Section 11. Adverse Event Reporting and Safety Monitoring

This section presents information related to adverse event (AE) reporting and participant safety monitoring in MTN 004. Please also refer to Section 8 of the MTN 004 protocol and the Manual for Expedited Reporting of Adverse Events to DAIDS in Appendix IV of the protocol.

11.1 Definitions and General Reporting Guidance

11.1.1 Adverse Event (AE)

The International Conference on Harmonization Consolidated Guidance for Good Clinical Practice (ICH-E6) defines an AE as any untoward medical occurrence in a clinical research participant administered an investigational product and that does not necessarily have a causal relationship with the investigational product. As such, an AE can be any unfavorable and unintended sign (including an abnormal laboratory finding), symptom, or disease temporally associated with the use of an investigational product, whether or not related to the investigational product.

The MTN 004 protocol specifies that any untoward medical occurrence experienced by a study participant after randomization is considered an AE, regardless of the study group to which the participant is assigned. Therefore AEs must be identified, documented, and followed to resolution for MTN 004 participants in all three study arms. Source documentation for each AE should minimally include the following information: AE term/diagnosis, severity grade, onset date, outcome, outcome date, and treatment.

Medical conditions, problems, signs, symptoms, and findings identified prior to randomization are considered pre-existing conditions. Such conditions should be documented per the screening and enrollment visit guidance provided in Sections 4, 7, and 10 of this manual, and reported on the Pre-Existing Conditions case report form (see Section 14). If a pre-existing condition worsens (increases in severity or frequency) after randomization, the worsened condition is considered an AE.

11.1.2 Reportable Adverse Events

Per Version 3.0 of the MTN 004 protocol, study staff will report on case report forms the following subset of AEs reported by or observed in enrolled participants:

- All genital, genitourinary, and reproductive system AEs
- All serious AEs, as defined by ICH-E6 (see also Section 11.1.3)
- All AEs of severity grade 1 or higher (see also Section 11.3)
- All AEs that result in permanent discontinuation of study product use
- All laboratory test abnormalities not otherwise associated with a reported
- clinical AE
- AEs that do not meet the above-listed criteria but do meet expedited AE reporting requirements (see also Section 11.1.4)

The category of genital, genitourinary, and reproductive system AEs includes AEs involving the vulva, vagina, cervix, uterus, Fallopian tubes, ovaries, breasts, anus, rectum, kidneys, ureters, urethra, and bladder. All AEs associated with abnormal pelvic exam findings are considered to fall in this category. All fetal losses — including spontaneous fetal deaths, still births, spontaneous abortions, and ectopic pregnancies — are considered reproductive system AEs. Elective abortions are not considered AEs; however, complications or untoward sequelae of elective abortions are considered reproductive system AEs. For pregnant participants, AEs that are related to the pregnancy, worsened by the pregnancy, or require changes in clinical management of the pregnancy are considered reproductive system AEs. For example, nausea and vomiting related to pregnancy (hyperemesis) are considered reproductive system AEs, but nausea and vomiting due to gastroenteritis during pregnancy are not. Chronic hypertension worsened by pregnancy would be considered a reproductive system AE, as would diabetes previously controlled by diet that requires insulin during pregnancy.

The Adverse Experience Log case report form (see Section 14) is used to report the above-listed reportable AEs to the MTN Statistical and Data Management Center (SDMC) via DataFax. All study sites are strongly encouraged to utilize AE tracking tools to ensure that all AEs are source documented and that all reportable AEs are reported to the MTN SDMC on the Adverse Experience Log form.

Source documentation for all AEs should minimally include the following information: AE term/diagnosis, severity grade, onset date, outcome, outcome date, and treatment. For reportable AEs, the following additional data elements also must be source documented: date reported to site, relationship to study product, action taken with study product as a result of the AE, whether the AE is serious per ICH-E6 (see Section 11.1.3), and whether the AE meets expedited AE reporting requirements (see Section 11.1.4). Each site's SOP for source documentation should define the extent to which the Adverse Experience Log form will be used as the source document for these data elements.

Site-specific delegation of duties documentation should designate study staff authorized by the Investigator or Record (IoR) to complete Adverse Experience Log forms. Regardless of who initially completes these forms, a clinician listed on the site's FDA Form 1572 should review them to ensure the accuracy of the data reported and to help maintain consistency of reporting across clinicians.

11.1.3 Serious Adverse Event (SAE)

ICH-E6 defines a serious adverse event (SAE) as any untoward medical occurrence that at any dose:

- Results in death,
- Is life-threatening,
- Requires inpatient hospitalization or prolongs an existing hospitalization,
- Results in persistent or significant disability/incapacity, or
- Is a congenital anomaly/birth defect.

ICH guidance (E2A) also states that medical and scientific judgment should be exercised in deciding whether other adverse events not listed above should be considered serious and that "important medical events that may not be immediately life-threatening or result in death or hospitalization but may jeopardize the participant or may require intervention to prevent one of the outcomes listed in the definition above" should also usually be considered serious.

SAEs are a subset of all AEs. All SAEs are reportable AEs. The Adverse Experience Log case report form includes an item (item 8) to record whether this is considered an SAE. For each AE identified in MTN 004, an authorized study clinician must determine whether the AE meets the definition of SAE. If the adverse event is determined to be a serious adverse event but DOES NOT ALSO MEET THE CRITERIA OF AN EAE (see Section 11.1.4), an SAE form (see Appendix 11-3) must be completed and faxed within one business day of the site awareness of the SAE to:

Clare Price Clinical Development Manager Starpharma Pty Ltd F: +61 3 9510 5955

Baker Building, 75 Commercial Rd Melbourne VIC 3004 Australia Postal Address: PO Box 6535 St Kilda Road Central VIC 8008 Australia T: +61 3 8532 2712,

M: 0438 007135 W: www.starpharma.com

Email: clare.price@starpharma.com

11.1.4 Expedited Adverse Event (EAE)

Expedited adverse events (EAEs) are AEs that meet criteria specified in the study protocol as requiring additional reporting for rapid review and assessment by DAIDS. In some cases, DAIDS may be required to report the EAE to the US Food and Drug Administration (FDA). DAIDS policy requires that EAEs be reported to the DAIDS Safety Office within three business days of site awareness of the EAE, however for MTN-004, sites will submit EAE to DAIDS within one business day. Sites will also submit EAE to Starpharma Pty Ltd within one business day of the site awareness of the EAE. All EAEs must be reported on a DAIDS Expedited Adverse Event (EAE) Form. Copies of the form and form completion instructions are available at http://rcc.tech-res-intl.com.

Although seriousness is a consideration in determining whether an AE meets the definition of EAE, the terms SAE and EAE are <u>not</u> synonymous. The two terms refer to two different, but overlapping, subsets of AEs. For MTN 004, the subset of AEs that are considered EAEs includes some AEs that are serious and some that are not serious.

The Manual for Expedited Reporting of Adverse Events to DAIDS defines levels of EAE reporting that may be used in DAIDS-sponsored studies. For MTN 004, the "intensive" reporting level must be followed in this Phase I study.

A study physician listed on the site's FDA Form 1572 must review and verify all data recorded on the DAIDS EAE Form for accuracy and completeness. This physician also must make the final assessment of the relationship between the EAE and study product and sign the completed form. If necessary to meet required reporting timeframes, an EAE Form may be submitted to the DAIDS Safety Office without a completed signature page. However, the completed signature page, and any necessary corrections or additions, must be submitted to the DAIDS Safety office and Starpharma Pty Ltd within one business day.

The DAIDS Safety Office fax number is shown on the first page of the EAE Form. Completed forms also may be digitally scanned and submitted to the DAIDS Safety Office via email. Contact details are as follows:

Website:	http://rcc.tech-res-intl.com		
Phone:	301-897-1709 or toll free in the US: 800-537-9979		
Fax:	301-897-1710 or toll free in the US: 800-275-7619		
Email:	RCCSafetyOffice@tech-res.com		
Office Hours:	Monday through Friday, 8:30 AM to 5:00 PM ET		

The DAIDS Safety Office will email a confirmation of receipt for each EAE Form received. If a confirmation of receipt is not received within 24-48 hours after submission, study sites should contact the Safety Office for more information and/or re-submit the EAE Form.

The completed EAE form must also be faxed within <u>one</u> business day of the site awareness of the EAE to:

Clare Price
Clinical Development Manager
Starpharma Pty Ltd
F: +61 3 9510 5955

Baker Building, 75 Commercial Rd Melbourne VIC 3004 Australia Postal Address: PO Box 6535 St Kilda Road Central VIC 8008 Australia T: +61 3 8532 2712.

M: 0438 007135 W: www.starpharma.com

Email: <u>clare.price@starpharma.com</u>

With the exception of congenital anomalies and birth defects identified among infants born to study participants, all EAEs are reportable AEs that must also be reported on Adverse Experience Log case report forms. When completing Adverse Experience Log case report forms and EAE Forms, study clinicians should carefully review all documentation of the event to ensure accuracy, completeness, and consistency. All AE descriptions and details (e.g., onset date, severity grade, relationship to study product) must be recorded consistently across all documents. All EAE Forms received at the DAIDS Safety Office will be compared with Adverse Experience Log forms received at the MTN SDMC to ensure that all reports that should have been received by both the DAIDS Safety Office and the SDMC have been received and that the details recorded on each form are consistent.

11.1.4.1 EAEs for MTN 004 Participants

EAE reporting requirements for MTN 004 are presented in Figure 11-3.

Figure 11-3 Expedited Adverse Event Reporting Requirements for MTN 004				
Type of Adverse Event	Phase I: Intensive EAE Reporting			
Results in death	Report as EAE regardless of relationship to study product			
Is a congenital anomaly or birth defect or fetal loss	Report as EAE regardless of relationship to study product			
Results in persistent or significant disabilities or incapacities	Report as EAE regardless of relationship to study product			
Requires or prolongs hospitalization or	Report as EAE if relationship to study product is:			
requires intervention to prevent	Definitely related			
significant/permanent disability or death	Probably related			
	Possibly related			
	Probably not related			
Is life-threatening (includes all Grade 4 AEs)	Report as EAE if relationship to study product is:			
	Definitely related			
	Probably related			
	Possibly related			
	Probably not related			
Other Grade 3 AEs	Report as EAE if relationship to study product is:			
	Definitely related			
	Probably related			
	Possibly related			
	Probably not related			
Other Grade 1 and Grade 2 AEs	Do not report as EAE			

In addition to the events listed above, the following also should be reported as EAEs:

 AEs that may be related to study product (i.e., definitely, probably, possibly, or probably not related) that the IoR believes are of sufficient concern to be reported on an expedited basis to DAIDS. This includes AEs that, based upon appropriate medical judgment, may jeopardize the participant and may require medical or surgical intervention to prevent a serious AE.

- Serious AEs that are not related to study product but could be associated with study participation or procedures.
- Unexpected serious AEs that may be related to study product (i.e., definitely, probably, possibly, or probably not related) that occur after the participant's study exit visit.

11.2 Adverse Event Terminology

Study staff must assign a term or description to all AEs identified in MTN 004. Whenever possible, a diagnosis should be assigned, rather than a cluster of signs and/or symptoms. When relevant, an anatomical location should be included in the term or description. This is especially important in MTN 004 for distinguishing pelvic exam findings that may be observed on the vulva, in the vagina, or on the cervix.

When it is not possible to identify a single diagnosis to describe a cluster of signs and/or symptoms, each individual sign and symptom must be reported as an individual AE.

If an abnormal laboratory test result is reported as an AE, separate from any clinical diagnosis associated with the result, the type of test performed and the direction of the abnormality should be reported (e.g., elevated ALT). The severity grade of the result should not be reported as part of the AE description since the grade is captured elsewhere (item 3) on the form.

11.3 Adverse Event Severity

The term severity is used to describe the intensity of an AE. The severity of all AEs identified in MTN 004 must be graded on a five-point scale:

- Grade 1 = Mild
- Grade 2 = Moderate
- Grade 3 = Severe
- Grade 4 = Potentially life-threatening
- Grade 5 = Death

Severity is <u>not</u> the same as seriousness, which is based on the outcome or action associated with an event, as described in Section 11.

