

STATISTICAL ANALYSIS PLAN

A PHASE 2 TRIAL OF NIROGACESTAT IN PATIENTS WITH RECURRENT OVARIAN GRANULOSA CELL TUMORS

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• Contents

| | |
|--|----|
| 1. SUMMARY OF STUDY PROTOCOL..... | 9 |
| 1.1. Introduction and Study Rationale..... | 9 |
| 1.2. Study Objectives and Endpoints | 10 |
| 1.3. Study Design | 12 |
| 1.4. Sample Size Determination | 13 |
| 1.5. Data Monitoring Committee | 16 |
| 2. ANALYSIS SETS | 17 |
| 2.1. Analysis Set Definitions..... | 17 |
| 2.2. Protocol Deviations | 17 |
| 2.3. Impacts from COVID-19 | 17 |
| 3. ENDPOINTS | 19 |
| 3.1. Primary Efficacy Endpoint..... | 19 |
| 3.2. Secondary Efficacy Endpoints | 19 |
| 3.3. Exploratory Efficacy Endpoints..... | 19 |
| 3.4. Safety Endpoints | 20 |
| 3.5. Pharmacokinetic Endpoints | 20 |
| 3.6. Other Endpoints | 20 |
| 4. STATISTICAL METHODOLOGY | 21 |
| 4.1. General Information..... | 21 |
| 4.2. Baseline Definitions | 22 |
| 4.3. Methods of Pooling Data..... | 22 |
| 4.4. Adjustments for Covariates | 22 |
| 4.5. Multiple Comparisons/Multiplicity..... | 22 |
| 4.6. Subgroups..... | 22 |
| 4.7. Withdrawals, Dropouts, Loss to Follow-up..... | 23 |
| 4.8. Missing Data Conventions for Efficacy Endpoints..... | 23 |
| 4.9. Missing Data Conventions for Safety Endpoints..... | 23 |
| 4.9.1. Handling of Missing/Partial Dates for AEs | 23 |
| 4.9.2. Handling of Concomitant Therapies/Medications with Missing/Partial Dates..... | 24 |
| 4.9.3. Handling of Missing Dates for Disease History and Prior Therapies | 24 |
| 4.10. Visit Windows | 25 |
| 5. STATISTICAL ANALYSES | 26 |
| 5.1. Disposition | 26 |
| 5.2. Demographics, Baseline Characteristics, and Medical History | 27 |
| 5.2.1. Demographics | 27 |
| 5.2.2. OvGCT History and baseline Characteristics | 27 |
| 5.2.3. Medical History | 27 |
| 5.2.4. Prior Systemic Therapies for OvGCT..... | 28 |
| 5.3. Primary Efficacy Endpoint..... | 28 |
| 5.3.1. Analysis of Objective Response Rate..... | 29 |
| 5.3.2. Sensitivity Analyses of Objective Response Rate | 29 |
| 5.3.3. Subgroup Analysis for Objective Response Rate | 29 |
| 5.4. Secondary Efficacy Endpoints | 29 |
| 5.4.1. PFS-6..... | 29 |
| 5.4.2. OS-2..... | 29 |

| | | |
|-----------|--|-----|
| 5.4.3. | Change from Baseline in FOSI-8 | 30 |
| 5.4.4. | Duration of Response (DoR) | 30 |
| 5.5. | Exploratory Efficacy Endpoints..... | 31 |
| 5.5.1. | Time to Event Endpoints..... | 31 |
| 5.5.2. | Next Generation Sequencing status..... | 33 |
| 5.5.3. | Inhibin A&B, Follicle-stimulating Hormone, Estradiol, CA-125, and AMH/Mullerian Inhibiting Substance (MIS) | 33 |
| 5.5.4. | Time to Response | 33 |
| 5.6. | Safety Analyses | 33 |
| 5.6.1. | Study Drug Exposure and Compliance | 34 |
| 5.6.2. | Adverse Events | 35 |
| 5.6.3. | Safety Topics of Special Interest | 37 |
| 5.6.4. | Protocol-Required Laboratory Assessments..... | 39 |
| 5.6.5. | Physical Exam and Eastern Cooperative Oncology Group Performance Status | 40 |
| 5.6.6. | Electrocardiogram..... | 41 |
| 5.6.7. | Vital Signs..... | 42 |
| 5.6.8. | Concomitant Medications..... | 43 |
| 5.7. | Pharmacokinetic and Pharmacodynamic Analyses..... | 44 |
| 5.8. | Interim Analysis | 44 |
| 6. | CHANGES TO PLANNED ANALYSES | 48 |
| 7. | REFERENCES..... | 49 |
| 8. | APPENDICES | 51 |
| 8.1. | RECIST Criteria V1.1 | 51 |
| 8.2. | FACT/NCCN Ovarian Symptom Index (FOSI) - Version 4 | 55 |
| 8.3. | Mock-up Tables, Listings, and Figure..... | 56 |
| 8.4. | Safety Topics of Special Interest Preferred Terms | 56 |
| 8.4.1. | Protocol-Specified AESIs..... | 56 |
| 8.4.1.1. | Hypersensitivity..... | 56 |
| 8.4.1.2. | Skin Disorder and Rash..... | 58 |
| 8.4.1.3. | Hepatotoxicity | 60 |
| 8.4.1.4. | Electrolyte Disorder | 66 |
| 8.4.1.5. | Non-Melanoma Skin Cancers..... | 67 |
| 8.4.2. | Other Safety Topics of Special Interest | 68 |
| 8.4.2.1. | Musculoskeletal Disorders | 68 |
| 8.4.2.2. | Bone Fracture | 69 |
| 8.4.2.3. | Mucositis/Stomatitis..... | 71 |
| 8.4.2.4. | Hematologic Disorders | 71 |
| 8.4.2.5. | Opportunistic Infections | 73 |
| 8.4.2.6. | Central Nervous System Vascular Disorders | 93 |
| 8.4.2.7. | Embolic and Thrombotic Events..... | 96 |
| 8.4.2.8. | Cardiac Rhythm Disturbances | 98 |
| 8.4.2.9. | Upper Respiratory Tract Infections | 99 |
| 8.4.2.10. | Diarrhea | 99 |
| | Plan Version History..... | 100 |
| | Change History Summary..... | 100 |

LIST OF TABLES

| | |
|---------------------------------------|---|
| <u>Table 1</u> | Simulated Probability of Early Stopping under Assumed ORR |
| <u>Table 2</u> | Exact 95% CI Given Observed ORR |
| <u>Table 3</u> | PFS and DoR Censoring Rules |
| <u>Table 4</u> | Eastern Cooperative Oncology Group Performance Status Grades |

LIST OF ABBREVIATIONS

| Abbreviation | Definition |
|---------------------|--|
| ADL | Activities of Daily Living |
| AE | Adverse event |
| AESI | Adverse event of special interest |
| ALT | Alanine Aminotransferase |
| AMH | Anti-Mullerian Hormone |
| AST | Aspartate Aminotransferase |
| ATC | Anatomic Therapeutic Class |
| BID | Twice daily |
| BMI | Body Mass Index |
| C | Cycle |
| CA 125 | Cancer Antigen 125 |
| CI | Confidence Interval |
| C _{max} | Maximum plasma concentration |
| C _{trough} | Plasma trough concentration |
| COVID-19 | Coronavirus Disease 2019 |
| CR | Complete response |
| CRF | Case report form |
| CSR | Clinical Study Report |
| CT | Computed tomography |
| CTCAE | Common Terminology Criteria for Adverse Events |
| ctDNA | Circulating tumor DNA |
| D | Day |
| DNA | Deoxyribonucleic acid |
| ECG | Electrocardiogram |
| ECOG | Eastern Cooperative Oncology Group |
| eCRF | Electronic case report form |
| EOT | End of Treatment |
| FDA | Food and Drug Administration |

| | |
|--------|---|
| FOSI | Functional Assessment of Cancer Therapy – Ovarian Symptom Index |
| FSH | Follicle-stimulating hormone |
| FUP | Follow-up |
| GCT | Granulosa cell tumors |
| GOG | Gynecologic Oncology Group |
| HBV | Hepatitis B virus |
| HLGT | High Level Group Term |
| HR | Heart rate |
| ICF | Informed Consent Form |
| INR | International normalized ratio |
| K-M | Kaplan-Meier |
| LD | Longest diameter |
| LH | Luteinizing Hormone |
| MIS | Mullerian Inhibiting Substance |
| MRI | Magnetic Resonance Imaging |
| NE | Not evaluable |
| NGS | Next Generation Sequencing |
| NICD | Notch Intracellular Domain |
| No. | Number |
| ORR | Objective Response Rate |
| OS | Overall survival |
| OS-2 | Overall survival probability at 2 years |
| OvGCTs | Ovarian granulosa cell tumors |
| PD | Progressive Disease or Pharmacodynamics |
| PFS | Progression free survival |
| PFS2 | Progression free survival 2 |
| PFS-6 | Progression-free survival at 6 months |
| PK | Pharmacokinetics |
| PR | Partial Response |
| QRS | QRS complex |

| | |
|--------|--|
| QT | Uncorrected QT interval |
| QTc | Corrected QT interval |
| QTcF | Corrected QT interval by Fredericia |
| RECIST | Response Evaluation Criteria in Solid Tumors |
| SAE | Serious adverse event |
| SAP | Statistical Analysis Plan |
| SD | Stable disease |
| SoA | Schedule of Assessments |
| SOC | System Organ Class |
| TEAE | Treatment Emergent Adverse Event |
| ULN | Upper Limit of Normal |

1. SUMMARY OF STUDY PROTOCOL

1.1. Introduction and Study Rationale

This document is the statistical analysis plan (SAP) for NIR-OGT-201, a Phase 2 trial of nirogacestat in Patients with Recurrent Ovarian Granulosa Cell Tumors study to assess the anti-tumor activity of nirogacestat in adult participants with relapsed/refractory ovarian granulosa cell tumors (OvGCTs). Standard of care treatment for relapsed/refractory OvGCT is platinum-based chemotherapy consisting of bleomycin, etoposide, and cisplatin or carboplatin and paclitaxel. These chemotherapy regimens, however, are not associated with durable remissions and most participants eventually develop progressive disease necessitating treatment with experimental agents. In prior studies in progressive OvGCTs, experimental agents have shown promise with only modest performance. In the Gynecologic Oncology Group (GOG) study of bevacizumab monotherapy, the Objective Response Rate (ORR) was 16.7% with a median Progression Free Survival (PFS) of 9.3 months (Brown et al. 2014). Combination therapy of bevacizumab with paclitaxel showed an improved ORR of 44% compared to 25% for paclitaxel monotherapy but did not improve PFS (Ray-Coquard et al. 2020).

Our hypothesis is that treatment of relapsed/refractory OvGCT with nirogacestat 150 mg twice daily (BID) will provide at least ORR of 30% with a secondary objective of improved duration of PFS and Overall Survival (OS) compared to bevacizumab monotherapy. In order to limit accrual of participants to ineffective treatments, the study will use a Bayesian strategy (J. Lee and Liu 2008; Chen et al. 2019) for continuous futility monitoring for early stopping based on ORR. Bayesian predictive probability will be used throughout the trial to assess the posterior probability of obtaining an ORR of no less than 15%.

Treatment of granulosa cell tumors with a gamma secretase (GS) inhibitor such as nirogacestat is expected to inhibit Notch-induced granulosa cell proliferation by (1) limiting activation of growth factor signaling by the FOXL2 mutant protein, (2) inhibiting proliferation signaling through NICD and (3) by inducing apoptosis through the pAKT activation.

This SAP further details the statistical analyses to be conducted during and at the end of the study as determined in the protocol. It is designed to outline the methods to be used in the

analysis of study data to achieve the study objective(s). Populations for analysis, data handling rules, statistical methods, and formats for data presentation are provided. The statistical analyses and summary tabulations described in this SAP will provide the basis for the results sections of the clinical study report (CSR) for this trial.

This SAP will also outline any differences in the currently planned analytical objectives relative to those planned in the study protocol if there is any.

1.2. Study Objectives and Endpoints

The study objectives and corresponding analysis endpoints are listed below.

| Primary Objectives: | Primary Endpoints: |
|---|---|
| To determine the anti-tumor activity of nirogacestat in adult participants with relapsed/refractory OvGCT | Objective response rate (ORR), defined as the proportion of participants with Complete Response (CR) + Partial Response (PR) using Response Evaluation Criteria in Solid Tumors (RECIST) v1.1 |
| Secondary Objectives: | Secondary Endpoints: |
| To determine if nirogacestat delays progression or death in OvGCT | Estimate of proportion of participants who have not progressed or died at 6 months follow-up: PFS-6. Progression is defined by RECIST v1.1 |
| To describe overall survival in participants treated with nirogacestat | Estimate of 2-year overall survival, defined as the proportion of participants who have not died after 2 years of follow-up after their first dose of nirogacestat |
| To determine the effect of nirogacestat on ovarian cancer symptoms measured by Functional Assessment of Cancer Therapy – Ovarian Symptom Index (FOSI) | Change from baseline in FOSI |
| To determine the duration of response | Duration of response (DoR), defined as the time from first assessment of response (CR + PR using RECIST v1.1) to first disease progression defined by RECIST v1.1 or death, whichever comes first |

| | |
|--|--|
| To determine the pharmacokinetics (PK) of nirogacestat | Serum concentrations of nirogacestat will be measured to evaluate system exposures (Cmax, Ctrough and other PK parameters as data allow) |
| Safety Objectives | Safety Endpoints |
| To characterize the safety and tolerability of nirogacestat at a dose of 150 mg BID in adult participants with relapsed/refractory OvGCT | <p>Key safety endpoints will include incidence of treatment-emergent Adverse Events (TEAEs), changes in clinical laboratory parameters, vital signs, physical examination findings, and electrocardiograms (ECGs)</p> <p>Tolerability will be assessed according to toxicities graded by National Cancer Institute Common Terminology Criteria for Adverse Events (CTCAE) v5.0</p> |
| Exploratory Objectives | Exploratory Endpoints |
| To detect FOXL2 C134W mutation as well as other genomic alterations and correlate these with response | Evaluate Next Generation Sequencing (NGS) status in baseline tumor tissue |
| To detect NICD and candidate biomarkers of response, and to correlate nirogacestat exposure with response | <p>Evaluate change from Baseline:</p> <ul style="list-style-type: none"> Inhibin A&B, Follicle-stimulating hormone (FSH), estradiol, CA-125, and Mullerian Inhibiting Substance (MIS) / AMH Circulating tumor DNA (ctDNA) <p>Baseline NICD expression in tumor tissue</p> |
| To describe progression free survival on continued nirogacestat treatment post first disease progression | Progression free survival on prolonged nirogacestat treatment, defined as time from first disease progression per RECIST v1.1 to second disease progression on continued nirogacestat treatment confirmed by investigator discretion or death, whichever comes first |

| | |
|--|---|
| To describe progression free survival on subsequent line of anticancer treatment | Progression free survival 2 (PFS2), defined as time from first dose of nirogacestat to second disease progression on subsequent line of anticancer treatment (after nirogacestat) confirmed by investigator discretion at long term safety follow-up visit or death, whichever comes first. |
|--|---|

1.3. Study Design

This is a multi-center, single-arm, Phase 2 open label treatment study to determine the efficacy, safety, tolerability, and pharmacokinetics of nirogacestat in adult participants with recurrent OvGCT. Participants must have received at least one prior course of systemic therapy for OvGCT and have measurable disease by RECIST v1.1 to meet the eligibility criteria.

The Schedule of Assessments (SoA) is in protocol Section 1.3, Table 2. Participants will be screened up to 28 days prior to the first dose of study treatment (nirogacestat) and full eligibility will be based on the inclusion and exclusion criteria (Protocol Section 7.1 and 7.2).

Participants will administer 150 mg (3×50 mg tablets) of study treatment BID, continuously in 28-day cycles. Participants will remain on study treatment until death, disease progression (unless the participants meet criteria for continued treatment), discontinuation of study treatment for any reason, the study is stopped by the Sponsor for any reason, or participant qualifies for Sponsor's Compassionate Use Program.

All scans will be performed and read locally by the site's radiologist for Tumor assessment as per RECIST v1.1. Same modality used at Screening must be used at each subsequent imaging visits. Baseline scan is defined as scans performed prior to first dose of study treatment. On treatment scans are performed every 8 weeks (C3D1, C5D1, C7D1) for the first 6 months and then every 12 weeks (C10D1, C13D1, etc.) thereafter. Scans may be performed (-) 7 days prior to the visit.

The final 2-year survival check-in will occur approximately 2 years after the first dose of study treatment. If participant discontinues from study treatment prior to the 2-year check-in, quarterly telephone or email contact following EOT is required until the 2-year survival data point has

been collected. In addition, collection of subsequent anticancer therapy after nirogacestat and overall response to this therapy will be recorded. Only information about the subsequent therapy used directly after nirogacestat is required along with the final survival outcome at the 2-year check point.

Participants who discontinue study treatment early for any reason should return to the clinic for an End of Treatment (EOT) visit within 7 days after the Investigator determines study treatment will no longer be used and then again for a safety Follow-up (FUP) visit 30 days (+7 days) after the last dose of study treatment.

The estimated study duration is 3 years, and all participants will be followed for at least 2 years (unless the study is prematurely stopped due to futility).

A Bayesian strategy allowing continuous monitoring will be used to evaluate the posterior distribution of ORR (complete + partial) ([Lee and Liu 2008](#); [Chen et al. 2019](#)) and the study may be stopped for futility if necessary. There will be no pause in accrual for interim assessments.

1.4. Sample Size Determination

A prior GOG phase 2 trial in previously treated participants with stromal tumors evaluated the efficacy and safety of bevacizumab monotherapy in participants with recurrent sex cord stromal tumors of the ovary. The ORR in this study was 16.7% ([Brown et al. 2014](#)). Following this outcome, the ALIENOR/ENGOT ov7 trial randomized participants to see if the addition of bevacizumab to paclitaxel had effect on the PFS rate among participants with relapsed ovarian sex cord stromal tumors. While the combination therapy of paclitaxel and bevacizumab showed an ORR of 44% over paclitaxel monotherapy, the PFS remained equivocal between the two treatment groups ([Ray-Coquard et al. 2020](#)). Based on the ORR from the bevacizumab monotherapy trial, this study aims for an ORR of 30% with PFS as a secondary endpoint.

Since this is a first-in-human proof of concept study for the indication, no formal hypothesis testing or sample size calculation is contemplated. The initial goal of accrual for this study is 43 participants which should provide sufficient sample size for interim evaluations for futility with a Bayesian strategy of continuous monitoring. Participant accrual will not be paused during the interim evaluations. The Bayesian approach to be used for futility analysis assumes a

beta-binomial distribution with an uninformative prior of beta distribution ([Lee and Liu 2008](#); [Chen et al. 2019](#)). Assume at an assessment point, the study has accrued X responders out of n (≤ 43) participants. With a prior distribution of $\text{beta}(a, b)$, X follows a binomial distribution and the posterior distribution of the response rate follows a beta distribution with parameters $(a+x, b+n-x)$, where x is the observed value of X . Thus, the number of responses in the potential $(43-n)$ future participants, Y , follows a beta-binomial distribution with parameters $(43-n, a+x, b+n-x)$. From the observed responders x and a target ORR, the predictive probability of reaching the target ORR at the end of study can be calculated with the beta-binomial distribution. If the predictive probability is too low, e.g., $\leq 10\%$, the study may be terminated for futility. A high predictive probability, e.g., $> 85\%$, suggests high likelihood of achieving treatment efficacy at the end of the study.

