Table 14.3.2.6: Laboratory data: Cross-tabulation of the worst-case CTCAE toxicity for key hematology and biochemistry parameters**

Cross-tabulation per lab category and lab test.

Population: safety population.

**Table 14.3.3.1: Vital signs: Descriptive statistics of the actual values and change from baseline per time point**

Descriptive statistics per test and unit and time point.

Population: safety population.

## 13.5 Immunogenicity

### **Table 14.3.4.1: Immunogenicity: Prevalence and incidence table of pre-Ab and treatment-emergent ADA based on ADA assay results**

Table sorted by treatment group. The table will present the incidence of different ADA subject categories and derived sets (see 9.4.1)

Population: safety population.

### **Table 14.3.4.2: Immunogenicity: Prevalence and incidence table of pre-Ab and treatment-emergent ADA based on mADA assay results**

Table sorted by treatment group. The table will present the incidence of different mADA subject categories and derived sets (see 9.4.2).

Population: safety population.

### **Table 14.3.4.3: Immunogenicity: Prevalence and incidence table of pre-Ab and treatment-emergent ADA based on ADA and mADA assay results (overall subject classification)**

Table sorted by treatment group. The table will present the incidence of different overall subject categories and derived sets (see 9.4.3)

Population: safety population.

### **Table 14.3.4.4: Immunogenicity: Prevalence and incidence table of pre-dose and treatment-emergent ADA based on NAb results**

Table sorted by treatment group. The table will present the NAb subject classification and derived sets (see 9.4.4).

Population: safety population.

### **Table 14.3.4.5: Immunogenicity: Prevalence and incidence table of pre-Ab and treatment-emergent ADA based on ADA and mADA assay results (overall subject classification) by injection-site reaction**

Table sorted by injection-site reaction category (see 9.4.5) and treatment group. The table will present the incidence of different overall subject classifications (no derived sets).

Population: safety population.

### **Table 14.3.4.6: Immunogenicity: Prevalence and incidence table of pre-Ab and treatment-emergent ADA based on ADA and mADA assay results (overall subject classification) by hypersensitivity reaction**

Table sorted by hypersensitivity reaction category (see 9.4.5) and treatment group. The table will present the incidence of different overall subject classifications (no derived sets).

Population: safety population.

### **Table 14.3.4.7: Immunogenicity: ADA incidence over time by pre-Ab population**

Incidence of positive ADA samples at each time point by pre-Ab population and treatment group (see 9.4.6). NA & NR samples will be excluded from the incidence calculation.

Population: Safety population.

### **Table 14.3.4.8: Immunogenicity: NAb incidence over time**

Incidence of positive NAb samples (reported or imputed) at each time point by treatment group. NA & NR samples will be excluded from the incidence calculation.

Population: Safety population

**Table 14.3.4.9: Immunogenicity: ADA/mADA log10(Titer) over time by pre-Ab population**

Descriptive statistics at each time point of titer values by pre-Ab population and treatment group. Within the pre-Ab negative population, only ADA log10(titers) will be available to calculate descriptive statistics. For the pre-Ab positive population, table will be subdivided in ADA and mADA log10(titer) results.

Population: Safety population.

**Table 14.3.4.10: Immunogenicity: NAb response ratio over time of NAb positive samples**

Descriptive statistics at each time point of NAb response ratio by treatment group.

Population: Safety population.

## 14 INDEX OF FIGURES

**Figure 14.2.1.1.1: ACR response - ACR20 response**

Line plot of the percentage of subjects with ACR20 response at each time point, including SE bars, with one line per treatment group.

Population: ITO.

**Figure 14.2.1.1.2: ACR response - ACR50 response**

Line plot of the percentage of subjects with ACR50 response at each time point, including SE bars, with one line per treatment group.

Population: ITO.

**Figure 14.2.1.1.3: ACR response - ACR70 response**

Line plot of the percentage of subjects with ACR70 response at each time point, including SE bars, with one line per treatment group.

Population: ITO.

**Figure 14.2.1.1.4: ACR response - ACR-N index of improvement**

Line plot of the mean ACR-N index at each time point, including SE bars, with one line per treatment group.

Population: ITO.

**Figure 14.2.1.2.1: DAS28 Score – Actual values**

Line plot of the mean DAS28(CRP) and the DAS28(ESR) score at each time point, including SE bars, with one line per treatment group. Separate graphs will be created for the DAS28(CRP) and the DAS28(ESR) score.

Population: ITO.

**Figure 14.2.1.2.2: DAS28 Score – EULAR (using CRP and using ESR) response**

Line plot of the percentage of subjects with EULAR good response at each time point, including SE bars, with one line per treatment group. Separate graphs will be created for EULAR response based on the DAS28(CRP) and on the DAS28(ESR).

Population: ITO.

**Figure 14.2.1.2.3: DAS28 Score – Disease activity**

Line plot of the percentage of subjects with disease remission at each time point, including SE bars, with one line per treatment group. Separate graphs will be created for remission based on the DAS28(ESR) and for the DAS28(CRP)<2.6 category. The graphs will be repeated for percentage of subjects with LDA/disease remission.

Population: ITO.

**Figure 14.2.1.3.1: Boolean disease remission definition**

Line plot of the percentage of subjects with disease remission based on the Boolean definition at each time point, including SE bars, with one line per treatment group.

Population: ITO.

**Figure 14.2.1.4.1: CDAI Score – Actual values**

Line plot of the mean CDAI score at each time point, including SE bars, with one line per treatment group.

Population: ITO.

**Figure 14.2.1.4.2: CDAI Score – Disease activity**

Line plot of the percentage of subjects with disease remission based on the CDAI score at each time point, including SE bars, with one line per treatment group.

Population: ITO.

**Figure 14.2.1.5.1: SDAI Score – Actual values**

Line plot of the mean SDAI score at each time point, including SE bars, with one line per treatment group.

Population: ITO.

**Figure 14.2.1.5.2: SDAI Score – Disease activity**

Line plot of the percentage of subjects with disease remission based on the SDAI score at each time point, including SE bars, with one line per treatment group.

Population: ITO.

**Figure 14.2.1.6.1: HAQ-DI Score – Actual values**

Line plot of the mean HAQ-DI score at each time point, including SE bars, with one line per treatment group.

Population: ITO.

**Figure 14.2.1.6.2: HAQ-DI Score – Clinically meaningful improvement**

Line plot of the percentage of subjects with HAQ-DI response at each time point, including SE bars, with one line per treatment group.

Population: ITO.

**Figure 14.2.1.6.3: HAQ-DI Score – Normal physical function**

Line plot of the percentage of subjects with normal physical function, based on the HAQ-DI score at each time point, including SE bars, with one line per treatment group.

Population: ITO.

**Figure 14.2.1.7.1: SF-36 – Physical and mental component scores – Actual values**

Line plot of the mean physical and mental component score at each time point, including SE bars, with one line per treatment group. Separate graphs will be created for the physical and mental component score.

Population: ITO.

**Figure 14.2.1.8.1: FACIT-F – Actual values**

Line plot of the mean FACIT-F total score and scores of subscales at each time point, including SE bars, with one line per treatment group.

Population: ITO.

**Figure 14.2.1.9.1: Duration of morning stiffness – Actual values**

Line plot of the mean duration of morning stiffness at each time point, including SE bars, with one line per treatment group.

Population: ITO.

**Figure 14.2.1.10.1: VAS scales – Actual values**

Line plot of the mean patient's assessment of pain VAS, patient's global assessment of disease activity VAS and the physician's global assessment of disease activity VAS, including SE bars, with one line per treatment group. Separate graphs will be created for the patient's assessment of pain VAS, patient's global assessment of disease activity VAS and the physician's global assessment of disease activity VAS.

Population: ITO.

**Figure 14.2.1.11.1: CRP and ESR – Actual values**

Line plot of the mean CRP and ESR concentrations, including SE bars, with one line per treatment group. Separate graphs will be created for CRP and ESR concentrations.

Population: ITO.

**Figure 14.2.1.12.1: TJC and SJC – Actual values**

Line plot of the mean TJC and SJC, including SE bars, with one line per treatment group. Separate graphs will be created for TJC and SJC.

Population: ITO.

**Figure 14.2.1.13.1: PK: Mean drug concentrations**

Line plot of the mean drug concentrations, including SE bars, with one line per treatment group. Plots will be created with both linear and semi-logarithmic PK profiles. Both graphs will be displayed on the same page.

Population: PK population.

**Figure 14.2.1.13.2: PK: Mean drug concentrations (geometric mean)**

Line plot of the geometric mean drug concentrations, including geometric SD bars, with one line per treatment group. Plots will be created with both linear and semi-logarithmic PK profiles. Both graphs will be displayed on the same page.

Population: PK population.

**Figure 14.2.1.13.3: Immunogenicity: Individual line plot of ADA log10(titer), mADA log10(titer), NAb response, PK concentration, DAS 28 Score and ACR50 over time**

For all subjects, line plot of ADA titer, mADA titer, NAb response ratio, PK, DAS28(CRP), and ACR50 vs. time (incl. parent screening & baseline visit). Different responses can be plotted against separate Y-axes above each other, but scale of time-axis should be identical for each plotted response. Note that for parent screening and baseline visit and OLE baseline visit, NAb response will be indicated by a flag (pos="Y" or neg="N") above the corresponding ADA titer. For PK and DAS28(CRP), a treatment group average over time plot will be added with each of the individual plot.

Population: safety population.

**Figure 14.3.1.1: Laboratory – box plots of parameters of interest**

Longitudinal box plots per treatment group of neutrophils, platelets, ALT, AST and cholesterol ratio. Separate graphs will be created for each parameter.

Population: ITO.

## 15 INDEX OF LISTINGS

### 15.1 General

**Listing 16.2.1.1: Subject disposition**

Listing of subject numbers, parent trial, dose in parent trial, population indicators, investigator and country.

Population: ITO population.

**Listing 16.2.1.2: Trial visits**

Listing of all visits, including the visit date and study day.

Population: ITO population.

**Listing 16.2.1.3: Subject disposition: First and last contact in the trial**

List with the following 3 dates:

- Date of the first signature on (C203) trial ICF
- Last visit date (all visits; including unscheduled visits)
- Last date of contact in the study with any subject.

Population: all screened population.

**Listing 16.2.1.4: Trial termination**

Listing of completion/discontinuation, the reason for discontinuation and the number of days since first study treatment administration at trial termination. In case the discontinuation was due to AE, the AE will be presented in this listing. If there is another explanation on the discontinuation reason collected in the CRF, this will also be presented in this listing.

Population: ITO population.

**Listing 16.2.1.5: Trial termination for adverse event**

Same as previous listing for subjects with primary reason for study discontinuation adverse event.

Population: ITO population.

**Listing 16.2.1.6: Major protocol deviations**

Listing of all major protocol deviations.

Population: ITO population.

**Listing 16.2.1.7: No-treatment subjects**

Listing of all subjects that were not treated, including the screening failures. The trial termination reason and/or the reason for being a no-treatment subject will be listed, whichever is available.

Population: all screened population, minus the safety population.

**Listing 16.2.2.1: Demographic data**

Listing of all demographic parameters. Country will be presented on this listing as well.

Population: ITO population.

**Listing 16.2.2.2: Baseline disease characteristics**

Listing of all baseline disease characteristics parameters which are not listed in the efficacy section.

Population: ITO population.

**Listing 16.2.2.3: Concomitant therapies**

Listing of all data on concomitant therapies, including coding information.

Population: ITO population.

**Listing 16.2.2.4: Exposure to study medication: Actual data**

Listing of all data collected in the CRF related to the use of study medication.

Population: safety population.

**Listing 16.2.2.5: Exposure to study medication: Derived data**

Listing of all derived data related to the use of study medication.

Population: safety population.

**Listing 16.2.2.6: Comments**

Listing of remarks and comments written in the CRF.

Population: ITO population.

## 15.2 Efficacy

**Listing 16.2.3.1: ACR response**

Listing per subject and visit of ACR20, ACR50 and ACR70 response and ACR-N index

Population: ITO.

**Listing 16.2.3.2: TJC and SJC**

Listing per subject and visit of TJC and SJC actual values, changes and percentage changes from baseline

Population: ITO.

**Listing 16.2.3.3: DAS28**

Listing per subject and visit of TJC28, SJC28, CRP, ESR, DAS28(ESR), DAS28(CRP), EULAR response, DAS28(ESR) disease activity, DAS28(CRP) disease activity, VASPA and Boolean remission.

Population: ITO.

**Listing 16.2.3.4: CDAI and SDAI**

Listing per subject and visit of CDAI actual values, changes from baseline, disease activity and of SDAI actual values, changes from baseline, disease activity.

Population: ITO.

**Listing 16.2.3.5: HAQ-DI**

Listing per subject and visit of HAQ-DI actual values, changes from baseline, percentage changes from baseline, response (clinically meaningful improvement) and normal physical function.

Population: ITO.

**Listing 16.2.3.6: SF-36**

Listing per subject and visit of the actual values and changes from baseline for the physical and mental component scores and for the 8 subscales (original scores).

Population: ITO.

**Listing 16.2.3.7: FACIT-F and duration of morning stiffness**

Listing per subject and visit of the actual values and changes from baseline for FACIT-F total score and subscales and of the actual values and changes from baseline for duration of morning stiffness.

Population: ITO.

**Listing 16.2.3.8: VAS scales**

Listing per subject and visit of the actual values, percentage changes from baseline and changes from baseline for VAS, VASPA and VASPHA.

Population: ITO.

**Listing 16.2.3.9: CRP and ESR**

Listing per subject and visit of the actual values, percentage changes from baseline and changes from baseline for CRP and ESR concentrations.

Population: ITO.

## 15.3 Pharmacokinetics

**Listing 16.2.4.1: PK: Study drug concentrations**

Listing of all individual study drug concentrations.

Population: PK population.

**Listing 16.2.4.2: PK: Sampling times**

Listing of nominal sampling times, actual sampling times and sampling time deviations. In case the actual sampling time deviates more than allowed per study protocol from the nominal time, the time point will be flagged.

Population: PK population.

## 15.4 Safety

**Listing 16.2.7.1: Adverse events**

Listing of all adverse events (started or ongoing in the C203 study) of the following:

- AE verbatim
- AE preferred term (flagging serious TEAEs with an asterisk \*)
- AE start and end
- AE onset day
- AE duration
- AE severity
- AE drug relatedness: relation to study drug, to MTX (C201 subjects only), to folic acid and to study procedure
- AE outcome
- AE action taken related to study drug
- Concomitant therapy started (yes/no)

Population: safety population.

**Listing 16.2.7.2: Serious adverse events**

Same as the previous listing, but only selecting SAEs. Additionally, the reason(s) for SAE will be listed as well.