The Division of AIDS Table for Grading the Severity of Adult and Pediatric Adverse Events, Version 1.0, December 2004, Addendum 1 (The Female Genital Grading Table for Use in Microbicide Studies), will be the primary tool for grading adverse events for this study, with the exception of asymptomatic bacterial vaginosis which will not be a reportable AE. Adverse events not included in Addendum 1, the Female Genital Grading Table, will be graded by the DAIDS Table for Grading Adult and Pediatric Adverse Events Version 1.0, December 2004. In cases where an AE is covered in both tables, the Female Genital Grading Table will be the grading scale utilized.

11.3.1 Answers to Frequently Asked Questions About Severity Grading

- If the severity of an AE falls into more than one grading category on the Female Genital Grading Table, assign the higher of the two grades to the AE.
- Laboratory values that fall outside of a site's normal range, but do not meet criteria for grade 1 severity, should not be considered "abnormal" for purposes of reporting pre-existing conditions or AEs, unless clinical judgment determines otherwise.
- Conditions and laboratory abnormalities that are not explicitly listed on the Female
 Genital Grading Table should be graded according to the "estimating severity grade" row
 of the Division of AIDS Table for Grading the Severity of Adult and Pediatric Adverse
 Events.
- Seasonal allergies should be graded according to the "estimating severity grade" row of the DAIDS AE Grading Table (not the "acute systemic allergic reaction" row).
- If systemic antimicrobial treatment is given to treat an STI/RTI, the grade must be 2 or higher.
- Spontaneous abortions should be graded according to the "First Trimester Bleeding" row of the Female Genital Grading Table.

11.4 Adverse Event Relationship to Study Product

For each reportable AE identified in MTN 004, an authorized study clinician must assess the relationship of the AE to study product, based on the temporal relationship of the AE to administration of product, product pharmacology and other information provided in the Investigator's Brochures, and clinical judgment. One of the following relationship categories must be assigned to each reportable AE:

- Definitely Related: The AE and administration of study gel are related in time, and a direct association can be demonstrated.
- Probably Related: The AE and administration of study gel are reasonably related in time, and the AE is more likely explained by study gel than other causes.
- Possibly Related: The AE and administration of study gel are reasonably related in time, and the AE can be explained equally well by causes other than study gel.
- Probably Not Related: A potential relationship between the AE and study gel could exist (i.e., the possibility cannot be excluded), but the AE is most likely explained by causes other than study gel.
- Not Related. The AE is clearly explained by another cause not related to study gel.

Note: The MTN 004 study products are comprised of the gel applicators as well as the gel contained in each applicator. Any AEs thought to be related to an applicator should be documented as such by choosing one of the "related" categories and using descriptive text, comments, or other notations to indicate that the presumed relationship is to the applicator.

In addition to the relationship categories listed above, DAIDS allows a relationship of "pending" to be temporarily assigned to AEs that result in death, if additional time and information are needed to determine the relationship of the AE to study product. However, a final relationship assessment must be submitted to DAIDS (via the EAE Form) within one business day after first reporting the death. If a final assessment is not made within one business day, the AE will be considered possibly related to study product.

11.5 Adverse Event Outcomes and Follow-Up Information

All AEs identified in MTN 004 must be followed clinically until the AE resolves (returns to baseline) or stabilizes. In addition to performing other protocol-specified procedures, at each follow-up visit, an authorized study clinician should review all previously identified ongoing AEs and evaluate and document their current status. Outcomes must also be reported on Adverse Experience Log case report forms. In many cases the final outcome of an AE will not be available when the Adverse Experience Log form is first completed and faxed to DataFax. In such cases, the form should be updated when the final outcome becomes available and re-faxed to DataFax at that time.

If an AE increases in severity or frequency (worsens) after it has been reported on an Adverse Experience Log case report form, it must be reported as a new AE, at the increased severity or frequency, on a new Adverse Experience Log case report form. In this case, the outcome of the first AE will be documented as "severity/frequency increased." The outcome date of the first AE and the onset date of the new (worsened) AE will both be the date upon which the severity or frequency increased.

Site staff are not required to report the outcome of EAEs to the DAIDS Safety Office, unless outcome information is specifically requested by DAIDS. However, if an EAE increases in severity to a higher grade than previously reported, it must be reported to the DAIDS Safety Office as a new EAE on a new EAE Form.

EAE follow-up information also must be reported to the DAIDS Safety Office under the following circumstances:

- Requests from DAIDS for additional information
- A change in the relationship between the AE and study product by the study physician
- Additional significant information that becomes available for a previously reported adverse event (this is particularly important for new information addressing cause of death if the initial assignment was "pending")
- Results of re-challenge with the study product, if performed

In these circumstances, the required follow-up information should be reported on a new EAE Form as a Follow-Up Report. See also Section 5 of the Manual for Expedited Reporting of Adverse Events to DAIDS.

11.6 Reporting Recurrent Adverse Events

If an AE that was previously reported on an Adverse Experience Log case report form resolves and then recurs at a later date, the second occurrence must be reported as a new AE on a new Adverse Experience Log case report form.

An important clarification of this guidance for MTN 004 relates to genital herpes.

- If <u>infection</u> with HSV-2 occurred <u>before</u> randomization, the infection is considered a preexisting condition: report on the Pre-existing Conditions form.
- Any <u>outbreaks</u> that occur <u>after</u> randomization are considered AEs, regardless of whether the viral infection was pre-existing before randomization: report on an Adverse Experience Log form.

If an EAE that was previously reported to the DAIDS Safety Office resolves and then later recurs at a level requiring expedited reporting, the second occurrence must be reported to the DAIDS Safety Office as a new EAE on a new EAE Form.

11.7 Social Harms

In addition to medical AEs, participants in MTN 004 may experience social harms — non-medical adverse consequences — as a result of their participation in the study. For example, participants could experience difficulties in their personal relationships with partners, family members, and friends. They also could experience stigma or discrimination from family members and members of their community. In the event that any social harms occur, study staff should fully document the issues or problems and make every effort to facilitate their resolution as described in this section.

Prior to study initiation, study staff teams at each site should discuss as a group, and with community representatives, what issues and problems are most likely to be encountered by participants at their site, and should agree upon how these issues and problems should be handled if reported. Roles and responsibilities should be defined for all staff members, such that each staff member is aware of what actions he/she can appropriately take, and what actions should be referred to other members of the team. During study implementation, staff teams at each site should continue to discuss actual participant experiences, successful and unsuccessful response strategies, and other lessons learned among themselves and with community representatives. Based on these discussions and lessons learned, procedures for responding to issues and problems should be reassessed and updated as needed throughout the study.

The following are suggested strategies for responding to social harms that may be adapted and tailored to best meet participant needs at each site:

- When first responding to an issue or problem, actively listen to the participant's description of the problem and ask questions to elicit as much detail as possible about the problem, including the participant's perception of the severity of the problem. Record all pertinent details in signed and dated chart notes. If the issue or problem meets criteria for expedited reporting to the DAIDS Safety Office, report it as described in Section 11 above. Also report the issue or problem to all responsible IRBs/ECs, if required per IRB/EC guidelines.
- Ask the participant to articulate her thoughts on what can/should be done to address the
 problem, including what she would like study staff to do in response to the problem (if
 anything).
- Discuss with the participant any additional or alternative strategies that you might suggest to address the problem and collaborate with her to develop a plan to try to address the problem. Document the plan in signed and dated chart notes.
- Take all possible action to try to address the problem, per the plan agreed upon with the
 participant. Document all action taken, and outcomes thereof, in signed and dated chart
 notes.
- As with medical AEs, follow all problems to resolution or stabilization.
- Provide referrals as needed/appropriate to other organizations, agencies, and service providers that may be able to help address the problem.
- Consult the MTN 004 Protocol Safety Review Team (PSRT) for further input and guidance as needed.

As is the case with medical AEs, data collected on social harms will be monitored by the MTN 004 PSRT and the NIAID Vaccine and Prevention Data and Safety Monitoring Board (DSMB), as described below.

11.8 MTN 004 Safety Monitoring, Review, and Oversight

Please refer to Section 8 of the MTN 004 protocol and Section 14 of this manual for a complete description of the participant safety monitoring procedures in place for MTN 004. Also refer to Section 15 of this manual for a description of the reports prepared by the MTN SDMC in support of MTN 004 safety monitoring procedures.

Participant safety is of paramount importance in MTN 004. Primary safety monitoring and safeguarding of individual study participants is the responsibility of study site staff, under the direction of the IoR. The IoR and designated site staff also are responsible for submitting case report forms to the MTN SDMC and EAE Forms to the DAIDS Safety Office, such that relevant safety data are available in a timely manner for other study-specific safety monitoring procedures, as follows:

- A sub-group of the Protocol Team, including the MTN Safety Physicians, the MTN PI, MTN-004 Protocol Chair, MTN Protocol Specialist, FHI Clinical Research Manager, Statistical Data Management Center (SDMC) Clinical Affairs Research Nurse, SDMC Project Manager, all Site IoR/PIs, DAIDS and NICHD Medical Officers and the DAIDS Clinical Operations Study Coordinator,, will serve as the Protocol Safety Review Team (PSRT). However, a quorum for PSRT calls will consist of only the DAIDS and NICHD Medical Officers and one of the MTN Safety Physicians. Close cooperation between the PSRT and other study team members will be necessary to monitor participant safety and respond to occurrences of toxicity in a timely manner.
- A multi-tiered safety review process will be followed for the duration of this study. The review process, which is both timely and extensive in scope, includes review of medical history information, clinical and laboratory AEs and concomitant medications. The study site investigators are the first layer of this tiered system and are responsible for the initial evaluation and reporting of safety information at the participant level, and for alerting the PSRT if unexpected concerns arise. Additional special reviews may also be conducted as dictated by the occurrence of certain events.
- The SDMC Clinical Affairs Research Nurse represents the second tier. This research nurse will review incoming safety data on an ongoing basis. Values identified during review that are considered questionable, inconsistent, or unexplained will be queried for verification.
- All EAE reports submitted to the DAIDS Safety Office will be synchronously sent by the sites to Starpharma, DAIDS Medical Officer, NICHD Medical Officer, SDMC Clinical Affairs Research Nurse, and the Protocol Chair for review.
- During the active product use phase of the trial, the PSRT will review clinical and laboratory safety reports (blinded to treatment assignment) and conduct calls every two weeks, or as needed, to review the data as appropriate. The content, format and frequency of these reports will be agreed upon by the PSRT and the SDMC in advance of study implementation. In addition to these routine safety data reviews, the PSRT will convene on an ad hoc basis to make decisions regarding the handling of any significant safety concerns. If necessary, experts external to the MTN representing expertise in the fields of microbicides, biostatistics, and medical ethics may be invited to join the PSRT safety review.
- After the product use and the final safety visits are completed, less frequent reporting and safety reviews may be conducted at the discretion of the MTN-004 PSRT.
- Decisions regarding permanent discontinuation of study gel in individual participants will be made by the PSRT based on careful review of all relevant data and may involve sponsor consultation with the US Food and Drug Administration (FDA).

11.9 Study Product Hold

Accrual and overall study product use for *all* participants will be suspended for a data safety review by the PSRT if any two women enrolled in the study experience the same safety or toxicity endpoint, defined as:

 Having at least one grade 3 or higher adverse experience during follow up judged by the investigator to be definitely, probably, or possibly related to the study gel or applicator,

or

Having at least one grade 3 or higher macroscopic finding or other clinical evidence
(excluding findings observed by colposcopy only) of damage during follow up
(judged not to be due to pathogen or iatrogenic trauma) to the vulvar and/or vaginal
deep epithelium and/or cervical mucosa including ulceration and other lesions, severe
global erythema, and/or severe global edema judged definitely, probably or possible
related to the study gel or applicator.

As soon as a site receives information concerning an AE that appears to meet the criteria above, they must first call the SCHARP Safety Phone at 206.786.1343 to report the event.