For this study, we assume that a response rate of $\leq 15\%$ at the end of study is considered ineffective for the treatment, and enrollment will stop if the posterior probability of $\text{ORR} > 15\%$ is less than 0.1. On the other hand, the treatment is considered promising if the posterior probability of $\text{ORR} > 15\%$ is higher than 0.85, that is, if the posterior distribution provides

$$\text{Prob}\{\text{ORR} > 0.15 | \text{data}\} > 0.85.$$

For calculating the posterior probability, a prior of $\text{beta}(0.1, 0.9)$ could be assumed. These parameters (0.1 and 0.9) of the beta prior correspond to the initial assumed distribution of ORR with mean equal to $0.1/(0.1+0.9) = 10\%$ (that is, an initial belief of ORR around 10%). The beta parameters will be updated according to observed number of responders at each analysis.

Given the cutoff points of the predictive probability for futility and efficacy, the characteristics of the design can be assessed in terms of type I and II errors. For example, if the cutoff points are set at 10% for futility and 85% for efficacy, the above Bayesian rule will result in futility stopping boundaries of 1, 2, and 5 or fewer respondents if interim evaluations were to occur at enrollment of 10, 20, 30 participants, respectively. If the true rate of ORR is 15%, the chance to conclude treatment efficacy at the end of the study is 7% (Type I error). However, the probability to stop the trial early is 79%. If the true rate of ORR is 30%, the chance to conclude treatment efficacy at the end of the study is 76%.

A set of simulations using a frequentist framework under the similar interim evaluation schedule as above are performed for comparisons. Specifically, the type I and II errors are simulated for scenarios where the study ceases for futility when the ORRs are 0%, $\leq 5\%$, $\leq 10\%$, or 15% when 10, 20, 30, and 43 participants have been enrolled, respectively. Those conditions correspond to stopping for futility when there are fewer than or equal to 0, 1, 3, and 6 respondents in the three interim and final analyses, respectively. Table 1 below provides results based on 10,000 simulations of probability of early stopping for futility and the expected overall sample sizes.

Table 1 Simulated Probability of Early Stopping under Assumed ORR

| Interim Time Point (Enrollment at N =) | | 10 | 20 | 30 | 43 | Futility at First Three Looks | Futility at End of Study | Efficacy at End of Study | Average Overall Sample Size ¹ |
|---|------|------|------|------|------|-------------------------------------|--------------------------------|-----------------------------------|---|
| Stopping Boundary (No. of Responders) | | 0 | 1 | 3 | 6 | | | | |
| Assumed True Underlying ORR | 0.05 | 0.60 | 0.19 | 0.16 | 0.05 | 0.95 | 1.00 | 0.00 | 11 |
| | 0.10 | 0.35 | 0.13 | 0.21 | 0.19 | 0.69 | 0.88 | 0.12 | 22 |
| | 0.15 | 0.20 | 0.07 | 0.13 | 0.19 | 0.40 | 0.59 | 0.41 | 32 |
| | 0.20 | 0.11 | 0.03 | 0.06 | 0.10 | 0.20 | 0.30 | 0.70 | 38 |
| | 0.25 | 0.06 | 0.01 | 0.02 | 0.03 | 0.09 | 0.12 | 0.88 | 41 |
| | 0.30 | 0.03 | 0.00 | 0.01 | 0.01 | 0.04 | 0.04 | 0.96 | 42 |

ORR = Objective Response Rate, N = Sample size; No. = Number

¹Without considering newly enrolled participants while the interim evaluation is ongoing.

As can be seen from the above table, the probabilities to stop for futility early if true ORR is either 5% or 10% are approximately 100% and 88%, respectively. The probabilities to stop for futility when true ORR is either 25% or 30% are approximately 12% and 4%, respectively. For various criteria to claim efficacy, the exact 95% CI for different corresponding observed ORR based on the Clopper-Pearson method are listed in Table 2. For example, if the total sample size is 20 at the second interim evaluation, the lower bound of the 95% CI will be 27.2% if the observed ORR is 50%. When the total sample size is 30 or higher and the observed ORR is 50%, the lower bound of the 95% CI will be $\geq 31.3\%$.

Table 2 Exact 95% CI Given Observed ORR

| Minimum ORR to Claim Efficacy | Sample Size | Observed No. of Responders | Observed ORR (%) | 95% Confidence Interval | |
|----------------------------------|-------------|-------------------------------|---------------------|-------------------------|----------------|
| | | | | Lower Bound | Upper Bound |
| 0.25 | 10 | 3 | 30.0 | 6.7 | 65.3 |
| | 20 | 5 | 25.0 | 8.7 | 49.1 |
| | 30 | 8 | 26.7 | 12.3 | 45.9 |
| | 43 | 11 | 25.6 | 13.5 | 41.2 |
| 0.3 | 10 | 3 | 30.0 | 6.7 | 65.3 |
| | 20 | 6 | 30.0 | 11.9 | 54.3 |
| | 30 | 9 | 30.0 | 14.7 | 49.4 |
| | 43 | 13 | 30.2 | 17.2 | 46.1 |
| 0.5 | 10 | 5 | 50.0 | 18.7 | 81.3 |
| | 20 | 10 | 50.0 | 27.2 | 72.8 |
| | 30 | 15 | 50.0 | 31.3 | 68.7 |
| | 43 | 22 | 51.2 | 35.5 | 66.7 |

CI = Confidence Interval; ORR = Objective Response Rate

1.5. Data Monitoring Committee

There is no Data Monitoring Committee for this study.

2. ANALYSIS SETS

2.1. Analysis Set Definitions

The following participant analysis sets will be evaluated and used for presentation and analysis of the data:

- **Screened Analysis Set:** The Screened Analysis Set will consist of all participants who signed the informed consent.
- **Full Analysis Set:** The Full Analysis Set will consist of all participants who received at least 1 dose of nirogacestat treatment.
- **PK Analysis Set:** The PK Analysis Set will consist of all treated participants with at least 1 non-missing value in serum concentration of nirogacestat.
- **Safety Analysis Set:** The Safety Analysis Set will consist of all participants who received at least 1 dose of nirogacestat treatment.

The Full Analysis Set is the same as the Safety Analysis Set. All efficacy analyses will be based on the Full Analysis Set. All safety analyses will be based on the Safety Analysis Set.

2.2. Protocol Deviations

Protocol deviations are reviewed in accordance with the Protocol Deviation Management Plan. All Major and Minor protocol deviations will be reviewed by SpringWorks prior to database lock. The protocol deviation categories are defined in the Protocol Deviation Management Plan, including those related to the inclusion/exclusion criteria, informed consent, withdrawal criteria, study treatment, etc. Major protocol deviations and the COVID-19 related major protocol deviations will be summarized. A data listing of all PDs including a description of the deviation will be generated, and the COVID-19 related protocol deviations will be flagged.

2.3. Impacts from COVID-19

This study was conducted during the global SARS-Cov-2 pandemic. The impact of COVID-19 was mitigated based on the evolving EMA and FDA COVID-19 guidelines [[European Medicines Agency 2021](#); [US Food and Drug Administration 2020](#)].

A listing of all participants impacted by COVID-19 and how their participation in the study was altered, including missed visits, missed assessments, impacts on the tumor assessments, and other deviations from protocol procedures due to COVID-19 will be provided.

3. ENDPOINTS

3.1. Primary Efficacy Endpoint

The primary efficacy endpoint is objective response rate, defined as the proportion of participants with CR + PR using RECIST v1.1. See Section 8.1 for the details of RECIST Criteria v1.1.

Study participants who have no post-baseline tumor assessment and those whose best overall response is not evaluable or less than CR or PR will be analyzed as a non-responder.

3.2. Secondary Efficacy Endpoints

Secondary efficacy endpoints include:

- PFS-6, defined as the survival probability of not having progressed or died at 6 months follow-up. Progression is defined by RECIST v1.1.
- Two-year overall survival at 2 years (OS-2), defined as the survival probability of being still alive at 2 years of follow-up after their first dose of nirogacestat.
- Change from baseline in FOSI.
- DoR, defined as the time from first assessment of response (CR + PR using RECIST v1.1) to first disease progression defined by RECIST v1.1 or death, whichever comes first.

3.3. Exploratory Efficacy Endpoints

Exploratory endpoints include:

- Progression free survival (PFS), defined as time from first dose of nirogacestat to first disease progression on nirogacestat or death from any cause, whichever comes first.
- Progression free survival on continued nirogacestat treatment, defined as time from first disease progression per RECIST v1.1 to second disease progression on continued nirogacestat treatment confirmed by investigator discretion or death, whichever comes first.
- Progression free survival 2 (PFS2), defined as time from first dose of nirogacestat to second disease progression on subsequent line of anticancer treatment (after nirogacestat)

confirmed by investigator discretion at long term safety follow-up visit or death, whichever comes first.

- Overall survival (OS), defined as time from first dose of nirogacestat to death from any cause.
- Time to response, defined as time in months from first dose until date of the first documented response (CR or PR).
- Evaluate Next Generation Sequencing (NGS) status in baseline tumor tissue.
- Change from baseline in:
 - Inhibin A&B, Follicle-stimulating, hormone (FSH), estradiol, CA-125, and Mullerian Inhibiting Substance (MIS) / AMH
 - Circulating tumor DNA (ctDNA) (if data are available)
- Baseline NICD expression in tumor tissue (if data are available).

3.4. Safety Endpoints

Key safety endpoints will include incidence of treatment-emergent Adverse Events (TEAEs), changes in clinical laboratory parameters, vital signs, physical examination findings, and electrocardiograms (ECGs).

Tolerability will be assessed according to toxicities graded by National Cancer Institute Common Terminology Criteria for Adverse Events (CTCAE) v5.0.

3.5. Pharmacokinetic Endpoints

Pharmacokinetic endpoints include C_{trough} and 1-hour post-dose serum concentrations of nirogacestat.

3.6. Other Endpoints

Not applicable.

4. STATISTICAL METHODOLOGY

4.1. General Information

All data listings that contain an evaluation date will have a relative study day associated with treatment start (Rel Day). Pre-treatment and on-treatment study days represented as Relative Day are numbered relative to the day of the first dose of study medication which is designated as Day 1. The preceding day is Day -1, the day before that is Day -2, etc.

Tabulations will be produced for appropriate disposition, demographic, baseline characteristics, efficacy, and safety parameters. For categorical variables, summary tabulations of the number and percentage of participants within each category (with a category for missing data) of the parameter will be presented. For continuous variables, the number of participants, mean, median, standard deviation, minimum, and maximum values will be presented. Time-to-event data will be summarized using 25th, 50th (median) and 75th percentiles and time point survival probabilities (at 6 months, 1 year, 18 months, 2 years, etc.) with associated 2-sided 95% confidence intervals (CIs) using Kaplan-Meier methodology and the log-log transformation, as well as number and percentage of events and censored observations.

Graphical displays will be provided where useful to aid in the interpretation of results. A swimmer plot may be used to present the exposure to study treatment, overall response and follow up for all participants in the Full Analysis Set. Each participant will be presented on a horizontal bar (y-axis) over time (x-axis) starting at treatment start date. For each participant's bar, the plot will include best overall response (CR, PR, SD, PD, or NE), end of response or continued response (at censored timepoint).

The following conversion conventions will be applied:

- CIs will be presented to 1 more decimal place than the raw data
- Weeks will be calculated as number of days divided by 7
- Months will be calculated as number of days divided by 30.4375
- Years will be calculated as number of days divided by 365.25
- Cycles as used in adverse event summaries are defined as every 28 days
- Day 1 will be considered as the first day of treatment

All tables, figures, and listings will include footers at the bottom of the page reflecting the path of the programs used to generate the tables, figures, and listings, and date and time of the generation of the output.

All descriptive statistical analyses will be performed using SAS statistical software Version 9.4 or higher. Medical history and adverse events will be coded using the Medical Dictionary for Regulatory Activities (MedDRA) Version 27.0. Concomitant medications will be coded using the World Health Organization (WHO) Drug Dictionary Version March 2022 or later.

4.2. Baseline Definitions

For all analyses, baseline will be defined as the last non-missing value prior to the first administration of study treatment.

4.3. Methods of Pooling Data

Data will be pooled across study sites.

4.4. Adjustments for Covariates

In this single arm study, covariate adjustment will not be used unless specified otherwise.

4.5. Multiple Comparisons/Multiplicity

Since this is a first-in-human proof of concept study for the indication, no formal hypothesis testing is contemplated. Hence there is no multiplicity adjustment for the primary or secondary efficacy endpoints.

4.6. Subgroups

Subgroup analyses for the primary endpoint ORR are not predefined due to the following reasons:

- This is a single arm study with a small sample size.
- The anticipated response rate is low-to-medium.

However, post-hoc analysis for subgroup analyses will be performed if deemed necessary.

4.7. Withdrawals, Dropouts, Loss to Follow-up

Participants who are withdrawn or discontinue from the study will not be replaced.

4.8. Missing Data Conventions for Efficacy Endpoints

There will be no imputation or substitutions made to accommodate missing efficacy data points.

All data recorded on the eCRF will be included in data listings that will accompany the CSR.

4.9. Missing Data Conventions for Safety Endpoints

4.9.1. Handling of Missing/Partial Dates for AEs

Adverse events with incomplete onset dates will be handled as follows for the purpose of determining treatment emergence.

1. If the month and day are missing:
 - If the year of the event is the **same** as the year of the first dosing date, then the day and month of the first dosing date will be assigned to the missing fields.
 - If the year is **prior to** the year of first dosing date, then December 31 will be assigned to the missing fields.
 - If the year is **after** the year of first dosing, then January 1 will be assigned to the missing fields.
2. If the day is missing:
 - If the month and year are the same as the month of treatment, the onset date will be assigned to the date of treatment.
 - If the month and year are not the same as the month/year of treatment, then the onset day will be set to the first day of the month.

If the start date is completely missing and end date is not before the first dose of study treatment, then the adverse event will be considered treatment emergent.

If the participant has died and the imputed date is later than the date of death, the date of death will be used.

4.9.2. Handling of Concomitant Therapies/Medications with Missing/Partial Dates

Concomitant medications are defined in Section 5.6.8. Concomitant therapies/medications with start dates that are completely or partially missing will be handled as follows for the purpose of determining concomitance.

1. If the start date has the month and year but the day is missing, the therapy will be considered concomitant if the month and year are:
 - a. On or after the month and year of the date of the first dose of study treatment
 - b. On or before the month and year of the date of the last dose of study treatment plus 30 days
2. If the start date has the year, but the day and month are missing, the therapy will be considered concomitant if the year is:
 - a. On or after the year of the date of the first dose of study treatment
 - b. On or before the year of the date of the last dose of study treatment plus 30 days.
3. If the start date of concomitant therapies is completely missing and the stop date of concomitant therapies is prior to the date of informed consent, then this therapy will not be considered concomitant.
4. If the start date of concomitant therapies is completely or partially missing and the stop date of concomitant therapies is on or after the date of the first dose of study treatment, then the therapy will be considered concomitant.
5. If the start date and stop date of concomitant therapies are completely missing, then the therapy will be considered concomitant if the therapy was reported as a concomitant therapy.

4.9.3. Handling of Missing Dates for Disease History and Prior Therapies

To calculate time from diagnosis or most recent prior therapy to informed consent, partial/missing dates for diagnosis and last prior therapy completion will be imputed as follows:

- If both day and month are missing and the year is prior to the year of screening, the imputed day and month will be July 1.

- If both day and month are missing and the year is the same as the year of screening, the imputed date will be the middle point between January 1 of the year and the screening date. If the middle point falls between two dates, the first of the two dates will be used.
- If day is missing and the month and year are prior to the month and year of screening, the imputed date will be 15th day of the month.
- If day is missing and the month and year are the same as the month and year of screening, the imputed date will be the middle point between the first date of the month and the screening date. If the middle point falls between two dates, the first of the two dates will be used.
- No imputation will be performed if the year is missing.

4.10. Visit Windows

No visit windowing was performed. All visits will be tabulated per the evaluation visit as recorded on the eCRF. Repeat, retest, and unscheduled assessments will not be considered for the calculation of summary statistics and figures, unless assessment qualifies as baseline, or otherwise indicated. These types of assessments will be included in the listings.

5. STATISTICAL ANALYSES

5.1. Disposition

The total number of participants who were screened (who have signed the informed consent), reasons for screen failure and the number in each study population will be summarized based on the Screened Analysis Set.

The end of treatment status (ongoing/discontinued) together with the primary reason for discontinuing the treatment will be summarized as follows:

- Death
- Disease Progression
- Removal From Study (Investigator/Sponsor Decision)
 - Adverse Event
 - Excluded Concomitant Medication or Procedure
 - Compliance (Study Treatment/Study Assessments)
 - New Information/Findings
 - Study/Site is Cancelled
 - Relocation
 - Lost to Follow-Up
 - Other
- Withdrawal of Consent
- Study Completion
- Other

In addition, the end of study status will be summarized including if a participant is participating in the long-term follow-up.

All treatment and study discontinuation data will be listed. A by-participant data listing of inclusion and exclusion criteria not met will be presented.

5.2. Demographics, Baseline Characteristics, and Medical History

Demographics and baseline characteristics will be summarized for the Full Analysis Set. In addition, medical history (including any history of infertility), disease characteristics, prior systemic treatment, radiation and surgery will also be summarized for the Full Analysis Set. Demographic and baseline data, disease characteristics, and prior systemic treatment for each participant will be provided in data listings. In addition, data listings containing the details for prior surgery coded with MedDRA (version 27.0) and prior radiation will be provided.

5.2.1. Demographics

Demographics will include univariate statistics for age at time of informed consent (years), baseline weight, baseline height, baseline body mass index (BMI) (kg/m^2), baseline FOSI, and categorical summaries for age groups, women of childbearing potential (yes / no), baseline ECOG, race, and ethnicity.

5.2.2. OvGCT History and baseline Characteristics

Baseline disease characteristics to be summarized including time (in months) since date of original OvGCT diagnosis to first study treatment, age at the original disease diagnosis, refractory disease (yes/no), time from refractory (months), relapse (yes/no), time from the original relapsed OvGCT diagnosis and the most recent relapse to first study treatment (months), history of prior surgery for OvGCT (yes/no), time (months) since the most recent surgery to first study treatment, prior radiation (yes/no), time (months) since the most recent radiotherapy to first study treatment, prior systemic treatment (yes/no), time (months) since the most recent prior treatment (surgery, radiotherapy and systemic treatment) to first study treatment, number of target lesions, number of non-target lesions, and baseline tumor size, defined as the sum of the target lesion diameters per RECIST v1.1.

5.2.3. Medical History

The following medical history will be summarized:

- time in months since last menstrual cycle to first study treatment,

- number and percentage of participants with any history of amenorrhea, menstrual irregularities, or infertility, and
- any clinically significant past or ongoing medical conditions, by MedDRA (version 27.0) System Organ Class (SOC) and Preferred Term (PT).

5.2.4. Prior Systemic Therapies for OvGCT

Prior systemic therapies for OvGCT will be coded with WHO Drug March 2022 version or higher and will be summarized by anatomic therapeutic class (ATC) and PT.