Population: safety population.

**Listing 16.2.7.3: Treatment-related adverse events**

Same as the previous listing, but only selecting treatment-related TEAEs.

Population: safety population.

**Listing 16.2.7.4: Adverse events leading to discontinuation of the study or the study medication**

Same as the previous listing, but only selecting TEAEs that lead to a stop of trial medication, or of the trial itself.

Population: safety population.

**Listing 16.2.7.5: Adverse events leading to death**

Same as the previous listing, but only selecting TEAEs that lead to death.

**Listing 16.2.7.6: Severe/Serious hypersensitivity adverse events**

Listing of severe/serious hypersensitivity adverse events, including ADA/mADA log10(titer) and biomarker test results (tryptase, total complement (CH50) and circulating immune complexes).

Population: safety population.

**Listing 16.2.7.7: Physical examinations: Abnormalities**

Listing of all abnormal findings, including the clinically significance status.

Population: safety population.

**Listing 16.2.7.8: Pregnancy tests**

Listing of all pregnancy test results, for women of childbearing potential only.

Population: ITO population.

**Listing 16.2.8.1: Laboratory data: Full listing**

Listing of raw laboratory data and changes, including a fasted (Y/N) flag, an abnormality L/H flag, the test's normal range and a clinical relevance flag.

Population: safety population.

**Listing 16.2.8.2: Laboratory data: Abnormalities**

Listing similar to 16.2.8.1, but only consisting of data scored as out-of-normal-range or clinically significant, plus also the baseline reference time point.

Population: safety population.

**Listing 16.2.8.3: Laboratory data: Abnormalities for key hematology and biochemistry parameters**

Listing of ALT, AST, total bilirubin, gamma-glutamyltransferase, leukocytes, neutrophils, thrombocytes, fibrinogen and lipids scored as at least CTCAE toxicity grade 1, plus also the baseline reference time point.

Population: safety population.

**Listing 16.2.8.4: Laboratory data: Comments**

Listing of all comments. This listing will be linked to the full listing and the abnormalities listings via numbered entries like "[C13]".

Population: safety population.

**Listing 16.2.9.1: Vital signs: Full listing**

Listing of all parameters: raw values, changes from baseline, and flagging clinically significant results.

Population: safety population.

**Listing 16.2.9.2: Vital signs: Abnormalities**

Listing of all data scored as clinically significant, plus also the baseline reference time point.

Population: safety population.

## 15.5 Immunogenicity

### **Listing 16.2.10.1: Immunogenicity: Full listing**

Listing of all immunogenicity parameters (ADA log10(titer), ADA subject classification, mADA log10(titer), mADA subject classification, overall subject classification, NAb result ("yes"/"no" for data obtained from parent trial; ratio for OLE post-baseline visits) and nAb subject classification at each time point (parent trial screening and/or baseline sample results, the "C203 baseline" results and Week 12, Week 24, Week 36, Week 48, Week 60, Week 72, Week 84, Week 96, Week 104 and FU or ET visit) .

Population: safety population.

## 16 APPENDICES

### 16.1 Appendix 1: Schedule of assessments

Study Period	Screening/Baseline, Treatment and Assessment period (weeks)												Early Termination <sup>c</sup> (weeks)	Follow-up (weeks)
<b>Study Visit<sup>D</sup></b>	<b>Screening/ Baseline<sup>B</sup> 0</b>	4	8	12	24	36	48	60	72	84	96	104	2 (after last study drug administration)	12 (after last study drug dosing)
<b>Visit Number</b>	1	2	3	4	5	6	7	8	9	10	11	12		13
Ambulatory visit	X	X	X	X	X	X	X	X	X	X	X	X		X
Written informed consent	X													
Review of entry criteria	X													
Smoking history	X													
Study drug injection card dispensation	X													
Study drug administration (via interactive web response system [IWRS]) <sup>E</sup>	X	Injections to continue every 2 weeks up to and including week 102												
Physical examination	X <sup>B</sup>		X	X	X	X	X	X	X	X	X	X	X	X
Vital signs <sup>F</sup>	X <sup>B</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X
Tuberculosis (TB) evaluation (questioning) <sup>G</sup>	X <sup>B</sup>		X	X	X	X	X	X	X	X	X	X		X
Routine clinical laboratory analyses <sup>H</sup>	X <sup>B</sup>	X	X	X		X		X		X	X			X
Extended clinical laboratory analyses (including fasting serum lipids) <sup>I</sup>	X <sup>B</sup>			X		X		X			X	X		
Pregnancy test (urine) for females of childbearing potential only	X <sup>B</sup>		X	X	X	X	X	X	X	X	X	X		
Morning stiffness duration	X <sup>B</sup>										X	X		
Joint assessment (66/68-joint count)	X <sup>B</sup>		X	X	X	X	X	X	X	X	X	X		
IWRS notification of tender & swollen joint counts	X <sup>B</sup>		X	X	X	X	X	X	X	X				

Patient pain visual analogue scale (VAS)	X <sup>B</sup>			X	X	X	X	X	X	X	X	X	X	
Health Assessment Questionnaire – Disability Index (HAQ-DI)	X <sup>B</sup>			X	X	X	X	X	X	X	X	X	X	
Short Form (36) Health Survey (SF-36)	X <sup>B</sup>				X		X		X			X	X	
Functional Assessment of Chronic Illness Therapy – Fatigue (FACIT-Fatigue)	X <sup>B</sup>			X		X		X			X	X		
Physician and Patient global assessment of disease activity	X <sup>B</sup>		X	X	X	X	X	X	X	X	X	X	X	
Concomitant medication	X <sup>B</sup>													→
Adverse events (AEs) <sup>D</sup>	X <sup>B</sup>													→
Pharmacokinetic (PK) samples <sup>K</sup>	X <sup>B</sup>		X	X	X	X	X	X	X	X	X	X	X	
Immunogenicity samples	X <sup>B</sup>		X	X	X	X	X	X	X	X	X	X	X	X

<sup>A</sup>. All assessments are to be completed prior to the study drug administration, except for subjects who discontinue study drug injections. The order of assessments if more than 1 assessment is planned at the same time should be performed according to the following principles: vital signs should be assessed prior to blood sampling; patient reported outcomes should occur prior to the physician's joint evaluation, independent joint assessment should occur prior to physician's global assessment, and study drug should be dosed after all other assessments have been performed.

<sup>B</sup>. The Baseline Visit will coincide with the 24-week End of Treatment Visit of the preceding Study ALX0061-C201, or with the 12-week End of Treatment Visit of Study ALX0061-C202. The results from the End of Treatment Visit assessments for these studies do not have to be repeated at baseline for this study, and include physical examination, vital signs, TB evaluation (questioning), routine/extended clinical laboratory analyses (at Week 22 in Study ALX0061-C201 or at Week 10 in Study ALX0061-C202), pregnancy test (urine), morning stiffness duration, joint assessment (66/68-joint count), patient pain VAS, HAQ-DI, SF-36, FACIT-F, physician and patient global assessment, concomitant medication, AEs, PK blood samples, and immunogenicity.

<sup>C</sup>. The Early Termination Visit is to be performed 2 weeks after the last study drug dosing for subjects who discontinue from the trial for other reasons than described in the efficacy discontinuation criteria (see section 3.2.3.2), unless they discontinue during a study visit, in which case that becomes their Early Termination Visit. For subjects who will meet the efficacy discontinuation criteria at Week 12, 24, 36, 48, 60, 72, 84 or 96, the visit at which subjects will meet these discontinuation criteria is defined as the Early Termination Visit.

<sup>D</sup>. All post baseline visits may occur at the indicated week ± 3 days throughout the trial.

<sup>E</sup>. At the study visits at Weeks 0, 4, 8, 12, 24, 36, 48, 60, 72, 84, and 96, study drug is to be administered s.c. at the study site. At all other time points, subjects are allowed to self-administer away from the clinic. Subjects unable to have injections administered away from the study site will be required to return to the site every 2 weeks for administration of study drug by an authorized health professional.

f. Vital signs (assessment after 5 minutes in supine position) will include weight, blood pressure, pulse, and temperature. A height measurement is not required (data available from the preceding study). In case blood sampling is to be performed at the same visit, the vital signs assessment is to be performed prior to the blood sampling.

g. If TB is suspected at any time during the study, chest x-ray and interferon-gamma release assay (IGRA) should be performed.

h. Samples for routine clinical laboratory analyses will be collected predose, and include blood chemistry, hematology, acute phase proteins (C-reactive protein [CRP], erythrocyte sedimentation rate [ESR], fibrinogen) and urinalysis (urinalysis at Weeks 48 and 104). For subjects on warfarin, international normalized ratio (INR) will be performed at Weeks 0, 4, 8, 12, 24, 36, 48, 60, 72, 84, and 96, or at the Early Termination Visit.

i. At the indicated visits, samples for extended clinical laboratory analyses, including fasting serum lipids on top of the routine clinical laboratory analyses, will be performed predose. Extended clinical laboratory samples will be taken predose after the subject has been fasting for at least 10 h.

j. AEs will be recorded from the time the informed consent form is signed through the Follow-up Visit. The Investigator must follow-up on all SAEs and AEs until the events have subsided, returned to baseline, or the subject's condition has stabilized in cases of permanent impairment. In case of acute or delayed severe/serious hypersensitivity reactions, an additional serum sample should be collected as soon as possible after the start of the event (blood volume: 5 mL).

k. PK and immunogenicity samples will be taken predose.

## 16.2 Appendix 2: Prednisolone equivalent dose chart

	Approx. equivalent dose (mg/day)*	Conversion factor
<b>Cortisone</b>	25	0.20
<b>Hydrocortisone</b>	20	0.25
<b>Methylprednisolone</b>	4	1.25
<b>Prednisolone</b>	5	1.00
<b>Prednisone</b>	5	1.00
<b>Triamcinolone</b>	4	1.25
<b>Betamethasone</b>	0.70	7.15
<b>Dexamethasone</b>	0.75	6.67
<b>Deflazacort</b>	6	0.83

\* Based on Prednisolone dose of 5 mg/day.

### References:

Dixon JS (1991), Meikle AW and Tyler FH (1977), Webb R, Singer M. and Nayal S et al. (2005)

### 16.3 Appendix 3: CTCAE grades (version 4.03 14JUN2010)

Adverse Event	Investigations				
	1	2	3	4	5
Activated partial thromboplastin time prolonged	>ULN - 1.5 x ULN	>1.5 - 2.5 x ULN	>2.5 x ULN; hemorrhage	-	-
Definition: An abnormal laboratory test result in which the partial thromboplastin time is found to be greater than the control value. As a possible indicator of coagulopathy, a prolonged partial thromboplastin time (PTT) may occur in a variety of diseases and disorders, both primary and related to treatment.					
Alanine aminotransferase increased	>ULN - 3.0 x ULN	>3.0 - 5.0 x ULN	>5.0 - 20.0 x ULN	>20.0 x ULN	-
Definition: A finding based on laboratory test results that indicate an increase in the level of alanine aminotransferase (ALT or SGPT) in the blood specimen.					
Alkaline phosphatase increased	>ULN - 2.5 x ULN	>2.5 - 5.0 x ULN	>5.0 - 20.0 x ULN	>20.0 x ULN	-
Definition: A finding based on laboratory test results that indicate an increase in the level of alkaline phosphatase in a blood specimen.					
Aspartate aminotransferase increased	>ULN - 3.0 x ULN	>3.0 - 5.0 x ULN	>5.0 - 20.0 x ULN	>20.0 x ULN	-
Definition: A finding based on laboratory test results that indicate an increase in the level of aspartate aminotransferase (AST or SGOT) in a blood specimen.					
Blood antidiuretic hormone abnormal	Asymptomatic; clinical or diagnostic observations only; intervention not indicated	Symptomatic; medical intervention indicated	Hospitalization indicated	-	-
Definition: A finding based on laboratory test results that indicate abnormal levels of antidiuretic hormone in the blood specimen.					
Blood bilirubin increased	>ULN - 1.5 x ULN	>1.5 - 3.0 x ULN	>3.0 - 10.0 x ULN	>10.0 x ULN	-
Definition: A finding based on laboratory test results that indicate an abnormally high level of bilirubin in the blood. Excess bilirubin is associated with jaundice.					
Blood corticotrophin decreased	Asymptomatic; clinical or diagnostic observations only; intervention not indicated	Symptomatic; medical intervention indicated	Hospitalization indicated	-	-
Definition: A finding based on laboratory test results that indicate a decrease in levels of corticotrophin in a blood specimen.					
Blood gonadotrophin abnormal	Asymptomatic; clinical or diagnostic observations only; intervention not indicated	Symptomatic; medical intervention indicated; limiting instrumental ADL	Severe symptoms; limiting self care ADL	-	-
Definition: A finding based on laboratory test results that indicate abnormal levels of gonadotrophin hormone in a blood specimen.					
Blood prolactin abnormal	Asymptomatic; clinical or diagnostic observations only; intervention not indicated	Moderate symptoms; limiting instrumental ADL	-	-	-
Definition: A finding based on laboratory test results that indicate abnormal levels of prolactin hormone in a blood specimen.					
Carbon monoxide diffusing capacity decreased	3 - 5 units below LLN; for follow-up, a decrease of 3 - 5 units (ml/min/mm Hg) below the baseline value	6 - 8 units below LLN; for follow-up, an asymptomatic decrease of >5 - 8 units (ml/min/mm Hg) below the baseline value	Asymptomatic decrease of >8 units drop; >5 units drop along with the presence of pulmonary symptoms (e.g., >Grade 2 hypoxia or >Grade 2 or higher dyspnea)	-	-
Definition: A finding based on lung function test results that indicate a decrease in the lung capacity to absorb carbon monoxide.					
Cardiac troponin I increased	Levels above the upper limit of normal and below the level of myocardial infarction as defined by the manufacturer	-	Levels consistent with myocardial infarction as defined by the manufacturer	-	-
Definition: A laboratory test result which indicates increased levels of cardiac troponin I in a biological specimen.					
Cardiac troponin T increased	Levels above the upper limit of normal and below the level of myocardial infarction as defined by the manufacturer	-	Levels consistent with myocardial infarction as defined by the manufacturer	-	-
Definition: A laboratory test result which indicates increased levels of cardiac troponin T in a biological specimen.					
CD4 lymphocytes decreased	<LLN - 500/mm <sup>3</sup> ; <LLN - 0.5 x 10 <sup>9</sup> /L	<500 - 200/mm <sup>3</sup> ; <0.5 - 0.2 x 10 <sup>9</sup> /L	<200 - 50/mm <sup>3</sup> ; <0.2 x 0.05 - 10 <sup>9</sup> /L	<50/mm <sup>3</sup> ; <0.05 x 10 <sup>9</sup> /L	-
Definition: A finding based on laboratory test results that indicate a decrease in levels of CD4 lymphocytes in a blood specimen.					
Cholesterol high	>ULN - 300 mg/dL; >ULN - 7.75 mmol/L	>300 - 400 mg/dL; >7.75 - 10.34 mmol/L	>400 - 500 mg/dL; >10.34 - 12.92 mmol/L	>500 mg/dL; >12.92 mmol/L	-
Definition: A finding based on laboratory test results that indicate higher than normal levels of cholesterol in a blood specimen.					
CPK increased	>ULN - 2.5 x ULN	>2.5 x ULN - 5 x ULN	>5 x ULN - 10 x ULN	>10 x ULN	-
Definition: A finding based on laboratory test results that indicate an increase in levels of creatine phosphokinase in a blood specimen.					