The SCHARP Safety Phone is monitored 24 hours a day by a SCHARP Clinical Affairs Safety Associate. When calling, sites should be prepared to provide the following information to the SCHARP Safety Associate:

- caller's name and study title (e.g., Nurse Coordinator, site PI)
- site name
- participant ID of participant with AE
- protocol name
- length of time participant has been using study product
- description of the event (onset/resolution dates, severity, work-up performed to date, etc)
- perceived relatedness of the event to study product (applicator and/or gel) per the site PI
- who has evaluated the participant (e.g., site clinician, site PI, doctor off-site)
- any concomitant meds the participant is using
- any pre-existing conditions the participant may have
- site's impression regarding relationship of AE to study product
- site's plan for follow-up and clinical management of participant

Site staff should provide as much detail as possible during this call, as noted above. They also should share any additional information that might help the SCHARP Safety Associate ascertain the participant's condition and health status. For documentation purposes, site staff will also send an email to SCHARP Clinical Affairs (sc.clin.aff@scharp.org) that will contain the same information that was relayed on the call.

When alerted of a safety event, the SCHARP Clinical Affairs Safety Associate determines the severity grade of the event using the Female Genital Grading Table for Use in Microbicide Studies. If the event is not listed in this table, the SCHARP Safety Associate will refer to the DAIDS Table for Grading the Severity of Adult and Pediatric Adverse Events (DAIDS Grading Table) to determine the severity grade of the event. For laboratory value AEs, the SCHARP Clinical Affairs Safety Associate will check the description, value and calculation of severity grade ranges, if applicable, to ensure the accurate grading of the value.

If the SCHARP Safety Associate determines that the criteria for an accrual pause and study-wide product hold are met (see above for criteria), the SCHARP Safety Associate contacts one of the MTN Safety Physicians by telephone as soon as possible to convey the details of the safety events. If the Safety Physician determines that the events may warrant an accrual pause and product hold (regardless of whether or not they meet the protocol criteria), the SCHARP Safety Associate then notifies the DAIDS Medical Officer, NICHD Medical Officer, and Protocol Chair (by phone if possible).

The SCHARP Safety Associate convenes an expedited PSRT review by conference call so that the PSRT can review all relevant safety information. At minimum, the PSRT quorum, consisting of the DAIDS Medical Officer, NICHD Medical Officer, and an MTN Safety Physician, are required to convene the PSRT review call. The PSRT will not consider AEs that are pending, or AEs that are assessed as probably not related or not related to study product when deciding whether or not to institute an accrual pause and study product hold. Per protocol, the PSRT makes the final decision on whether or not to pause study accrual and hold study product for all participants in the study.

If the PSRT decides to pause study accrual and hold study product for all participants, FHI is responsible for promptly notifying the site IoR or designee at all sites. In addition, FHI will send out an official study notification e-mail to the entire protocol team. Staff at each site are responsible for contacting each participant currently using study product at their site. They will instruct these participants to immediately and permanently discontinue study product use and return to the study site as soon as possible to return all unused study product in their possession. Site staff must make every effort to contact each participant personally in order to confirm that she has received and understood instructions to permanently discontinue study product use. Site staff will continue to complete regular study visits for participants in active follow-up. However, sites must immediately discontinue study screening and enrollment activities.

Site staff must complete an AE Log case report form for each reportable AE, and fax the form(s) to SCHARP DataFax within one business day of site awareness of the event(s). Site staff also must complete an EAE or SAE report, if indicated, and must submit the report to the appropriate parties within one business day of site awareness of the event(s). Refer to sections 11.1.3 and 11.1.4 of this manual for more information on reporting and submitting EAE and SAE reports.

Once the relevant AE Log case report forms are faxed to SCHARP DataFax, the SCHARP Safety Associate compares the data recorded on the form with the information provided by the site via phone to identify any discrepancies. The SCHARP Safety Associate may contact the site to address any discrepancies and/or to request further information as needed.

The PSRT holds the responsibility for determining whether to lift a safety pause of accrual and study product use. If and when the PSRT determines to lift the pause, FHI will send official notification via e-mail to the entire protocol team.

11.10 Safety Distributions from DAIDS

Study sites will receive product- and safety-related information throughout the period of study implementation. This information will be distributed by DAIDS, through its Regulatory Compliance Center and/or the MTN Coordinating and Operations Center, and may include:

- Updated Investigator's Brochures
- IND Safety Reports
- DSMB review summaries
- Other safety memoranda and updates

Each distribution will include a cover memo providing instructions on how the document is to be handled. In all cases, a copy of the distribution must be filed in the study site Essential Document files for MTN 004. Also in all cases, study staff responsible for clinical oversight of study participants should be made aware of any newly available safety information. In many cases, the distribution will need to be submitted to all study site IRBs/ECs. Safety distributions do not require IRB/EC approval; however acknowledgement of receipt is desirable. Submission letters/memos for IRB/EC submissions should specify the name and date of all documents submitted.

Section Appendix 11-1 DAIDS Table for Grading the Severity of Adult and Pediatric Adverse Events

DIVISION OF AIDS TABLE FOR GRADING THE SEVERITY OF ADULT AND PEDIATRIC ADVERSE EVENTS VERSION 1.0, DECEMBER, 2004; CLARIFICATION AUGUST 2009

The Division of AIDS Table for Grading the Severity of Adult and Pediatric Adverse Events ("DAIDS AE Grading Table") is a descriptive terminology which can be utilized for Adverse Event (AE) reporting. A grading (severity) scale is provided for each AE term.

This clarification of the DAIDS Table for Grading the Severity of Adult and Pediatric AE's provides additional explanation of the DAIDS AE Grading Table and clarifies some of the parameters.

I. Instructions and Clarifications

Grading Adult and Pediatric AEs

The DAIDS AE Grading Table includes parameters for grading both Adult and Pediatric AEs. When a single set of parameters is not appropriate for grading specific types of AEs for both Adult and Pediatric populations, separate sets of parameters for Adult and/or Pediatric populations (with specified respective age ranges) are given in the Table. If there is no distinction in the Table between Adult and Pediatric values for a type of AE, then the single set of parameters listed is to be used for grading the severity of both Adult and Pediatric events of that type.

Note: In the classification of adverse events, the term "**severe**" is <u>not</u> the same as "**serious**." Severity is an indication of the <u>intensity</u> of a specific event (as in mild, moderate, or severe chest pain). The term "**serious**" relates to a participant/event <u>outcome or action criteria</u>, usually associated with events that pose a threat to a participant's life or functioning.

Addenda 1-3 Grading Tables for Microbicide Studies

For protocols involving topical application of products to the female genital tract, male genital area or rectum, strong consideration should be given to using Appendices I-III as the primary grading scales for these areas. The protocol would need to specifically state that one or more of the Appendices would be primary (and thus take precedence over the main Grading Table) for items that are listed in both the Appendix and the main Grading Table.

- Addendum 1 Female Genital Grading Table for Use in Microbicide Studies PDF
- Addendum 2 Male Genital Grading Table for Use in Microbicide Studies PDF
- Addendum 3 Rectal Grading Table for Use in Microbicide Studies PDF

Grade 5

For any AE where the outcome is death, the severity of the AE is classified as Grade 5.

Estimating Severity Grade for Parameters Not Identified in the Table

In order to grade a clinical AE that is <u>not</u> identified in the DAIDS AE grading table, use the category "Estimating Severity Grade" located on Page 3.

Determining Severity Grade for Parameters "Between Grades"

If the severity of a clinical AE could fall under either one of two grades (e.g., the severity of an AE could be either Grade 2 or Grade 3), select the higher of the two grades for the AE. If a laboratory value that is graded as a multiple of the ULN or LLN falls between two grades, select the higher of the two grades for the AE. For example, Grade 1 is 2.5 x ULN and Grade 2 is 2.6 x ULN for a parameter. If the lab value is 2.53 x ULN (which is between the two grades), the severity of this AE would be Grade 2, the higher of the two grades.

Values Below Grade 1

Any laboratory value that is between either the LLN or ULN and Grade 1 should not be graded.

DIVISION OF AIDS TABLE FOR GRADING THE SEVERITY OF ADULT AND PEDIATRIC ADVERSE EVENTS VERSION 1.0, DECEMBER, 2004; CLARIFICATION AUGUST 2009

<u>Determining Severity Grade when Local Laboratory Normal Values Overlap with Grade 1 Ranges</u> In these situations, the severity grading is based on the ranges in the DAIDS AE Grading Table, even when there is a reference to the local lab LLN.

For example: Phosphate, Serum, Low, Adult and Pediatric > 14 years (Page 20) Grade 1 range is 2.50 mg/dL - < LLN. A particular laboratory's normal range for Phosphate is 2.1 – 3.8 mg/dL. A participant's actual lab value is 2.5. In this case, the value of 2.5 exceeds the LLN for the local lab, but will be graded as Grade 1 per DAIDS AE Grading Table.

II. <u>Definitions of terms used in the Table:</u>

Basic Self-care Functions Adult

Activities such as bathing, dressing, toileting, transfer/movement,

continence, and feeding.

Young Children

Activities that are age and culturally appropriate (e.g., feeding self with

culturally appropriate eating implement).

LLN Lower limit of normal

Medical Intervention Use of pharmacologic or biologic agent(s) for treatment of an AE.

NA Not Applicable

Operative Intervention Surgical OR other invasive mechanical procedures.

ULN Upper limit of normal

Usual Social & Functional

Activities

Adult

Adaptive tasks and desirable activities, such as going to work, shopping, cooking, use of transportation, pursuing a hobby, etc.

Young Children

Activities that are age and culturally appropriate (e.g., social

interactions, play activities, learning tasks, etc.).

VERSION 1.0, DECEMBER, 2004; CLARIFICATION AUGUST 2009

PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING
ESTIMATING SEVER	RITY GRADE			
Clinical adverse event NOT identified elsewhere in this DAIDS AE Grading Table	Symptoms causing no or minimal interference with usual social & functional activities	Symptoms causing greater than minimal interference with usual social & functional activities	Symptoms causing inability to perform usual social & functional activities	Symptoms causing inability to perform basic self-care functions OR Medical or operative intervention indicated to prevent permanent impairment, persistent disability, or death
SYSTEMIC				
Acute systemic allergic reaction	Localized urticaria (wheals) with no medical intervention indicated	Localized urticaria with medical intervention indicated OR Mild angioedema with no medical intervention indicated	Generalized urticaria OR Angioedema with medical intervention indicated OR Symptomatic mild bronchospasm	Acute anaphylaxis OR Life-threatening bronchospasm OR laryngeal edema
Chills	Symptoms causing no or minimal interference with usual social & functional activities	Symptoms causing greater than minimal interference with usual social & functional activities	Symptoms causing inability to perform usual social & functional activities	NA
Fatigue Malaise	Symptoms causing no or minimal interference with usual social & functional activities	Symptoms causing greater than minimal interference with usual social & functional activities	Symptoms causing inability to perform usual social & functional activities	Incapacitating fatigue/ malaise symptoms causing inability to perform basic self-care functions
Fever (nonaxillary)	37.7 – 38.6°C	38.7 – 39.3°C	39.4 – 40.5°C	> 40.5°C
Pain (indicate body site) DO NOT use for pain due to injection (See Injection Site Reactions: Injection site pain) See also Headache, Arthralgia, and Myalgia	Pain causing no or minimal interference with usual social & functional activities	Pain causing greater than minimal interference with usual social & functional activities	Pain causing inability to perform usual social & functional activities	Disabling pain causing inability to perform basic self-care functions OR Hospitalization (other than emergency room visit) indicated

Basic Self-care Functions - Adult: Activities such as bathing, dressing, toileting, transfer/movement, continence, and feeding.

Basic Self-care Functions – Young Children: Activities that are age and culturally appropriate (e.g., feeding self with culturally appropriate eating implement).

Usual Social & Functional Activities – Adult: Adaptive tasks and desirable activities, such as going to work, shopping, cooking, use of transportation, pursuing a hobby, etc.