Details about each line of treatment, including agents start and stop date, reason for discontinuation, best overall response will be listed. The number of lines of systemic treatment, prior use of Bevacizumab (yes/no), time (months) since most recent Bevacizumab use and time (months) since most recent systemic treatment line to first study treatment will be summarized along with other disease characteristics.

5.3. Primary Efficacy Endpoint

All efficacy endpoints will be analyzed using the Full Analysis Set. The primary efficacy endpoint is objective response rate, defined as the proportion of participants with CR + PR.

Tumor response and progression of cancer under study in real time will be evaluated locally at each study site according to RECIST v1.1.

To be assigned a status of PR or CR, changes in tumor measurements must be confirmed by repeat assessments that will be performed no less than 4 weeks after the criteria for response are first met. In order for a valid value of Stable Disease (SD) to be assigned, there must be evidence of stable disease for at least 7 weeks (the 8-week scan interval inclusive of a 1-week window per the SoA) from start of treatment. If the minimum time for SD has not been met on the first assessment, the assignment of BOR will depend on subsequent response assessments.

Participants who do not have follow up data after a first assessment of SD prior to the minimum time requirement will be considered as not evaluable (NE).

The best overall response is determined by the following hierarchy: CR > PR > SD > PD > NE.

Participants with a best overall response as confirmed CR or PR during the study will be

responders. Participants who had no post-baseline tumor assessment and those whose best overall response is no evaluable or less than CR or PR will be analyzed as non-responders.

5.3.1. Analysis of Objective Response Rate

The objective response rate and its 95% CI based on the Clopper-Pearson method will be provided. The proportion and 95% CI of participants with CR, PR, Stable Disease (SD), Progressive disease (PD) and Not Evaluable (NE) as defined by RECIST v1.1 will also be summarized and listed by visit.

Tumor size, defined as the sum of the target lesion diameters per RECIST v1.1, will be summarized as percent change from baseline by visit. In addition, the percent change from baseline in the sum of target lesion diameters as identified by RECIST v1.1 by the best overall response will be displayed graphically using a waterfall plot.

5.3.2. Sensitivity Analyses of Objective Response Rate

There is no sensitivity analysis of objective response rate. Post hoc analyses may be performed if deemed necessary.

5.3.3. Subgroup Analysis for Objective Response Rate

See Section 4.6 for subgroup analysis.

5.4. Secondary Efficacy Endpoints

Analysis of secondary endpoints will be conducted using the Full Analysis Set.

5.4.1. PFS-6

PFS-6 will be estimated using Kaplan-Meier method and 2-sided 95% CI based on log-log transformation. Participants who do not progress or die will be censored according to the censoring rules for the PFS as outlined in Table 3.

5.4.2. OS-2

The Kaplan-Meier method will be used to estimate the OS-2. Death due to any reasons will be an event. Participants who did not die at 2 years will be censored.

5.4.3. Change from Baseline in FOSI-8

Functional Assessment of Cancer Therapy (FACT) Ovarian Symptom Index-8 item version (FOSI-8) was used in this study for description of each item in FOSI-8 version 4, see Section 8.2.

Participants are asked to circle or make one number per statement to indicate their response as it applies to the past 7 days. In each statement, the numbers and meaning are as follows: 0 = Not at all, 1 = A little bit, 2 = Somewhat, 3 = Quite a bit, 4 = Very much. Except for statement 7 (I am content with the quality of my life right now), a lower number in the answer indicates a better condition. The response to the statements except for the statement 7 will be reversed and the sum of non-missing responses will be calculated.

The total FOSI-8 score will be summarized as sum of (8 question items) x 8 divided by the number of items answered. The FOSI-8 total score will range from 0 to 32 and a higher score is good. Therefore, a score of “0” is a severely symptomatic participant and the highest possible score is an asymptomatic participant. The FOSI-8 total score will be set to missing if 5 or more of the 8 item responses are missing.

Summary statistics of change from baseline in the FOSI-8 total score and the individual item responses will be summarized for each visit. In addition, the proportion of participants who achieved ≥ 2 improvement in FOSI-8 total score from baseline ([Beaumont et al. 2007](#)) will be summarized by each visit. Participants who could not possibly improve by at least 2 points due to a high score at baseline will be excluded from this analysis. A box and whisker plot displaying the total score over time by nominal visit and a figure for median change from baseline overtime will also be provided.

To evaluate association between changes of tumor size over time and the FOSI-8 total score, a figure with the percent change from baseline in tumor size on one y-axis and the change from baseline in FOSI-8 total score on a secondary y-axis over time (x-axis) will be generated.

5.4.4. Duration of Response (DoR)

DoR will be summarized with standard summary statistics and will also be analyzed using the Kaplan-Meier method for confirmed responders only. Quartiles (i.e., the 25th, 50th, and 75th percentile estimates) and the 2-sided 95% confidence intervals will be presented. If progression

or death was not observed, the participant will be censored according to the censoring rule for PFS (see Table 3). If there are censored participants in DoR, time to censoring will be used to summarize the range. The Kaplan-Meier plot will be provided.

By-participant listing will be provided for responders. The listing will include number of completed cycles before first response, date of first response, date of first disease progression or death if any, censored or event will be marked.

5.5. Exploratory Efficacy Endpoints

5.5.1. Time to Event Endpoints

Exploratory time to event endpoints include PFS, PFS on continued treatment, PFS2 and OS.

For each endpoint, quartiles (i.e., the 25th, 50th, and 75th percentile estimates) and the 2-sided 95% confidence intervals will be calculated from the Kaplan-Meier method. Survival probability and associated 95% CIs will be estimated at 6 months, 1 year, 18 months and 2 years as well. The number of events, number of participants censored, number of participants for each reason of censoring will be provided. The Kaplan-Meier plot of the survival distribution function will be presented with the number of participants at risk over time.

PFS

For PFS, participants who have no documented disease progression and death will be censored according to the rules in Table 3. For PFS-6 and DoR, similar censoring rules should be used if applicable.

Table 3 PFS and DoR censoring rules

| Situation | Date of Censoring or Event | Outcome |
|--|---|----------|
| No adequate tumor assessment at baseline or post-baseline and the participant has not died | Date of first dose of study treatment | Censored |
| No documented progression or death | Date of last adequate disease status assessment | Censored |

| Situation | Date of Censoring or Event | Outcome |
|--|---|----------|
| Progression based on RECIST v1.1 with ≤ 1 missing consecutive scheduled tumor assessment before progression | Date of the earliest assessment that results in a finding of progression | Event |
| Death without documented progression with ≤ 1 missing consecutive scheduled tumor assessment before death | Date of death | Event |
| New anticancer therapy or procedure started prior to documented disease progression | Date of last adequate disease status assessment before the new therapy | Censored |
| Progression/Death after two or more missing scheduled tumor assessments | Date of last adequate disease status assessment before the missed assessments | Censored |

Progression-free survival on continued nirogacestat treatment and PFS2

For the PFS analysis on continued nirogacestat treatment, only participants who continued the study treatment after the initial evidence of disease progression will be included. Participants who are alive and have not had a second progression will be censored at the last adequate disease status assessment date.

For PFS2, the second disease progression after participants discontinued the study treatment following the initial evidence of disease progression, and started the subsequent line of anticancer treatment, or death, whichever occurs first, will be considered as events for the PFS2 analysis. Participants who are alive and have not had a second progression on subsequent line of anticancer treatment will be censored at the last adequate disease status assessment date.

OS

For OS, in participants who have died, death will be considered an event and the death date will be used to calculate the time. For participants who are alive at the time of analysis, who are lost to follow-up or who withdraw consent for follow-up, the OS endpoint will be censored on the last date that participants were known to be alive or lost to follow-up.

5.5.2. Next Generation Sequencing status

The NGS status will be assessed at baseline to detect FOXL2 C134W mutation as well as other genomic alterations and correlate these with response. A 2×2 table will be generated for FOXL2 C134W mutation (yes/no) vs. Objective Response (yes/no) to evaluate the correlation between mutation and ORR with the Spearman rank correlation and its 95% CI provided. Within each status, the percentage of participants with objective response (CR + PR) and its 2-sided exact 95% CI based on the Clopper-Pearson method will be provided. The response ratio of participants with alteration vs. those without alteration and its 95% CI will also be provided using the Farrington-Manning method.

NGS status data will be listed. Correlation between ORR and other genomic alterations will be analyzed post hoc if deemed necessary.

5.5.3. Inhibin A&B, Follicle-stimulating Hormone, Estradiol, CA-125, and AMH/Mullerian Inhibiting Substance (MIS)

Tumor and hormonal markers Inhibin A, Inhibin B, AMH/MIS, follicle-stimulating hormone, estradiol, and CA-125 will be assessed per the SoA (see Table 2 in the protocol). Summary statistics and change from baseline at each visit will be provided. Box and whisker plots displaying the values over time by nominal visit will also be provided.

To evaluate association between changes in tumor size over time with FSH and estradiol level, a figure with the percent change from baseline in tumor size on one y-axis and the change from baseline in FSH and estradiol level on a secondary y-axis over time (x-axis) will be generated.

5.5.4. Time to Response

Time to first objective response will be calculated as time in months from first dose until date of the first documented response (CR or PR). Only participants with confirmed response will be included and the time in months to first response will be summarized with standard summary statistics.

5.6. Safety Analyses

Safety analyses will be conducted using the Safety Analysis Set.

5.6.1. Study Dug Exposure and Compliance

Extent of exposure will be summarized as follows:

- Duration of exposure in months (last dose of study treatment date – first dose date + 1 /30.4375) summarized as a continuous variable
- If a data cut-off date is used and some participants are receiving treatment at the time of analysis, the last dose date at the time of the data cut-off for analysis will be the data cut-off date
- Number and percentage of participants who received treatment with a duration of at least 1 cycle (28 days), 2 cycles, 3 cycles, 4 cycles, 5 cycles, 6 to 12 cycles, 13 to 25 cycles and 26 cycles or longer
- Actual dose intensity (mg/day) – calculated as the cumulative dose received / duration of exposure in days
- Relative dose intensity (%) defined as $100 \times (\text{total cumulative dose received}) / (\text{planned cumulative dose, where planned cumulative dose is 300 mg/day multiplied by duration of exposure in days})$ and summarized as a continuous variable
- Number and percentage of participants with a dose modification (dose reduction and/or dose interruption as reported on eCRF) as well as reasons for dose modification
- Number and percentage of participants with a dose reduction (as reported on eCRF)
- Time (in days) to the first dose reduction and first dose interruption will be summarized as continuous variables
- Number and percentage of participants with a dose interruption including the number of days interrupted
- Number and percentage of participants with study treatment discontinued
- Special Situations in exposure are defined as Abuse, Misuse, Occupational Exposure (inadvertent/accidental), or Medication Error of study treatment. The number and percentage of participants with each and overall special situations resulting in an adverse event will also be summarized.

A by-participant listing will be presented for exposure to study treatment and dosing modifications.

5.6.2. Adverse Events

All AEs will be coded using the MedDRA coding dictionary version 27.0 and displayed in tables and data listings using system organ class (SOC) and preferred term (PT).

Analyses of AEs will be performed for those events that are considered treatment-emergent adverse events (TEAEs), defined as those with initial onset or increasing in severity after the first dose of study treatment through 30 days after the last dose of study treatment. The imputation of partial/missing dates is described in Section 4.9.1.

Treatment-related TEAEs are defined as a TEAE that was considered by the Investigator to be related to the study treatment. If “Relationship to Study Treatment” is missing, it will be imputed as related in summary tables.

AE grade refers to the severity of the AE. The Common Terminology Criteria for Adverse Events (CTCAE) version 5.0 displays Grades 1 through 5 with unique clinical descriptions of severity for each AE based on this general guideline:

- Grade 1 Mild; asymptomatic or mild symptoms; clinical or diagnostic observations only; treatment not indicated.
- Grade 2 Moderate; minimal, local or noninvasive intervention indicated; limiting age-appropriate instrumental Activities of Daily Living (ADL).
- Grade 3 Severe or medically significant but not immediately life-threatening; hospitalization or prolongation of hospitalization indicated; disabling; limiting self-care ADL.
- Grade 4 Life-threatening consequences; urgent intervention indicated.
- Grade 5 Death related to AE.

An event is defined as ‘serious’ when it meets at least 1 of the predefined outcomes as described in the definition of an SAE (Protocol Appendix A5-1.3), not when it is rated as severe.

A summary of TEAEs will include the number and percentage of participants who experience at least one of the following. The total number of events will also be reported.

- TEAEs

- TEAEs related to study treatment
- Serious TEAEs
- Serious TEAEs related to study treatment
- Serious TEAEs by maximum severity (Grade)
- TEAEs with CTCAE grade ≥ 3
- TEAEs with CTCAE grade ≥ 3 related to study treatment
- TEAEs by maximum severity (Grade)
- TEAEs leading to early discontinuation from study treatment
- TEAEs leading to early discontinuation from study treatment related to study treatment
- TEAEs leading to dose reduction
- TEAEs leading to dose reduction related to study treatment
- TEAEs leading to dose interruption
- TEAEs leading to dose interruption related to study treatment
- TEAEs leading to dose reduction or interruption
- TEAEs leading to dose reduction or interruption related to study treatment
- TEAEs leading to death
- TEAEs leading to death related to study treatment
- TEAEs by cycle of onset

In each tabulation of TEAEs, each participant will contribute only once (i.e., the most related occurrence, or the most intense occurrence, or the first cycle of onset) to each of the participant incidence rates in the descriptive analysis, regardless of the number of episodes.

The above categories will also be presented in tables summarizing SOC and PT, and sorted by descending frequency. If a participant experiences multiple AEs under the same PT (or SOC), the participant will be counted only once for that PT (or SOC). The number of events of each type will be displayed alongside associated participant incidence percentages.

A TEAE summary by PT only and sorted by descending frequency will also be produced.

All AEs will be listed in participant data listings. By-participant listings will also be provided for the following: TEAEs leading to death, serious adverse events, TEAEs leading to study treatment withdrawn, and TEAE leading to discontinuation from study.

5.6.3. Safety Topics of Special Interest

Safety topics of special interest have been identified based on review of safety data from prior studies with nirogacestat and include additional AEs beyond those specified in Protocol Section 11.3.1 as adverse events of special interest (AESIs). These safety topics of interest, including AESIs determined by the investigators for this study, will be summarized on separate tables. These safety topics, including AESIs, are defined for analysis purposes in different ways, including by using standardized MedDRA queries (SMQ) or customized MedDRA queries, and whether an investigator determined that an event was an AESI.

Unless specified otherwise, the incidence of AESIs based on the investigator's determination will be summarized by SOC and PT in tables and listed separately in participant data listings, and those by using defined lists of specific MedDRA PTs without regard to the investigator's designation of the reported event as an AESI will be summarized similarly.

For the safety topics of special interest (including AESIs) defined using standardized MedDRA queries (SMQ) or customized MedDRA queries, the specific MedDRA PTs for inclusion are all listed in Appendix 8.4 under the following groups. Safety topics for which narrow and broad terms are identified, only narrow terms are used for summary tables. The safety topics will be summarized by SOC and PT based on the Safety Analysis Set.

- Hypersensitivity
- Skin Disorder and Rash
- Hepatotoxicity
- Electrolyte Disorder
- Non-melanoma Skin Cancer
- Musculoskeletal Disorders
- Bone Fractures
- Mucositis/Stomatitis

- Hematologic Disorders
- Opportunistic Infections
- Central Nervous System Vascular Disorders
- Embolic and Thrombotic Events
- Cardiac Rhythm Disturbances
- Upper Respiratory Tract Infections
- Diarrhea

In addition to the summaries by SOC and PT as described above, separate summaries for concomitant medication use will be presented for the following safety topics:

- Hypophosphataemia (A subset of Electrolyte Disorder terms)
- Upper Respiratory Tract Infection
- Diarrhea
- Skin and Subcutaneous Rash (Broad and Narrow; a subset of Skin Disorder and Rash terms)
- Skin and Subcutaneous Rash (Narrow; a subset of Skin Disorder and Rash terms)

The number and percentage of participants with concomitant medication used for each safety topic of special interest will be presented by ATC Classification, Preferred Term and Grade (1-2 vs. ≥ 3). The following will be also summarized:

- Number and percentage of participants with the safety topic of special interest
- Time to Onset of First Instance of the safety topic of special interest (days)
- Duration of the safety topic of special interest (days) for each event
- Time from onset of first instance of the safety topic of special interest to resolution of last event
- Number of participants with the safety topic of special interest by outcome, grade (1-2 vs. ≥ 3), and dose modification (if any)
- Number and percentage of participants with concomitant medication use for the safety topic of special interest
- Duration of concomitant medication use for the safety topic of special interest (days)

If an adverse event is ongoing, the end date will be imputed as the data cut-off date for the duration calculation. The duration of concomitant medication use is defined as the number days a participant took medications for the safety topic of special interest. If multiple concomitant medications are taken on a given day, that day will be counted once in the sum. If a medication is ongoing, the end date will be imputed as the last visit date + 28 days (if not before the medication start date), or the study treatment end date if unavailable.

5.6.4. Protocol-Required Laboratory Assessments

Protocol-required laboratory parameters are listed in Table 13-1 in the protocol. The tests in this table will be performed by the local laboratory except for follicle-stimulating hormone (FSH), luteinizing hormone (LH), estradiol, progesterone, Inhibin A, Inhibin B, Anti-Mullerian hormone/Mullerian inhibiting substance (AMH/MIS), and CA-125, which will be sent to a central laboratory.

Clinical laboratory values will be expressed in international system of units (SI) units.

Summaries of clinical laboratory parameters will be summarized by study visit and overall.

Tables for the shift of laboratory data from baseline to the worst post-baseline value will be presented for each lab parameter. The shift from baseline to each visit will also be presented for hematology and chemistry parameters.

The actual value and change from baseline will be summarized for each visit for clinical hematology and chemistry. For analysis of tumor markers and hormones, see Section 5.5.3.

Laboratory results will also be summarized by maximum CTCAE grade as available. For lab tests with NCI – CTCAE classification, the shift from baseline to each post baseline visit and the maximum (worst) post baseline grade will be tabulated. Shift tables will summarize the count and frequency of each baseline CTCAE grade to the highest CTCAE grade on study. Laboratory tests with bi-directional grades will be presented separately for each direction (e.g., hyperglycemia and hypoglycemia). For lab tests without NCI – CTCAE classifications, the shift from baseline to each post baseline visit and the worst post-baseline value (high or low) will be summarized using the lab range indicators (normal, high, or low).

Additional shift tables will be produced for ALT, AST, alkaline phosphatase, bilirubin, phosphorus, and creatine showing shifts of below normal range, within normal range, >1 to $2 \times$ upper limit of normal range, >2 to $3 \times$ upper limit of normal range, >3 to $5 \times$ upper limit of normal range, to $> 5 \times$ upper limit of normal range from baseline to the worst (highest) post baseline value.

Box and whisker plots displaying the values over time by nominal visit will be produced for the hematology and clinical chemistry lab tests.

All laboratory results will be listed and laboratory tests with an abnormal result will be flagged. A subset listing will be presented for all grade 3 or higher laboratory values.