Investigations						
Adverse Event	Grade					
	1	2	3	4	5	
Creatinine Increased	>1 - 1.5 x baseline; >ULN - 1.5 x ULN	>1.5 - 3.0 x baseline; >1.5 - 3.0 x ULN	>3.0 baseline; >3.0 - 6.0 x ULN	>6.0 x ULN	-	
Definition: A finding based on laboratory test results that indicate increased levels of creatinine in a biological specimen.						
Ejection fraction decreased	-	Resting ejection fraction (EF) 50 - 40%; 10 - 19% drop from baseline	Resting ejection fraction (EF) 39 - 20%; >20% drop from baseline	Resting ejection fraction (EF) <20%	-	
Definition: The percentage computed when the amount of blood ejected during a ventricular contraction of the heart is compared to the amount that was present prior to the contraction.						
Electrocardiogram QT corrected interval prolonged	QTc 450 - 480 ms	QTc 481 - 500 ms	QTc >= 501 ms on at least two separate ECGs	QTc >= 501 or >60 ms change from baseline and Torsade de pointes or polymorphic ventricular tachycardia or signs/symptoms of serious arrhythmia	-	
Definition: A finding of a cardiac dysrhythmia characterized by an abnormally long corrected QT interval.						
Fibrinogen decreased	<1.0 - 0.75 x LLN or <25% decrease from baseline	<0.75 - 0.5 x LLN or 25 - <50% decrease from baseline	<0.5 - 0.25 x LLN or 50 - <75% decrease from baseline	<0.25 x LLN or 75% decrease from baseline or absolute value <50 mg/dL	-	
Definition: A finding based on laboratory test results that indicate a decrease in levels of fibrinogen in a blood specimen.						
Forced expiratory volume decreased	FEV1% (percentages of observed FEV1 and FVC related to their respective predicted values) 99 - 70% predicted	FEV1 60 - 69%	50 - 59%	<= 49%	-	
Definition: A finding based on test results that indicate a relative decrease in the fraction of the forced vital capacity that is exhaled in a specific number of seconds.						
GGT Increased	>ULN - 2.5 x ULN	>2.5 - 5.0 x ULN	>5.0 - 20.0 x ULN	>20.0 x ULN	-	
Definition: A finding based on laboratory test results that indicate higher than normal levels of the enzyme gamma-glutamyltransferase in the blood specimen. GGT (gamma-glutamyltransferase) catalyzes the transfer of a gamma glutamyl group from a gamma glutamyl peptide to another peptide, amino acids or water.						
Growth hormone abnormal	Asymptomatic; clinical or diagnostic observations only; Intervention not indicated	Symptomatic; medical Intervention Indicated; limiting Instrumental ADL	-	-	-	
Definition: A finding based on laboratory test results that indicate abnormal levels of growth hormone in a biological specimen.						
Haptoglobin decreased	<LLN	-	-	-	-	
Definition: A finding based on laboratory test results that indicate a decrease in levels of haptoglobin in a blood specimen.						
Hemoglobin increased	Increase in >0 - 2 gm/dL above ULN or above baseline if baseline is above ULN	Increase in >2 - 4 gm/dL above ULN or above baseline if baseline is above ULN	Increase in >4 gm/dL above ULN or above baseline if baseline is above ULN	-	-	
Definition: A finding based on laboratory test results that indicate increased levels of hemoglobin in a biological specimen.						
INR Increased	>1 - 1.5 x ULN; >1 - 1.5 times above baseline if on anticoagulation	>1.5 - 2.5 x ULN; >1.5 - 2.5 times above baseline if on anticoagulation	>2.5 x ULN; >2.5 times above baseline if on anticoagulation	-	-	
Definition: A finding based on laboratory test results that indicate an increase in the ratio of the patient's prothrombin time to a control sample in the blood.						
Lipase Increased	>ULN - 1.5 x ULN	>1.5 - 2.0 x ULN	>2.0 - 5.0 x ULN	>5.0 x ULN	-	
Definition: A finding based on laboratory test results that indicate an increase in the level of lipase in a biological specimen.						
Lymphocyte count decreased	<LLN - 800/mm <sup>3</sup> ; <LLN - 0.8 x 10 <sup>9</sup> /L	<800 - 500/mm <sup>3</sup> ; <0.8 - 0.5 x 10 <sup>9</sup> /L	<500 - 200/mm <sup>3</sup> ; <0.5 - 0.2 x 10 <sup>9</sup> /L	<200/mm <sup>3</sup> ; <0.2 x 10 <sup>9</sup> /L	-	
Definition: A finding based on laboratory test results that indicate a decrease in number of lymphocytes in a blood specimen.						
Lymphocyte count increased	-	>4000/mm <sup>3</sup> - 20,000/mm <sup>3</sup>	>20,000/mm <sup>3</sup>	-	-	
Definition: A finding based on laboratory test results that indicate an abnormal increase in the number of lymphocytes in the blood, effusions or bone marrow.						
Neutrophil count decreased	<LLN - 1500/mm <sup>3</sup> ; <LLN - 1.5 x 10 <sup>9</sup> /L	<1500 - 1000/mm <sup>3</sup> ; <1.5 - 1.0 x 10 <sup>9</sup> /L	<1000 - 500/mm <sup>3</sup> ; <1.0 - 0.5 x 10 <sup>9</sup> /L	<500/mm <sup>3</sup> ; <0.5 x 10 <sup>9</sup> /L	-	
Definition: A finding based on laboratory test results that indicate a decrease in number of neutrophils in a blood specimen.						
Pancreatic enzymes decreased	<LLN and asymptomatic	Increase in stool frequency, bulk, or odor; steatorrhea	Sequelae of absorption deficiency	-	-	
Definition: A finding based on laboratory test results that indicate a decrease in levels of pancreatic enzymes in a biological specimen.						

Investigations					
Adverse Event	Grade				
	1	2	3	4	5
Platelet count decreased	<LLN - 75,000/mm <sup>3</sup> ; <LLN - 75.0 x 10 <sup>9</sup> /L	<75,000 - 50,000/mm <sup>3</sup> ; <75.0 - 50.0 x 10 <sup>9</sup> /L	<50,000 - 25,000/mm <sup>3</sup> ; <50.0 - 25.0 x 10 <sup>9</sup> /L	<25,000/mm <sup>3</sup> ; <25.0 x 10 <sup>9</sup> /L	-
Definition: A finding based on laboratory test results that indicate a decrease in number of platelets in a blood specimen.					
Serum amylase increased	>ULN - 1.5 x ULN	>1.5 - 2.0 x ULN	>2.0 - 5.0 x ULN	>5.0 x ULN	-
Definition: A finding based on laboratory test results that indicate an increase in the levels of amylase in a serum specimen.					
Urine output decreased	-	-	Oliguria (<80 ml in 8 hr)	Anuria (<240 ml in 24 hr)	-
Definition: A finding based on test results that indicate urine production is less relative to previous output.					
Vital capacity abnormal	90 - 75% of predicted value	<75 - 50% of predicted value; limiting Instrumental ADL	<50% of predicted value; limiting self care ADL	-	-
Definition: A finding based on pulmonary function test results that indicate an abnormal vital capacity (amount of exhaled after a maximum inhalation) when compared to the predicted value.					
Weight gain	5 - <10% from baseline	10 - <20% from baseline	>=20% from baseline	-	-
Definition: A finding characterized by an increase in overall body weight; for pediatrics, greater than the baseline growth curve.					
Weight loss	5 to <10% from baseline; Intervention not indicated	10 - <20% from baseline; nutritional support indicated	>=20% from baseline; tube feeding or TPN indicated	-	-
Definition: A finding characterized by a decrease in overall body weight; for pediatrics, less than the baseline growth curve.					
White blood cell decreased	<LLN - 3000/mm <sup>3</sup> ; <LLN - 3.0 x 10 <sup>9</sup> /L	<3000 - 2000/mm <sup>3</sup> ; <3.0 - 2.0 x 10 <sup>9</sup> /L	<2000 - 1000/mm <sup>3</sup> ; <2.0 - 1.0 x 10 <sup>9</sup> /L	<1000/mm <sup>3</sup> ; <1.0 x 10 <sup>9</sup> /L	-
Definition: A finding based on laboratory test results that indicate a decrease in number of white blood cells in a blood specimen.					
Investigations - Other, specify	Asymptomatic or mild symptoms; clinical or diagnostic observations only; Intervention not indicated	Moderate; minimal, local or noninvasive Intervention indicated; limiting age-appropriate Instrumental ADL	Severe or medically significant but not immediately life-threatening; hospitalization or prolongation of existing hospitalization indicated; disabling; limiting self care ADL	Life-threatening consequences; urgent Intervention indicated	Death

## 16.4 Appendix 4: FACIT-F Scoring Guidelines (version 4)

- Instructions:\*
1. Record answers in "item response" column. If missing, mark with an X
  2. Perform reversals as indicated, and sum individual items to obtain a score.
  3. Multiply the sum of the item scores by the number of items in the subscale, then divide by the  
number of items answered. This produces the subscale score.
  4. Add subscale scores to derive total scores (TOI, FACT-G & FACIT-F).
  - 5. The higher the score, the better the QOL.**

<u>Subscale</u>	<u>Item Code</u>	<u>Reverse item?</u>	<u>Item response</u>	<u>Item Score</u>
PHYSICAL	GP1 =_____	4	-	_____
WELL-BEING (PWB)	GP2 =_____	4	-	_____
	GP3 =_____	4	-	_____
	GP4 =_____	4	-	_____
Score range: 0-28	GP5 =_____	4	-	_____
	GP6 =_____	4	-	_____
	GP7 =_____	4	-	_____
<i>Sum individual item scores:</i> _____				
<i>Multiply by 7:</i> _____				
<i>Divide by number of items answered:</i>				
<u><b>=PWB subscale score</b></u>				

SOCIAL/FAMILY	GS1	0	+	_____	=_____
WELL-BEING (SWB)	GS2 GS3 GS4	0 0 0	+	_____	=_____
	GS5 GS6	0 0	+	_____	=_____
Score range: 0-28					

$$\text{GS7} \quad 0 \quad + \quad \underline{\quad} \quad = \underline{\quad}$$

*Sum individual item scores:* \_\_\_\_\_  
*Multiply by 7:* \_\_\_\_\_  
*Divide by number of items answered:* \_\_\_\_\_

<b>EMOTIONAL</b>	GE1	4	-	_____	= _____
<b>WELL-BEING</b>	GE2	0	+	_____	= _____
<b>(EWB)</b>	GE3	4	-	_____	= _____
	GE4	4	-	_____	= _____
<i>Score range: 0-24</i>	GE5	4	-	_____	= _____
	GE6	4	-	_____	= _____

		<i>Sum individual item scores:</i> _____		
		<i>Multiply by 6:</i> _____		
		<i>Divide</i>	<i>by</i>	<i>number of items answered:</i>
_____	<u>=EWB subscale score</u>			
<b>FUNCTIONAL</b>	GF1	0	+	_____ = _____
<b>WELL-BEING</b>	GF2	0	+	_____ = _____
<b>(FWB)</b>	GF3	0	+	_____ = _____
	GF4	0	+	_____ = _____
<i>Score range: 0-28</i>	GF5	0	+	_____ = _____
	GF6	0	+	_____ = _____
	GF7	0	+	_____ = _____

*Sum individual item scores:* \_\_\_\_\_  
*Multiply by 7:* \_\_\_\_\_  
*Divide by number of items answered:* \_\_\_\_\_  
\_\_\_\_\_ =FWB subscale score

<u>Subscale Score</u>	<u>Item Code</u>	<u>Reverse item?</u>	<u>Item response</u>	<u>Item</u>
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<b>FATIGUE</b>	HI7	4	-	_____	= _____
<b>SUBSCALE</b>	HI12	4	-	_____	= _____
<b>(FS)</b>	An1	4	-	_____	= _____
	An2	4	-	_____	= _____
Score range: 0-52	An3	4	-	_____	= _____
	An4	4	-	_____	= _____
	An5	0	+	_____	= _____
	An7	0	+	_____	= _____
	An8	4	-	_____	= _____
	An12	4	-	_____	= _____
	An14	4	-	_____	= _____
	An15	4	-	_____	= _____
	An16	4	-	_____	= _____

*Sum individual item scores: \_\_\_\_\_*

*Multiply by 13: \_\_\_\_\_*

*Divide by number of items answered: \_\_\_\_\_ =F*

**Subscale score**

**To derive a FACIT-F Trial Outcome Index (TOI):**

Score range: 0-108

$$= \frac{\text{_____}}{(\text{PWB score})} + \frac{\text{_____}}{(\text{FWB score})} + \frac{\text{_____}}{(\text{FS score})} = \text{FACIT-F TOI}$$

**To Derive a FACT-G total score:**

Score range: 0-108

$$= \frac{\text{_____}}{(\text{PWB score})} + \frac{\text{_____}}{(\text{SWB score})} + \frac{\text{_____}}{(\text{EWB score})} + \frac{\text{_____}}{(\text{FWB score})} = \text{FACT-G Total score}$$

**To Derive a FACIT-F total score:**

Score range: 0-

100

$$= \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad} \\ \text{=FACIT-F Total score} \\ (\text{PWB score}) (\text{SWB score}) (\text{EWB score}) (\text{FWB score}) (\text{FS score})$$

\*For guidelines on handling missing data and scoring options, please refer to the Administration and Scoring Guidelines in the manual or on-line at [www.facit.org](http://www.facit.org).

## 16.5 Appendix 5: Search criteria for adverse events of special interest

Search criteria for AESIs are either MedDRA PT clusters or SMQs. The SMQs and the individual PTs for the PT clusters are provided below. The MedDRA version used for the data coding is v21.0.