VERSION 1.0, DECEMBER, 2004; CLARIFICATION AUGUST 2009

PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING
Unintentional weight loss	NA	5 – 9% loss in body weight from baseline	10 – 19% loss in body weight from baseline	≥ 20% loss in body weight from baseline OR Aggressive intervention indicated [e.g., tube feeding or total parenteral nutrition (TPN)]
INFECTION				
Infection (any other than HIV infection)	Localized, no systemic antimicrobial treatment indicated AND Symptoms causing no or minimal interference with usual social & functional activities	Systemic antimicrobial treatment indicated OR Symptoms causing greater than minimal interference with usual social & functional activities	Systemic antimicrobial treatment indicated AND Symptoms causing inability to perform usual social & functional activities OR Operative intervention (other than simple incision and drainage) indicated	Life-threatening consequences (e.g., septic shock)
INJECTION SITE RE	ACTIONS			
Injection site pain (pain without touching) Or Tenderness (pain when area is touched)	Pain/tenderness causing no or minimal limitation of use of limb	Pain/tenderness limiting use of limb OR Pain/tenderness causing greater than minimal interference with usual social & functional activities	Pain/tenderness causing inability to perform usual social & functional activities	Pain/tenderness causing inability to perform basic self-care function OR Hospitalization (other than emergency room visit) indicated for management of pain/tenderness
Injection site reaction (lo	calized)			
Adult > 15 years	Erythema OR Induration of 5x5 cm – 9x9 cm (or 25 cm ² – 81cm ²)	Erythema OR Induration OR Edema > 9 cm any diameter (or > 81 cm ²)	Ulceration OR Secondary infection OR Phlebitis OR Sterile abscess OR Drainage	Necrosis (involving dermis and deeper tissue)
Pediatric ≤ 15 years	Erythema OR Induration OR Edema present but ≤ 2.5 cm diameter	Erythema OR Induration OR Edema > 2.5 cm diameter but < 50% surface area of the extremity segment (e.g., upper arm/thigh)	Erythema OR Induration OR Edema involving ≥ 50% surface area of the extremity segment (e.g., upper arm/thigh) OR Ulceration OR Secondary infection OR Phlebitis OR Sterile abscess OR Drainage	Necrosis (involving dermis and deeper tissue)

Basic Self-care Functions - Adult: Activities such as bathing, dressing, toileting, transfer/movement, continence, and feeding.

Basic Self-care Functions – Young Children: Activities that are age and culturally appropriate (e.g., feeding self with culturally appropriate eating implement).

Usual Social & Functional Activities – Adult: Adaptive tasks and desirable activities, such as going to work, shopping, cooking, use of transportation, pursuing a hobby, etc.

VERSION 1.0, DECEMBER, 2004; CLARIFICATION AUGUST 2009

PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING
Pruritis associated with injection See also Skin: Pruritis (itching - no skin lesions)	Itching localized to injection site AND Relieved spontaneously or with < 48 hours treatment	Itching beyond the injection site but not generalized OR Itching localized to injection site requiring ≥ 48 hours treatment	Generalized itching causing inability to perform usual social & functional activities	NA
SKIN - DERMATOLO	OGICAL			
Alopecia	Thinning detectable by study participant (or by caregiver for young children and disabled adults)	Thinning or patchy hair loss detectable by health care provider	Complete hair loss	NA
Cutaneous reaction – rash	Localized macular rash	Diffuse macular, maculopapular, or morbilliform rash OR Target lesions	Diffuse macular, maculopapular, or morbilliform rash with vesicles or limited number of bullae OR Superficial ulcerations of mucous membrane limited to one site	Extensive or generalized bullous lesions OR Stevens-Johnson syndrome OR Ulceration of mucous membrane involving two or more distinct mucosal sites OR Toxic epidermal necrolysis (TEN)
Hyperpigmentation	Slight or localized	Marked or generalized	NA	NA
Hypopigmentation	Slight or localized	Marked or generalized	NA	NA
Pruritis (itching – no skin lesions) (See also Injection Site Reactions: Pruritis associated with injection)	Itching causing no or minimal interference with usual social & functional activities	Itching causing greater than minimal interference with usual social & functional activities	Itching causing inability to perform usual social & functional activities	NA
CARDIOVASCULAR				
Cardiac arrhythmia (general) (By ECG or physical exam)	Asymptomatic AND No intervention indicated	Asymptomatic AND Non-urgent medical intervention indicated	Symptomatic, non-life- threatening AND Non- urgent medical intervention indicated	Life-threatening arrhythmia OR Urgent intervention indicated
Cardiac- ischemia/infarction	NA	NA	Symptomatic ischemia (stable angina) OR Testing consistent with ischemia	Unstable angina OR Acute myocardial infarction

Basic Self-care Functions - Adult: Activities such as bathing, dressing, toileting, transfer/movement, continence, and feeding.

Basic Self-care Functions – Young Children: Activities that are age and culturally appropriate (e.g., feeding self with culturally appropriate eating implement).

Usual Social & Functional Activities – Adult: Adaptive tasks and desirable activities, such as going to work, shopping, cooking, use of transportation, pursuing a hobby, etc.

VERSION 1.0, DECEMBER, 2004; CLARIFICATION AUGUST 2009

PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING
Hemorrhage (significant acute blood loss)	NA	Symptomatic AND No transfusion indicated	Symptomatic AND Transfusion of ≤ 2 units packed RBCs (for children ≤ 10 cc/kg) indicated	Life-threatening hypotension OR Transfusion of > 2 units packed RBCs (for children > 10 cc/kg) indicated
Hypertension				
Adult > 17 years (with repeat testing at same visit)	140 – 159 mmHg systolic OR 90 – 99 mmHg diastolic	160 – 179 mmHg systolic OR 100 – 109 mmHg diastolic	≥ 180 mmHg systolic OR ≥ 110 mmHg diastolic	Life-threatening consequences (e.g., malignant hypertension) OR Hospitalization indicated (other than emergency room visit)
		60-179 (systolic) and to ≥ 10 to ≥ 110 from > 110 (dia	100 -109 from > 100-109 (di stolic).	astolic) and
Pediatric ≤ 17 years (with repeat testing at same visit)	NA	91 st – 94 th percentile adjusted for age, height, and gender (systolic and/or diastolic)	≥ 95 th percentile adjusted for age, height, and gender (systolic and/or diastolic)	Life-threatening consequences (e.g., malignant hypertension) OR Hospitalization indicated (other than emergency room visit)
Hypotension	NA	Symptomatic, corrected with oral fluid replacement	Symptomatic, IV fluids indicated	Shock requiring use of vasopressors or mechanical assistance to maintain blood pressure
Pericardial effusion	Asymptomatic, small effusion requiring no intervention	Asymptomatic, moderate or larger effusion requiring no intervention	Effusion with non-life threatening physiologic consequences OR Effusion with non-urgent intervention indicated	Life-threatening consequences (e.g., tamponade) OR Urgent intervention indicated
Prolonged PR interval	•	•	•	
Adult > 16 years	PR interval 0.21 – 0.25 sec	PR interval > 0.25 sec	Type II 2 nd degree AV block OR Ventricular pause > 3.0 sec	Complete AV block
Pediatric ≤ 16 years	1 st degree AV block (PR > normal for age and rate)	Type I 2 nd degree AV block	Type II 2 nd degree AV block	Complete AV block

Basic Self-care Functions - Adult: Activities such as bathing, dressing, toileting, transfer/movement, continence, and feeding.

Basic Self-care Functions – Young Children: Activities that are age and culturally appropriate (e.g., feeding self with culturally appropriate eating implement).

Usual Social & Functional Activities – Adult: Adaptive tasks and desirable activities, such as going to work, shopping, cooking, use of transportation, pursuing a hobby, etc.

VERSION 1.0, DECEMBER, 2004; CLARIFICATION AUGUST 2009

PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING
Prolonged QTc				
Adult > 16 years	Asymptomatic, QTc interval 0.45 – 0.47 sec OR Increase interval < 0.03 sec above baseline	Asymptomatic, QTc interval 0.48 – 0.49 sec OR Increase in interval 0.03 – 0.05 sec above baseline	Asymptomatic, QTc interval ≥ 0.50 sec OR Increase in interval ≥ 0.06 sec above baseline	Life-threatening consequences, e.g. Torsade de pointes or other associated serious ventricular dysrhythmia
Pediatric ≤ 16 years	Asymptomatic, QTc interval 0.450 – 0.464 sec	Asymptomatic, QTc interval 0.465 – 0.479 sec	Asymptomatic, QTc interval ≥ 0.480 sec	Life-threatening consequences, e.g. Torsade de pointes or other associated serious ventricular dysrhythmia
Thrombosis/embolism	NA	Deep vein thrombosis AND No intervention indicated (e.g., anticoagulation, lysis filter, invasive procedure)	Deep vein thrombosis AND Intervention indicated (e.g., anticoagulation, lysis filter, invasive procedure)	Embolic event (e.g., pulmonary embolism, life-threatening thrombus)
Vasovagal episode (associated with a procedure of any kind)	Present without loss of consciousness	Present with transient loss of consciousness	NA	NA
Ventricular dysfunction (congestive heart failure)	NA	Asymptomatic diagnostic finding AND intervention indicated	New onset with symptoms OR Worsening symptomatic congestive heart failure	Life-threatening congestive heart failure
GASTROINTESTINA	L			
Anorexia	Loss of appetite without decreased oral intake	Loss of appetite associated with decreased oral intake without significant weight loss	Loss of appetite associated with significant weight loss	Life-threatening consequences OR Aggressive intervention indicated [e.g., tube feeding or total parenteral nutrition (TPN)]
			onal Weight Loss may be us ostitute for clinical judgment	
Ascites	Asymptomatic	Symptomatic AND Intervention indicated (e.g., diuretics or therapeutic paracentesis)	Symptomatic despite intervention	Life-threatening consequences

Basic Self-care Functions - Adult: Activities such as bathing, dressing, toileting, transfer/movement, continence, and feeding.

Basic Self-care Functions – Young Children: Activities that are age and culturally appropriate (e.g., feeding self with culturally appropriate eating implement).

Usual Social & Functional Activities – Adult: Adaptive tasks and desirable activities, such as going to work, shopping, cooking, use of transportation, pursuing a hobby, etc.

VERSION 1.0, DECEMBER, 2004; CLARIFICATION AUGUST 2009

PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING
Cholecystitis	NA	Symptomatic AND Medical intervention indicated	Radiologic, endoscopic, or operative intervention indicated	Life-threatening consequences (e.g., sepsis or perforation)
Constipation	NA	Persistent constipation requiring regular use of dietary modifications, laxatives, or enemas	Obstipation with manual evacuation indicated	Life-threatening consequences (e.g., obstruction)
Diarrhea				
Adult and Pediatric ≥ 1 year	Transient or intermittent episodes of unformed stools OR Increase of ≤ 3 stools over baseline per 24-hour period	Persistent episodes of unformed to watery stools OR Increase of 4 – 6 stools over baseline per 24-hour period	Bloody diarrhea OR Increase of ≥ 7 stools per 24-hour period OR IV fluid replacement indicated	Life-threatening consequences (e.g., hypotensive shock)
Pediatric < 1 year	Liquid stools (more unformed than usual) but usual number of stools	Liquid stools with increased number of stools OR Mild dehydration	Liquid stools with moderate dehydration	Liquid stools resulting in severe dehydration with aggressive rehydration indicated OR Hypotensive shock
Dysphagia- Odynophagia	Symptomatic but able to eat usual diet	Symptoms causing altered dietary intake without medical intervention indicated	Symptoms causing severely altered dietary intake with medical intervention indicated	Life-threatening reduction in oral intake
Mucositis/stomatitis (clinical exam) Indicate site (e.g., larynx, oral) See Genitourinary for Vulvovaginitis See also Dysphagia- Odynophagia and Proctitis	Erythema of the mucosa	Patchy pseudomembranes or ulcerations	Confluent pseudomembranes or ulcerations OR Mucosal bleeding with minor trauma	Tissue necrosis OR Diffuse spontaneous mucosal bleeding OR Life-threatening consequences (e.g., aspiration, choking)
Nausea	Transient (< 24 hours) or intermittent nausea with no or minimal interference with oral intake	Persistent nausea resulting in decreased oral intake for 24 – 48 hours	Persistent nausea resulting in minimal oral intake for > 48 hours OR Aggressive rehydration indicated (e.g., IV fluids)	Life-threatening consequences (e.g., hypotensive shock)

Basic Self-care Functions - Adult: Activities such as bathing, dressing, toileting, transfer/movement, continence, and feeding.