A summary table and a listing of participants meeting liver chemistry stopping criteria will be provided by the cycle of onset and overall. These are participants with the following conditions:

- $ALT \geq 5 \times ULN$
- $ALT \geq 3 \times ULN$ persists for ≥ 4 weeks
- $ALT \geq 3 \times ULN$ and bilirubin $\geq 2 \times ULN$ ($> 35\%$ direct bilirubin)
- $ALT \geq 3 \times ULN$ and International normalized ratio (INR) > 1.5 , if INR measured
- $ALT \geq 3 \times ULN$ and cannot be monitored weekly for 4 weeks. Missing lab values within window will be considered not monitored.
- $ALT \geq 3 \times ULN$ associated with symptoms (new or worsening) believed to be related to liver

Serum pregnancy testing data will be presented for each participant in a data listing.

5.6.5. Physical Exam and Eastern Cooperative Oncology Group Performance Status

Physical examination abnormalities reported as AEs will be summarized along with other TEAEs.

Shift tables will be used to summarize the count and frequency for each shift of baseline ECOG performance status grade to the worst and the best post-baseline ECOG grade. The ECOG performance status grades are outlined in Table 4.

All physical examination findings and ECOG performance status results will be presented in data listings.

Table 4 Eastern Cooperative Oncology Group Performance Status Grades

| Grade | Description |
|-------|---|
| 0 | Normal activity. Fully active, able to carry on all pre-disease performance without restriction. |
| 1 | Symptoms, but ambulatory. Restricted in physically strenuous activity, but ambulatory and able to carry out work of a light or sedentary nature (e.g., light housework, office work). |
| 2 | In bed < 50% of the time. Ambulatory and capable of all self-care, but unable to carry out any work activities. Up and about more than 50% of waking hours. |
| 3 | In bed > 50% of the time. Capable of only limited self-care, confined to bed or chair more than 50% of waking hours. |
| 4 | 100% bedridden. Completely disabled. Cannot carry on any self-care. Totally confined to bed or chair. |
| 5 | Dead. |

Source: Oken MM, Creech RH, Tormey DC, et al. Toxicity and response criteria of the Eastern Cooperative Oncology Group. Am J Clin Oncol. 1982; 5:649-655

5.6.6. Electrocardiogram

The actual value and change from baseline at each time point will be summarized for 12-lead ECG parameters. The 12-Lead ECG parameters include heart rate, PR, RR, QRS, QT and QTcF intervals.

Categorical groups of QTcF will be summarized as follows:

- Maximum post-baseline QTcF
 - ≤ 450 msec
 - > 450 and ≤ 480 msec
 - > 480 and ≤ 500 msec
 - > 500 msec

- Maximum change from baseline for QTcF
 - ≤ 30 msec
 - > 30 and ≤ 60 msec
 - > 60 msec
- Baseline QTcF < 450 msec and post-baseline QTcF > 500 msec
- Baseline QTcF between 450 and 480 msec and post-baseline QTcF ≥ 530 msec

ECG parameters will be summarized by visit and the worst post-baseline change from baseline. All ECG data will be included in a by-participant data listing. Listings will be provided for participants with abnormal or outlying values for QTcF and changes in QTcF.

5.6.7. Vital Signs

The actual value and change from baseline for all parameters (blood pressure, respiratory rate, heart rate, and body temperature) will be summarized at each scheduled visit.

Potentially clinically significant post-baseline vital signs will also be summarized following the criteria as below:

- Systolic Blood Pressure (mmHg)
 - Value ≥ 150
 - Increase of 20 from baseline
 - Value ≥ 150 and increase of 20 from baseline
 - Value < 90
 - Decrease of 20 from baseline
 - Value < 90 and decrease of 20 from baseline
- Diastolic Blood Pressure (mmHg)
 - Value ≥ 95
 - Increase of 10 from baseline
 - Value ≥ 95 and increase of 10 from baseline
 - Value < 60
 - Decrease of 10 from baseline
 - Value < 60 and decrease of 10 from baseline

- Heart Rate (beats/min)
 - Value ≥ 110
 - Increase of 20 from baseline
 - Value ≥ 110 and increase of 20 from baseline
 - Value ≤ 50
 - Decrease of 20 from baseline
 - Value ≤ 50 and decrease of 20 from baseline
- Temperature (°C)
 - Value ≥ 38
 - Value < 35

Vital sign measurements will be summarized by visit and the worst post-baseline change from baseline. The data listing will be presented for each participant. A summary table and listing will also be provided for participants with potentially clinically significant vital signs.

5.6.8. Concomitant Medications

Any medication or vaccine (including over-the-counter or prescription medicines, vitamins, and/or herbal supplements) that the participant is receiving at the time of informed consent and/or receives during the study through 30 days after the last dose of study treatment will be recorded along with:

- Reason for use;
- Dates of administration including start and end dates; and
- Dosage information including dose and frequency.

Concomitant medications will be coded using the WHO Drug Dictionary March 2022 version or higher. Medications or vaccines that ended before receiving the first study treatment will be considered as the prior medication. Medications or vaccines that continued or started on or after receiving the first dose through 30 days after the last dose of study treatment will be summarized as the concomitant medication. Medication, vaccine or procedure started more than 30 days after the last dose will be considered as subsequent.

The handling of partial/missing start dates for concomitant therapies/medications are described in Section 4.9.2. Concomitant medications will be tabulated by anatomic therapeutic class (ATC) and PT. In these tabulations, each participant will contribute only once to each ATC and PT regardless of number of uses.

The concomitant procedures will be coded using the MedDRA coding dictionary version 27.0 and displayed in tables and data listings using system organ class (SOC) and preferred term (PT).

All medications, vaccines and procedures will be included in data listings. An identifier will be used to show whether a medication, vaccine or procedure was prior, concomitant or subsequent.

5.7. Pharmacokinetic and Pharmacodynamic Analyses

Exploratory analyses maybe conducted based on the data collected, with purposes of providing information for potential pharmacokinetic/pharmacodynamic (PK/PD) analysis if deemed necessary. The specifics of these analyses will be described in a separate PK/PD Analysis Plan and reported separately from the main Clinical Study Report (CSR). For purposes of the CSR for which this SAP provides the basis, serum pharmacokinetic collection dates, times, and concentrations will be displayed in a data listing. Additionally, summaries of the concentrations will be provided.

5.8. Interim Analysis

No formal interim analysis is planned. This study planned to use a Bayesian approach of continuous monitoring for early futility stopping based on ORR Potential timepoints for interim evaluation might occur when 10, 20, and 30 participants had completed 6 months of follow-up or dropped out. At each interim look, an exact 2-sided 95% CI based on the Clopper-Pearson method would also be provided. See Section 1.4 for a brief description of both methods.

This section provides detailed calculation of the Bayesian approach, however, due to the rapid enrollment, the previously planned informal data assessment using this Bayesian approach for early futility stopping based on ORR was no longer feasible as instead of 10 participants, 53 were already enrolled before the one year predicted cutoff time point.

The Bayesian approach to be used for futility analysis assumes a beta-binomial distribution with an uninformative prior of beta distribution. If a random variable Z follows a beta distribution with parameters (α, β) , the probability density function will be

$$(1) \quad f(z) = \frac{z^{\alpha-1}(1-z)^{\beta-1}}{B(\alpha, \beta)},$$

where potential values of z are in $(0,1)$,

$$(2) \quad B(\alpha, \beta) = \Gamma(\alpha)\Gamma(\beta)/\Gamma(\alpha, \beta),$$

and Γ is the Gamma function, i.e., $\Gamma(\alpha) = \int_0^\infty t^{\alpha-1}e^{-t}dt$. The mean of Z is $\alpha/(\alpha + \beta)$.

At the first interim look, the prior of ORR is assumed to follow a beta distribution with parameter $(0.1, 0.9)$. Hence the corresponding mean is 0.1. Assume at an assessment point, the study has accrued X responders out of n (<43) participants. With a prior distribution of $beta(a, b)$, X follows a binomial distribution and the posterior distribution of the response rate follows a beta distribution with parameters $(a+x, b+n-x)$, where x is the observed value of X ([Lee and Liu 2008](#); [Chen et al. 2019](#)). For example, if 2 out of 10 participants are responders at the first interim look, the updated prior of ORR will follow a beta distribution with parameters $(2.1, 8.9)$, which has a mean of $2.1/11=19.1\%$. Hence, the initially assumed beta prior with parameters $(0.1, 0.9)$ does not have substantial impact on the updated prior and is considered non-informative prior.

For the remaining $(43-n)$ future participants, the number of responses, Y , follows a beta-binomial distribution with parameters $(43-n, a+x, b+n-x)$ ([Lee and Liu 2008](#)). Since a, b, n, x are known at this point, the probability $\Pr(Y=i)$ can be calculated using the probability mass function of a beta-binomial distribution. See equation (3) below.

If Z follows a beta-binomial distribution with parameters (n, a, b) , the probability of $Z = z$ is:

$$(3) \quad f(z|n, a, b) = \binom{n}{z} \frac{B(z+a, n-z+b)}{B(a, b)}$$

If i out of $(43-n)$ future participants are responders, the updated prior for ORR will follow a beta distribution with parameters $(0.1+x+i, 0.9-x-i)$. If under the frequentist framework, the null hypothesis is $ORR = 15\%$. the posterior probability of $ORR > 15\%$ can be calculated. Using SAS® CDF function, this probability is:

$$(4) \quad \text{pr}(ORR > 0.15|x, Y = i) = 1 - CDF(\text{"Beta"}, 0.15, (0.1 + x + i), (0.9+43-x-i)).$$

Define the predictive probability as the chance of observing any $Y=i$ responders in future participants such that the posterior probability of $ORR > 0.15$ is greater than 85%. If the predictive probability is too low, e.g., $\leq 10\%$, the study may be terminated for futility.

From the observed responders x and a target ORR, the predictive probability of reaching the target ORR at the end of study can be calculated with the beta-binomial distribution as follows. After observing a total of x out of n responders up to an interim look, the possible number of responders, Y , in the future will be $0, 1, 2, \dots, (43-n)$. For each possible $Y = i$, calculate the posterior probability of $\text{Pr}_i(ORR > 0.15|x, Y=i)$, where $i=0, 1, 2, \dots, (43-n)$, using equation (4). If this posterior probability is > 0.85 , $Y=i$ responders is considered promising. The probability of $Y = i$ can be calculated using equation (3). The predictive probability for $ORR > 15\%$ with threshold 85% is:

$$(5) \quad \text{Predictive probability} \\ = \sum_{i=0}^{43-n} \{ \text{pr}(Y = i|x) \times I[\text{pr}(ORR > 0.15|x, Y = i) > 0.85] \},$$

where $\text{pr}(Y = i|x)$ is the probability of observing i responders in future $(43-n)$ participants given x out of n responders, and $I[\text{pr}(ORR > 0.15|x, Y = i) > 0.85] = 1$ if the statement inside $[]$ is true; otherwise, the value of I is 0. In summary, the predictive probability in equation (5) can be calculated using the following algorithm:

- 1) Assign predictive probability pp to 0.
- 2) For $i=0$ to $43-n$,
 - a. Calculate the posterior probability $ps = \text{pr}(ORR > 0.15|x, Y = i)$ using equation (4).
 - b. If $ps > 0.85$, do the following:
 - i. Calculate the probability of observing $Y=i$ conditional on observing x responders using the beta-binomial distribution with parameters $(43-n, x+0.1, n-x+0.9)$, i.e.,

$$(6) \quad \text{Pr}(Y = i|x)$$

$$= \binom{43-n}{i} \frac{B(i+x+0.1, 43-n-i+n-x+0.9)}{B(a, b)}$$

$$= \binom{43-n}{i} \frac{B(i+x+0.1, 43-i-x+0.9)}{B(x+0.1, n-x+0.9)}.$$

- ii. Update predictive probability pp with $pp + \text{pr}(Y = i|x)$.
- c. After completing the loop in 2), the final pp is the predictive probability of ORR > 0.15 with threshold 0.85.

In addition to using the Bayesian approach to calculate the predictive probability of observing a promising ORR, the frequentist approach will also be applied by generating the exact 95% CI of ORR based on the Clopper-Pearson method.

To evaluate the robustness of the observed result, the number of observed responders will be decreased and increased by 1, 2, and 3 (as long as the resulting ORR is between 0 and 100%) to repeat the analyses of ORR.

6. CHANGES TO PLANNED ANALYSES

Notable changes from the protocol-defined statistical analyses compared to this statistical analysis plan are described below:

- I. PFS-6 was redefined as a survival probability.
- II. Definitions and analysis method were added for PFS and OS.
- III. The planned informal interim analysis using the Bayesian approach for early futility stopping based on ORR was not performed. Due to this study's rapid enrollment, it was not feasible to perform the planned informal interim analysis using the Bayesian approach because, instead of 10 participants, 53 were enrolled before the one year predicted cutoff time point.
- IV. Additional preferred terms were added in electrolyte abnormalities – protocol Section 4.3 vs. SAP section 8.4.1.4.

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8. APPENDICES

8.1. RECIST Criteria V1.1

For full guidelines, see RECIST Criteria v1.1 (Eisenhauer 2009).

Categorizing lesions at Baseline:

- Only participants with measurable disease (i.e., at least one measurable lesion) at screening are included.

Measurable lesion – Lesion that can be accurately measured in at least one dimension (longest diameter [LD]) in the plane of measurement is to be recorded) and with longest diameter at least twice the slice thickness and at least 10 mm when assessed by computed tomography (CT) or magnetic resonance imaging (MRI)

- Measurable disease will be assessed by CT or MRI.
- The same method of assessment (CT or MRI) and the same technique will be used to characterize each identified and reported lesion at screening and during follow-up.
- Target Lesions - up to 2 lesions per organ and 5 lesions in total, representative of all involved organs at Baseline.
- Non-target Lesion-All other lesions (or sites of disease) will be identified as non-target lesions and should also be recorded at baseline. Measurements of these lesions are not required, but the presence or absence of each should be noted throughout follow-up.

Methods of Measurement

CT or MRI must be used to measure target lesions selected for response assessment.

Conventional CT and MRI will be performed with cuts of 10 mm or less in slice thickness contiguously.

Recording Tumor Assessments

All sites of disease must be assessed at screening. Screening assessment must be done within 28 days of starting study treatment. For an adequate screening assessment, all required scans must be done within 28 days prior to first dose of study treatment and all disease must be documented appropriately.

At follow-up, disease site must be assessed using the method (CT or MRI) and same technique as screening, including consistent administration of contrast (CT only) and timing of scanning. If a change needs to be made the case must be discussed with the Sponsor.

Unequivocal new lesions will be recorded at follow-up time points. Measurement of new lesions is not required. If a new lesion is equivocal, for example because of its small size, continued therapy and follow-up evaluation will clarify if it represents truly new disease. If repeat scans confirm there is definitely a new lesion, then progression should be declared using the date of the initial scan.

Response Criteria: Evaluation of target lesions

| | |
|---------------------------|---|
| Complete Response (CR): | Disappearance of all target lesions. |
| Partial Response (PR): | At least a 30% decrease in the sum of the LD of target lesions, taking as reference the baseline sum of LD. |
| Progressive Disease (PD): | At least a 20% increase in the sum of the LD of target lesions, taking as reference the smallest sum of LD recorded since the treatment started or the appearance of one or more unequivocal new lesions. In addition to the relative increase of 20%, the sum must also demonstrate an absolute increase of at least 5 mm. |
| Stable Disease (SD): | Neither sufficient shrinkage to qualify for PR nor sufficient increase to qualify for PD, taking as reference the smallest sum LD since the treatment started. |

Evaluation of best overall response

The best overall response is the best response recorded from the start of the study treatment until disease progression/recurrence (taking as reference for PD the smallest measurements recorded since the start of study treatment). The participant's best response assignment will depend on the achievement of both measurement and confirmation criteria (defined below).

Time point response: participants with target disease

| Target Lesions | Nontarget Lesions | New Lesions | Overall Response |
|-------------------|-----------------------------|-------------|------------------|
| CR | CR | No | CR |
| CR | Non-CR/non-PD | No | PR |
| CR | Not evaluated | No | PR |
| PR | Non-PD or not all evaluated | No | PR |
| SD | Non-PD or not all evaluated | No | SD |
| Not all evaluated | Non-PD | No | NE |
| PD | Any | Yes or No | PD |
| Any | PD | Yes or No | PD |
| Any | Any | Yes | PD |

CR=Complete Response; NE=Not Evaluable; PD=Progressive Disease; PR=Partial Response; SD=Stable Disease.

Participants with a global deterioration of health status requiring discontinuation of study treatment without objective evidence of disease progression at that time will be classified as having “symptomatic deterioration”. Every effort should be made to document the objective progression even after discontinuation of treatment.

Confirmation

- **Confirmation of response:**
 - The main goal of confirmation of objective response is to avoid overestimating the response rate observed. In cases where confirmation of response is not feasible, it should be made clear when reporting the outcome of such studies that the responses are not confirmed.
 - To be assigned a status of PR or CR, changes in tumor measurements must be confirmed by repeat assessments that will be performed no less than 4 weeks after the criteria for response are first met.
- **Confirmation of SD:** in the case of SD, follow-up measurements must have met the SD criteria at least once after study entry (signing of Informed Consent Form [ICF]) at a minimum interval of 8 weeks.

Duration of overall response

- The duration of overall response is measured from the time measurement criteria are met for CR or PR (whichever status is recorded first) until the first date that recurrence

or PD is objectively documented, taking as reference for PD the smallest measurements recorded since the treatment started.

Duration of stable disease

- SD is measured from the start of the treatment until the criteria for disease progression are met, taking as reference the smallest measurements recorded since the treatment started.

8.2. FACT/NCCN Ovarian Symptom Index (FOSI) - Version 4

Below is a list of statements that other people with your illness have said are important. **Please circle or mark one number per line to indicate your response as it applies to the past 7 days.**

| | | Not at all | A little bit | Some- what | Quite a bit | Very much |
|-----|--|---------------|-----------------|---------------|----------------|--------------|
| GP1 | I have a lack of energy | 0 | 1 | 2 | 3 | 4 |
| O2 | I have been vomiting | 0 | 1 | 2 | 3 | 4 |
| GP4 | I have pain | 0 | 1 | 2 | 3 | 4 |
| GP2 | I have nausea | 0 | 1 | 2 | 3 | 4 |
| O1 | I have swelling in my stomach area | 0 | 1 | 2 | 3 | 4 |
| GE6 | I worry that my condition will get worse | 0 | 1 | 2 | 3 | 4 |
| GF7 | I am content with the quality of my life right now | 0 | 1 | 2 | 3 | 4 |
| O3 | I have cramps in my stomach area | 0 | 1 | 2 | 3 | 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 symptom index score.
4. As with all FACIT questionnaires, a high score is good. Therefore, a score of "0" is a severely symptomatic patient and the highest possible score is an asymptomatic patient.

| <u>Subscale</u> | <u>Item Code</u> | <u>Reverse item?</u> | <u>Item response</u> | <u>Item Score</u> |
|--|------------------|----------------------|----------------------|-------------------|
| FOSI | GP1 | 4 - | _____ | = _____ |
| | O2 | 4 - | _____ | = _____ |
| | GP4 | 4 - | _____ | = _____ |
| | GP2 | 4 - | _____ | = _____ |
| | O1 | 4 - | _____ | = _____ |
| | GE6 | 4 - | _____ | = _____ |
| | GF7 | 0 + | _____ | = _____ |
| | O3 | 4 - | _____ | = _____ |
| <i>Score range: 0-32</i> | | | | |
| Sum individual item scores: _____ Multiply by 8: _____ Divide by number of items answered: _____ = FOSI total score | | | | |

8.3. Mock-up Tables, Listings, and Figure

Mock-up tables, listings and figures are in separate documents.