### Infections

Abdominal abscess	Acarodermatitis	Acute sinusitis
Abdominal hernia gangrenous	Acid fast bacilli infection	Adenoiditis
Abdominal infection	Acinetobacter bacteraemia	Adenopathy syphilitic
Abdominal lymphadenopathy	Acinetobacter infection	Adenoviral conjunctivitis
Abdominal sepsis	Acinetobacter test positive	Adenoviral haemorrhagic cystitis
Abdominal wall abscess	Acne pustular	Adenoviral hepatitis
Abdominal wall infection	Acquired immunodeficiency syndrome	Adenoviral upper respiratory infection
Abortion infected	Acrodermatitis chronica atrophicans	Adenovirus encephalomyeloradiculitis
Abscess	Actinomyces test positive	Adenovirus infection
Abscess bacterial	Actinomycosis	Adenovirus test
Abscess fungal	Actinomycotic abdominal infection	Adenovirus test positive
Abscess intestinal	Actinomycotic pulmonary infection	Adiponectin increased
Abscess jaw	Actinomycotic skin infection	Administration site abscess
Abscess limb	Acute endocarditis	Administration site cellulitis
Abscess neck	Acute focal bacterial nephritis	Administration site infection
Abscess of external auditory meatus	Acute haemorrhagic conjunctivitis	Adrenal gland abscess
Abscess of eyelid	Acute hepatitis B	Adrenal gland tuberculosis
Abscess of salivary gland	Acute hepatitis C	Adrenalitis
Abscess oral	Acute HIV infection	Aeromonas infection
Abscess rupture	Acute pulmonary histoplasmosis	Aeromonas test positive
Abscess soft tissue		African trypanosomiasis
Abscess sweat gland		AIDS cholangiopathy
Acanthamoeba infection		
Acanthamoeba keratitis		
Acariasis		

AIDS related complex	Angina gangrenous	Application site folliculitis
AIDS related complication	Angiostrongylus infection	Application site infection
AIDS retinopathy	Anicteric leptospirosis	Application site pustules
Air-borne transmission	Anisakiasis	Arachnoiditis
Alcaligenes infection	Anogenital warts	Arboviral infection
Allescheriosis	Anorectal cellulitis	Arbovirus test positive
Alopecia syphilitic	Anorectal human papilloma virus infection	Arenaviral haemorrhagic fever
Alpha haemolytic streptococcal infection	Anorectal infection	Arenavirus test positive
Alphaviral infection	Anorectal infection bacterial	Argentine haemorrhagic fever
Alphavirus test	Anthrax	Arteriosclerotic gangrene
Alphavirus test positive	Anthrax sepsis	Arteriovenous fistula site infection
Alternaria infection	Antifungal treatment	Arteriovenous graft site abscess
Alveolar osteitis	Antimicrobial susceptibility test	Arteriovenous graft site infection
American trypanosomiasis	Antimicrobial susceptibility test intermediate	Arteritis infective
Amniotic cavity infection	Antimicrobial susceptibility test resistant	Arthritis bacterial
Amniotic infection syndrome of Blane	Antimicrobial susceptibility test sensitive	Arthritis fungal
Amoeba test	Aortic aneurysm syphilitic	Arthritis gonococcal
Amoeba test positive	Aortitis salmonella	Arthritis helminthic
Amoebiasis	Aortitis syphilitic	Arthritis infective
Amoebic brain abscess	Aphthovirus test positive	Arthritis reactive
Amoebic colitis	Apical granuloma	Arthritis rubella
Amoebic dysentery	Appendiceal abscess	Arthritis salmonella
Amoebic lung abscess	Appendicitis	Arthritis viral
Amoebic skin ulcer	Appendicitis perforated	Arthropod infestation
Anal abscess	Application site abscess	Arthropod-borne disease
Anal candidiasis	Application site cellulitis	Ascariasis
Anal chlamydia infection		Aspergilloma
Anal fistula infection		Aspergillosis oral
Anal fungal infection		
Anal infection		
Anal tinea		

Aspergillus infection	Bacterial disease carrier	Bifidobacterium infection
Aspergillus test	Bacterial food poisoning	Bifidobacterium test positive
Aspergillus test positive	Bacterial infection	Bile culture
Astrovirus test positive	Bacterial iritis	Bile culture positive
Asymptomatic bacteriuria	Bacterial labyrinthitis	Biliary abscess
Asymptomatic HIV infection	Bacterial pericarditis	Biliary sepsis
Asymptomatic viral hepatitis	Bacterial prostatitis	Biliary tract infection
Atypical mycobacterial infection	Bacterial pyelonephritis	Biliary tract infection bacterial
Atypical mycobacterial lower respiratory tract infection	Bacterial rhinitis	Biliary tract infection cryptosporidial
Atypical mycobacterial lymphadenitis	Bacterial sepsis	Biliary tract infection fungal
Atypical mycobacterial pneumonia	Bacterial test	Biliary tract infection helminthic
Atypical mycobacterium pericarditis	Bacterial test positive	Biliary tract infection viral
Atypical mycobacterium test positive	Bacterial toxæmia	BK virus infection
Atypical pneumonia	Bacterial tracheitis	Black piedra
Avian influenza	Bacterial translocation	Bladder candidiasis
Babesiosis	Bacterial vaginosis	Bladder diverticulitis
Bacillary angiomatosis	Bacterial vulvovaginitis	Blastocystis infection
Bacillus bacteraemia	Bacteriuria	Blastomycosis
Bacillus infection	Bacteriuria in pregnancy	Blebitis
Bacillus test positive	Bacteroides bacteraemia	Blepharitis
Bacteraemia	Bacteroides infection	Blister infected
Bacterascites	Bacteroides test positive	Blood bactericidal activity
Bacterial abscess central nervous system	Balamuthia infection	Blood beta-D-glucan abnormal
Bacterial allergy	Balanitis candida	Blood beta-D-glucan decreased
Bacterial dacryocystitis	Balanoposthitis	Blood beta-D-glucan increased
Bacterial diarrhoea	Balanoposthitis infective	Blood culture
	Balantidiasis	Blood culture positive
	Bartholin's abscess	
	Bartonella test positive	
	Bartonellosis	
	Bed bug infestation	
	Beta haemolytic streptococcal infection	

Blood HIV RNA	Bronchitis haemophilus	Campylobacter gastroenteritis
Blood HIV RNA below assay limit	Bronchitis moraxella	Campylobacter infection
Blood HIV RNA decreased	Bronchitis pneumococcal	Campylobacter sepsis
Blood HIV RNA increased	Bronchitis viral	Campylobacter test positive
Body tinea	Bronchoalveolar lavage abnormal	Candida cervicitis
Bolivian haemorrhagic fever	Bronchopulmonary aspergillosis	Candida endophthalmitis
Bone abscess	Bronchopulmonary aspergillosis allergic	Candida infection
Bone tuberculosis	Bronchoscopy abnormal	Candida nappy rash
Borderline leprosy	Brucella sepsis	Candida osteomyelitis
Bordetella infection	Brucella test	Candida pneumonia
Bordetella test	Brucella test positive	Candida retinitis
Bordetella test positive	Brucellosis	Candida sepsis
Borrelia infection	Bubonic plague	Candida test
Borrelia test	Bulbar poliomyelitis	Candida test positive
Borrelia test positive	Bullous impetigo	Candiduria
Botryomycosis	Burkholderia cepacia complex infection	Capillariasis
Botulism	Burkholderia cepacia complex sepsis	Capillaritis
Boutonneuse fever	Burkholderia gladioli infection	Capnocytophaga infection
Bovine pustular stomatitis virus infection	Burkholderia infection	Capnocytophaga test positive
Bovine tuberculosis	Burkholderia mallei infection	Carbuncle
Brain abscess	Burkholderia pseudomallei infection	Cardiac granuloma
Brain empyema	Burkholderia test positive	Cardiac infection
Breast abscess	Burn infection	Cardiac valve abscess
Breast cellulitis	Bursitis infective	Cardiac valve vegetation
Breast discharge infected	Bursitis infective staphylococcal	Cardiovascular syphilis
Bronchiectasis	Calicivirus test positive	Carditis
Bronchiolitis		Cat scratch disease
Bronchitis		Catheter culture
Bronchitis bacterial		Catheter culture positive
Bronchitis fungal		Catheter site abscess

Catheter site cellulitis	Cervicitis gonococcal	Chronic recurrent multifocal osteomyelitis
Catheter site infection	Cervicitis human papilloma virus	Chronic sinusitis
Catheter site pustule	Cervicitis mycoplasmal	Chronic tonsillitis
Catheter site warmth	Cervicitis streptococcal	Citrobacter infection
Cavernous sinus thrombosis	Cervicitis trichomonal	Citrobacter sepsis
Cellulitis	Cervix warts	Citrobacter test positive
Cellulitis enterococcal	Cestode infection	Clitoris abscess
Cellulitis gangrenous	Chancroid	Clonorchiasis
Cellulitis laryngeal	Chest wall abscess	Clostridial infection
Cellulitis of male external genital organ	Chikungunya virus infection	Clostridial sepsis
Cellulitis orbital	Chlamydia test	Clostridium bacteraemia
Cellulitis pasteurella	Chlamydia test positive	Clostridium colitis
Cellulitis pharyngeal	Chlamydial cervicitis	Clostridium difficile colitis
Cellulitis staphylococcal	Chlamydial infection	Clostridium difficile infection
Cellulitis streptococcal	Chlamydial pelvic inflammatory disease	Clostridium test
Central nervous system abscess	Cholangitis infective	Clostridium test positive
Central nervous system enteroviral infection	Cholecystitis infective	CNS ventriculitis
Central nervous system fungal infection	Cholera	Coccidioides encephalitis
Central nervous system infection	Cholesteatoma	Coccidioidomycosis
Central nervous system inflammation	Cholesterol granuloma	Colitis herpes
Central nervous system viral infection	Choriomeningitis lymphocytic	Colon gangrene
Cerebral aneurysm ruptured syphilitic	Chorioretinitis	Colonic abscess
Cerebral aspergillosis	Choroid tubercles	Colorado tick fever
Cerebral fungal infection	Choroiditis	Colorado tick fever virus test positive
Cerebral malaria	Chromoblastomycosis	Colostomy infection
Cerebral septic infarct	Chronic gastritis	Community acquired infection
Cerebral toxoplasmosis	Chronic hepatitis	Condyloma latum
Cervicitis	Chronic hepatitis B	Congenital condyloma
	Chronic hepatitis C	
	Chronic pulmonary histoplasmosis	

Congenital cytomegalovirus infection	Corona virus infection	Cryptococcosis
Congenital hepatitis B infection	Coronavirus test positive	Cryptococcus test
Congenital herpes simplex infection	Corynebacterium infection	Cryptococcus test positive
Congenital HIV infection	Corynebacterium sepsis	Cryptosporidiosis infection
Congenital infection	Corynebacterium test	CSF culture
Congenital malaria	Corynebacterium test positive	CSF culture positive
Congenital pneumonia	Cow pox	CSF immunoglobulin G index
Congenital rubella infection	Coxiella infection	CSF
Congenital syphilis	Coxiella test positive	leukocyte/erythrocyte ratio
Congenital syphilitic encephalitis	Coxsackie carditis	CSF
Congenital syphilitic meningitis	Coxsackie endocarditis	leukocyte/erythrocyte ratio increased
Congenital syphilitic osteochondritis	Coxsackie myocarditis	CSF measles antibody positive
Congenital toxoplasmosis	Coxsackie pericarditis	CSF virus identified
Congenital tuberculosis	Coxsackie viral disease of the newborn	CSF virus no organisms observed
Congenital varicella infection	Coxsackie viral infection	Culture
Congo-Crimean haemorrhagic fever	Coxsackie virus test	Culture cervix
Conjunctivitis	Coxsackie virus test positive	Culture cervix positive
Conjunctivitis bacterial	Cranial nerve infection	Culture positive
Conjunctivitis chlamydial	Creutzfeldt-Jakob disease	Culture stool
Conjunctivitis gonococcal neonatal	Cronobacter bacteraemia	Culture stool positive
Conjunctivitis tuberculous	Cronobacter infection	Culture throat
Conjunctivitis viral	Cronobacter necrotising enterocolitis	Culture throat positive
Corneal abscess	Cronobacter test positive	Culture tissue specimen
Corneal endotheliitis	Cross infection	Culture tissue specimen positive
Corneal infection	Croup infectious	Culture urine
	Cryptococcal cutaneous infection	Culture urine positive
	Cryptococcal fungaemia	Culture wound
		Culture wound positive
		Cutaneous anthrax

Cutaneous coccidioidomycosis	Cytomegalovirus gastroenteritis	Dental fistula
Cutaneous larva migrans	Cytomegalovirus gastrointestinal infection	Dental gangrene
Cutaneous leishmaniasis	Cytomegalovirus hepatitis	Dermatitis infected
Cutaneous sporotrichosis	Cytomegalovirus infection	Dermatomyositis
Cutaneous tuberculosis	Cytomegalovirus mononucleosis	Dermatophytosis
Cyclitis	Cytomegalovirus mucocutaneous ulcer	Dermo-hypodermitis
Cyclosporidium infection	Cytomegalovirus myelomeningoradiculitis	Device related infection
Cystitis	Cytomegalovirus myocarditis	Device related sepsis
Cystitis bacterial	Cytomegalovirus oesophagitis	Diabetic foot infection
Cystitis erosive	Cytomegalovirus pancreatitis	Diabetic gangrene
Cystitis escherichia	Cytomegalovirus pericarditis	Diaphragmatic hernia gangrenous
Cystitis glandularis	Cytomegalovirus syndrome	Diarrhoea infectious
Cystitis gonococcal	Cytomegalovirus test	Diarrhoea infectious neonatal
Cystitis haemorrhagic	Cytomegalovirus test positive	Diphtheria
Cystitis helminthic	Cytomegalovirus urinary tract infection	Diphtheria carrier
Cystitis interstitial	Cytomegalovirus viraemia	Diphyllobothriasis
Cystitis klebsiella	Dacryoadenitis acquired	Direct infection transmission
Cystitis noninfective	Dacryocanaliculitis	Disseminated cryptococcosis
Cystitis pseudomonal	Dacryocystitis	Disseminated cytomegaloviral infection
Cystitis radiation	Deltaretrovirus test positive	Disseminated tuberculosis
Cystitis ulcerative	Demodicidosis	Diverticulitis
Cystitis viral	Dengue fever	Douglas' abscess
Cytomegalovirus chorioretinitis	Dental caries	Dracunculiasis
Cytomegalovirus colitis		Dural abscess
Cytomegalovirus duodenitis		Dysentery
Cytomegalovirus enteritis		Ear infection
Cytomegalovirus enterocolitis		Ear infection bacterial
Cytomegalovirus gastritis		Ear infection fungal