Basic Self-care Functions - Young Children: Activities that are age and culturally appropriate (e.g., feeding self with culturally appropriate eating implement).

Usual Social & Functional Activities - Adult: Adaptive tasks and desirable activities, such as going to work, shopping, cooking, use of transportation, pursuing a hobby, etc.

VERSION 1.0, DECEMBER, 2004; CLARIFICATION AUGUST 2009

PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING
Pancreatitis	NA	Symptomatic AND Hospitalization not indicated (other than emergency room visit)	Symptomatic AND Hospitalization indicated (other than emergency room visit)	Life-threatening consequences (e.g., circulatory failure, hemorrhage, sepsis)
Proctitis (<u>functional-symptomatic</u>) Also see Mucositis/stomatitis for clinical exam	Rectal discomfort AND No intervention indicated	Symptoms causing greater than minimal interference with usual social & functional activities OR Medical intervention indicated	Symptoms causing inability to perform usual social & functional activities OR Operative intervention indicated	Life-threatening consequences (e.g., perforation)
Vomiting	Transient or intermittent vomiting with no or minimal interference with oral intake	Frequent episodes of vomiting with no or mild dehydration	Persistent vomiting resulting in orthostatic hypotension OR Aggressive rehydration indicated (e.g., IV fluids)	Life-threatening consequences (e.g., hypotensive shock)
NEUROLOGIC				
Alteration in personality-behavior or in mood (e.g., agitation, anxiety, depression, mania, psychosis)	Alteration causing no or minimal interference with usual social & functional activities	Alteration causing greater than minimal interference with usual social & functional activities	Alteration causing inability to perform usual social & functional activities	Behavior potentially harmful to self or others (e.g., suicidal and homicidal ideation or attempt, acute psychosis) OR Causing inability to perform basic self-care functions
Altered Mental Status For Dementia, see Cognitive and behavioral/attentional disturbance (including dementia and attention deficit disorder)	Changes causing no or minimal interference with usual social & functional activities	Mild lethargy or somnolence causing greater than minimal interference with usual social & functional activities	Confusion, memory impairment, lethargy, or somnolence causing inability to perform usual social & functional activities	Delirium OR obtundation, OR coma
Ataxia	Asymptomatic ataxia detectable on exam OR Minimal ataxia causing no or minimal interference with usual social & functional activities	Symptomatic ataxia causing greater than minimal interference with usual social & functional activities	Symptomatic ataxia causing inability to perform usual social & functional activities	Disabling ataxia causing inability to perform basic self-care functions

Basic Self-care Functions - Adult: Activities such as bathing, dressing, toileting, transfer/movement, continence, and feeding.

Basic Self-care Functions – Young Children: Activities that are age and culturally appropriate (e.g., feeding self with culturally appropriate eating implement).

Usual Social & Functional Activities – Adult: Adaptive tasks and desirable activities, such as going to work, shopping, cooking, use of transportation, pursuing a hobby, etc.

VERSION 1.0, DECEMBER, 2004; CLARIFICATION AUGUST 2009

PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING
Cognitive and behavioral/attentional disturbance (including dementia and attention deficit disorder)	Disability causing no or minimal interference with usual social & functional activities OR Specialized resources not indicated	Disability causing greater than minimal interference with usual social & functional activities OR Specialized resources on part-time basis indicated	Disability causing inability to perform usual social & functional activities OR Specialized resources on a full-time basis indicated	Disability causing inability to perform basic self-care functions OR Institutionalization indicated
CNS ischemia (acute)	NA	NA	Transient ischemic attack	Cerebral vascular accident (CVA, stroke) with neurological deficit
Developmental delay – Pediatric ≤ 16 years	Mild developmental delay, either motor or cognitive, as determined by comparison with a developmental screening tool appropriate for the setting	Moderate developmental delay, either motor or cognitive, as determined by comparison with a developmental screening tool appropriate for the setting	Severe developmental delay, either motor or cognitive, as determined by comparison with a developmental screening tool appropriate for the setting	Developmental regression, either motor or cognitive, as determined by comparison with a developmental screening tool appropriate for the setting
Headache	Symptoms causing no or minimal interference with usual social & functional activities	Symptoms causing greater than minimal interference with usual social & functional activities	Symptoms causing inability to perform usual social & functional activities	Symptoms causing inability to perform basic self-care functions OR Hospitalization indicated (other than emergency room visit) OR Headache with significant impairment of alertness or other neurologic function
Insomnia	NA	Difficulty sleeping causing greater than minimal interference with usual social & functional activities	Difficulty sleeping causing inability to perform usual social & functional activities	Disabling insomnia causing inability to perform basic self-care functions
Neuromuscular weakness (including myopathy & neuropathy)	Asymptomatic with decreased strength on exam OR Minimal muscle weakness causing no or minimal interference with usual social & functional activities	Muscle weakness causing greater than minimal interference with usual social & functional activities	Muscle weakness causing inability to perform usual social & functional activities	Disabling muscle weakness causing inability to perform basic self-care functions OR Respiratory muscle weakness impairing ventilation

Basic Self-care Functions - Adult: Activities such as bathing, dressing, toileting, transfer/movement, continence, and feeding.

Basic Self-care Functions – Young Children: Activities that are age and culturally appropriate (e.g., feeding self with culturally appropriate eating implement).

Usual Social & Functional Activities – Adult: Adaptive tasks and desirable activities, such as going to work, shopping, cooking, use of transportation, pursuing a hobby, etc.

VERSION 1.0, DECEMBER, 2004; CLARIFICATION AUGUST 2009

PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING
Neurosensory alteration (including paresthesia and painful neuropathy)	Asymptomatic with sensory alteration on exam or minimal paresthesia causing no or minimal interference with usual social & functional activities	Sensory alteration or paresthesia causing greater than minimal interference with usual social & functional activities	Sensory alteration or paresthesia causing inability to perform usual social & functional activities	Disabling sensory alteration or paresthesia causing inability to perform basic self-care functions
Seizure: (new onset) - Adult ≥ 18 years See also Seizure: (known pre-existing seizure disorder)	NA	1 seizure	2 – 4 seizures	Seizures of any kind which are prolonged, repetitive (e.g., status epilepticus), or difficult to control (e.g., refractory epilepsy)
Seizure: (known pre- existing seizure disorder) - Adult ≥ 18 years For worsening of existing epilepsy the grades should be based on an increase from previous level of control to any of these levels.	NA	Increased frequency of pre-existing seizures (non-repetitive) without change in seizure character OR Infrequent breakthrough seizures while on stable medication in a previously controlled seizure disorder	Change in seizure character from baseline either in duration or quality (e.g., severity or focality)	Seizures of any kind which are prolonged, repetitive (e.g., status epilepticus), or difficult to control (e.g., refractory epilepsy)
Seizure - Pediatric < 18 years	Seizure, generalized onset with or without secondary generalization, lasting < 5 minutes with < 24 hours post ictal state	Seizure, generalized onset with or without secondary generalization, lasting 5 – 20 minutes with < 24 hours post ictal state	Seizure, generalized onset with or without secondary generalization, lasting > 20 minutes	Seizure, generalized onset with or without secondary generalization, requiring intubation and sedation
Syncope (not associated with a procedure)	NA	Present	NA	NA
Vertigo	Vertigo causing no or minimal interference with usual social & functional activities	Vertigo causing greater than minimal interference with usual social & functional activities	Vertigo causing inability to perform usual social & functional activities	Disabling vertigo causing inability to perform basic self-care functions

Basic Self-care Functions - Adult: Activities such as bathing, dressing, toileting, transfer/movement, continence, and feeding.

Basic Self-care Functions – Young Children: Activities that are age and culturally appropriate (e.g., feeding self with culturally appropriate eating implement).

Usual Social & Functional Activities – Adult: Adaptive tasks and desirable activities, such as going to work, shopping, cooking, use of transportation, pursuing a hobby, etc.

VERSION 1.0, DECEMBER, 2004; CLARIFICATION AUGUST 2009

PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING
RESPIRATORY				
Bronchospasm (acute)	FEV1 or peak flow reduced to 70 – 80%	FEV1 or peak flow 50 – 69%	FEV1 or peak flow 25 – 49%	Cyanosis OR FEV1 or peak flow < 25% OR Intubation
Dyspnea or respiratory of	listress			
Adult ≥ 14 years	Dyspnea on exertion with no or minimal interference with usual social & functional activities	Dyspnea on exertion causing greater than minimal interference with usual social & functional activities	Dyspnea at rest causing inability to perform usual social & functional activities	Respiratory failure with ventilatory support indicated
Pediatric < 14 years	Wheezing OR minimal increase in respiratory rate for age	Nasal flaring OR Intercostal retractions OR Pulse oximetry 90 – 95%	Dyspnea at rest causing inability to perform usual social & functional activities OR Pulse oximetry < 90%	Respiratory failure with ventilatory support indicated
MUSCULOSKELETA	AL.			
Arthralgia See also Arthritis	Joint pain causing no or minimal interference with usual social & functional activities	Joint pain causing greater than minimal interference with usual social & functional activities	Joint pain causing inability to perform usual social & functional activities	Disabling joint pain causing inability to perform basic self-care functions
Arthritis See also Arthralgia	Stiffness or joint swelling causing no or minimal interference with usual social & functional activities	Stiffness or joint swelling causing greater than minimal interference with usual social & functional activities	Stiffness or joint swelling causing inability to perform usual social & functional activities	Disabling joint stiffness or swelling causing inability to perform basic self-care functions
Bone Mineral Loss				
Adult ≥ 21 years	BMD t-score -2.5 to -1.0	BMD t-score < -2.5	Pathological fracture (including loss of vertebral height)	Pathologic fracture causing life-threatening consequences
Pediatric < 21 years	BMD z-score -2.5 to -1.0	BMD z-score < -2.5	Pathological fracture (including loss of vertebral height)	Pathologic fracture causing life-threatening consequences
Myalgia (<u>non-injection site</u>)	Muscle pain causing no or minimal interference with usual social & functional activities	Muscle pain causing greater than minimal interference with usual social & functional activities	Muscle pain causing inability to perform usual social & functional activities	Disabling muscle pain causing inability to perform basic self-care functions

Basic Self-care Functions - Adult: Activities such as bathing, dressing, toileting, transfer/movement, continence, and feeding.

Basic Self-care Functions – Young Children: Activities that are age and culturally appropriate (e.g., feeding self with culturally appropriate eating implement).

Usual Social & Functional Activities – Adult: Adaptive tasks and desirable activities, such as going to work, shopping, cooking, use of transportation, pursuing a hobby, etc.

VERSION 1.0, DECEMBER, 2004; CLARIFICATION AUGUST 2009

PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING
Osteonecrosis	NA	Asymptomatic with radiographic findings AND No operative intervention indicated	Symptomatic bone pain with radiographic findings OR Operative intervention indicated	Disabling bone pain with radiographic findings causing inability to perform basic self-care functions
GENITOURINARY				
Cervicitis (symptoms) (For use in studies evaluating topical study agents) For other cervicitis see Infection: Infection (any other than HIV infection)	Symptoms causing no or minimal interference with usual social & functional activities	Symptoms causing greater than minimal interference with usual social & functional activities	Symptoms causing inability to perform usual social & functional activities	Symptoms causing inability to perform basic self-care functions
Cervicitis (clinical exam) (For use in studies evaluating topical study agents) For other cervicitis see Infection: Infection (any other than HIV infection)	Minimal cervical abnormalities on examination (erythema, mucopurulent discharge, or friability) OR Epithelial disruption < 25% of total surface	Moderate cervical abnormalities on examination (erythema, mucopurulent discharge, or friability) OR Epithelial disruption of 25 – 49% total surface	Severe cervical abnormalities on examination (erythema, mucopurulent discharge, or friability) OR Epithelial disruption 50 – 75% total surface	Epithelial disruption > 75% total surface
Inter-menstrual bleeding (IMB)	Spotting observed by participant OR Minimal blood observed during clinical or colposcopic examination	Inter-menstrual bleeding not greater in duration or amount than usual menstrual cycle	Inter-menstrual bleeding greater in duration or amount than usual menstrual cycle	Hemorrhage with life- threatening hypotension OR Operative intervention indicated
Urinary tract obstruction (e.g., stone)	NA	Signs or symptoms of urinary tract obstruction without hydronephrosis or renal dysfunction	Signs or symptoms of urinary tract obstruction with hydronephrosis or renal dysfunction	Obstruction causing life- threatening consequences

Basic Self-care Functions - Adult: Activities such as bathing, dressing, toileting, transfer/movement, continence, and feeding.