8.4. Safety Topics of Special Interest Preferred Terms

This appendix outlines the definition of treatment-emergent AESIs. Additional attention will specifically be given to the safety topics of special interest identified using SMQ or customized MedDRA queries based on MedDRA version 27.0.

8.4.1. Protocol-Specified AESIs

Ovarian Toxicity is specified in the protocol as an AESI. However, the majority of participants in this study will not menstruate since they have had their ovaries or uteruses, or both, surgically removed, or were documented to be post-menopausal. Therefore, it will not be relevant to assess ovarian toxicity in this study so the Preferred Terms defining Ovarian Toxicity are not included in this section.

8.4.1.1. Hypersensitivity

The Hypersensitivity search definition is a custom MedDRA version 27.0 query based on selected terms from the Anaphylactic reaction SMQ, Angioedema SMQ, and Allergic conditions High Level Group Term (HLGT). The PTs are listed below, and all will be considered Narrow search terms:

| | |
|-----------------------------------|--------------------------------|
| Acquired C1 inhibitor deficiency | Laryngotracheal oedema |
| AGEP-DRESS overlap | Limbal swelling |
| Allergic oedema | Lip oedema |
| Allergic reaction to excipient | Lip swelling |
| Anaphylactic reaction | Mouth swelling |
| Anaphylactic shock | Multiple drug hypersensitivity |
| Anaphylactic transfusion reaction | Oculorespiratory syndrome |
| Anaphylactoid reaction | Oedema mouth |
| Anaphylactoid shock | Orbital oedema |

| | |
|---|-----------------------------------|
| Angioedema | Orbital swelling |
| Circulatory collapse | Oropharyngeal oedema |
| Circumoral oedema | Oropharyngeal swelling |
| Circumoral swelling | Palatal oedema |
| Conjunctival oedema | Palatal swelling |
| Corneal oedema | Periorbital oedema |
| Dermatitis allergic | Periorbital swelling |
| Dialysis membrane reaction | Pharyngeal oedema |
| Drug eruption | Pharyngeal swelling |
| Drug hypersensitivity | Procedural shock |
| Drug reaction with eosinophilia and systemic symptoms | Scleral oedema |
| Epiglottic oedema | Severe cutaneous adverse reaction |
| Erythema multiforme | Shock |
| Eye oedema | Shock symptom |
| Eye swelling | SJS-TEN overlap |
| Eyelid oedema | Stevens-Johnson syndrome |
| Face oedema | Swelling face |
| Fixed eruption | Swelling of eyelid |
| Gingival oedema | Swollen tongue |
| Gingival swelling | Systemic contact dermatitis |
| Gleich's syndrome | Tongue oedema |
| Hereditary angioedema | Toxic epidermal necrolysis |
| Hereditary angioedema with C1 esterase inhibitor deficiency | Toxic skin eruption |
| Hereditary angioedema with normal C1 esterase inhibitor | Tracheal oedema |
| Hypersensitivity | Type I hypersensitivity |
| Idiopathic angioedema | Type II hypersensitivity |

| | |
|-------------------------------------|---|
| Idiopathic histaminergic angioedema | Type III immune complex mediated reaction |
| Idiopathic urticaria | Type IV hypersensitivity reaction |
| Intestinal angioedema | Urticaria |
| Kounis syndrome | Urticaria cholinergic |
| Laryngeal oedema | Urticaria chronic |
| | Urticaria papular |

8.4.1.2. Skin Disorder and Rash

The Skin Disorder and Rash search definition is a custom MedDRA version 27.0 query based on selected terms from the Skin and subcutaneous tissue disorders and Infections and infestations System Organ Classes (SOCs). Analyses of skin disorders will be presented for both narrow and broad terms. It is grouped into hidradenitis, skin and subcutaneous rash, and hair follicle subcategories. The PTs are listed below, with Narrow search terms indicated:

Hidradenitis:

Hidradenitis¹
 Sweat gland infection
 Abscess sweat gland
 Groin sinus excision
 Groin abscess

¹ Narrow term.

Skin and subcutaneous rash:

| | |
|----------------------|----------------------------------|
| Acne | Rash erythematous ¹ |
| Acne conglobata | Rash follicular ¹ |
| Acne cystic | Rash macular ¹ |
| Acne pustular | Rash maculo-papular ¹ |
| Dermatitis acneiform | Rash maculovesicular |

| | |
|------------------------------------|----------------------------------|
| Dermatitis exfoliative | Rash morbilliform ¹ |
| Dermatitis exfoliative generalised | Rash papular ¹ |
| Dermatitis ¹ | Rash papulosquamous ¹ |
| Dry skin | Rash pruritic ¹ |
| Erythema ¹ | Rash pustular |
| Erythrodermic atopic dermatitis | Rash rubelliform |
| Exfoliative rash | Rash scarlatiniform |
| Mucocutaneous rash | Rash vesicular |
| Nodular rash ¹ | Rash ¹ |
| Pruritus | Skin exfoliation |
| Pustule | Vasculitic rash |

¹ Narrow term.

Hair Follicle:

| | |
|-----------------------------------|-------------------------------|
| Abscess of eyelid | Eyelid infection |
| Acne | Follicular disorder |
| Acne conglobata | Folliculitis ¹ |
| Acne cosmetica | Folliculitis barbae |
| Acne cystic | Folliculitis genital |
| Acne fulminans | Furuncle ¹ |
| Acne infantile | Hordeolum |
| Acne occupational | Oil acne |
| Acne varioliformis | Pyoderma |
| Alopecia areata ¹ | Pyoderma streptococcal |
| Alopecia totalis ¹ | Rash pustular ¹ |
| Alopecia universalis ¹ | Skin bacterial infection |
| Alopecia ¹ | Staphylococcal skin infection |
| Carbuncle | Subcutaneous abscess |

Dermatitis acneiform

Diffuse alopecia¹

Eyelid boil

Eyelid folliculitis

¹Narrow term.

8.4.1.3. Hepatotoxicity

The Hepatotoxicity search definition is a custom MedDRA version 27.0 query based on Narrow and Broad terms from the Drug related hepatic disorders - comprehensive search SMQ, Cholestasis and jaundice of hepatic origins SMQ, Drug related hepatic disorders SMQ— severe events only, Liver related investigations, signs and symptoms SMQ, and Liver related coagulation and bleeding disturbances SMQ. The PTs are listed below, with Narrow search terms indicated:

| | |
|---|--|
| 5'nucleotidase increased | Hepatic hypoperfusion |
| Acquired antithrombin III deficiency | Hepatic lymphocytic infiltration |
| Acquired factor IX deficiency | Hepatic mass |
| Acquired factor V deficiency ¹ | Hepatic pain |
| Acquired factor VIII deficiency | Hepatic sequestration |
| Acquired factor XI deficiency | Hepatic vascular resistance increased |
| Acquired hepatocerebral degeneration | Hepatic venous pressure gradient abnormal |
| Acquired protein S deficiency | Hepatic venous pressure gradient increased |
| Acute graft versus host disease in liver | Hepatobiliary cancer |
| Acute hepatic failure ¹ | Hepatobiliary cancer in situ |
| Acute on chronic liver failure | Hepatobiliary cyst |
| Acute yellow liver atrophy | Hepatobiliary disease |
| Alanine aminotransferase abnormal ¹ | Hepatobiliary neoplasm |
| Alanine aminotransferase increased ¹ | Hepatobiliary scan abnormal |

| | |
|--|------------------------------------|
| Allergic hepatitis | Hepatoblastoma |
| Alloimmune hepatitis | Hepatoblastoma recurrent |
| Ammonia abnormal | Hepatocellular carcinoma |
| Ammonia increased | Hepatocellular foamy cell syndrome |
| Anorectal varices | Hepatocellular injury |
| Anorectal varices haemorrhage | Hepatomegaly |
| Anti factor X activity abnormal | Hepatopulmonary syndrome |
| Anti factor X activity decreased | Hepatorenal failure |
| Anti factor X activity increased | Hepatorenal syndrome |
| Anti-liver cytosol antibody type 1 positive ¹ | Hepatosplenomegaly |
| Antithrombin III decreased | Hepatotoxicity ¹ |
| Ascites | Hyperammonaemia |
| Aspartate aminotransferase abnormal ¹ | Hyperbilirubinaemia |
| Aspartate aminotransferase increased ¹ | Hypercholia |
| AST to platelet ratio index increased | Hyperfibrinolysis |
| AST/ALT ratio abnormal | Hypertransaminaemia |
| Asterixis | Hypoalbuminaemia |
| Autoimmune hepatitis | Hypocoagulable state |
| Bacterascites | Hypofibrinogenaemia |
| Benign hepatic neoplasm | Hypoprothrombinaemia |
| Benign hepatobiliary neoplasm | Hypothrombinaemia |
| Bile acids abnormal ¹ | Hypothromboplastinaemia |
| Bile acids increased ¹ | Icterus index increased |
| Bile output abnormal | Immune-mediated cholangitis |
| Bile output decreased | Immune-mediated hepatic disorder |
| Biliary ascites | Immune-mediated hepatitis |
| Biliary cirrhosis | Increased liver stiffness |

| | |
|--|--|
| Biliary fibrosis | International normalised ratio abnormal |
| Bilirubin conjugated abnormal | International normalised ratio increased |
| Bilirubin conjugated increased | Intestinal varices |
| Bilirubin excretion disorder | Intestinal varices haemorrhage |
| Bilirubin urine present | Intrahepatic portal hepatic venous fistula |
| Biopsy liver abnormal | Ischaemic hepatitis |
| Blood alkaline phosphatase abnormal | Jaundice |
| Blood alkaline phosphatase increased | Jaundice cholestatic |
| Blood bilirubin abnormal | Jaundice hepatocellular |
| Blood bilirubin increased | Kayser-Fleischer ring |
| Blood bilirubin unconjugated increased | Leucine aminopeptidase increased |
| Blood cholinesterase abnormal | Liver and pancreas transplant rejection |
| Blood cholinesterase decreased | Mixed liver injury |
| Blood fibrinogen abnormal | Ocular icterus |
| Blood fibrinogen decreased | Parenteral nutrition associated liver disease |
| Blood thrombin abnormal | Liver carcinoma ruptured |
| Blood thrombin decreased | Liver dialysis |
| Blood thromboplastin abnormal | Liver disorder |
| Blood thromboplastin decreased | Liver injury |
| Bromosulphthalein test abnormal | Liver-kidney microsomal antibody positive ¹ |
| Cardiohepatic syndrome | Liver operation |
| Child-Pugh-Turcotte score abnormal | Liver sarcoidosis |
| Child-Pugh-Turcotte score increased | Liver transplant |
| Cholaemia | Liver transplant failure |
| Cholangiosarcoma | Liver transplant rejection |
| Cholestasis | Lupoid hepatic cirrhosis |
| Cholestatic liver injury | Lupus hepatitis |

| | |
|--|---|
| Cholestatic pruritus | Mixed hepatocellular cholangiocarcinoma |
| Chronic graft versus host disease in liver | Multivisceral transplantation |
| Chronic hepatic failure | Nodular regenerative hyperplasia |
| Chronic hepatitis | Nonalcoholic fatty liver disease |
| Coagulation factor decreased | Non-alcoholic steatohepatitis |
| Coagulation factor IX level abnormal | Non-cirrhotic portal hypertension |
| Coagulation factor IX level decreased | Oedema due to hepatic disease |
| Coagulation factor V level abnormal | Oesophageal varices haemorrhage |
| Coagulation factor V level decreased | Peripancreatic varices |
| Coagulation factor VII level abnormal | Peritoneovenous shunt |
| Coagulation factor VII level decreased | Portal fibrosis |
| Coagulation factor X level abnormal | Portal hypertension |
| Coagulation factor X level decreased | Portal hypertensive colopathy |
| Coma hepatic | Portal hypertensive enteropathy |
| Complications of transplanted liver | Portal hypertensive gastropathy |
| Computerised tomogram liver abnormal | Portal shunt |
| Congestive hepatopathy | Portal shunt procedure |
| Cryptogenic cirrhosis | Portal tract inflammation |
| Cytokeratin 18 increased | Portal vein cavernous transformation |
| Deficiency of bile secretion | Portal vein dilatation |
| Diabetic hepatopathy | Portopulmonary hypertension |
| Drug-induced liver injury | Primary biliary cholangitis |
| Duodenal varices | Radiation hepatitis |
| Factor VII activity decreased ¹ | |
| Flood syndrome | Regenerative siderotic hepatic nodule |
| Focal nodular hyperplasia | Renal and liver transplant |
| Foetor hepaticus | Retrograde portal vein flow |

| | |
|---|---|
| Galactose elimination capacity test abnormal | Reye's syndrome |
| Galactose elimination capacity test decreased | Reynold's syndrome |
| Gallbladder varices | Small-for-size liver syndrome |
| Gamma-glutamyltransferase abnormal ¹ | Spider naevus |
| Gamma-glutamyltransferase increased ¹ | Splenic artery embolisation |
| Gastric variceal injection | Splenic varices |
| Gastric variceal ligation | Splenic varices haemorrhage |
| Gastric varices | Splenorenal shunt |
| Gastric varices haemorrhage | Splenorenal shunt procedure |
| Gastroesophageal variceal haemorrhage prophylaxis | Spontaneous intrahepatic portosystemic venous shunt |
| Glutamate dehydrogenase increased | Steatohepatitis |
| Glycocholic acid increased | Stomal varices |
| Graft versus host disease in liver | Subacute hepatic failure |
| Granulomatous liver disease | Sugiura procedure |
| Hepatitis cholestatic | Suspected drug-induced liver injury ¹ |
| Haemangioma of liver | Transient hepatic attenuation differences |
| Haemorrhagic hepatic cyst | Varices oesophageal |
| Hepatectomy | Varicose veins of abdominal wall |
| Hepatic adenoma | White nipple sign |
| Hepatic angiosarcoma | Liver function test abnormal |
| Hepatic atrophy | Liver function test decreased |
| Hepatic calcification | Liver function test increased |
| Hepatic cancer | Liver induration |
| Hepatic cancer metastatic | Liver iron concentration abnormal |
| Hepatic cancer recurrent | Liver iron concentration increased |
| Hepatic cancer stage I | Liver opacity |

| | |
|------------------------------------|--|
| Hepatic cancer stage II | Liver palpable |
| Hepatic cancer stage III | Liver scan abnormal |
| Hepatic cancer stage IV | Liver tenderness |
| Hepatic cirrhosis | Magnetic resonance imaging hepatobiliary abnormal |
| Hepatic cyst | Magnetic resonance proton density fat fraction measurement |
| Hepatic cyst ruptured | Mitochondrial aspartate aminotransferase increased |
| Hepatic cytolysis | Model for end stage liver disease score abnormal |
| Hepatic encephalopathy | Model for end stage liver disease score increased |
| Hepatic encephalopathy prophylaxis | Molar ratio of total branched-chain amino acid to tyrosine |
| Hepatic failure | Osteopontin increased |
| Hepatic fibrosis | Perihepatic discomfort |
| Hepatic haemangioma rupture | Periportal oedema |
| Hepatic hamartoma | Peritoneal fluid protein abnormal |
| Hepatic hydrothorax | Peritoneal fluid protein decreased |
| Hepatic infiltration eosinophilic | Peritoneal fluid protein increased |
| Hepatic lesion | Pneumobilia |
| Hepatic necrosis | Portal vein flow decreased |
| Hepatic neoplasm | Portal vein pressure increased |
| Hepatic perfusion disorder | Retinol binding protein decreased |
| Hepatic steato-fibrosis | Transaminases abnormal ¹ |
| Hepatic steatosis | Transaminases increased ¹ |
| Hepatitis | Ultrasound liver abnormal |
| Hepatitis acute | Urine bilirubin increased |

| | |
|-----------------------------------|----------------------------------|
| Hepatitis chronic active | Urobilinogen urine decreased |
| Hepatitis chronic persistent | Urobilinogen urine increased |
| Hepatitis fulminant | X-ray hepatobiliary abnormal |
| Hepatitis toxic ¹ | Protein C decreased |
| Guanase increased | Protein S abnormal |
| Haemorrhagic ascites | Protein S decreased |
| Hepaplastin abnormal | Prothrombin level abnormal |
| Hepaplastin decreased | Prothrombin level decreased |
| Hepatic artery flow decreased | Prothrombin time abnormal |
| Hepatic enzyme abnormal | Prothrombin time prolonged |
| Hepatic enzyme decreased | Prothrombin time ratio abnormal |
| Hepatic enzyme increased | Prothrombin time ratio increased |
| Hepatic fibrosis marker abnormal | |
| Hepatic fibrosis marker increased | |
| Hepatic function abnormal | |
| Hepatic hypertrophy | |

¹Narrow term.

8.4.1.4. Electrolyte Disorder

Selected treatment-emergent abnormally low electrolyte disorder adverse events will be summarized. The electrolyte disorder search definition is a custom MedDRA version 27.0 query based on selected terms from the Metabolism and nutrition disorders and Investigations SOCs. The PTs are as defined below for each electrolyte. The frequency table will be summarized by descending frequency of lab analyte and PT. A shift table will be generated for lab grades in hypocalcemia, hypercalcemia, hypomagnesemia, hypermagnesemia, hypokalemia, hyperkalemia, hyponatremia, and hypernatremia, as well as for clinical categorization in phosphate.

| <u>Lab Analyte</u> | <u>Pertinent PTs</u> |
|---------------------------|---|
| Hypocalcemia: | Blood calcium decreased, Hypocalcaemia, Hypocalcaemic seizure |
| Hypomagnesaemia: | Blood magnesium decreased, Hypomagnesaemia |
| Hypophosphatemia: | Blood phosphorus decreased, Hypophosphataemia |
| Hypokalaemia: | Blood potassium decreased, Hypokalaemia, Hypokalaemic syndrome |
| | Blood sodium decreased, Hyponatraemia, Hyponatraemic coma, |
| Hyponatremia: | Hyponatraemic encephalopathy, Hyponatraemic seizure, Hyponatraemic syndrome |

8.4.1.5. Non-Melanoma Skin Cancers

The non-melanoma skin cancers search definition is a custom MedDRA version 27.0 query based on selected terms from the Skin neoplasms malignant and unspecified (excluding melanoma) HLT within the Neoplasms benign, malignant and unspecified (including cysts and polyps) SOC, plus the PT of Squamous cell carcinoma. The PTs are shown below:

| | |
|---------------------------------|--|
| Atypical fibroxanthoma | Neoplasm skin |
| Basal cell carcinoma | Neuroendocrine carcinoma of the skin |
| Basal cell carcinoma metastatic | Pilomatrix carcinoma |
| Basal cell naevus syndrome | Porocarcinoma |
| Basosquamous carcinoma of skin | Primary cutaneous adenoid cystic carcinoma |
| Bowen's disease | Sebaceous carcinoma |
| Carcinoma in situ of skin | Squamoproliferative lesion |
| Dysplastic naevus syndrome | Skin angiosarcoma |
| Eccrine carcinoma | Skin cancer |
| Epidermal naevus syndrome | Skin cancer metastatic |
| Keratoacanthoma | Skin neoplasm bleeding |
| Malignant sweat gland neoplasm | Skin squamous cell carcinoma metastatic |

| | |
|------------------|--|
| Marjolin's ulcer | Skin squamous cell carcinoma recurrent |
| Mastocytoma | Squamous cell carcinoma of skin |
| | Trichoblastic carcinoma |
| | Squamous cell carcinoma |

8.4.2. Other Safety Topics of Special Interest

Safety topics of special interest have been identified based on the review of safety data from prior studies with nirogacestat and include additional AEs beyond those specified in Protocol Section 11.3.1 as AESIs. These safety topics of interest are defined for analysis purposes by using standardized MedDRA queries (SMQ) or customized MedDRA queries, as described below.