Ear infection staphylococcal	Encephalitis brain stem	Endocarditis enterococcal
Ear infection viral	Encephalitis california	Endocarditis gonococcal
Ear lobe infection	Encephalitis cytomegalovirus	Endocarditis haemophilus
Ear tuberculosis	Encephalitis eastern equine	Endocarditis helminthic
Ebola disease	Encephalitis enteroviral	Endocarditis histoplasma
Ebola Reston virus infection	Encephalitis fungal	Endocarditis meningococcal
Ebola virus test positive	Encephalitis haemorrhagic	Endocarditis pseudomonal
Echinococcosis	Encephalitis influenzal	Endocarditis Q fever
Echo virus infection	Encephalitis Japanese B	Endocarditis rheumatic
Echovirus test	Encephalitis lethargica	Endocarditis staphylococcal
Echovirus test positive	Encephalitis meningococcal	Endocarditis syphilitic
Ecthyma	Encephalitis mumps	Endocarditis viral
Eczema herpeticum	Encephalitis post immunisation	Endometritis
Eczema impetiginous	Encephalitis post varicella	Endometritis bacterial
Eczema infected	Encephalitis protozoal	Endometritis decidual
Eczema vaccinatum	Encephalitis rickettsial	Endometritis gonococcal
Ehrlichia test	Encephalitis toxic	Endophthalmitis
Ehrlichia test positive	Encephalitis venezuelan equine	Endotoxaemia
Elephantiasis nostras verrucosa	Encephalitis viral	Endotoxic shock
Embolic pneumonia	Encephalitis western equine	Enteritis infectious
Empedobacter brevis infection	Encephalomyelitis	Enteritis necroticans
Empedobacter test positive	Encephalomyelitis rubella	Enterobacter bacteraemia
Emphysematous cholecystitis	End stage AIDS	Enterobacter infection
Emphysematous cystitis	Endemic syphilis	Enterobacter pneumonia
Emphysematous pyelonephritis	Endocarditis	Enterobacter sepsis
Empyema	Endocarditis bacterial	Enterobacter test positive
Encephalitis	Endocarditis candida	Enterobacter tracheobronchitis
Encephalitis allergic		
Encephalitis australia		

Enterobiasis	Epiglottitis obstructive	Escherichia urinary tract infection
Enterococcal bacteraemia	Epstein-Barr viraemia	Escherichia vaginitis
Enterococcal infection	Epstein-Barr virus antibody	Eubacterium infection
Enterococcal sepsis	Epstein-Barr virus antibody positive	Exanthema subitum
Enterococcus test positive	Epstein-Barr virus antigen positive	Exserohilum infection
Enterocolitis AIDS	Epstein-Barr virus associated lymphoma	External ear cellulitis
Enterocolitis bacterial	Epstein-Barr virus associated lymphoproliferative disorder	Extradural abscess
Enterocolitis fungal	Epstein-Barr virus infection	Extrapulmonary tuberculosis
Enterocolitis helminthic	Epstein-Barr virus test	Eye abscess
Enterocolitis infectious	Epstein-Barr virus test positive	Eye infection
Enterocolitis viral	Erosive balanitis	Eye infection bacterial
Enterovirus infection	Eruptive pseudoangiomatosis	Eye infection chlamydial
Enterovirus test	Erysipelas	Eye infection fungal
Enterovirus test positive	Erysipeloid	Eye infection gonococcal
Eosinophilia myalgia syndrome	Erysipelothrix infection	Eye infection helminthic
Eosinophilic cystitis	Erysipelothrix test positive	Eye infection intraocular
Ependymitis	Erythema induratum	Eye infection staphylococcal
Epidemic pleurodynia	Erythema infectiosum	Eye infection syphilitic
Epidemic polyarthritits	Erythema migrans	Eye infection toxoplasmal
Epidemic typhus	Erythrasma	Eye infection viral
Epidermodysplasia verruciformis	Escherichia bacteraemia	Eyelid boil
Epididymitis	Escherichia infection	Eyelid folliculitis
Epididymitis blastomyces	Escherichia pyelonephritis	Eyelid infection
Epididymitis mumps	Escherichia sepsis	Faecal-oral transmission of infection
Epididymitis tuberculous	Escherichia test positive	Fallopian tube abscess
Epididymitis ureaplasmal		Fascial infection
Epididymo-orchitis gonococcal		Fascioliasis
Epiglottitis		Fasciolopsiasis
Epiglottitis haemophilus		Febrile infection

Female genital tract tuberculosis	Funisitis	Gastroenteritis cryptococcal
Femoral hernia gangrenous	Furuncle	Gastroenteritis cryptosporidial
Filariasis	Fusarium infection	Gastroenteritis
Filariasis lymphatic	Fusobacterium infection	enteroviral
Filovirus infection	Fusobacterium test positive	Gastroenteritis
Filovirus test positive	Gallbladder abscess	Escherichia coli
Flavivirus infection	Gallbladder empyema	Gastroenteritis norovirus
Flavivirus test positive	Gangrene	Gastroenteritis
Flavobacterium infection	Gangrene neonatal	paracolon bacillus
Flavobacterium test positive	Gangrenous balanitis	Gastroenteritis proteus
Flea infestation	Gardnerella infection	Gastroenteritis
Folliculitis	Gardnerella test positive	pseudomonas
Foot and mouth disease	Gas gangrene	Gastroenteritis rotavirus
Francisella test positive	Gastric infection	Gastroenteritis
Fungaemia	Gastric ulcer	salmonella
Fungal abscess central nervous system	helicobacter	Gastroenteritis
Fungal cystitis	Gastritis bacterial	shigella
Fungal endocarditis	Gastritis fungal	Gastroenteritis
Fungal infection	Gastritis helminthic	staphylococcal
Fungal labyrinthitis	Gastritis herpes	Gastroenteritis vibrio
Fungal oesophagitis	Gastritis viral	Gastroenteritis viral
Fungal paronychia	Gastroenteritis	Gastroenteritis yersinia
Fungal peritonitis	adenovirus	Gastrointestinal anthrax
Fungal retinitis	Gastroenteritis	Gastrointestinal
Fungal rhinitis	aerobacter	bacterial infection
Fungal sepsis	Gastroenteritis	bacterial overgrowth
Fungal skin infection	aeromonas	Gastrointestinal
Fungal test	Gastroenteritis astroviral	candidiasis
Fungal test positive	Gastroenteritis bacillus	Gastrointestinal fungal
Fungal tracheitis	Gastroenteritis bacterial	infection
Fungating wound	Gastroenteritis caliciviral	Gastrointestinal
	Gastroenteritis clostridial	infection

Gastrointestinal mucosal necrosis	Gerstmann Straussler Scheinker syndrome	Haemophilus sepsis
Gastrointestinal necrosis	Gianotti-Crosti syndrome	Haemophilus test positive
Gastrointestinal protozoal infection	Giardia test	Haemorrhagic fever
Gastrointestinal viral infection	Giardia test positive	Haemorrhagic fever with renal syndrome
Generalised vaccinia	Giardiasis	Haemorrhoid infection
Genital abscess	Gingival abscess	Hand-foot-and-mouth disease
Genital candidiasis	Gingivitis	Hantaviral infection
Genital herpes	Gliosis	Hantavirus pulmonary infection
Genital herpes simplex	Gnathostomiasis	Hantavirus test positive
Genital herpes zoster	Gonococcal pelvic inflammatory disease	HBV-DNA polymerase increased
Genital infection	Gonorrhoea	Helicobacter gastritis
Genital infection bacterial	Gradenigo's syndrome	Helicobacter infection
Genital infection female	Graft infection	Helicobacter sepsis
Genital infection fungal	Gram stain	Helicobacter test
Genital infection helminthic	Gram stain positive	Helicobacter test positive
Genital infection male	Granuloma inguinale	Helminthic infection
Genital infection viral	Granulomatous dermatitis	Henipavirus test positive
Genital tract inflammation	Granulomatous liver disease	Hepatic amoebiasis
Genitourinary chlamydia infection	Granulomatous pneumonitis	Hepatic candidiasis
Genitourinary tract gonococcal infection	Groin abscess	Hepatic cyst infection
Genitourinary tract infection	Groin infection	Hepatic echinococcosis
Genotype drug resistance test	Group B streptococcus neonatal sepsis	Hepatic infection
Genotype drug resistance test abnormal	Guillain-Barre syndrome	Hepatic infection bacterial
Genotype drug resistance test positive	Gynaecological chlamydia infection	Hepatic infection fungal
Geotrichum infection	H1N1 influenza	Hepatic infection helminthic
	Haematoma infection	Hepatic infiltration eosinophilic
	Haemophilus bacteraemia	Hepatic necrosis
	Haemophilus infection	Hepatitis

Hepatitis A	Hepatitis B e antigen	Hepatitis D antigen positive
Hepatitis A antibody	Hepatitis B e antigen positive	Hepatitis D RNA
Hepatitis A antibody abnormal	Hepatitis B surface antibody	Hepatitis D RNA positive
Hepatitis A antibody positive	Hepatitis B surface antibody positive	Hepatitis D virus test
Hepatitis A antigen positive	Hepatitis B surface antigen	Hepatitis D virus test positive
Hepatitis A virus test	Hepatitis B surface antigen positive	Hepatitis E
Hepatitis A virus test positive	Hepatitis B virus test	Hepatitis E antibody
Hepatitis acute	Hepatitis B virus test positive	Hepatitis E antibody abnormal
Hepatitis B	Hepatitis C	Hepatitis E positive
Hepatitis B antibody	Hepatitis C antibody	Hepatitis E antigen
Hepatitis B antibody abnormal	Hepatitis C antibody positive	Hepatitis E antigen positive
Hepatitis B antibody positive	Hepatitis C RNA	Hepatitis E virus test positive
Hepatitis B antigen	Hepatitis C RNA decreased	Hepatitis F
Hepatitis B antigen positive	Hepatitis C RNA fluctuation	Hepatitis fulminant
Hepatitis B core antibody	Hepatitis C RNA increased	Hepatitis G
Hepatitis B core antibody positive	Hepatitis C RNA positive	Hepatitis H
Hepatitis B core antigen	Hepatitis C virus test	Hepatitis infectious mononucleosis
Hepatitis B core antigen positive	Hepatitis C virus test positive	Hepatitis mumps
Hepatitis B DNA assay	Hepatitis chronic active	Hepatitis neonatal
Hepatitis B DNA assay positive	Hepatitis chronic persistent	Hepatitis non-A non-B
Hepatitis B DNA decreased	Hepatitis D	Hepatitis non-A non-B non-C
Hepatitis B DNA increased	Hepatitis D antibody	Hepatitis post transfusion
Hepatitis B e antibody	Hepatitis D antibody positive	Hepatitis syphilitic
Hepatitis B e antibody positive	Hepatitis D antigen	Hepatitis toxoplasmal
		Hepatitis viral
		Hepatitis viral
		Hepatitis viral test

Hepatitis viral test positive	Herpes simplex test	HIV associated nephropathy
Hepatitis virus-associated nephropathy	Herpes simplex test positive	HIV cardiomyopathy
Hepatobiliary infection	Herpes simplex virus conjunctivitis neonatal	HIV carrier
Hepatosplenic candidiasis	Herpes simplex visceral	HIV enteropathy
Hernia gangrenous	Herpes virus infection	HIV infection
Herpangina	Herpes zoster	HIV infection CDC category A
Herpes dermatitis	Herpes zoster cutaneous disseminated	HIV infection CDC category B
Herpes oesophagitis	Herpes zoster disseminated	HIV infection CDC category C
Herpes ophthalmic	Herpes zoster infection neurological	HIV infection CDC Group I
Herpes pharyngitis	Herpes zoster meningitis	HIV infection CDC Group II
Herpes sepsis	Herpes zoster meningoencephalitis	HIV infection CDC Group III
Herpes simplex	Herpes zoster meningomyelitis	HIV infection CDC group IV
Herpes simplex colitis	Herpes zoster necrotising retinopathy	HIV infection CDC Group IV subgroup A
Herpes simplex encephalitis	Herpes zoster oticus	HIV infection CDC Group IV subgroup B
Herpes simplex gastritis	Herpes zoster pharyngitis	HIV infection CDC Group IV subgroup C1
Herpes simplex hepatitis	Heterophyiasis	HIV infection CDC Group IV subgroup C2
Herpes simplex meningitis	Hirudiniasis	HIV infection CDC Group IV subgroup D
Herpes simplex meningoencephalitis	Histiocytic necrotising lymphadenitis	HIV infection CDC Group IV subgroup E
Herpes simplex meningomyelitis	Histoplasmosis	HIV infection WHO clinical stage I
Herpes simplex necrotising retinopathy	Histoplasmosis cutaneous	HIV infection WHO clinical stage II
Herpes simplex oesophagitis	Histoplasmosis disseminated	HIV infection WHO clinical stage III
Herpes simplex otitis externa	HIV antibody	
Herpes simplex pharyngitis	HIV antibody positive	
Herpes simplex pneumonia	HIV antigen	
Herpes simplex sepsis	HIV antigen positive	

HIV infection WHO clinical stage IV	Human polyomavirus infection	Induced abortion infection
HIV peripheral neuropathy	Human rhinovirus test positive	Infantile septic granulomatosis
HIV test	Human T-cell lymphocytic virus type II infection	Infected bite
HIV test positive	Human T-cell lymphotropic virus infection	Infected bunion
HIV tropism test	Human T-cell lymphotropic virus type I infection	Infected cyst
HIV wasting syndrome	Hydrocele male infected	Infected dermal cyst
HIV-associated neurocognitive disorder	Hymenolepisis	Infected fistula
Hookworm infection	Hypopyon	Infected lymphocele
Hordeolum	Iatrogenic infection	Infected naevus
HTLV test positive	Ileal gangrene	Infected neoplasm
HTLV-1 carrier	Immune reconstitution inflammatory syndrome associated tuberculosis	Infected seroma
HTLV-1 test positive	Impetigo	Infected skin ulcer
HTLV-2 test positive	Implant site abscess	Infected varicose vein
Human anaplasmosis	Implant site cellulitis	Infection
Human ehrlichiosis	Implant site infection	Infection in an immunocompromised host
Human herpes virus 6 serology	Implant site pustules	Infection masked
Human herpes virus 6 serology positive	Incision site abscess	Infection parasitic
Human herpes virus 8 test positive	Incision site cellulitis	Infection protozoal
Human herpesvirus 6 infection	Incisional hernia gangrenous	Infection reactivation
Human herpesvirus 7 infection	Inclusion body myositis	Infection susceptibility increased
Human herpesvirus 8 infection	Inclusion conjunctivitis	Infection transmission via personal contact
Human immunodeficiency virus transmission	Inclusion conjunctivitis neonatal	Infection via vaccinee
Human papilloma virus test	Indeterminate leprosy	Infectious colitis
Human papilloma virus test positive	Indirect infection transmission	Infectious crystalline keratopathy
		Infectious disease carrier
		Infectious iridocyclitis
		Infectious mononucleosis