Basic Self-care Functions – Young Children: Activities that are age and culturally appropriate (e.g., feeding self with culturally appropriate eating implement).

Usual Social & Functional Activities – Adult: Adaptive tasks and desirable activities, such as going to work, shopping, cooking, use of transportation, pursuing a hobby, etc.

VERSION 1.0, DECEMBER, 2004; CLARIFICATION AUGUST 2009

PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING
Vulvovaginitis (symptoms) (Use in studies evaluating topical study agents) For other vulvovaginitis see Infection: Infection (any other than HIV infection)	Symptoms causing no or minimal interference with usual social & functional activities	Symptoms causing greater than minimal interference with usual social & functional activities	Symptoms causing inability to perform usual social & functional activities	Symptoms causing inability to perform basic self-care functions
Vulvovaginitis (clinical exam) (Use in studies evaluating topical study agents) For other vulvovaginitis see Infection: Infection (any other than HIV infection)	Minimal vaginal abnormalities on examination OR Epithelial disruption < 25% of total surface	Moderate vaginal abnormalities on examination OR Epithelial disruption of 25 - 49% total surface	Severe vaginal abnormalities on examination OR Epithelial disruption 50 - 75% total surface	Vaginal perforation OR Epithelial disruption > 75% total surface
OCULAR/VISUAL				
Uveitis	Asymptomatic but detectable on exam	Symptomatic anterior uveitis OR Medical intervention indicated	Posterior or pan-uveitis OR Operative intervention indicated	Disabling visual loss in affected eye(s)
Visual changes (from baseline)	Visual changes causing no or minimal interference with usual social & functional activities	Visual changes causing greater than minimal interference with usual social & functional activities	Visual changes causing inability to perform usual social & functional activities	Disabling visual loss in affected eye(s)
ENDOCRINE/METAE	BOLIC			
Abnormal fat accumulation (e.g., back of neck, breasts, abdomen)	Detectable by study participant (or by caregiver for young children and disabled adults)	Detectable on physical exam by health care provider	Disfiguring OR Obvious changes on casual visual inspection	NA
Diabetes mellitus	NA	New onset without need to initiate medication OR Modification of current medications to regain glucose control	New onset with initiation of medication indicated OR Diabetes uncontrolled despite treatment modification	Life-threatening consequences (e.g., ketoacidosis, hyperosmolar non- ketotic coma)

Basic Self-care Functions - Adult: Activities such as bathing, dressing, toileting, transfer/movement, continence, and feeding.

Basic Self-care Functions – Young Children: Activities that are age and culturally appropriate (e.g., feeding self with culturally appropriate eating implement).

Usual Social & Functional Activities – Adult: Adaptive tasks and desirable activities, such as going to work, shopping, cooking, use of transportation, pursuing a hobby, etc.

VERSION 1.0, DECEMBER, 2004; CLARIFICATION AUGUST 2009

PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING
Gynecomastia	Detectable by study participant or caregiver (for young children and disabled adults)	Detectable on physical exam by health care provider	Disfiguring OR Obvious on casual visual inspection	NA
Hyperthyroidism	Asymptomatic	Symptomatic causing greater than minimal interference with usual social & functional activities OR Thyroid suppression therapy indicated	Symptoms causing inability to perform usual social & functional activities OR Uncontrolled despite treatment modification	Life-threatening consequences (e.g., thyroid storm)
Hypothyroidism	Asymptomatic	Symptomatic causing greater than minimal interference with usual social & functional activities OR Thyroid replacement therapy indicated	Symptoms causing inability to perform usual social & functional activities OR Uncontrolled despite treatment modification	Life-threatening consequences (e.g., myxedema coma)
Lipoatrophy (e.g., fat loss from the face, extremities, buttocks)	Detectable by study participant (or by caregiver for young children and disabled adults)	Detectable on physical exam by health care provider	Disfiguring OR Obvious on casual visual inspection	NA

Basic Self-care Functions - Adult: Activities such as bathing, dressing, toileting, transfer/movement, continence, and feeding.

Basic Self-care Functions – Young Children: Activities that are age and culturally appropriate (e.g., feeding self with culturally appropriate eating implement).

Usual Social & Functional Activities – Adult: Adaptive tasks and desirable activities, such as going to work, shopping, cooking, use of transportation, pursuing a hobby, etc.

VERSION 1.0, DECEMBER, 2004; CLARIFICATION AUGUST 2009

	LABORATORY					
PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING		
HEMATOLOGY	Standard Internationa	al Units are listed in it	alics			
Absolute CD4+ count - Adult and Pediatric > 13 years (HIV NEGATIVE ONLY)	300 – 400/mm ³ 300 – 400/μL	200 – 299/mm³ 200 – 299/μL	100 – 199/mm ³ 100 – 199/μL	< 100/mm ³ < 100/μL		
Absolute lymphocyte count - Adult and Pediatric > 13 years (HIV NEGATIVE ONLY)	600 – 650/mm ³ 0.600 x 10 ⁹ – 0.650 x 10 ⁹ /L	500 – 599/mm ³ 0.500 x 10 ⁹ – 0.599 x 10 ⁹ /L	350 – 499/mm ³ 0.350 x 10 ⁹ – 0.499 x 10 ⁹ /L	< 350/mm ³ < 0.350 x 10 ⁹ /L		
Comment: Values in child	ren ≤ 13 years are not giv	en for the two parameters	s above because the abso	blute counts are variable.		
Absolute neutrophil count (ANC)					
Adult and Pediatric, > 7 days	1,000 – 1,300/mm ³ 1.000 x 10 ⁹ – 1.300 x 10 ⁹ /L	750 – 999/mm ³ 0.750 x 10 ⁹ – 0.999 x 10 ⁹ /L	500 – 749/mm ³ 0.500 x 10 ⁹ – 0.749 x 10 ⁹ /L	< 500/mm ³ < 0.500 x 10 ⁹ /L		
Infant* [†] , 2 – ≤ 7 days	1,250 – 1,500/mm ³ 1.250 × 10 ⁹ – 1.500 × 10 ⁹ /L	1,000 – 1,249/mm ³ 1.000 x 10 ⁹ – 1.249 x 10 ⁹ /L	750 – 999/mm³ 0.750 x 10° – 0.999 x 10°/L	< 750/mm ³ < 0.750 x 10 ⁹ /L		
Infant* [†] , ≤1 day	4,000 – 5,000/mm ³ 4.000 x 10 ⁹ – 5.000 x 10 ⁹ /L	3,000 – 3,999/mm ³ 3.000 x 10 ⁹ – 3.999 x10 ⁹ /L	1,500 – 2,999/mm ³ 1.500 x 10 ⁹ – 2.999 x 10 ⁹ /L	< 1,500/mm ³ < 1.500 x 10 ⁹ /L		
Comment: Parameter cha	nged from "Infant, < 1 day	y" to "Infant, ≤1 day"				
Fibrinogen, decreased	100 – 200 mg/dL 1.00 – 2.00 g/L OR 0.75 – 0.99 x LLN	75 – 99 mg/dL 0.75 – 0.99 g/L OR 0.50 – 0.74 x LLN	50 – 74 mg/dL 0.50 – 0.74 g/L OR 0.25 – 0.49 x LLN	< 50 mg/dL < 0.50 g/L OR < 0.25 x LLN OR Associated with gross bleeding		

Page 16 of 21

^{*}Values are for term infants. Preterm infants should be assessed using local normal ranges.

[†] Use age and sex appropriate values (e.g., bilirubin).

	LABORATORY					
PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING		
Hemoglobin (Hgb)		•				
Comment: The Hgb value changed from 0.155 to 0.62 method with a conversion for that lab.	206 (the most commonly	used conversion factor).	For grading Hgb results of	obtained by an analytic		
Adult and Pediatric ≥ 57 days (HIV POSITIVE ONLY)	8.5 – 10.0 g/dL 5.24 – 6.23 mmol/L	7.5 – 8.4 g/dL 4.62–5.23 mmol/L	6.50 – 7.4 g/dL 4.03–4.61 mmol/L	< 6.5 g/dL < 4.03 mmol/L		
Adult and Pediatric ≥ 57 days (HIV <u>NEGATIVE</u> ONLY)	10.0 – 10.9 g/dL 6.18 – 6.79 mmol/L OR Any decrease 2.5 – 3.4 g/dL 1.58 – 2.13 mmol/L	9.0 – 9.9 g/dL 5.55 - 6.17 mmol/L OR Any decrease 3.5 – 4.4 g/dL 2.14 – 2.78 mmol/L	7.0 – 8.9 g/dL 4.34 - 5.54 mmol/L OR Any decrease ≥ 4.5 g/dL > 2.79 mmol/L	< 7.0 g/dL < 4.34 mmol/L		
Comment: The decrease	is a decrease from baseli					
Infant* [†] , 36 – 56 days (HIV <u>POSITIVE</u> OR <u>NEGATIVE</u>)	8.5 – 9.4 g/dL 5.24 – 5.86 mmol/L	7.0 – 8.4 g/dL 4.31 – 5.23 mmol/L	6.0 – 6.9 g/dL 3.72 – 4.30 mmol/L	< 6.00 g/dL < 3.72 mmol/L		
Infant* [†] , 22 – 35 days (HIV <u>POSITIVE</u> OR <u>NEGATIVE</u>)	9.5 – 10.5 g/dL 5.87 - 6.54 mmol/L	8.0 – 9.4 g/dL 4.93 – 5.86 mmol/L	7.0 – 7.9 g/dL 4.34 – 4.92 mmol/L	< 7.00 g/dL < 4.34 mmol/L		
Infant* [†] , ≤ 21 days (HIV <u>POSITIVE</u> OR <u>NEGATIVE</u>)	12.0 – 13.0 g/dL 7.42 – 8.09 mmol/L	10.0 – 11.9 g/dL 6.18 – 7.41 mmol/L	9.0 – 9.9 g/dL 5.59- 6.17 mmol/L	< 9.0 g/dL < 5.59 mmol/L		
Correction: Parameter ch	anged from "Infant < 21 o	lays" to "Infant ≤ 21 days	ıı	·		
International Normalized Ratio of prothrombin time (INR)	1.1 – 1.5 x ULN	1.6 – 2.0 x ULN	2.1 – 3.0 x ULN	> 3.0 x ULN		
Methemoglobin	5.0 – 10.0%	10.1 – 15.0%	15.1 – 20.0%	> 20.0%		
Prothrombin Time (PT)	1.1 – 1.25 x ULN	1.26 – 1.50 x ULN	1.51 – 3.00 x ULN	> 3.00 x ULN		
Partial Thromboplastin Time (PTT)	1.1 – 1.66 x ULN	1.67 – 2.33 x ULN	2.34 – 3.00 x ULN	> 3.00 x ULN		
Platelets, decreased	100,000 – 124,999/mm ³ 100.000 x 10 ⁹ – 124.999 x 10 ⁹ /L	50,000 – 99,999/mm ³ 50.000 x 10 ⁹ – 99.999 x 10 ⁹ /L	25,000 – 49,999/mm ³ 25.000 x 10 ⁹ – 49.999 x 10 ⁹ /L	< 25,000/mm ³ < 25.000 x 10 ⁹ /L		
WBC, decreased	2,000 – 2,500/mm ³ 2.000 x 10 ⁹ – 2.500 x 10 ⁹ /L	1,500 – 1,999/mm ³ 1.500 x 10 ⁹ – 1.999 x 10 ⁹ /L	1,000 – 1,499/mm ³ 1.000 x 10 ⁹ – 1.499 x 10 ⁹ /L	< 1,000/mm ³ < 1.000 x 10 ⁹ /L		

^{*}Values are for term infants. Preterm infants should be assessed using local normal ranges.