8.4.2.1. Musculoskeletal Disorders

The Musculoskeletal Disorders search definition is a custom MedDRA version 27.0 query based on selected terms from the Bone disorders (excluding congenital and fractures) HLGT. The PTs are shown below:

| | |
|--------------------------|-----------------------------------|
| Bone atrophy | Fracture delayed union |
| Bone callus excessive | Fracture malunion |
| Bone decalcification | Fracture nonunion |
| Bone erosion | Idiopathic juvenile osteoporosis |
| Bone demineralisation | Melorheostosis |
| Bone formation decreased | Osteodystrophy |
| Bone formation increased | Osteolysis |
| Bone hypertrophy | Osteomalacia |
| Bone loss | Osteopenia |
| Bone pain | Osteoporosis |
| Callus formation delayed | Osteoporosis circumscripta cranii |
| Enostosis | Osteoporosis postmenopausal |

| | |
|---------------------------------|---------------------------|
| Exostosis | Osteosclerosis |
| Exostosis of external ear canal | Osteosis |
| Exostosis of jaw | Resorption bone decreased |
| Extraskelatal ossification | Resorption bone increased |

8.4.2.2. Bone Fracture

The Bone Fracture search definition is a custom MedDRA version 27.0 query based on selected terms from the Fractures of the Musculoskeletal HLGT and Connective tissue disorders SOC.

The PTs are shown below:

| | |
|-----------------------------|-----------------------------|
| Acetabulum fracture | Impacted fracture |
| Ankle fracture | Jaw fracture |
| Atypical femur fracture | Limb fracture |
| Atypical fracture | Lisfranc fracture |
| Avulsion fracture | Lower limb fracture |
| Bone fissure | Lumbar vertebral fracture |
| Bone fragmentation | Maisonneuve fracture |
| Cervical vertebral fracture | Metaphyseal corner fracture |
| Chance fracture | Multiple fractures |
| Clavicle fracture | Neurogenic fracture |
| Comminuted fracture | Open fracture |
| Complicated fracture | Osteochondral fracture |
| Compression fracture | Osteo-meningeal breaches |
| Costal cartilage fracture | Osteophyte fracture |
| Craniofacial fracture | Osteoporotic fracture |
| Craniofacial injury | Patella fracture |
| Epiphyseal fracture | Pathological fracture |
| Facial bones fracture | Pelvic fracture |

| | |
|--|------------------------------------|
| Femoral neck fracture | Periprosthetic fracture |
| Femur fracture | Pseudarthrosis |
| Fibula fracture | Pseudofracture |
| Flail chest | Radius fracture |
| Foot fracture | Rib fracture |
| Forearm fracture | Sacroiliac fracture |
| Fracture | Scapula fracture |
| Fracture blisters | Scapulothoracic dissociation |
| Fracture delayed union | Skull fracture |
| Fracture displacement | Skull fractured base |
| Fracture infection | Spinal compression fracture |
| Fracture malunion | Spinal fracture |
| Fracture nonunion | Spinal fusion fracture |
| Fracture of clavicle due to birth trauma | Sternal fracture |
| Fractured coccyx | Stress fracture |
| Fractured sacrum | Subchondral insufficiency fracture |
| Fractured skull depressed | Thoracic vertebral fracture |
| Greenstick fracture | Tibia fracture |
| Hand fracture | Torus fracture |
| Hip fracture | Traumatic fracture |
| Humerus fracture | Ulna fracture |
| Ilium fracture | Upper limb fracture |
| | Wrist fracture |

8.4.2.3. Mucositis/Stomatitis

The Mucositis/Stomatitis search definition is a custom MedDRA version 27.0 query based on selected terms from the Stomatitis and ulceration and Oral soft tissue signs and symptoms HLTs.

The PTs are shown below:

| | |
|---------------------|-------------------------|
| Mouth ulceration | Palatal ulcer |
| Oral mucosa erosion | Stomatitis haemorrhagic |
| Oral pain | Stomatitis necrotizing |
| Oropharyngeal pain | Stomatitis |

8.4.2.4. Hematologic Disorders

The Hematologic Disorders search definition is a custom MedDRA version 27.0 query based on selected terms from the Blood and lymphatic disorders SOC. The PTs are shown below:

| | |
|--------------------------------------|----------------------------------|
| Agranulocytosis | Lymphocyte percentage decreased |
| Anaemia | Lymphocytopenia neonatal |
| Anaemia macrocytic | Lymphopenia |
| Anaemia neonatal | Metamyelocyte count decreased |
| Aplasia pure red cell | Microcytic anaemia |
| Aplastic anaemia | Monoblast count decreased |
| Band neutrophil count decreased | Monocyte count abnormal |
| Band neutrophil percentage decreased | Monocyte count decreased |
| Basophil count abnormal | Monocyte percentage decreased |
| Basophil count decreased | Monocytopenia |
| Basophil percentage decreased | Mononuclear cell count decreased |
| Basophilopenia | Myeloblast count decreased |
| B-lymphocyte abnormalities | Myeloblast percentage decreased |
| B-lymphocyte count abnormal | Myelocyte count decreased |
| B-lymphocyte count decreased | Myelocyte percentage decreased |
| Cyclic neutropenia | Myeloid maturation arrest |

| | |
|--|-----------------------------------|
| Differential white blood cell count abnormal | Neutropenia |
| Eosinopenia | Neutropenia neonatal |
| Eosinophil count abnormal | Neutropenic infection |
| Eosinophil count decreased | Neutropenic sepsis |
| Eosinophil percentage decreased | Neutrophil count abnormal |
| Erythroblast count abnormal | Neutrophil count decreased |
| Erythroblast count decreased | Neutrophil percentage decreased |
| Erythroid maturation arrest | Normochromic anaemia |
| Erythropenia | Normochromic normocytic anaemia |
| Erythropoiesis abnormal | Normocytic anaemia |
| Febrile neutropenia | Plasma cell disorder |
| Foetal anaemia | Plasma cells absent |
| Full blood count abnormal | Proerythroblast count abnormal |
| Granulocyte count decreased | Proerythroblast count decreased |
| Granulocytes abnormal | Promyelocyte count decreased |
| Granulocytes maturation arrest | Pure white cell aplasia |
| Granulocytopenia | Radiation leukopenia |
| Granulocytopenia neonatal | Red blood cell count abnormal |
| Haematocrit abnormal | Red blood cell count decreased |
| Haematocrit decreased | Reticulocyte count abnormal |
| Haemoglobin abnormal | Reticulocyte count decreased |
| Haemoglobin decreased | Reticulocyte percentage decreased |
| Hypohaemoglobinaemia | Reticulocytopenia |
| Hypoplastic anaemia | T-lymphocyte count abnormal |
| Idiopathic neutropenia | T-lymphocyte count abnormal |
| Leukoerythroblastic anaemia | T-lymphocyte count decreased |

| | |
|--------------------------------|------------------------------------|
| Leukopenia | White blood cell analysis abnormal |
| Leukopenia neonatal | White blood cell count abnormal |
| Lymphocyte count abnormal | White blood cell count decreased |
| Lymphocyte count decreased | White blood cell disorder |
| Lymphocyte percentage abnormal | |

8.4.2.5. Opportunistic Infections

The Opportunistic Infections search definition is based on MedDRA version 27.0 Narrow and Broad terms from the Opportunistic Infections SMQ. The PTs are shown below, with Narrow search terms indicated:

| | |
|---|--|
| Abdominal sepsis | Human herpesvirus 6 infection reactivation ¹ |
| Abiotrophia defectiva endocarditis ¹ | Human herpesvirus 6 viraemia ¹ |
| Abscess fungal | Human herpesvirus 7 infection |
| Acanthamoeba infection | Human herpesvirus 8 infection ¹ |
| Achromobacter infection | Human metapneumovirus test positive |
| Acid fast bacilli infection ¹ | Human papilloma virus test positive |
| Acinetobacter bacteraemia | Human polyomavirus infection |
| | Hyperparasitaemia ¹ |
| Acinetobacter infection | Immune reconstitution inflammatory syndrome |
| Acinetobacter sepsis ¹ | Immune reconstitution inflammatory syndrome associated tuberculosis ¹ |
| Actinomyces test positive | Indeterminate leprosy ¹ |
| | Indeterminate tuberculosis test |
| Actinomycosis | Infection in an immunocompromised host ¹ |
| Actinomycotic abdominal infection | Infection susceptibility increased ¹ |
| Actinomycotic pulmonary infection | Infectious thyroiditis |
| Actinomycotic sepsis ¹ | Infective aneurysm |

| | |
|---|---|
| Actinomycotic skin infection | Influenza |
| Acute haemorrhagic conjunctivitis | Influenza A virus test positive |
| Acute hepatitis B | Influenza B virus test positive |
| Acute hepatitis C | Influenza C virus test positive |
| | Influenza myocarditis |
| Acute pulmonary histoplasmosis ¹ | Influenza virus test positive |
| Adenoviral conjunctivitis | Interferon gamma release assay positive |
| Adenoviral encephalitis ¹ | Intestinal tuberculosis ¹ |
| Adenoviral haemorrhagic cystitis ¹ | Isosporiasis ¹ |
| | Jamestown Canyon encephalitis |
| Adenoviral hepatitis | JC polyomavirus test positive |
| Adenoviral meningitis ¹ | JC virus CSF test positive ¹ |
| Adenoviral upper respiratory infection | JC virus granule cell neuronopathy ¹ |
| Adenovirus encephalomyeloradiculitis ¹ | JC virus infection ¹ |
| Adenovirus infection | Joint tuberculosis ¹ |
| Adenovirus interstitial nephritis ¹ | |
| Adenovirus test positive | Kaposi's sarcoma ¹ |
| Adrenal gland tuberculosis ¹ | Kaposi's sarcoma AIDS related ¹ |
| Aerococcus urinae infection | Keratitis fungal |
| Aeromonas infection | Keratitis viral |
| Aeromonas test positive | Klebsiella bacteraemia |
| African trypanosomiasis | Klebsiella infection |
| | Klebsiella pneumoniae invasive syndrome |
| Alcaligenes infection | Klebsiella sepsis |
| Algid malaria | |
| Allergic bronchopulmonary mycosis | Klebsiella test positive |

| | |
|---|---|
| | Lactobacillus bacteraemia |
| Allescheriosis | Lactobacillus infection |
| Alpha haemolytic streptococcal infection | Laryngeal cryptococcosis ¹ |
| Alphavirus test positive | Laryngitis fungal ¹ |
| | Leclercia bacteraemia ¹ |
| Alternaria infection ¹ | Legionella infection |
| American trypanosomiasis | Legionella test positive |
| Amoeba test positive | Leishmaniasis |
| Amoebiasis | Lepromatous leprosy ¹ |
| Amoebic brain abscess ¹ | Leprosy ¹ |
| Amoebic colitis | Leptotrichia infection |
| Amoebic dysentery | Leuconostoc infection |
| Amoebic lung abscess ¹ | Listeria encephalitis ¹ |
| Amoebic skin ulcer | Listeria sepsis ¹ |
| Amoeboma ¹ | |
| Anal candidiasis | Listeria test positive |
| Anal fungal infection | Listeriosis ¹ |
| Angina gangrenous | Lower respiratory tract herpes infection ¹ |
| Angiostrongylus infection | Lower respiratory tract infection fungal ¹ |
| Anogenital warts | Lower respiratory tract infection viral |
| Anorectal human papilloma virus infection | Lupus vulgaris ¹ |
| Anthrax sepsis | Lymph node tuberculosis ¹ |
| Anti-JC virus antibody index | Lymphadenitis fungal ¹ |
| Arbovirus test positive | Malaria |
| Arenavirus test positive | Malaria antibody test positive |
| Arthritis fungal ¹ | Malarial myocarditis |

| | |
|---|--|
| Arthritis salmonella | Male genital tract tuberculosis ¹ |
| Arthritis-dermatitis syndrome | |
| Aspergilloma | Mammary tuberculosis ¹ |
| Aspergillosis oral ¹ | Mastitis fungal ¹ |
| | Mastoiditis fungal |
| Aspergillus infection ¹ | Measles meningitis |
| Aspergillus test positive | Meningitis aspergillus ¹ |
| Atypical mycobacterial infection ¹ | Meningitis candida ¹ |
| Atypical mycobacterial lower respiratory tract infection ¹ | Meningitis coccidioides ¹ |
| Atypical mycobacterial lymphadenitis ¹ | Meningitis cronobacter |
| Atypical mycobacterial pneumonia ¹ | Meningitis cryptococcal ¹ |
| Atypical mycobacterium pericarditis ¹ | Meningitis enterococcal |
| Atypical mycobacterium test positive | Meningitis exserohilum ¹ |
| Atypical pneumonia | Meningitis fungal ¹ |
| Avian influenza | Meningitis haemophilus |
| Babesiosis | Meningitis herpes ¹ |
| Bacillary angiomatosis ¹ | Meningitis histoplasma ¹ |
| Bacteraemia | Meningitis listeria ¹ |
| Bacterial myositis | Meningitis meningococcal |
| Bacterial sepsis | Meningitis pneumococcal |
| Bacterial test positive | Meningitis salmonella |
| Balamuthia infection | Meningitis staphylococcal |
| Balanitis candida | Meningitis streptococcal |
| Bartonella test positive | Meningitis toxoplasmal ¹ |
| Bartonellosis | Meningitis trypanosomal |

| | |
|--|---|
| Beta haemolytic streptococcal infection | Meningitis tuberculous ¹ |
| Biliary sepsis | Meningoencephalitis herpes simplex neonatal |
| Biliary tract infection cryptosporidial ¹ | |
| Biliary tract infection fungal ¹ | Meningoencephalitis viral |
| BK polyomavirus test positive | Meningomyelitis herpes ¹ |
| BK virus infection ¹ | Merkel cell polyomavirus infection |
| Bladder candidiasis | MERS-CoV test positive |
| Blastocystis infection ¹ | Metapneumovirus bronchiolitis |
| Blastomycosis ¹ | Metapneumovirus infection |
| Blood beta-D-glucan abnormal | Metapneumovirus pneumonia |
| Blood beta-D-glucan increased | Methylobacterium infection ¹ |
| Blood beta-D-glucan positive | Micrococcal sepsis |
| Blood culture positive | Micrococcus infection |
| Body tinea | Micrococcus test positive |
| Bone tuberculosis ¹ | Microsporidia infection ¹ |
| Borderline leprosy ¹ | Microsporum infection |
| Botryomycosis | Middle East respiratory syndrome |
| Bovine tuberculosis ¹ | Miliary pneumonia ¹ |
| Breakthrough COVID-19 | |
| Bronchitis fungal ¹ | Morganella infection |
| Bronchitis haemophilus | Mucocutaneous candidiasis |
| Bronchopulmonary aspergillosis ¹ | Mucormycosis ¹ |
| | Multisystem inflammatory syndrome in adults |
| Bronchopulmonary aspergillosis allergic | Multisystem inflammatory syndrome in children |
| Brucella sepsis | Mumps antibody test positive |
| Brucella test positive | Murray Valley encephalitis |

| | |
|--|---|
| Bullous impetigo | Mycetoma mycotic ¹ |
| Burkholderia cepacia complex infection | Mycobacterial infection ¹ |
| Burkholderia cepacia complex sepsis ¹ | Mycobacterial peritonitis ¹ |
| Burkholderia gladioli infection ¹ | Mycobacterium abscessus infection ¹ |
| Burkholderia infection | Mycobacterium avium complex immune restoration disease ¹ |
| Burkholderia mallei infection | Mycobacterium avium complex infection ¹ |
| Burkholderia pseudomallei infection ¹ | Mycobacterium chelonae infection ¹ |
| Burkholderia test positive | Mycobacterium fortuitum infection ¹ |
| Bursitis infective staphylococcal | Mycobacterium kansasii infection ¹ |
| Buschke-Lowenstein's tumour | Mycobacterium leprae test positive |
| Cache Valley virus infection | |
| Campylobacter bacteraemia | |
| Campylobacter sepsis | Mycobacterium marinum infection ¹ |
| Campylobacter test positive | Mycobacterium test positive |
| Candida cervicitis | Mycobacterium tuberculosis complex test positive |
| Candida endophthalmitis ¹ | Mycobacterium ulcerans infection ¹ |
| Candida infection | Mycotic corneal ulcer |
| Candida osteomyelitis ¹ | Mycotic endophthalmitis ¹ |
| Candida pneumonia ¹ | Mycotoxicosis |
| Candida retinitis ¹ | Myocarditis mycotic ¹ |
| Candida sepsis ¹ | Myocarditis septic |
| Candida test positive | Myocarditis toxoplasmal ¹ |
| Candidiasis of trachea ¹ | Nail candida |
| Capnocytophaga infection ¹ | Nasal candidiasis |
| Capnocytophaga sepsis ¹ | Nasal herpes |
| Capnocytophaga test positive | Necrotising fasciitis fungal ¹ |

| | |
|--|---|
| Capripox viral infection | |
| Cardiac tuberculosis ¹ | |
| Cat scratch disease | Necrotising fasciitis staphylococcal |
| Cellulitis enterococcal | Necrotising fasciitis streptococcal |
| Cellulitis pasteurella | Necrotising herpetic retinopathy ¹ |
| Cellulitis staphylococcal | Neisseria test positive |
| | Neonatal bacteraemia |
| Cellulitis streptococcal | Neonatal candida infection |
| Central nervous system fungal infection ¹ | Neonatal infective mastitis |
| Central nervous system listeria infection ¹ | |
| Central nervous system viral infection ¹ | Neonatal mucocutaneous herpes simplex |
| Cerebral aspergillosis ¹ | Neurocryptococcosis ¹ |
| Cerebral fungal infection ¹ | Neutropenic infection |
| Cerebral malaria | Neutropenic sepsis ¹ |
| Cerebral nocardiosis ¹ | |
| Cerebral toxoplasmosis ¹ | Nocardia sepsis ¹ |
| Cervicitis human papilloma virus | Nocardia test positive |
| Cervicitis streptococcal | Nocardiosis ¹ |
| Cervix warts | Oesophageal candidiasis ¹ |
| Chagas' cardiomyopathy | |
| Chagas' gastrointestinal disease | |
| Chancroid | Oesophageal tuberculosis ¹ |
| Chlamydia test positive | Onychomycosis |
| Choriomeningitis lymphocytic | Ophthalmic herpes simplex ¹ |
| Choroid tubercles ¹ | Ophthalmic herpes zoster ¹ |