Infectious pleural effusion	Influenza C virus test positive	Joint abscess
Infectious thyroiditis	Influenza virus test	Joint tuberculosis
Infective aneurysm	Influenza virus test positive	Kaposi's sarcoma AIDS related
Infective aortitis	Infusion site abscess	Kaposi's varicelliform eruption
Infective chondritis	Infusion site cellulitis	Kawasaki's disease
Infective corneal ulcer	Infusion site infection	Keratitis
Infective episcleritis	Infusion site pustule	Keratitis bacterial
Infective exacerbation of bronchiectasis	Inguinal hernia gangrenous	Keratitis fungal
Infective exacerbation of chronic obstructive airways disease	Injection site abscess	Keratitis interstitial
Infective gastroduodenitis	Injection site cellulitis	Keratitis viral
Infective glossitis	Injection site infection	Keratoconjunctivitis measles
Infective iritis	Injection site joint infection	Keratosis gonococcal
Infective mesenteric panniculitis	Injection site pustule	Kerion
Infective myositis	Instillation site abscess	Kidney infection
Infective periostitis	Instillation site infection	Klebsiella bacteraemia
Infective pulmonary exacerbation of cystic fibrosis	Instillation site pustules	Klebsiella infection
Infective spondylitis	Intervertebral discitis	Klebsiella sepsis
Infective tenosynovitis	Intestinal fistula infection	Klebsiella test positive
Infective thrombosis	Intestinal gangrene	Kuru
Infective uveitis	Intestinal tuberculosis	Kyasanur Forest disease
Infestation	Intrauterine infection	Labyrinthitis
Influenza	Iridocyclitis	Lacrimal sac cellulitis
Influenza A virus test	Iritis	Lactobacillus infection
Influenza A virus test positive	Isosporiasis	Lactobacillus test positive
Influenza B virus test	Japanese spotted fever	Laryngitis
Influenza B virus test positive	JC polyomavirus test	Laryngitis bacterial
	JC polyomavirus test positive	Laryngitis fungal
	JC virus granule cell neuronopathy	Laryngitis viral
	JC virus infection	Laryngotracheitis obstructive
	Jejunal gangrene	Lassa fever

Latent syphilis	Lung abscess	Mastoid empyema
Latent tuberculosis	Lung infection	Mastoiditis
Legionella infection	Lung infection	Measles
Legionella test	pseudomonal	Measles antibody
Legionella test positive	Lupus encephalitis	Measles antibody positive
Leishmaniasis	Lupus vulgaris	Measles post vaccine
Lemierre syndrome	Lyme disease	Mediastinal abscess
Lentivirus test positive	Lymph gland infection	Mediastinitis
Lepromatous leprosy	Lymph node abscess	Meibomian gland discharge
Leprosy	Lymph node tuberculosis	Meibomianitis
Leptospira test positive	Lymphadenitis bacterial	Meningitis
Leptospirosis	Lymphadenitis fungal	Meningitis aseptic
Leptotrichia infection	Lymphadenitis	Meningitis aspergillus
Leuconostoc infection	helminthic	Meningitis bacterial
Lice infestation	Lymphadenitis viral	Meningitis borrelia
Ligneous conjunctivitis	Lymphangitis	Meningitis candida
Lineal gingival erythema	Lymphogranuloma	Meningitis chemical
Lip infection	venereum	Meningitis coccidioides
Listeria encephalitis	Lyssavirus test positive	Meningitis coxsackie
Listeria sepsis	Malaria	viral
Listeria test positive	Malaria antibody test	Meningitis cronobacter
Listeriosis	Malaria antibody test positive	Meningitis cryptococcal
Liver abscess	Malarial myocarditis	Meningitis echo viral
Localised infection	Male genital tract	Meningitis enterococcal
Lochial infection	tuberculosis	Meningitis enteroviral
Louping ill	Malignant syphilis	Meningitis eosinophilic
Lower respiratory tract infection	Marburg disease	Meningitis exserohilum
Lower respiratory tract infection bacterial	Marburg virus test positive	Meningitis fungal
Lower respiratory tract infection fungal	Mastitis	Meningitis gonococcal
Lower respiratory tract infection viral	Mastitis bacterial	Meningitis haemophilus
Ludwig angina	Mastitis fungal	Meningitis herpes
	Mastitis postpartum	Meningitis histoplasma
	Mastoid abscess	Meningitis leptospiral

Meningitis listeria	Metapneumovirus infection	Mucocutaneous leishmaniasis
Meningitis meningococcal	Methylobacterium infection	Mucormycosis
Meningitis mumps	Microbiology test	Mucosal infection
Meningitis neonatal	Microbiology test abnormal	Mumps
Meningitis pneumococcal	Micrococcal sepsis	Mumps antibody test
Meningitis salmonella	Micrococcus infection	Mumps antibody test positive
Meningitis staphylococcal	Micrococcus test positive	Mumps deafness
Meningitis streptococcal	Microsporidia infection	Murine typhus
Meningitis toxoplasmal	Microsporum infection	Murray Valley encephalitis
Meningitis trypanosomal	Middle ear operation	Muscle abscess
Meningitis tuberculous	Middle East respiratory syndrome	Muscular sarcoidosis
Meningitis viral	Miliary pneumonia	Mycetoma mycotic
Meningococcal bacteraemia	Milker's nodules	Mycobacterial disease carrier
Meningococcal carditis	Minimum inhibitory concentration	Mycobacterial infection
Meningococcal infection	Molluscipoxvirus test positive	Mycobacterial peritonitis
Meningococcal sepsis	Molluscum contagiosum	Mycobacterium abscessus infection
Meningoencephalitis amoebic	Monkeypox	Mycobacterium avium complex immune restoration disease
Meningoencephalitis bacterial	Mononucleosis heterophile test	Mycobacterium avium complex infection
Meningoencephalitis helminthic	Mononucleosis heterophile test positive	Mycobacterium chelonae infection
Meningoencephalitis herpes simplex neonatal	Mononucleosis syndrome	Mycobacterium fortuitum infection
Meningoencephalitis herpetic	Moraxella infection	Mycobacterium kansasii infection
Meningoencephalitis viral	Moraxella test positive	Mycobacterium leprae test positive
Meningomyelitis herpes	Morbillivirus test positive	Mycobacterium marinum infection
Mesenteric abscess	Morganella infection	Mycobacterium test
Mesenteritis	Morganella test positive	
Metagonimiasis	Mucocutaneous candidiasis	

Mycobacterium test positive	Myocarditis syphilitic	Necrotising fasciitis fungal
Mycobacterium tuberculosis complex test	Myocarditis toxoplasmal	Necrotising fasciitis staphylococcal
Mycobacterium tuberculosis complex test positive	Myometritis	Necrotising fasciitis streptococcal
Mycobacterium ulcerans infection	Myositis	Necrotising herpetic retinopathy
Mycoplasma genitalium infection	Myositis ossificans	Necrotising myositis
Mycoplasma infection	Myositis-like syndrome	Necrotising retinitis
Mycoplasma test	Myringitis	Necrotising ulcerative gingivostomatitis
Mycoplasma test positive	Naegleria infection	Necrotising ulcerative periodontitis
Mycoplasmal postabortal fever	Nail bed infection	Neisseria infection
Mycoplasmal postpartum fever	Nail bed infection bacterial	Neisseria test positive
Mycotic corneal ulcer	Nail bed infection viral	Nematodiasis
Mycotic endophthalmitis	Nail candida	Neonatal candida infection
Mycotoxicosis	Nail infection	Neonatal infection
Myelitis	Nairovirus test positive	Neonatal infective mastitis
Myelitis transverse	Nasal abscess	Neonatal mucocutaneous herpes simplex
Myiasis	Nasal candidiasis	Neonatal pneumonia
Myocardiac abscess	Nasal discharge discolouration	Neuroborreliosis
Myocarditis	Nasal herpes	Neurocryptococcosis
Myocarditis bacterial	Nasal vestibulitis	Neurocysticercosis
Myocarditis helminthic	Nasopharyngitis	Neurological infection
Myocarditis infectious	Natural killer cell count	Neurosarcoidosis
Myocarditis meningococcal	Natural killer cell count decreased	Neurosyphilis
Myocarditis mycotic	Natural killer cell count increased	Neutropenic infection
Myocarditis post infection	Natural killer T cell count	Neutropenic sepsis
Myocarditis septic	Natural killer T cell count decreased	Newcastle disease
	Natural killer T cell count increased	Newcastle disease virus test positive
	Necrobacillosis	
	Necrotising fasciitis	

Nipah virus infection	Oral candidiasis	Osteomyelitis
Nipple infection	Oral fungal infection	salmonella
Nipple inflammation	Oral hairy leukoplakia	Osteomyelitis viral
Nocardia sepsis	Oral helminthic infection	Otitis externa
Nocardia test positive	Oral herpes	Otitis externa bacterial
Nocardiosis	Oral infection	Otitis externa candida
Norovirus test positive	Oral pustule	Otitis externa fungal
North Asian tick typhus	Oral viral infection	Otitis externa viral
Nosocomial infection	Orbital infection	Otitis media
Obstetric infection	Orbivirus infection	Otitis media acute
Oculoglandular syndrome	Orbivirus test positive	Otitis media bacterial
Oesophageal candidiasis	Orchitis	Otitis media chronic
Oesophageal infection	Orchitis mumps	Otitis media fungal
Oesophageal tuberculosis	Orf	Otitis media
Oesophagitis bacterial	Organic dust toxic syndrome	haemophilus
Omphalitis	Oro-pharyngeal aspergillosis	Otitis media moraxella
Omsk haemorrhagic fever	Oropharyngeal candidiasis	Otitis media post measles
Onchocerciasis	Oropharyngeal gonococcal infection	Otitis media viral
Oncovirus test positive	Oropharyngitis fungal	Otorrhoea
Onychomycosis	Orthobunyavirus test positive	Otosalpingitis
Oophoritis	Orthopox virus infection	Ovarian abscess
Ophthalmia neonatorum	Orthopoxvirus test positive	Ovarian bacterial infection
Ophthalmic herpes simplex	Osler's nodes	Overgrowth bacterial
Ophthalmic herpes zoster	Osteomyelitis	Pachymeningitis
Opisthorchiasis	Osteomyelitis acute	Pancreas infection
Opportunistic infection	Osteomyelitis bacterial	Pancreatic abscess
Optic neuritis	Osteomyelitis	Pancreatitis bacterial
Optic neuritis meningococcal	blastomyces	Pancreatitis fungal
Oral bacterial infection	Osteomyelitis chronic	Pancreatitis helminthic
	Osteomyelitis fungal	Pancreatitis mumps

Pantoea agglomerans infection	Parasitic test	Peptostreptococcus test positive
Pantoea agglomerans test positive	Parasitic test positive	Perianal streptococcal infection
Papilloma viral infection	Paraspinal abscess	Pericarditis amoebic
Paracoccidioides infection	Parathyroid gland abscess	Pericarditis fungal
Paragonimiasis	Paratyphoid fever	Pericarditis gonococcal
Parainfluenzae viral laryngotracheobronchitis	Paravaccinia	Pericarditis helminthic
Parainfluenzae virus infection	Paravaccinia virus test positive	Pericarditis histoplasma
Parametric abscess	Parechovirus infection	Pericarditis infective
Parametritis	Paronychia	Pericarditis meningococcal
Paraoesophageal abscess	Parophthalmia	Pericarditis mycoplasmal
Parapox virus infection	Parotid abscess	Pericarditis rheumatic
Parapoxvirus test positive	Parotitis	Pericarditis syphilitic
Parasite allergy	Parvovirus B19 test	Pericarditis tuberculous
Parasite blood test	Parvovirus B19 test positive	Perichondritis
Parasite blood test positive	Parvovirus infection	Pericoronitis
Parasite cervical specimen test positive	Pasteurella infection	Perihepatic abscess
Parasite DNA test	Pasteurella test positive	Perihepatitis
Parasite DNA test positive	Pathogen resistance	Perihepatitis gonococcal
Parasite stool test	Peliosis hepatis	Perinatal HBV infection
Parasite stool test positive	Pelvic abscess	Perinatal HIV infection
Parasite tissue specimen test positive	Pelvic infection	Perineal abscess
Parasite urine test positive	Pelvic inflammatory disease	Perineal infection
Parasitic encephalitis	Pelvic inflammatory disease mycoplasmal	Perinephric abscess
Parasitic gastroenteritis	Pelvic sepsis	Periodontal destruction
Parasitic oesophagitis	Penicillium infection	Periodontal inflammation
	Penile abscess	Periodontitis
	Penile infection	Periorbital abscess
	Penile wart	Periorbital cellulitis
	Peptic ulcer helicobacter	Periorbital infection
	Peptostreptococcus infection	Peripheral nerve infection

Periporitis staphylogenies	Pharyngotonsillitis	Pneumonia anthrax
Perirectal abscess	Phlebitis infective	Pneumonia bacterial
Peritoneal abscess	Phlebotomus fever	Pneumonia blastomyces
Peritoneal candidiasis	Phlebovirus test positive	Pneumonia bordetella
Peritoneal chlamydia infection	Pilonidal cyst	Pneumonia chlamydial
Peritoneal tuberculosis	Pilonidal cyst congenital	Pneumonia cryptococcal
Peritonitis	Pingueculitis	Pneumonia cytomegaloviral
Peritonitis bacterial	Pinta	Pneumonia escherichia
Peritonitis gonococcal	Pitted keratolysis	Pneumonia fungal
Peritonitis helminthic	Plague	Pneumonia haemophilus
Peritonitis pneumococcal	Plague sepsis	Pneumonia helminthic
Peritonitis syphilitic	Plasma cell mastitis	Pneumonia herpes viral
Peritonitis viral	Plasmodium falciparum infection	Pneumonia influenzal
Peritonsillar abscess	Plasmodium malariae infection	Pneumonia klebsiella
Peritonsillitis	Plasmodium ovale infection	Pneumonia legionella
Perumbilical abscess	Plasmodium vivax infection	Pneumonia measles
Persistent generalised lymphadenopathy	Pleural fluid analysis	Pneumonia moraxella
Pertussis	Pleural infection	Pneumonia mycoplasmal
Petrositis	Pleural infection bacterial	Pneumonia necrotising
Phaeohyphomycosis	Pleurisy viral	Pneumonia parainfluenzae viral
Pharyngeal abscess	Pneumococcal bacteraemia	Pneumonia pneumococcal
Pharyngeal chlamydia infection	Pneumococcal infection	Pneumonia pseudomonal
Pharyngitis	Pneumococcal sepsis	Pneumonia respiratory syncytial viral
Pharyngitis bacterial	Pneumocystis jirovecii infection	Pneumonia salmonella
Pharyngitis mycoplasmal	Pneumocystis jirovecii pneumonia	Pneumonia staphylococcal
Pharyngitis streptococcal	Pneumocystis test positive	Pneumonia streptococcal
Pharyngoconjunctival fever of children	Pneumonia	Pneumonia toxoplasmal
Pharyngolaryngeal abscess	Pneumonia adenoviral	Pneumonia tularaemia