[†] Use age and sex appropriate values (e.g., bilirubin).

LABORATORY					
PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING	
CHEMISTRIES	Standard Internationa	al Units are listed in ita	alics	•	
Acidosis	NA	pH < normal, but ≥ 7.3	pH < 7.3 without life- threatening consequences	pH < 7.3 with life- threatening consequences	
Albumin, serum, low	3.0 g/dL - < LLN 30 g/L - < LLN	2.0 – 2.9 g/dL 20 – 29 g/L	< 2.0 g/dL < 20 g/L	NA	
Alkaline Phosphatase	1.25 – 2.5 x ULN [†]	2.6 – 5.0 x ULN [†]	5.1 – 10.0 x ULN [†]	> 10.0 x ULN [†]	
Alkalosis	NA	pH > normal, but ≤ 7.5	pH > 7.5 without life- threatening consequences	pH > 7.5 with life- threatening consequences	
ALT (SGPT)	1.25 – 2.5 x ULN	2.6 – 5.0 x ULN	5.1 – 10.0 x ULN	> 10.0 x ULN	
AST (SGOT)	1.25 – 2.5 x ULN	2.6 – 5.0 x ULN	5.1 – 10.0 x ULN	> 10.0 x ULN	
Bicarbonate, serum, low	16.0 mEq/L - < LLN 16.0 mmol/L - < LLN	11.0 – 15.9 mEq/L 11.0 – 15.9 mmol/L	8.0 – 10.9 mEq/L 8.0 – 10.9 mmol/L	< 8.0 mEq/L < 8.0 mmol/L	
Comment: Some laborato are the same tests; values	ries will report this value a should be graded accordi	as Bicarbonate (HCO ₃) an ng to the ranges for Bicarl	d others as Total Carbon conate as listed above.	Dioxide (CO ₂). These	
Bilirubin (Total)	T	1	T		
Adult and Pediatric > 14 days	1.1 – 1.5 x ULN	1.6 – 2.5 x ULN	2.6 – 5.0 x ULN	> 5.0 x ULN	
Infant* [†] , ≤ 14 days (non-hemolytic)	NA	20.0 – 25.0 mg/dL 342 – 428 μmol/L	25.1 – 30.0 mg/dL 429 – 513 μmol/L	> 30.0 mg/dL > 513.0 μmol/L	
Infant* [†] , ≤ 14 days (hemolytic)	NA	NA	20.0 – 25.0 mg/dL 342 – 428 μmol/L	> 25.0 mg/dL > 428 μmol/L	
Calcium, serum, high				•	
Adult and Pediatric ≥ 7 days	10.6 – 11.5 mg/dL 2.65 – 2.88 mmol/L	11.6 – 12.5 mg/dL 2.89 – 3.13 mmol/L	12.6 – 13.5 mg/dL 3.14 – 3.38 mmol/L	> 13.5 mg/dL > 3.38 mmol/L	
Infant* [†] , < 7 days	11.5 – 12.4 mg/dL 2.88 – 3.10 mmol/L	12.5 – 12.9 mg/dL 3.11 – 3.23 mmol/L	13.0 – 13.5 mg/dL 3.245 – 3.38 mmol/L	> 13.5 mg/dL > 3.38 mmol/L	
Calcium, serum, low				•	
Adult and Pediatric ≥ 7 days	7.8 – 8.4 mg/dL 1.95 – 2.10 mmol/L	7.0 – 7.7 mg/dL 1.75 – 1.94 mmol/L	6.1 – 6.9 mg/dL 1.53 – 1.74 mmol/L	< 6.1 mg/dL < 1.53 mmol/L	
Infant* [†] , < 7 days	6.5 – 7.5 mg/dL 1.63 – 1.88 mmol/L	6.0 – 6.4 mg/dL 1.50 – 1.62 mmol/L	5.50 – 5.90 mg/dL 1.38 – 1.51 mmol/L	< 5.50 mg/dL < 1.38 mmol/L	
Comment: Do not adju	st Calcium, serum, low or	Calcium, serum, high for	albumin	•	

^{*}Values are for term infants. Preterm infants should be assessed using local normal ranges.

[†] Use age and sex appropriate values (e.g., bilirubin).

LABORATORY					
PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING	
Cardiac troponin I (cTnI)	NA	NA	NA	Levels consistent with myocardial infarction or unstable angina as defined by the manufacturer	
Cardiac troponin T (cTnT)	NA	NA	NA	≥ 0.20 ng/mL OR Levels consistent with myocardial infarction or unstable angina as defined by the manufacturer	
Cholesterol (fasting)					
Adult ≥ 18 years	200 – 239 mg/dL 5.18 – 6.19 mmol/L	240 – 300 mg/dL 6.20 – 7.77 mmol/L	> 300 mg/dL > 7.77 mmol/L	NA	
Pediatric < 18 years	170 – 199 mg/dL 4.40 – 5.15 mmol/L	200 – 300 mg/dL 5.16 – 7.77 mmol/L	> 300 mg/dL > 7.77 mmol/L	NA	
Creatine Kinase	3.0 – 5.9 x ULN [†]	6.0 – 9.9 x ULN [†]	10.0 – 19.9 x ULN [†]	\geq 20.0 x ULN [†]	
Creatinine	1.1 – 1.3 x ULN [†]	1.4 – 1.8 x ULN [†]	1.9 – 3.4 x ULN [†]	≥ 3.5 x ULN [†]	

LABORATORY					
PARAMETER	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE-THREATENING	
Glucose, serum, high					
Nonfasting	116 – 160 mg/dL 6.44 – 8.88 mmol/L	161 – 250 mg/dL 8.89 – 13.88 mmol/L	251 – 500 mg/dL 13.89 – 27.75 mmol/L	> 500 mg/dL > 27.75 mmol/L	
Fasting	110 – 125 mg/dL 6.11 – 6.94 mmol/L	126 – 250 mg/dL 6.95 – 13.88 mmol/L	251 – 500 mg/dL 13.89 – 27.75 mmol/L	> 500 mg/dL > 27.75 mmol/L	
Glucose, serum, low					
Adult and Pediatric ≥ 1 month	55 – 64 mg/dL 3.05 – 3.55 mmol/L	40 – 54 mg/dL 2.22 – 3.06 mmol/L	30 – 39 mg/dL 1.67 – 2.23 mmol/L	< 30 mg/dL < 1.67 mmol/L	
Infant* [†] , < 1 month	50 – 54 mg/dL 2.78 – 3.00 mmol/L	40 – 49 mg/dL 2.22 – 2.77 mmol/L	30 – 39 mg/dL 1.67 – 2.21 mmol/L	< 30 mg/dL < 1.67 mmol/L	
Lactate	ULN - < 2.0 x ULN without acidosis	≥ 2.0 x ULN without acidosis	Increased lactate with pH < 7.3 without life-threatening consequences	Increased lactate with pH < 7.3 with life-threatening consequences	

^{*}Values are for term infants. Preterm infants should be assessed using local normal ranges.

[†] Use age and sex appropriate values (e.g., bilirubin).

LDL cholesterol (fasting)				
Adult ≥ 18 years	130 – 159 mg/dL 3.37 – 4.12 mmol/L	≥ 190 mg/dL ≥ 4.91 mmol/L	NA	
Pediatric > 2 - < 18 years	110 – 129 mg/dL 2.85 – 3.34 mmol/L	130 – 189 mg/dL 3.35 – 4.90 mmol/L	≥ 190 mg/dL ≥ 4.91 mmol/L	NA
Lipase	1.1 – 1.5 x ULN	1.6 – 3.0 x ULN	3.1 – 5.0 x ULN	> 5.0 x ULN
Magnesium, serum, low	1.2 - 1.4 mEq/L	0.9 – 1.1 mEq/L	0.6 – 0.8 mEq/L	< 0.60 mEq/L
	0.60 - 0.70 mmol/L	0.45 – 0.59 mmol/L	0.30 – 0.44 mmol/L	< 0.30 mmol/L
Pancreatic amylase	1.1 – 1.5 x ULN	1.6 – 2.0 x ULN	2.1 – 5.0 x ULN	> 5.0 x ULN
Phosphate, serum, low				
Adult and Pediatric > 14 years	2.5 mg/dL – < LLN	2.0 – 2.4 mg/dL	1.0 – 1.9 mg/dL	< 1.00 mg/dL
	0.81 mmol/L – < LLN	0.65 – 0.80 mmol/L	0.32 – 0.64 mmol/L	< 0.32 mmol/L
Pediatric 1 year – 14	3.0 – 3.5 mg/dL	2.5 – 2.9 mg/dL	1.5 – 2.4 mg/dL	< 1.50 mg/dL
years	0.97 – 1.13 mmol/L	0.81 – 0.96 mmol/L	0.48 – 0.80 mmol/L	< 0.48 mmol/L
Pediatric < 1 year	3.5 – 4.5 mg/dL	2.5 – 3.4 mg/dL	1.5 – 2.4 mg/dL	< 1.50 mg/dL
	1.13 – 1.45 mmol/L	0.81 – 1.12 mmol/L	0.48 – 0.80 mmol/L	< 0.48 mmol/L
Potassium, serum, high	5.6 – 6.0 mEq/L	6.1 – 6.5 mEq/L	6.6 – 7.0 mEq/L	> 7.0 mEq/L
	5.6 – 6.0 mmol/L	6.1 – 6.5 mmol/L	6.6 – 7.0 mmol/L	> 7.0 mmol/L
Potassium, serum, low	3.0 – 3.4 mEq/L	2.5 – 2.9 mEq/L	2.0 – 2.4 mEq/L	< 2.0 mEq/L
	3.0 – 3.4 mmol/L	2.5 – 2.9 mmol/L	2.0 – 2.4 mmol/L	< 2.0 mmol/L
Sodium, serum, high	146 – 150 mEq/L	151 – 154 mEq/L	155 – 159 mEq/L	≥ 160 mEq/L
	146 – 150 mmol/L	151 – 154 mmol/L	155 – 159 mmol/L	≥ 160 mmol/L
Sodium, serum, low	130 – 135 mEq/L	125 – 129 mEq/L	121 – 124 mEq/L	≤ 120 mEq/L
	130 – 135 mmol/L	125 – 129 mmol/L	121 – 124 mmol/L	≤ 120 mmol/L
Triglycerides (fasting)	NA	500 – 750 mg/dL 5.65 – 8.48 mmol/L	751 – 1,200 mg/dL 8.49 – 13.56 mmol/L	> 1,200 mg/dL > 13.56 mmol/L

^{*}Values are for term infants. Preterm infants should be assessed using local normal ranges.

[†] Use age and sex appropriate values (e.g., bilirubin).

	LABORATORY						
Р	ARAMETER	GRADE 1 GRADE 2 GRADE 3 GRADE 4 MILD MODERATE SEVERE POTENTIALLY LIFE-THREATEN					
U	ric acid	7.5 – 10.0 mg/dL 0.45 – 0.59 mmol/L	10.1 – 12.0 mg/dL 0.60 – 0.71 mmol/L	12.1 – 15.0 mg/dL 0.72 – 0.89 mmol/L	> 15.0 mg/dL > 0.89 mmol/L		
U	URINALYSIS Standard International Units are listed in italics						
Н	lematuria (microscopic)	6 – 10 RBC/HPF	> 10 RBC/HPF	Gross, with or without clots OR with RBC casts	Transfusion indicated		
	roteinuria, random ollection	1+	2 – 3 +	4+	NA		
Р	roteinuria, 24 hour collecti	on					
	Adult and Pediatric ≥ 10 years	200 – 999 mg/24 h 0.200 – 0.999 g/d	1,000 – 1,999 mg/24 h 1.000 – 1.999 g/d	2,000 – 3,500 mg/24 h 2.000 – 3.500 g/d	> 3,500 mg/24 h > 3.500 g/d		
	Pediatric > 3 mo - < 10 years	201 – 499 mg/m²/24 h 0.201 – 0.499 g/d	500 – 799 mg/m²/24 h 0.500 – 0.799 g/d	800 – 1,000 mg/m ² /24 h <i>0.800 – 1.000 g/d</i>	> 1,000 mg/ m²/24 h > 1.000 g/d		

^{*}Values are for term infants. Preterm infants should be assessed using local normal ranges.