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| Chromoblastomycosis ¹ | Opportunistic infection ¹ |
| Chronic active Epstein-Barr virus infection | Oral candidiasis |
| Chronic hepatitis B | Oral fungal infection |
| Chronic hepatitis C | Oral hairy leukoplakia |
| Chronic hyperplastic candidiasis ¹ | |
| Chronic pulmonary histoplasmosis ¹ | Oral herpes |
| | Oral herpes zoster |
| Citrobacter infection | Oral tuberculosis ¹ |
| Citrobacter sepsis | Organic dust toxic syndrome |
| Citrobacter test positive | Oro-pharyngeal aspergillosis ¹ |
| Clostridial sepsis | Oropharyngeal candidiasis |
| Clostridium bacteraemia | Oropharyngitis fungal |
| Clostridium colitis | Orthopox virus infection |
| Clostridium difficile colitis | Orthopoxvirus test positive |
| | Osteoarticular sporotrichosis ¹ |
| Clostridium difficile infection | Osteomyelitis blastomyces ¹ |
| Clostridium test positive | Osteomyelitis fungal ¹ |
| Coccidioides encephalitis ¹ | Osteomyelitis salmonella |
| Coccidioidomycosis ¹ | Otitis externa candida |
| Colitis herpes ¹ | Otitis media fungal ¹ |
| Complicated malaria ¹ | |
| Conjunctivitis tuberculous ¹ | Otitis media haemophilus |
| Coronavirus infection | |
| Coronavirus pneumonia | |
| Coronavirus test positive | Pancreatitis fungal ¹ |
| Corynebacterium infection | Pantoea agglomerans infection |

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| Corynebacterium sepsis | Pantoea agglomerans test positive |
| Corynebacterium test positive | Papilloma viral infection |
| COVID-19 | Paracoccidioides infection ¹ |
| COVID-19 pneumonia | Parainfluenzae viral bronchitis |
| Coxiella infection | Parainfluenzae viral laryngotracheobronchitis |
| Coxiella test positive | Parainfluenzae virus infection |
| Coxsackie viral disease of the newborn | Parapharyngeal space infection |
| Creutzfeldt-Jakob disease | Parasitic encephalitis |
| Cronobacter bacteraemia | Parechovirus infection |
| Cronobacter infection | Parvovirus B19 infection reactivation ¹ |
| Cronobacter necrotising enterocolitis | Pasteurella test positive |
| Cryptococcal cutaneous infection ¹ | Peliosis hepatis |
| Cryptococcal fungaemia ¹ | Pelvic sepsis |
| Cryptococcal meningoencephalitis ¹ | Penicillium infection ¹ |
| Cryptococcosis ¹ | Penile gangrene |
| Cryptococcus test positive | Penile wart |
| Cryptosporidiosis infection ¹ | Peptostreptococcus infection |
| CSF measles antibody positive | Peptostreptococcus test positive |
| Cutaneous anthrax | Perianal streptococcal infection |
| Cutaneous coccidioidomycosis ¹ | Pericarditis fungal ¹ |
| Cutaneous mucormycosis | Pericarditis histoplasma ¹ |
| Cutaneous sporotrichosis | Pericarditis tuberculous ¹ |
| Cutaneous tuberculosis ¹ | Perinatal HBV infection |
| Cyclosporidium infection | Periporitis staphylogenes |
| Cystitis escherichia | Peritoneal candidiasis ¹ |
| Cystitis klebsiella | Peritoneal tuberculosis ¹ |

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| Cystitis pseudomonal | Peritonitis pneumococcal |
| Cytomegalovirus chorioretinitis ¹ | Phaeohyphomycosis ¹ |
| Cytomegalovirus colitis ¹ | Pharyngeal abscess |
| Cytomegalovirus duodenitis ¹ | Pharyngoconjunctival fever of children |
| Cytomegalovirus enteritis ¹ | Plasmodium falciparum infection |
| Cytomegalovirus enterocolitis ¹ | Plasmodium malariae infection |
| Cytomegalovirus gastritis ¹ | Plasmodium ovale infection |
| Cytomegalovirus gastroenteritis ¹ | Plasmodium vivax infection |
| | Plesiomonas shigelloides infection |
| Cytomegalovirus gastrointestinal infection ¹ | Pneumococcal bacteraemia |
| Cytomegalovirus gastrointestinal ulcer ¹ | Pneumococcal infection |
| Cytomegalovirus hepatitis ¹ | Pneumococcal sepsis |
| Cytomegalovirus immunisation | Pneumocystis jirovecii infection ¹ |
| Cytomegalovirus infection ¹ | Pneumocystis jirovecii pneumonia ¹ |
| Cytomegalovirus infection reactivation ¹ | Pneumocystis test positive |
| Cytomegalovirus mononucleosis ¹ | Pneumonia adenoviral |
| Cytomegalovirus mucocutaneous ulcer ¹ | Pneumonia anthrax |
| Cytomegalovirus myelomeningoradiculitis ¹ | |
| Cytomegalovirus myocarditis ¹ | Pneumonia cryptococcal ¹ |
| Cytomegalovirus oesophagitis ¹ | Pneumonia cytomegaloviral ¹ |
| Cytomegalovirus pancreatitis ¹ | Pneumonia escherichia |
| Cytomegalovirus pericarditis ¹ | Pneumonia fungal ¹ |
| Cytomegalovirus syndrome ¹ | Pneumonia haemophilus |
| Cytomegalovirus test positive | Pneumonia herpes viral ¹ |

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| Cytomegalovirus urinary tract infection ¹ | Pneumonia influenzal |
| Cytomegalovirus viraemia ¹ | Pneumonia Klebsiella |
| Delftia acidovorans infection | Pneumonia legionella ¹ |
| Deltaretrovirus test positive | Pneumonia measles |
| Dengue fever | Pneumonia parainfluenzae viral |
| Dengue shock syndrome | |
| Dental sepsis | |
| Dermatolymphangioadenitis | |
| Device related bacteraemia | Pneumonia pneumococcal |
| Device related fungaemia | |
| Device related sepsis | Pneumonia pseudomonal |
| Disseminated aspergillosis ¹ | Pneumonia respiratory syncytial viral |
| Disseminated blastomycosis ¹ | Pneumonia salmonella |
| Disseminated coccidioidomycosis ¹ | Pneumonia staphylococcal |
| Disseminated cryptococcosis ¹ | Pneumonia streptococcal |
| Disseminated cytomegaloviral infection ¹ | Pneumonia toxoplasmal ¹ |
| Disseminated enteroviral infection ¹ | |
| Disseminated gonococcal infection | |
| Disseminated herpes simplex | |
| Disseminated leishmaniasis ¹ | Polyomavirus test positive |
| Disseminated mucormycosis ¹ | Polyomavirus viraemia ¹ |
| Disseminated mycobacterium avium complex infection ¹ | Polyomavirus-associated nephropathy ¹ |
| Disseminated paracoccidioidomycosis ¹ | Pontiac fever |
| | Porphyromonas bacteraemia |

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| Disseminated sporotrichosis ¹ | Porphyromonas infection |
| Disseminated strongyloidiasis ¹ | Porphyromonas test positive |
| Disseminated toxoplasmosis ¹ | Post streptococcal glomerulonephritis |
| Disseminated trichosporonosis ¹ | Post transplant lymphoproliferative disorder |
| Disseminated tuberculosis ¹ | Presumed ocular histoplasmosis syndrome |
| Disseminated varicella ¹ | Prion agent test positive |
| Disseminated varicella zoster vaccine virus infection ¹ | Proctitis fungal |
| Disseminated varicella zoster virus infection ¹ | Proctitis herpes ¹ |
| Ear infection fungal | Proctitis monilial |
| Ear tuberculosis ¹ | Progressive multifocal leukoencephalopathy ¹ |
| Eczema herpeticum | Progressive vaccinia ¹ |
| Elsberg syndrome ¹ | |
| Encephalitis australia | Prostatitis Escherichia coli |
| Encephalitis californica | Prostatitis tuberculous ¹ |
| Encephalitis cytomegalovirus ¹ | Protothecosis ¹ |
| Encephalitis eastern equine | Pseudallescheria infection ¹ |
| Encephalitis enteroviral | Pseudallescheria sepsis ¹ |
| Encephalitis fungal ¹ | Pseudoaneurysm infection |
| Encephalitis herpes ¹ | |
| Encephalitis influenzal | Pseudomonal bacteraemia |
| Encephalitis Japanese B | Pseudomonal sepsis |
| Encephalitis meningococcal | Pseudomonas aeruginosa meningitis ¹ |
| Encephalitis mumps | Pseudomonas bronchitis |
| Encephalitis post varicella ¹ | Pseudomonas infection |
| Encephalitis protozoal | Pseudomonas peritonitis |
| Encephalitis rickettsial | Pseudomonas test positive |

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| | Pulmonary blastomycosis ¹ |
| | Pulmonary gangrene |
| | Pulmonary histoplasmosis ¹ |
| Encephalitis venezuelan equine | Pulmonary mucormycosis ¹ |
| Encephalitis viral | Pulmonary nocardiosis ¹ |
| Encephalitis western equine | Pulmonary sepsis |
| Encephalomyelitis rubella | Pulmonary trichosporonosis ¹ |
| Endocarditis candida ¹ | Pulmonary tuberculoma ¹ |
| Endocarditis enterococcal | Pulmonary tuberculosis ¹ |
| Endocarditis haemophilus | Pyelonephritis fungal ¹ |
| Endocarditis histoplasma ¹ | Pyoderma streptococcal |
| Endocarditis pseudomonal | Pythium insidiosum infection |
| Endocarditis Q fever ¹ | Q fever |
| Endocarditis staphylococcal | Raoultella ornithinolytica infection |
| Endocarditis viral | Renal tuberculosis ¹ |
| Enterobacter bacteraemia | Respiratory moniliasis |
| Enterobacter infection | Respiratory syncytial virus bronchiolitis |
| Enterobacter pneumonia | Respiratory syncytial virus bronchitis |
| Enterobacter sepsis | Respiratory syncytial virus infection |
| Enterobacter test positive | Respiratory syncytial virus test positive |
| Enterobacter tracheobronchitis | Respiratory tract infection fungal ¹ |
| Enterococcal bacteraemia | Retinitis histoplasma ¹ |
| Enterococcal infection | Retinitis viral ¹ |
| Enterococcal sepsis | Retroviral rebound syndrome |
| Enterococcus test positive | Rhinocerebral mucormycosis ¹ |
| | Rhizobium radiobacter bacteraemia ¹ |
| Enterocolitis fungal ¹ | Rhodococcus infection ¹ |

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| Enterocolitis viral | Rhodococcus test positive |
| Enterovirus test positive | Roseolovirus test positive |
| Epididymitis blastomyces ¹ | Rubella antibody positive |
| Epididymitis tuberculous ¹ | Salmonella bacteraemia |
| Epiglottitis haemophilus | Salmonella sepsis |
| Epstein-Barr viraemia | Salmonella test positive |
| Epstein-Barr virus antibody positive | Salmonellosis |
| Epstein-Barr virus antigen positive | Salpingitis tuberculous ¹ |
| Epstein-Barr virus associated lymphoma | SARS-CoV-1 test positive |
| Epstein-Barr virus associated lymphoproliferative disorder ¹ | SARS-CoV-2 antibody test positive |
| Epstein-Barr virus infection | SARS-CoV-2 sepsis |
| Epstein-Barr virus infection reactivation ¹ | SARS-CoV-2 test false negative |
| Epstein-Barr virus test positive | SARS-CoV-2 test positive |
| Erysipelas | Scarlet fever |
| Erythema induratum | Scedosporium infection ¹ |
| Escherichia bacteraemia | Sepsis |
| Escherichia infection | Sepsis neonatal |
| Escherichia sepsis | Sepsis pasteurella |
| Escherichia test positive | Sepsis syndrome |
| Escherichia urinary tract infection | Septic arthritis haemophilus |
| Escherichia vaginitis | Septic arthritis staphylococcal ¹ |
| Exanthema subitum | Septic arthritis streptobacillus |
| Exserohilum infection ¹ | Septic arthritis streptococcal |
| | Septic cardiomyopathy |
| | Septic cerebral embolism |

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| Exserohilum test positive | Septic coagulopathy |
| Extrapulmonary tuberculosis ¹ | Septic embolus |
| | Septic endocarditis |
| Eye infection fungal | Septic necrosis |
| Eye infection staphylococcal | Septic phlebitis |
| Eye infection toxoplasma ¹ | Septic pulmonary embolism |
| Eye infection viral | Septic shock |
| Female genital tract tuberculosis ¹ | Serratia bacteraemia |
| Flavivirus test positive | Serratia infection |
| Flavobacterium infection ¹ | Serratia sepsis |
| Flavobacterium test positive | Serratia test positive |
| Fournier's gangrene ¹ | Severe acute respiratory syndrome |
| Fungaemia ¹ | Severe invasive streptococcal infection |
| Fungal abscess central nervous system ¹ | Shewanella algae bacteraemia |
| Fungal cystitis | Shigella infection |
| Fungal endocarditis ¹ | Shigella test positive |
| Fungal infection | Silicotuberculosis |
| Fungal labyrinthitis ¹ | Sinusitis aspergillus ¹ |
| Fungal myositis ¹ | |
| Fungal oesophagitis ¹ | Sinusitis fungal ¹ |
| Fungal paronychia | Skin candida |
| Fungal peritonitis ¹ | Sphingomonas paucimobilis bacteraemia ¹ |
| Fungal retinitis ¹ | Sphingomonas paucimobilis infection ¹ |
| Fungal rhinitis ¹ | Spleen tuberculosis ¹ |
| Fungal sepsis ¹ | Splenic candidiasis ¹ |
| Fungal test positive | Splenic infection fungal ¹ |

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| Fungal tracheitis ¹ | Sporotrichosis |
| Fusarium endocarditis ¹ | |
| Fusarium infection ¹ | Spotted fever rickettsia test positive |
| Gastric ulcer helicobacter | St. Louis encephalitis |
| Gastritis fungal ¹ | Staphylococcal abscess |
| Gastritis herpes ¹ | Staphylococcal bacteraemia |
| Gastroenteritis adenovirus | Staphylococcal impetigo |
| Gastroenteritis aeromonas | Staphylococcal infection |
| Gastroenteritis cryptococcal ¹ | Staphylococcal mediastinitis |
| Gastroenteritis cryptosporidial ¹ | Staphylococcal osteomyelitis |
| Gastroenteritis Escherichia coli | Staphylococcal scalded skin syndrome |
| Gastroenteritis pseudomonas | Staphylococcal sepsis |
| Gastroenteritis salmonella | Staphylococcal skin infection |
| Gastroenteritis staphylococcal | Staphylococcal toxemia |
| Gastroenteritis vibrio | Staphylococcus test positive |
| Gastrointestinal anthrax | Stenotrophomonas bacteraemia ¹ |
| Gastrointestinal candidiasis | Stenotrophomonas infection ¹ |
| | Stenotrophomonas maltophilia pneumonia ¹ |
| Gastrointestinal fungal infection ¹ | Stenotrophomonas sepsis ¹ |
| Gastrointestinal mucormycosis ¹ | Stenotrophomonas test positive |
| Genital candidiasis | Stoma site candida |
| Genital herpes | Stomatococcal infection |
| Genital herpes simplex | Stomatococcus test positive |
| Genital herpes zoster | Streptobacillary fever |
| Genital infection fungal | Streptobacillus infection |
| Geotrichum infection | Streptobacillus test positive |
| Group B streptococcus neonatal sepsis | Streptococcal abscess |

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| H1N1 influenza | Streptococcal bacteraemia |
| Haematological infection | |
| Haemophilus bacteraemia | Streptococcal bronchitis |
| Haemophilus infection | Streptococcal endocarditis |
| Haemophilus sepsis | Streptococcal impetigo |
| Haemophilus test positive | Streptococcal infection |
| Helicobacter gastritis | Streptococcal sepsis |
| Helicobacter infection | Streptococcal urinary tract infection |
| Helicobacter sepsis | Streptococcus test positive |
| Helicobacter test positive | Streptokinase antibody increased |
| Hepatic actinomycosis ¹ | |
| Hepatic candidiasis ¹ | Strongyloidiasis |
| Hepatic infection fungal ¹ | Subacute sclerosing panencephalitis |
| | Submandibular abscess |
| Hepatitis A antibody abnormal | Superinfection fungal ¹ |
| Hepatitis A antibody positive | Superinfection mycobacterial ¹ |
| Hepatitis A antigen positive | Suspected COVID-19 |
| Hepatitis A virus test positive | Syphilis |
| | Syphilitic pelvic inflammatory disease ¹ |
| Hepatitis B | Systemic candida ¹ |
| Hepatitis B antibody abnormal | Systemic inflammatory response syndrome |
| Hepatitis B antibody positive | Systemic mycosis ¹ |
| Hepatitis B antigen positive | Thrombophlebitis septic |
| Hepatitis B core antibody positive | Thyroid tuberculosis ¹ |
| Hepatitis B core antigen positive | Tick-borne viral encephalitis |
| Hepatitis B DNA assay positive | Tonsillitis fungal ¹ |
| Hepatitis B DNA increased | Torulopsis infection |

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| Hepatitis B e antibody positive | Toxic shock syndrome staphylococcal |
| Hepatitis B e antigen positive | Toxic shock syndrome streptococcal |
| Hepatitis B surface antibody positive | Toxoplasma serology positive |
| Hepatitis B surface antigen positive | Toxoplasmosis ¹ |
| Hepatitis B virus test positive | Toxoplasmosis prophylaxis |
| Hepatitis C | Treponema test positive |
| Hepatitis C antibody positive | Trichophytic granuloma |
| Hepatitis C core antibody positive | Trichosporon infection |
| Hepatitis C RNA increased | Trypanosoma serology positive |
| Hepatitis C RNA positive | Trypanosomiasis |
| Hepatitis C virus test positive | Tuberculid |
| Hepatitis D | Tuberculin test false negative |
| Hepatitis D antibody positive | Tuberculin test false positive |
| Hepatitis D antigen positive | Tuberculin test positive |
| Hepatitis D RNA positive | Tuberculoid leprosy ¹ |
| | Tuberculoma ¹ |
| Hepatitis D virus test positive | Tuberculoma of central nervous system ¹ |
| Hepatitis E antibody positive | Tuberculosis ¹ |
| Hepatitis E antigen positive | Tuberculosis bladder ¹ |
| Hepatitis E virus test positive | Tuberculosis gastrointestinal ¹ |
| Hepatitis infectious mononucleosis | Tuberculosis liver ¹ |
| Hepatitis non-A non-B | Tuberculosis of central nervous system ¹ |
| Hepatitis non-A non-B non-C | Tuberculosis of eye ¹ |
| Hepatitis syphilitic | Tuberculosis of genitourinary system ¹ |
| Hepatitis toxoplasmal | Tuberculosis of intrathoracic lymph nodes ¹ |
| Hepatitis viral test positive | Tuberculosis of peripheral lymph nodes ¹ |
| | Tuberculosis of uterine cervix ¹ |