Pneumonia viral	Post viral fatigue syndrome	Prostatitis
Pneumonic plague	Postoperative abscess	Prostatitis Escherichia coli
Pneumovirus test positive	Postoperative wound infection	Prostatitis gonococcal
Pogosta disease	Postoperative wound infection	Prostatitis trichomonal
Polioencephalitis	Postoperative wound infection	Prostatitis tuberculous
Poliomyelitis	Postpartum sepsis	Prostatovesiculitis
Poliovirus test	Potassium hydroxide preparation	Proteus infection
Poliovirus test positive	Potassium hydroxide preparation positive	Proteus test positive
Polymerase chain reaction	Presumed ocular histoplasmosis syndrome	Protozoal corneal ulcer
Polymyositis	Primary syphilis	Pseudallescheria infection
Polyneuropathy mumps	Primary transmission	Pseudallescheria sepsis
Polyomavirus test positive	Prion agent test positive	Pseudofolliculitis barbae
Polyomavirus-associated nephropathy	Proctitis bacterial	Pseudomembranous colitis
Pontiac fever	Proctitis chlamydial	Pseudomonal bacteraemia
Porphyromonas infection	Proctitis fungal	Pseudomonal sepsis
Porphyromonas test positive	Proctitis gonococcal	Pseudomonas aeruginosa meningitis
Portal pyaemia	Proctitis herpes	Pseudomonas bronchitis
Portal tract inflammation	Proctitis infectious	Pseudomonas infection
Post abortion infection	Proctitis monilial	Pseudomonas test positive
Post herpetic neuralgia	Proctitis mycoplasmal	Psittacosis
Post polio syndrome	Progressive massive fibrosis	Psoas abscess
Post procedural cellulitis	Progressive multifocal leukoencephalopathy	Psorospermiasis
Post procedural infection	Progressive vaccinia	Puerperal infection
Post procedural pneumonia	Propionibacterium infection	Puerperal pyrexia
Post procedural sepsis	Propionibacterium test positive	Pulmonary echinococcosis
Post streptococcal glomerulonephritis	Prostate infection	Pulmonary mycosis
Post vaccination autoinoculation	Prostatic abscess	Pulmonary sepsis
		Pulmonary syphilis

Pulmonary trichosporonosis	Rabies	Retinitis
Pulmonary tuberculoma	Raoultella ornithinolytica infection	Retinitis histoplasma
Pulmonary tuberculosis	Raoultella test positive	Retinitis viral
Pulpitis dental	Rash pustular	Retroperitoneal abscess
Punctate keratitis	Recrudescent typhus	Retroperitoneal infection
Puncture site abscess	Rectal abscess	Retroviral infection
Puncture site discharge	Rectovaginal septum abscess	Retroviral rebound syndrome
Puncture site infection	Reiter's syndrome	Reye's syndrome
Puncture site oedema	Relapsing fever	Rheumatic fever
Purulence	Renal abscess	Rheumatic heart disease
Purulent discharge	Renal cyst infection	Rhinitis
Purulent pericarditis	Renal syphilis	Rhinolaryngitis
Purulent synovitis	Renal tuberculosis	Rhinoscleroma
Pyelocystitis	Respiratory moniliasis	Rhinosporidiosis
Pyelonephritis	Respiratory papilloma	Rhinotracheitis
Pyelonephritis acute	Respiratory syncytial virus bronchiolitis	Rhinovirus infection
Pyelonephritis chronic	Respiratory syncytial virus bronchitis	Rhodococcus infection
Pyelonephritis fungal	Respiratory syncytial virus infection	Rhodococcus test positive
Pyelonephritis mycoplasmal	Respiratory syncytial virus test	Rickettsialpox
Pyelonephritis viral	Respiratory syncytial virus test positive	Rickettsioses not tick borne
Pyloric abscess	Respiratory tract infection	Rickettsiosis
Pyoderma	Respiratory tract infection bacterial	Rift Valley fever
Pyoderma streptococcal	Respiratory tract infection fungal	Rocky mountain spotted fever
Pyometra	Respiratory tract infection viral	Root canal infection
Pyomyositis	Respirovirus test	Roseola
Pyonephrosis	Respirovirus test positive	Roseolovirus test positive
Pyopneumothorax	Respirovirus test positive	Rotavirus infection
Pyospermia	Respirovirus test positive	Rotavirus test
Pythium insidiosum infection	Respirovirus test positive	Rotavirus test positive
Pyuria	Respirovirus test positive	Rubella
Q fever		
Queensland tick typhus		

Rubella antibody positive	Secondary syphilis	Serratia test positive
Rubella antibody test	Secondary transmission	Severe acute respiratory syndrome
Rubella immunity confirmed	Seminal vesicular infection	Severe invasive streptococcal infection
Rubella in pregnancy	Seminal vesiculitis	Sexual transmission of infection
Rubella infection neurological	Seminal vesiculitis gonococcal	Sexually transmitted disease
Rubivirus test positive	Sepsis	Sexually transmitted disease carrier
Rubulavirus test positive	Sepsis neonatal	Shigella infection
Salmonella bacteraemia	Sepsis pasteurella	Shigella sepsis
Salmonella sepsis	Sepsis syndrome	Shigella test positive
Salmonella test positive	Septic arthritis haemophilus	Shunt infection
Salmonellosis	Septic arthritis neisserial	Sialoadenitis
Salpingitis	Septic arthritis staphylococcal	Silicotuberculosis
Salpingitis gonococcal	Septic arthritis streptobacillus	Sinobronchitis
Salpingitis tuberculous	Septic arthritis streptococcal	Sinusitis
Salpingo-oophoritis	Septic embolus	Sinusitis aspergillus
Sapovirus test positive	Septic encephalopathy	Sinusitis bacterial
Sarcocystis infection	Septic necrosis	Sinusitis fungal
Scarlet fever	Septic phlebitis	Skin bacterial infection
Scedosporium infection	Septic rash	Skin candida
Schistosoma test	Septic shock	Skin graft infection
Schistosoma test positive	Septic vasculitis	Skin infection
Schistosomiasis	Seroconversion test	Skin infection helminthic
Schistosomiasis bladder	Seroconversion test positive	Slit-lamp tests abnormal
Schistosomiasis cutaneous	Serology abnormal	Slow virus infection
Schistosomiasis liver	Serology positive	Small intestine gangrene
Scrotal abscess	Serology test	Smallpox
Scrotal gangrene	Serratia bacteraemia	Snowshoe hare virus infection
Scrotal infection	Serratia infection	Soft tissue infection
Scrub typhus	Serratia sepsis	
Sebaceous gland infection		

Spermatic cord funiculitis	Staphylococcal parotitis	Streptococcal endocarditis
Spermatic cord inflammation	Staphylococcal pharyngitis	Streptococcal impetigo
Sphingomonas paucimobilis infection	Staphylococcal scalded skin syndrome	Streptococcal infection
Spinal cord abscess	Staphylococcal sepsis	Streptococcal sepsis
Spinal cord infection	Staphylococcal skin infection	Streptococcal urinary tract infection
Spirillary fever	Staphylococcal toxæmia	Streptococcus test
Spirillum test positive	Staphylococcus test	Streptococcus test positive
Spirochaetal infection	Staphylococcus test positive	Strongyloidiasis
Spleen tuberculosis	Stenotrophomonas infection	Subacute endocarditis
Splenic abscess	Stenotrophomonas sepsis	Subacute sclerosing panencephalitis
Splenic candidiasis	Stenotrophomonas test positive	Subarachnoid abscess
Splenic infection	Sternitis	Subcutaneous abscess
Splenic infection bacterial	Stitch abscess	Subdiaphragmatic abscess
Splenic infection fungal	Stoma site abscess	Subglottic laryngitis
Splenic infection helminthic	Stoma site candida	Subperiosteal abscess
Splenic infection viral	Stoma site cellulitis	Superinfection
Sporotrichosis	Stoma site infection	Superinfection bacterial
Spotted fever rickettsia test positive	Stomach granuloma	Superinfection fungal
Sputum culture	Stomatococcal infection	Superinfection mycobacterial
Sputum culture positive	Stomatococcus test positive	Superinfection viral
Sputum purulent	Strawberry tongue	Suspected transmission of an infectious agent via product
St. Louis encephalitis	Streptobacillary fever	Sweat gland infection
Staphylococcal abscess	Streptobacillus infection	Sweating fever
Staphylococcal bacteraemia	Streptobacillus test positive	Sycosis barbae
Staphylococcal impetigo	Streptococcal abscess	Syphilis
Staphylococcal infection	Streptococcal bacteraemia	Syphilis anal
Staphylococcal mediastinitis		Syphilis genital
Staphylococcal osteomyelitis		Syphilis musculoskeletal

Syphilitic endocarditis of heart valve	Tonsillitis fungal	Trichomoniasis intestinal
Systemic candida	Tonsillitis streptococcal	Trichophytic granuloma
Systemic mycosis	Tooth abscess	Trichophytosis
Taeniasis	Tooth infection	Trichosporon infection
Tertiary syphilis	Torulopsis infection	Trichostrongyliasis
Testicular abscess	Toxic shock syndrome	Trichuriasis
Tetanus	Toxic shock syndrome staphylococcal	Trigonitis
Tetanus neonatorum	Toxic shock syndrome streptococcal	Tropical eosinophilia
Thornwaldt disease	Toxocariasis	Tropical infectious disease
Thrombophlebitis septic	Toxoplasma serology	Tropical spastic paresis
Thymus abscess	Toxoplasma serology positive	Tropical ulcer
Thyroglossal cyst infection	Toxoplasmosis	Trypanosoma serology positive
Thyroid echinococcosis	Tracheitis	Trypanosomiasis
Thyroid gland abscess	Tracheitis obstructive	Tuberculin test
Thyroid tuberculosis	Tracheobronchitis	Tuberculin test positive
Thyroiditis subacute	Tracheobronchitis mycoplasmal	Tuberculoid leprosy
Tick-borne fever	Tracheobronchitis viral	Tuberculoma of central nervous system
Tick-borne viral encephalitis	Tracheostomy infection	Tuberculosis
Tinea barbae	Trachoma	Tuberculosis bladder
Tinea blanca	Transmission of an infectious agent via product	Tuberculosis gastrointestinal
Tinea capitis	Transplant abscess	Tuberculosis liver
Tinea cruris	Trematode infection	Tuberculosis of central nervous system
Tinea faciei	Trench fever	Tuberculosis of eye
Tinea imbricata	Treponema test	Tuberculosis of genitourinary system
Tinea infection	Treponema test false positive	Tuberculosis of intrathoracic lymph nodes
Tinea manuum	Treponema test positive	Tuberculosis of peripheral lymph nodes
Tinea nigra	Trichiniasis	Tuberculosis ureter
Tinea pedis	Trichomoniasis	
Tinea versicolour		
Tongue abscess		
Tonsillitis		
Tonsillitis bacterial		

Tuberculous abscess central nervous system	Ureteritis	Uterine abscess
Tuberculous endometritis	Urethral abscess	Uterine infection
Tuberculous laryngitis	Urethral carbuncle	Uveitis
Tuberculous pleurisy	Urethral stricture post infection	Vaccination site abscess
Tuberculous tenosynovitis	Urethritis	Vaccination site cellulitis
Tubo-ovarian abscess	Urethritis chlamydial	Vaccination site discharge
Tularaemia	Urethritis gonococcal	Vaccination site infection
Type 1 lepra reaction	Urethritis mycoplasmal	Vaccination site pallor
Type 2 lepra reaction	Urethritis trichomonal	Vaccination site pustule
Typhoid carrier	Urinary bladder abscess	Vaccine associated paralytic poliomyelitis
Typhoid fever	Urinary tract abscess	Vaccine breakthrough infection
Typhus	Urinary tract infection	Vaccine virus shedding
Typhus rickettsia test	Urinary tract infection bacterial	Vaccinia test positive
Typhus rickettsia test positive	Urinary tract infection enterococcal	Vaccinia virus infection
Ulcerative keratitis	Urinary tract infection fungal	Vaginal abscess
Umbilical hernia gangrenous	Urinary tract infection neonatal	Vaginal cellulitis
Umbilical sepsis	Urinary tract infection pseudomonal	Vaginal infection
Upper aerodigestive tract infection	Urinary tract infection staphylococcal	Vaginitis chlamydial
Upper respiratory fungal infection	Urinary tract infection viral	Vaginitis gardnerella
Upper respiratory tract infection	Urinary tract inflammation	Vaginitis viral
Upper respiratory tract infection bacterial	Urogenital infection bacterial	Variant Creutzfeldt-Jakob disease
Upper respiratory tract infection helminthic	Urogenital infection fungal	Varicella
Urachal abscess	Urogenital infection trichomoniasis	Varicella post vaccine
Ureaplasma infection	Urosepsis	Varicella virus test
Ureaplasma test positive		Varicella virus test positive
Ureter abscess		Varicella zoster gastritis