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| Hepatosplenic candidiasis ¹ | Tuberculosis ureter ¹ |
| Herpes dermatitis | Tuberculous abscess central nervous system ¹ |
| Herpes gestationis | Tuberculous endometritis ¹ |
| Herpes oesophagitis ¹ | Tuberculous laryngitis ¹ |
| | Tuberculous pelvic inflammatory disease ¹ |
| Herpes ophthalmic ¹ | Tuberculous pleurisy ¹ |
| Herpes pharyngitis | Tuberculous tenosynovitis ¹ |
| Herpes sepsis ¹ | Typhus rickettsia test positive |
| Herpes simplex | Upper respiratory fungal infection ¹ |
| Herpes simplex bronchitis ¹ | Urinary tract candidiasis |
| Herpes simplex colitis ¹ | Urinary tract infection enterococcal |
| Herpes simplex encephalitis ¹ | Urinary tract infection fungal |
| Herpes simplex gastritis ¹ | Urinary tract infection pseudomonal |
| Herpes simplex hepatitis ¹ | Urinary tract infection staphylococcal |
| Herpes simplex meningitis ¹ | Urogenital infection fungal |
| Herpes simplex meningoencephalitis ¹ | Urosepsis |
| Herpes simplex meningomyelitis ¹ | Variant Creutzfeldt-Jakob disease |
| Herpes simplex necrotising retinopathy ¹ | Varicella |
| | Varicella encephalitis ¹ |
| | Varicella meningitis ¹ |
| Herpes simplex oesophagitis ¹ | Varicella post vaccine |
| Herpes simplex otitis externa ¹ | Varicella virus test positive |
| Herpes simplex pharyngitis | Varicella zoster gastritis ¹ |
| Herpes simplex pneumonia ¹ | Varicella zoster oesophagitis ¹ |
| Herpes simplex sepsis ¹ | Varicella zoster pneumonia ¹ |
| Herpes simplex test positive | Varicella zoster sepsis ¹ |

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| Herpes simplex viraemia ¹ | Varicella zoster virus infection |
| | Vascular access device culture positive |
| Herpes simplex virus conjunctivitis neonatal | Vibrio test positive |
| Herpes simplex visceral ¹ | Viraemia |
| Herpes virus infection | Viral myelitis |
| Herpes zoster | Viral myocarditis |
| Herpes zoster cutaneous disseminated ¹ | Viral oesophagitis |
| Herpes zoster disseminated ¹ | |
| Herpes zoster infection neurological ¹ | Viral pericarditis |
| Herpes zoster meningitis ¹ | Viral sepsis |
| Herpes zoster meningoencephalitis ¹ | Viral test positive |
| Herpes zoster meningomyelitis ¹ | Viral uveitis |
| Herpes zoster meningoradiculitis ¹ | Visceral leishmaniasis ¹ |
| Herpes zoster necrotising retinopathy ¹ | Vulvovaginal candidiasis |
| Herpes zoster oticus ¹ | Vulvovaginal human papilloma virus infection |
| Herpes zoster pharyngitis ¹ | Weissella infection ¹ |
| Herpes zoster reactivation ¹ | |
| Histoplasmosis ¹ | West Nile viral infection |
| Histoplasmosis cutaneous ¹ | West Nile virus test positive |
| Histoplasmosis disseminated ¹ | Wound infection fungal |
| Human anaplasmosis | Wound infection pseudomonas |
| Human ehrlichiosis | Wound infection staphylococcal |
| Human herpes virus 6 serology positive | Wound sepsis |
| | WU virus infection |
| Human herpes virus 8 test positive | Yersinia sepsis |

¹Narrow term

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| Amaurosis fugax ¹ | Cerebrovascular disorder ¹ |
| Amyloid related imaging abnormalities | Cerebrovascular insufficiency ¹ |
| Amyloid related imaging abnormality-microhaemorrhages and haemosiderin deposits | Cerebrovascular stenosis ¹ |
| Amyloid related imaging abnormality-oedema/effusion | Chronic cerebrospinal venous insufficiency ¹ |
| Basal ganglia haematoma ¹ | Claude's syndrome ¹ |
| Basal ganglia haemorrhage ¹ | Congenital cerebrovascular anomaly |
| | Cortical hand stroke ¹ |
| Basal ganglia infarction ¹ | Delayed ischaemic neurological deficit ¹ |
| Basal ganglia stroke ¹ | Dural arteriovenous fistula ¹ |
| Basilar artery occlusion ¹ | Embolitic cerebellar infarction ¹ |
| Basilar artery perforation ¹ | Embolitic cerebral infarction ¹ |
| Basilar artery stenosis ¹ | Embolitic stroke ¹ |
| Basilar artery thrombosis ¹ | Epidural haemorrhage ¹ |
| Benedikt's syndrome ¹ | Extra-axial haemorrhage ¹ |
| Blood brain barrier defect | Extradural haematoma ¹ |
| Brachiocephalic arteriosclerosis ¹ | Extradural haematoma evacuation ¹ |
| Brachiocephalic artery occlusion ¹ | Extracerebral cerebral haematoma ¹ |
| Brachiocephalic artery stenosis ¹ | Foetal cerebrovascular disorder ¹ |
| Brain hypoxia ¹ | Foville syndrome ¹ |
| Brain stem embolism ¹ | Haemorrhage intracranial ¹ |

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| Brain stem haematoma ¹ | Haemorrhagic cerebellar infarction ¹ |
| Brain stem haemorrhage ¹ | Haemorrhagic cerebral infarction ¹ |
| Brain stem infarction ¹ | Haemorrhagic stroke ¹ |
| Brain stem ischaemia ¹ | Haemorrhagic transformation stroke ¹ |
| Brain stem microhaemorrhage ¹ | Hypertensive cerebrovascular disease |
| Brain stem stroke ¹ | Hypoxic-ischaemic encephalopathy ¹ |
| Brain stem thrombosis ¹ | Inner ear infarction ¹ |
| Brain stent insertion ¹ | Internal capsule infarction ¹ |
| CADASIL ¹ | Intracerebral haematoma evacuation ¹ |
| | Intracranial haematoma ¹ |
| | Intracranial haemorrhage neonatal ¹ |
| | Intracranial tumour haemorrhage ¹ |
| Capsular warning syndrome ¹ | Intraventricular haemorrhage ¹ |
| CARASIL syndrome ¹ | Intraventricular haemorrhage neonatal ¹ |
| Carotid aneurysm rupture ¹ | Ischaemic cerebral infarction ¹ |
| Carotid angioplasty ¹ | Ischaemic stroke ¹ |
| Carotid arterial embolus ¹ | Jugular vein embolism ¹ |
| | Lacunar infarction ¹ |
| Carotid arteriosclerosis ¹ | Lacunar stroke ¹ |
| Carotid artery bypass ¹ | Lateral medullary syndrome ¹ |
| Carotid artery disease ¹ | Medullary compression syndrome |
| | Meningorrhagia ¹ |
| Carotid artery dolichoectasia | Middle cerebral artery stroke ¹ |
| Carotid artery insufficiency ¹ | Migrainous infarction ¹ |
| Carotid artery occlusion ¹ | Millard-Gubler syndrome ¹ |
| Carotid artery perforation ¹ | Moyamoya disease ¹ |
| | Occipital lobe stroke ¹ |
| | Parietal lobe stroke ¹ |
| Carotid artery restenosis ¹ | Perinatal stroke ¹ |
| Carotid artery stenosis ¹ | Periventricular haemorrhage neonatal ¹ |
| Carotid artery stent insertion ¹ | Pituitary apoplexy ¹ |

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| Carotid artery stent removal ¹ | Pituitary haemorrhage ¹ |
| Carotid artery thrombosis ¹ | Post cardiac arrest syndrome ¹ |
| Carotid endarterectomy ¹ | Post procedural stroke ¹ |
| Carotid revascularisation ¹ | Precerebral arteriosclerosis ¹ |
| Central nervous system haemorrhage ¹ | Precerebral artery embolism ¹ |
| Central nervous system vasculitis ¹ | Precerebral artery occlusion ¹ |
| Cerebellar artery occlusion ¹ | Precerebral artery thrombosis ¹ |
| Cerebellar artery thrombosis ¹ | Primary familial brain calcification |
| | Pseudo-occlusion of internal carotid artery ¹ |
| Cerebellar atherosclerosis ¹ | Putamen haemorrhage ¹ |
| | Retinal artery occlusion ¹ |
| Cerebellar embolism ¹ | Reversible cerebral vasoconstriction syndrome ¹ |
| Cerebellar haematoma ¹ | Reversible ischaemic neurological deficit ¹ |
| Cerebellar haemorrhage ¹ | Ruptured cerebral aneurysm ¹ |
| | Sigmoid sinus thrombosis ¹ |
| Cerebellar infarction ¹ | Sneddon's syndrome |
| Cerebellar ischaemia ¹ | Spinal artery embolism ¹ |
| Cerebellar microhaemorrhage ¹ | Spinal artery thrombosis ¹ |
| Cerebellar stroke ¹ | Spinal cord haematoma ¹ |
| Cerebral amyloid angiopathy | Spinal cord haemorrhage ¹ |
| | Spinal cord hypoxia ¹ |
| Cerebral aneurysm perforation ¹ | Spinal cord infarction ¹ |
| Cerebral aneurysm ruptured syphilitic ¹ | Spinal cord ischaemia ¹ |
| Cerebral angioplasty ¹ | |
| Cerebral arteriosclerosis ¹ | Spinal epidural haematoma ¹ |
| Cerebral arteriovenous malformation haemorrhagic ¹ | Spinal epidural haemorrhage ¹ |
| Cerebral arteritis ¹ | Spinal stroke ¹ |
| Cerebral artery embolism ¹ | Spinal subarachnoid haemorrhage ¹ |
| Cerebral artery occlusion ¹ | Spinal subdural haematoma ¹ |
| Cerebral artery perforation ¹ | Spinal subdural haemorrhage ¹ |
| Cerebral artery restenosis ¹ | Spinal vascular disorder |
| Cerebral artery stenosis ¹ | Spinal vessel congenital anomaly |
| Cerebral artery stent insertion ¹ | Stroke in evolution ¹ |
| Cerebral artery thrombosis ¹ | Subarachnoid haematoma ¹ |
| Cerebral bypass surgery ¹ | |

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| Cerebral capillary telangiectasia ¹ | Subarachnoid haemorrhage ¹ |
| Cerebral circulatory failure ¹ | Subarachnoid haemorrhage neonatal ¹ |
| Cerebral congestion ¹ | Subclavian steal syndrome ¹ |
| | Subcortical stroke ¹ |
| Cerebral cyst haemorrhage ¹ | Subdural haematoma ¹ |
| Cerebral gas embolism ¹ | Subdural haematoma evacuation ¹ |
| Cerebral haematoma ¹ | Subdural haemorrhage ¹ |
| Cerebral haemorrhage ¹ | Subdural haemorrhage neonatal ¹ |
| Cerebral haemorrhage foetal ¹ | Superior sagittal sinus thrombosis ¹ |
| Cerebral haemorrhage neonatal ¹ | Susac's syndrome |
| | Temporal artery stenosis ¹ |
| Cerebral hypoperfusion ¹ | Thalamic infarction ¹ |
| | Thalamic stroke ¹ |
| Cerebral infarction ¹ | Thalamus haemorrhage ¹ |
| Cerebral infarction foetal ¹ | Thrombotic cerebral infarction ¹ |
| Cerebral ischaemia ¹ | Thrombotic stroke ¹ |
| Cerebral microangiopathy | Transient ischaemic attack ¹ |
| Cerebral microembolism ¹ | Transverse sinus thrombosis ¹ |
| Cerebral microhaemorrhage ¹ | Vascular encephalopathy ¹ |
| Cerebral microinfarction ¹ | Vascular stent occlusion ¹ |
| Cerebral revascularisation ¹ | Vascular stent stenosis ¹ |
| Cerebral septic infarct ¹ | Vertebral artery arteriosclerosis ¹ |
| Cerebral small vessel ischaemic disease ¹ | Vertebral artery occlusion ¹ |
| Cerebral thrombosis ¹ | Vertebral artery perforation ¹ |
| Cerebral vascular occlusion ¹ | Vertebral artery stenosis ¹ |
| Cerebral vasoconstriction ¹ | Vertebral artery thrombosis ¹ |
| Cerebral venous sinus thrombosis ¹ | Vertebrobasilar dolichoectasia |
| | Vertebrobasilar infarction ¹ |
| Cerebral venous thrombosis ¹ | Vertebrobasilar insufficiency ¹ |
| Cerebrovascular accident ¹ | Vertebrobasilar stroke ¹ |
| Cerebrovascular arteriovenous malformation | Weber's syndrome ¹ |

¹Narrow term.

8.4.2.7. Embolic and Thrombotic Events

The Embolic and thrombotic events search definition is based on the MedDRA version 27.0

Embolic and thrombotic events, venous SMQ. The PTs are listed below, and all will be considered Narrow search terms:

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| Aseptic cavernous sinus thrombosis | Pulmonary embolism |
| Axillary vein thrombosis | Pulmonary infarction |
| Brachiocephalic vein occlusion | Pulmonary microemboli |
| | Pulmonary oil microembolism |
| Brachiocephalic vein thrombosis | Pulmonary thrombosis |
| Budd-Chiari syndrome | Pulmonary vein occlusion |
| Catheterisation venous | Pulmonary veno-occlusive disease |
| Cavernous sinus thrombosis | Pulmonary venous thrombosis |
| Central venous catheterisation | Renal vein embolism |
| Cerebral venous sinus thrombosis | Renal vein occlusion |
| Cerebral venous thrombosis | Renal vein thrombosis |
| Compression garment application | Retinal vein occlusion |
| Deep vein thrombosis | Retinal vein thrombosis |
| Deep vein thrombosis postoperative | Septic pulmonary embolism |
| Embolism venous | SI QIII TIII pattern |
| | Sigmoid sinus thrombosis |
| | Spermatic vein thrombosis |
| Hepatic vein embolism | Splenic vein occlusion |
| Hepatic vein occlusion | Splenic vein thrombosis |
| | Subclavian vein embolism |
| Hepatic vein thrombosis | Subclavian vein occlusion |
| Homans' sign positive | Subclavian vein thrombosis |
| Iliac vein occlusion | Superior sagittal sinus thrombosis |
| Inferior vena cava syndrome | Superior vena cava occlusion |
| Inferior vena caval occlusion | Superior vena cava syndrome |
| Jugular vein embolism | Thrombophlebitis |
| Jugular vein occlusion | Thrombophlebitis migrans |
| Jugular vein thrombosis | Thrombophlebitis neonatal |
| Mahler sign | |
| May-Thurner syndrome | Thrombosed varicose vein |
| Mesenteric vein embolism | |
| Mesenteric vein thrombosis | Thrombosis corpora cavernosa |
| Mesenteric venous occlusion | Transverse sinus thrombosis |
| | Vascular graft |
| Obstetrical pulmonary embolism | Vena cava embolism |
| Obstructive shock | Vena cava filter insertion |
| Ophthalmic vein thrombosis | Vena cava filter removal |
| Ovarian vein thrombosis | Vena cava thrombosis |

| | |
|---|--------------------------------|
| Paget-Schroetter syndrome | Venogram abnormal |
| Pelvic venous thrombosis | Venoocclusive disease |
| Penile vein thrombosis | Venoocclusive liver disease |
| Peripheral vein occlusion | Venous angioplasty |
| Peripheral vein thrombosis | |
| Peripheral vein thrombus extension | Venous occlusion |
| Phlebectomy | Venous operation |
| Portal vein cavernous transformation | Venous recanalisation |
| Portal vein embolism | Venous repair |
| Portal vein occlusion | Venous stent insertion |
| Portal vein thrombosis | Venous thrombosis |
| Portosplenomesenteric venous thrombosis | Venous thrombosis in pregnancy |
| Post procedural pulmonary embolism | Venous thrombosis limb |
| Post thrombotic syndrome | Venous thrombosis neonatal |
| Postoperative thrombosis | Visceral venous thrombosis |
| Postpartum venous thrombosis | |

8.4.2.8. Cardiac Rhythm Disturbances

The Cardiac rhythm disturbances search definition is based on the MedDRA version 27.0

Narrow and Broad Terms from the Arrhythmia related investigations, signs and symptoms SMQ.

The PTs are shown below, with Narrow search terms indicated:

| | |
|---|--|
| Chronotropic incompetence ¹ | Electrocardiogram ambulatory abnormal |
| Early repolarisation syndrome ¹ | |
| Electrocardiogram repolarisation abnormality ¹ | Electrocardiogram change |
| Electrocardiogram RR interval abnormal ¹ | |
| Electrocardiogram RR interval prolonged ¹ | Heart rate abnormal |
| Electrocardiogram RR interval shortened ¹ | |
| Electrocardiogram U wave inversion ¹ | Heart rate decreased |
| Electrocardiogram U wave present ¹ | Heart rate increased |
| Electrocardiogram U-wave abnormality ¹ | Loss of consciousness |
| Sudden cardiac death ¹ | Palpitations |
| Bezold-Jarisch reflex | Rebound tachycardia |
| Bradycardia | Respiratory sinus arrhythmia magnitude abnormal |
| Cardiac arrest | Respiratory sinus arrhythmia magnitude decreased |
| Cardiac death | Respiratory sinus arrhythmia magnitude |

increased

Cardiac telemetry abnormal

Sudden death

Cardio-respiratory arrest

Syncope

Central bradycardia

Tachycardia

Cerebrocardiac syndrome

Electrocardiogram abnormal

Tachycardia paroxysmal

¹Narrow term

8.4.2.9. Upper Respiratory Tract Infections

The Upper respiratory tract infections search definition based on the following selected MedDRA version 27.0 PTs:

Acute sinusitis

Sinusitis

Upper respiratory tract infection

Viral upper respiratory tract infection

8.4.2.10. Diarrhea

The Diarrhea search definition is based on the MedDRA version 27.0 PT of Diarrhoea.

Plan Version History

| Version | Effective Date | Changes | Author / Modified by |
|---------|----------------|-------------------|----------------------|
| 1.0 | 17-Feb-2023 | NA | Steven Chang |
| 2.0 | 03-Jun-2024 | See summary below | Eve Zeng |
| 3.0 | 28-Oct-2024 | See summary below | Steven Chang |

Change History Summary

| Version | Modifications |
|---------|--|
| 1.0 | Initial Version |
| 2.0 | PFS-6 was redefined as a survival probability for consistency with the Kaplan-Meier methodology which was intended to be used to estimate this endpoint. |
| 2.0 | Definitions and analysis methods were added for PFS and OS. |
| 2.0 | Progression-free survival on continued nirogacestat treatment and PFS2 were added due to protocol amendment. |
| 2.0 | Miscellaneous formatting and typographical changes. |
| 2.0 | Statement was added for why the planned interim assessment using Bayesian approach as mentioned in the protocol was not performed. |
| 2.0 | Analysis of safety topics of special interest identified using standardized MedDRA queries (SMQ) or customized MedDRA queries was added. |
| 3.0 | Section 5.6.2 - Added a summary table for serious TEAEs by maximum severity (Grade) |
| 3.0 | Section 5.6.6 - Rows for the worst post-baseline change from baseline added to the ECG summary table. |
| 3.0 | Section 5.6.7 - Rows for the worst post-baseline change from baseline added to the vital signs summary table. |
| 3.0 | Section 8.4.1.4 Electrolyte disorder PTs were revised. Added new electrolyte disorder analyses (summary table and shift table). |

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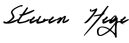
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