Vector-borne transmission of infection	Viral sepsis	Vulvovaginitis streptococcal
Veillonella infection	Viral sinusitis	Vulvovaginitis trichomonal
Veillonella test positive	Viral skin infection	
Vertical infection transmission	Viral test	Waterhouse-Friderichsen syndrome
Vessel puncture site infection	Viral test positive	Weil's disease
Vestibular neuronitis	Viral titre	West Nile viral infection
Vestibulitis	Viral titre decreased	Whipple's disease
Vibrio test positive	Viral titre increased	Withdrawal hepatitis
Viraemia	Viral tonsillitis	
Viral cardiomyopathy	Viral tracheitis	Wound abscess
Viral corneal ulcer	Viral upper respiratory tract infection	Wound contamination
Viral diarrhoea	Viral uveitis	Wound infection
Viral epiglottitis	Viral vasculitis	Wound infection bacterial
Viral haemorrhagic cystitis	Virologic failure	Wound infection fungal
Viral hepatitis carrier	Visceral larva migrans	Wound infection helminthic
Viral infection	Visceral leishmaniasis	
Viral labyrinthitis	Vitreous abscess	Wound infection pseudomonas
Viral load	Vitritis	Wound infection staphylococcal
Viral load decreased	Vorticella infection	
Viral load increased	Vulval abscess	Wound infection viral
Viral mastitis	Vulval cellulitis	Wound sepsis
Viral mutation identified	Vulvitis	Yaws
Viral myelitis	Vulvovaginal candidiasis	Yaws of bone
Viral myocarditis	Vulvovaginal human papilloma virus infection	Yaws of skin
Viral myositis	Vulvovaginal mycotic infection	Yellow fever
Viral oesophagitis	Vulvovaginal warts	Yellow fever vaccine-associated neurotropic disease
Viral parotitis	Vulvovaginitis	Yellow fever vaccine-associated viscerotropic disease
Viral pericarditis	Vulvovaginitis chlamydial	
Viral pharyngitis	Vulvovaginitis gonococcal	Yersinia bacteraemia
Viral rash	Vulvovaginitis helminthic	Yersinia infection
Viral rhinitis		Yersinia sepsis

Yersinia test	Young's syndrome	Zoonotic bacterial infection
Yersinia test positive	Zoonosis	

### **Serious infections**

Any events like this will be listed under cluster = Infections, and can be identified based on AESER = Y

### **Opportunistic infections (excluding TB)**

Aeromonas infection	Candida endophthalmitis	Cytomegalovirus chorioretinitis
Aeromonas test positive	Candida osteomyelitis	Cytomegalovirus colitis
Allescheriosis	Candida pneumonia	Cytomegalovirus duodenitis
Alternaria infection	Candida retinitis	
Aspergilloma	Candida sepsis	Cytomegalovirus enteritis
Aspergillosis oral	Capnocytophaga infection	Cytomegalovirus enterocolitis
Aspergillus infection	Capnocytophaga test positive	Cytomegalovirus gastritis
Aspergillus test	Cerebral aspergillosis	Cytomegalovirus gastroenteritis
Aspergillus test positive	Cerebral fungal infection	Cytomegalovirus gastrointestinal infection
Atypical mycobacterial lower respiratory tract infection	Cerebral toxoplasmosis	Cytomegalovirus gastrointestinal ulcer
Atypical mycobacterial pneumonia	Chronic pulmonary histoplasmosis	Cytomegalovirus hepatitis
Atypical mycobacterium pericarditis	Coccidioides encephalitis	Cytomegalovirus infection
Bacillary angiomatosis	Coccidioidomycosis	Cytomegalovirus mucocutaneous ulcer
BK virus infection	Colitis herpes	Cytomegalovirus myelomeningoradiculitis
Bronchopulmonary aspergillosis	Cryptococcal cutaneous infection	Cytomegalovirus myocarditis
Burkholderia cepacia complex infection	Cryptococcal fungaemia	Cytomegalovirus oesophagitis
Burkholderia cepacia complex sepsis	Cryptococciosis	Cytomegalovirus pancreatitis
Burkholderia gladioli infection	Cryptococcus test positive	
Burkholderia infection	Cryptococcus test positive	
Burkholderia test positive	Cutaneous coccidioidomycosis	

Cytomegalovirus pericarditis	Gastroenteritis cryptococcal	Herpes zoster meningoencephalitis
Cytomegalovirus syndrome	Genital herpes zoster	Herpes zoster meningomyelitis
Cytomegalovirus test	Hepatic candidiasis	
Cytomegalovirus test positive	Hepatic infection fungal	Herpes zoster necrotising retinopathy
Cytomegalovirus urinary tract infection	Hepatitis toxoplasmal	Herpes zoster oticus
Cytomegalovirus viraemia	Hepatosplenic candidiasis	Herpes zoster pharyngitis
Disseminated cryptococcosis	Herpes oesophagitis	Histoplasmosis cutaneous
Disseminated cytomegaloviral infection	Herpes sepsis	Histoplasmosis disseminated
Encephalitis cytomegalovirus	Herpes simplex colitis	Infection in an immunocompromised host
Encephalitis fungal	Herpes simplex encephalitis	JC polyomavirus test
Endocarditis histoplasma	Herpes simplex gastritis	JC polyomavirus test positive
Enterocolitis fungal	Herpes simplex hepatitis	JC virus granule cell neuronopathy
Exserohilum infection	Herpes simplex meningitis	JC virus infection
Exserohilum test	Herpes simplex meningoencephalitis	Kaposi's sarcoma AIDS related
Exserohilum test positive	Herpes simplex meningomyelitis	Kaposi's varicelliform eruption
Eye infection toxoplasmal	Herpes simplex necrotising retinopathy	Listeria encephalitis
Fungaemia	Herpes simplex oesophagitis	Listeria sepsis
Fungal abscess central nervous system	Herpes simplex pneumonia	Listeria test positive
Fungal oesophagitis	Herpes simplex sepsis	Lymphadenitis fungal
Fungal retinitis	Herpes simplex visceral	Meningitis aspergillus
Fungal sepsis	Herpes zoster cutaneous disseminated	Meningitis candida
Fungal tracheitis	Herpes zoster disseminated	Meningitis coccidioides
Fusarium infection	Herpes zoster infection neurological	Meningitis cryptococcal
Gastritis fungal	Herpes zoster meningitis	Meningitis exserohilum
Gastritis herpes		Meningitis fungal
		Meningitis herpes

Meningitis histoplasma	Oral candidiasis	Pseudallescheria infection
Meningitis listeria	Oral fungal infection	Pseudallescheria sepsis
Meningitis toxoplasmal	Oral hairy leukoplakia	Pyelonephritis fungal
Meningomyelitis herpes	Oro-pharyngeal aspergillosis	Respiratory moniliasis
Methylobacterium infection	Oropharyngeal candidiasis	Retinitis histoplasma
Miliary pneumonia	Oropharyngitis fungal	Retinitis viral
Mucocutaneous candidiasis	Otitis media fungal	Rhodococcus infection
Mucormycosis	Pancreatitis fungal	Rhodococcus test positive
Mycobacterium avium complex immune restoration disease	Penicillium infection	Scedosporium infection
Mycobacterium avium complex infection	Pericarditis fungal	Sepsis pasteurella
Mycobacterium cheloneae infection	Pericarditis histoplasma	Sinusitis aspergillus
Mycobacterium fortuitum infection	Phaeohyphomycosis	Sinusitis fungal
Mycobacterium kansasii infection	Pneumocystis jirovecii infection	Splenic candidiasis
Myocarditis toxoplasmal	Pneumocystis jirovecii pneumonia	Splenic infection fungal
Necrotising herpetic retinopathy	Pneumocystis test positive	Stomatococcal infection
Neurocryptococcosis	Pneumonia cryptococcal	Stomatococcus test positive
Neutropenic infection	Pneumonia cytomegaloviral	Strongyloidiasis
Neutropenic sepsis	Pneumonia herpes viral	Systemic candida
Nocardia sepsis	Pneumonia toxoplasmal	Systemic mycosis
Nocardia test positive	Polyomavirus-associated nephropathy	Tonsillitis fungal
Nocardiosis	Presumed ocular histoplasmosis syndrome	Upper respiratory fungal infection
Oesophageal candidiasis	Proctitis herpes	Varicella zoster gastritis
Ophthalmic herpes zoster	Progressive multifocal leukoencephalopathy	Varicella zoster oesophagitis
Opportunistic infection	Progressive vaccinia	Varicella zoster pneumonia

Adrenal gland tuberculosis	Male genital tract tuberculosis	Tuberculosis liver
Bone tuberculosis	Meningitis tuberculous	Tuberculosis of central nervous system
Choroid tubercles	Oesophageal tuberculosis	Tuberculosis of eye
Congenital tuberculosis	Pericarditis tuberculous	Tuberculosis of genitourinary system
Conjunctivitis tuberculous	Peritoneal tuberculosis	Tuberculosis of intrathoracic lymph nodes
Cutaneous tuberculosis	Prostatitis tuberculous	Tuberculosis of peripheral lymph nodes
Disseminated tuberculosis	Pulmonary tuberculoma	Tuberculosis ureter
Ear tuberculosis	Pulmonary tuberculosis	Tuberculous abscess
Epididymitis tuberculous	Renal tuberculosis	central nervous system
Erythema induratum	Salpingitis tuberculous	Tuberculous endometritis
Exposure to communicable disease	Silicotuberculosis	Tuberculous laryngitis
Extrapulmonary tuberculosis	Spleen tuberculosis	Tuberculous pleurisy
Female genital tract tuberculosis	Thyroid tuberculosis	Tuberculous tenosynovitis
Joint tuberculosis	Tuberculosis of central nervous system	
Lymph node tuberculosis	Tuberculosis	
	Tuberculosis bladder	
	Tuberculosis gastrointestinal	

### Latent TB

Latent tuberculosis	Mycobacterium tuberculosis complex	Tuberculin test false negative
Mycobacterium test positive		Tuberculin test positive

Herpes zoster infection		
Colitis herpes	Herpes zoster	Herpes zoster meningoencephalitis
Gastritis herpes	Herpes zoster cutaneous disseminated	Herpes zoster meningomyelitis
Genital herpes zoster	Herpes zoster disseminated	Herpes zoster necrotising retinopathy
Herpes oesophagitis	Herpes zoster infection neurological	Herpes zoster oticus
Herpes ophthalmic		
Herpes pharyngitis	Herpes zoster meningitis	Herpes zoster pharyngitis
Herpes sepsis		
Herpes virus infection		

Meningitis herpes  
Meningomyelitis herpes  
Ophthalmic herpes  
zoster  
Pneumonia herpes viral  
Proctitis herpes  
Varicella zoster gastritis  
Varicella zoster  
oesophagitis  
Varicella zoster  
pneumonia  
Varicella zoster virus  
infection

**Malignancies**

Malignancies standardized MedDRA query (SMQ) (Narrow)

**Hypersensitivity reactions (including anaphylaxis and angioedema)**

Anaphylactic reaction SMQ (Narrow)

Angioedema SMQ (Narrow)

Hypersensitivity SMQ (Narrow)

**Gastrointestinal (GI) perforation**

Gastrointestinal perforation SMQ (Narrow)

**Demyelinating disorders**

Demyelination SMQ (Narrow)

**Major adverse cardiac events (MACE)**

Cardiac failure SMQ (Narrow)

Cerebrovascular disorders SMQ (Narrow)

Ischemic heart disease SMQ (Narrow)

# Your Health and Well-Being

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This survey asks for your views about your health. This information will help keep track of how you feel and how well you are able to do your usual activities. *Thank you for completing this survey!*

For each of the following questions, please mark an  in the one box that best describes your answer.

**1. In general, would you say your health is:**

Excellent	Very good	Good	Fair	Poor
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

**2. Compared to one week ago, how would you rate your health in general now?**

Much better now than one week ago	Somewhat better now than one week ago	About the same as one week ago	Somewhat worse now than one week ago	Much worse now than one week ago
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

3. The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?

Yes, limited a lot	Yes, limited a little	No, not limited at all
▼	▼	▼

- a Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports.....  1.....  2.....  3
- b Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf.....  1.....  2.....  3
- c Lifting or carrying groceries .....  1.....  2.....  3
- d Climbing several flights of stairs .....  1.....  2.....  3
- e Climbing one flight of stairs .....  1.....  2.....  3
- f Bending, kneeling, or stooping .....  1.....  2.....  3
- g Walking more than a mile .....  1.....  2.....  3
- h Walking several hundred yards.....  1.....  2.....  3
- i Walking one hundred yards .....  1.....  2.....  3
- j Bathing or dressing yourself .....  1.....  2.....  3

**4. During the past week, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of your physical health?**

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
	▼	▼	▼	▼	▼

- a Cut down on the amount of time you spent on work or other activities .....  1 .....  2 .....  3 .....  4 .....  5
- b Accomplished less than you would like .....  1 .....  2 .....  3 .....  4 .....  5
- c Were limited in the kind of work or other activities .....  1 .....  2 .....  3 .....  4 .....  5
- d Had difficulty performing the work or other activities (for example, it took extra effort) .....  1 .....  2 .....  3 .....  4 .....  5

**5. During the past week, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?**

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
	▼	▼	▼	▼	▼

- a Cut down on the amount of time you spent on work or other activities .....  1 .....  2 .....  3 .....  4 .....  5
- b Accomplished less than you would like .....  1 .....  2 .....  3 .....  4 .....  5
- c Did work or other activities less carefully than usual .....  1 .....  2 .....  3 .....  4 .....  5

6. During the past week, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?

Not at all	Slightly	Moderately	Quite a bit	Extremely
				
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

7. How much bodily pain have you had during the past week?

None	Very mild	Mild	Moderate	Severe	Very severe
					
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6

8. During the past week, how much did pain interfere with your normal work (including both work outside the home and housework)?

Not at all	A little bit	Moderately	Quite a bit	Extremely
				
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

- 9. These questions are about how you feel and how things have been with you during the past week. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the past week...**

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
	▼	▼	▼	▼	▼

- a Did you feel full of life? .....  1 .....  2 .....  3 .....  4 .....  5
- b Have you been very nervous? .....  1 .....  2 .....  3 .....  4 .....  5
- c Have you felt so down in the dumps that nothing could cheer you up? .....  1 .....  2 .....  3 .....  4 .....  5
- d Have you felt calm and peaceful? .....  1 .....  2 .....  3 .....  4 .....  5
- e Did you have a lot of energy? .....  1 .....  2 .....  3 .....  4 .....  5
- f Have you felt downhearted and depressed? .....  1 .....  2 .....  3 .....  4 .....  5
- g Did you feel worn out? .....  1 .....  2 .....  3 .....  4 .....  5
- h Have you been happy? .....  1 .....  2 .....  3 .....  4 .....  5
- i Did you feel tired? .....  1 .....  2 .....  3 .....  4 .....  5

- 10. During the past week, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?**

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
	▼	▼	▼	▼	▼
	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

**11. How TRUE or FALSE is each of the following statements for you?**

Definitely true	Mostly true	Don't know	Mostly false	Definitely false
▼	▼	▼	▼	▼

- a I seem to get sick a little easier than other people.....  1 .....  2 .....  3 .....  4 .....  5
- b I am as healthy as anybody I know.....  1 .....  2 .....  3 .....  4 .....  5
- c I expect my health to get worse .....  1 .....  2 .....  3 .....  4 .....  5
- d My health is excellent .....  1 .....  2 .....  3 .....  4 .....  5

***Thank you for completing these questions!***

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