[†] Use age and sex appropriate values (e.g., bilirubin).

Section Appendix 11-2 Addendum 1 – The Female Genital Grading Table for Use in Microbicide Studies

Addendum 1 Female Genital Grading Table for Use in Microbicide Studies

INDIVIDUAL SIGNS/SYMPTOMS								
INDIVIDUAL GIGING/GTIVII TOWG								
PARAMETER	GRADE 0 NORMAL	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE- THREATENING			
GENERAL								
Odor	No complaint	Mild-moderate unpleasant odor	Severe unpleasant odor	NA	NA			
(Specify Area: Vulvar/ Pelvic/Lower Abdomi	PAIN AND TENDERNESS (Specify Area: Vulvar/Perineum, Vagina, Cervix (including cervical motion tenderness), Uterus, Adnexae, Pelvic/Lower Abdominal, or Ovulatory) *Note – if both pain and tenderness are present, only report the one with the most severe grade							
Pain* 1	None	Pain causing no or minimal interference with usual social & functional activities	Pain causing greater than minimal interference with usual social & functional activities or the need for non-narcotic medication	Pain causing inability to perform usual social & functional activities or the need for narcotic medication	Disabling pain causing inability to perform basic self-care functions OR hospitalization (other than emergency room visit) indicated			
Tenderness* 1	None	Mild tenderness	Moderate tenderness	Severe tenderness	NA			
Dyspareunia (pain with sexual activity)	None	Pain causing no or minimal interference with sexual function	Pain causing greater than minimal interference with sexual function	NA	NA			
Dysmenorrhea/cramping with menses	None	Pain causing no or minimal interference with usual social & functional activities	Pain causing greater than minimal interference with usual social & functional activities or the need for non-narcotic medication	Pain causing inability to perform usual social or functional activities or the need for narcotic medication	NA			

¹ If pain or tenderness is included in the grading of another category (e.g., PID), it should not be graded again in the pain or tenderness category.

Addendum 1 Female Genital Grading Table for Use in Microbicide Studies

	IN	DIVIDUAL SIGN	S/SYMPTOMS				
PARAMETER	GRADE 0 NORMAL	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE- THREATENING		
GENITOURINARY SIG	NS/SYMPTOMS - V	/ULVA					
Vulvar/vaginal itching	None	Itching causing no, mild, or moderate interference with usual social & functional activities	Itching causing inability to perform usual social & functional activities; may require intervention such as antihistamine or bathing to provide relief	NA	NA		
Vulvar edema	None	Mild, non-pitting edema	Moderate, 1-2+ pitting edema	3+ pitting edema, severe enough to require urinary drainage, or weeping edema ± skin breakdown	NA		
Vulvar erythema	None	Erythema covering < 50% of vulvar surface	Erythema covering ≥ 50% of vulvar surface	NA	NA		
Vulvar lesions (findings seen only by colposcopy should not be included here)	Normal variants including skin tags, moles, scars, etc.	Blisters, ulcerations, or pustules - no treatment indicated	Blisters, ulcerations or pustules, with treatment indicated	Severe epithelial disruption with hospitalization indicated	NA		
Vulvar rash	None	Rash covering < 50% of vulvar surface	Rash covering ≥ 50% of vulvar surface	Severe epithelial disruption with hospitalization indicated	NA		
Bartholin's or Skene's gland	No findings	Cyst with no inflammation	Cyst or abscess with outpatient intervention indicated	Cyst or abscess with hospitalization indicated	Necrotizing fasciitis from Bartholin's abscess		
GENITOURINARY SIGNS/SYMPTOMS – VAGINA ** Note – if vaginal discharge is present both by history and on examination, only report the one with the most severe grade							
Vaginal edema	None	Mild-moderate engorgement	Loss of ruggae and friability	NA	NA		
Vaginal erythema	None	Erythema covering < 50% of vaginal surface	Erythema covering ≥ 50% of vaginal surface	NA	NA		

Addendum 1 Female Genital Grading Table for Use in Microbicide Studies

INDIVIDUAL SIGNS/SYMPTOMS							
PARAMETER	GRADE 0 NORMAL	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE- THREATENING		
Vaginal dryness	No complaint	Dryness causing no or minimal interference with usual sexual, social, & functional activities	Dryness causing greater than minimal interference with usual sexual, social, & functional activities	NA	NA		
Vaginal discharge by participant report **	Participant's usual amount of discharge, regardless of color or quantity	Mild-moderate increase in amount above participant baseline - no sanitary protection required	Profuse increase in discharge requiring pad use or other hygienic intervention	NA	NA		
Vaginal discharge as observed by clinician ** (red or brown discharge should be reported under bleeding, not discharge)	Slight amount of discharge, any color	Mild-moderate increase in amount	Significant increase in amount with pooling in vagina on examination	NA	NA		
Vaginal abrasions or lacerations (including probable applicator injuries)	None	Superficial disruptions and disruptions extending through the mucosa with minimal impact on life	Large disruptions extending through the mucosa or large superficial disruptions, hospitalization not indicated	Large disruptions extending through the mucosa or large superficial disruptions, hospitalization indicated	Lacerations extending into the peritoneal cavity, bladder, or rectum		
Vaginal lesions (findings seen only by colposcopy should not be included here)	Normal variants including skin tags, moles, scars, etc.	Blisters, ulcerations, or pustules, no treatment indicated	Blisters, ulcerations, or pustules with treatment indicated	Severe epithelial disruption requiring hospitalization	NA		
Vaginal and Cervical masses (polyps, myomas, or possible malignancy)	None or normal variants such as Nabothian cyst or Gartner duct cyst	Polyp or myoma or undiagnosed mass without symptoms	Polyp, myoma, or undiagnosed mass causing mild symptoms, e.g., bleeding/pain not requiring more than mild analgesia	Polyp, myoma, or undiagnosed mass causing severe symptoms, e.g., bleeding/pain affecting bladder and bowel function	Visible cervical cancer		
GENITOURINARY SIG	NS/SYMPTOMS – C	ERVIX					
Cervical edema and friability	None	Edema without friability	Friable cervix	NA	NA		

Addendum 1 Female Genital Grading Table for Use in Microbicide Studies

	INI	DIVIDUAL SIGN	S/SYMPTOMS		
PARAMETER	GRADE 0 NORMAL	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE- THREATENING
Cervical erythema	None	Erythema covering < 50% of cervix	Erythema covering ≥ 50% of cervix	NA	NA
Cervical discharge	White or clear discharge	Small amount of purulent discharge at os	Purulent discharge extending onto cervix or vagina	NA	NA
Visible cervical lesions (findings seen only by colposcopy should not be included here)	Normal variants including skin tags, moles, scars, etc.	Blisters, ulcerations, or pustules, no treatment indicated	Blisters, ulcerations, or pustules with treatment indicated	NA	NA
GENITOURINARY SIG	NS/SYMPTOMS - U	ITERUS			
Uterine masses/enlargement based on bimanual examination	Normal to 8 week size, no palpable myomas	Enlarged uterus and mild symptoms, e.g., bleeding/pain requiring mild analgesics	Enlarged uterus/myoma with moderate pain or symptoms, e.g., bleeding	Mass causing severe bleeding/pain or with impact on bowel/bladder function	Uterine mass that requires transfusion or surgery
Polyp, submucosal fibroid, or thickened endometrium detected by transvaginal ultrasound (new or increasing in size from prior exam)	None or unchanged/reduced in size from prior exam	New myomas < 6 cm diameter (single or multiple) or diameter increased < 6 cm since prior exam	New myomas ≥ 6 cm diameter (single or multiple) or diameter increased ≥ 6 cm since prior exam	Hospitalization and/or surgery indicated	NA
GENITOURINARY SIG	NS/SYMPTOMS – A	DNEXA			
Not pregnancy- or infection-related adnexal masses based on bimanual exam (use if no ultrasound done; if ultrasound done, use ultrasound categories below)	None, ≤ 4 cm, normal size ovary	> 4 cm with minimal or no symptoms	> 4 cm with severe symptoms, e.g., pain, but hospitalization not indicated (see footnote #1)	> 4 cm with severe symptoms, e.g., pain and hospitalization indicated (see footnote #1)	NA
Hydrosalpinx based on ultrasound	None	Asymptomatic, suspected hydrosalpinx	Hydrosalpinx with pain, but without evidence of infection or ectopic pregnancy	Signs/symptoms of infection with hospitalization and/or surgery indicated	NA
Adnexal mass based on ultrasound	None	Simple cyst, asymptomatic	Simple cyst, symptomatic	Mass suspicious for malignancy	Malignant mass

Addendum 1 Female Genital Grading Table for Use in Microbicide Studies

INDIVIDUAL SIGNS/SYMPTOMS							
PARAMETER	GRADE 0 NORMAL	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE- THREATENING		
GENITOURINARY SIG	NS/SYMPTOMS - A	ABDOMEN					
Abdominal mass not palpable on pelvic exam of unknown diagnosis	None or known (pre-existing) mass unchanged in size	New mass or increased size of known mass requiring mild analgesia with minimal impact	New mass or increased size of known mass with moderate symptoms	Mass causing severe bleeding/ pain with impact on bladder/bowel function or with hospitalization indicated	Malignancy		
GENITOURINARY SIG	NS/SYMPTOMS - U	JRINARY TRACT					
Urinary frequency	None	Up to 2 times participant's normal frequency	> 2 times participant's normal frequency	NA	NA		
Dysuria	None	Superficial only	Deep ± superficial	Inability to void due to pain	NA		
Hematuria	None	Microscopic, no intervention indicated (beyond evaluation for infection)	Gross blood in urine or medical intervention/ evaluation indicated (beyond evaluation for infection)	Persistent bleeding with transfusion, hospitalization or intervention indicated to obtain hemostasis (endoscopy, interventional radiology, or operative)	Profuse hemorrhage with shock or orthostatic dizziness		

Addendum 1 Female Genital Grading Table for Use in Microbicide Studies

COMPOSITE SIGNS/SYMPTOMS (Use instead of individual categories if 2 or more signs/symptoms are present)								
PARAMETER	GRADE 0 NORMAL	GRADE 1 MILD (Use if all signs/ symptoms would individually be Grade 0 or 1)	GRADE 2 MODERATE (Use if one or more signs/symptoms would individually be Grade 2 and all others Grade 0 or 1)	GRADE 3 SEVERE (Use if one or more signs/symptoms would individually be Grade 3)	GRADE 4 POTENTIALLY LIFE- THREATENING			
NO ORGANISM IDENT	TIFIED BUT INADE	QUATE TESTING P	ERFORMED					
Vulvovaginitis (combinations of pain, itching, erythema, edema, rash, tenderness, or discharge)	None	Mild signs/ symptoms	Moderate signs/ symptoms	Severe signs/ symptoms	NA			
Cervicitis (combinations of dyspareunia, erythema, edema, tenderness, and discharge)	None	Mild signs/ symptoms	Moderate signs/ symptoms	Severe signs/ symptoms	NA			
PID (if Gonorrhea or Chlamydia identified use that category)	None	NA	Cervicitis with mild uterine tenderness, ± mild cervical motion tenderness, no signs of peritoneal irritation	More diffuse tenderness, any signs of peritoneal irritation, or indications for hospitalization	Tubo-ovarian abscess or surgery required for resolution			
NO ORGANISM IDENT	TIFIED AFTER APP	ROPRIATE TESTIN	G PERFORMED					
Vulvovaginitis (combinations of pain, itching, erythema, edema, rash, tenderness, or discharge)	None	Mild signs/ symptoms	Moderate signs/ symptoms	Severe signs/ symptoms	NA			
Cervicitis (combinations of dyspareunia, erythema, edema, tenderness, and discharge)	None	Mild signs/ symptoms	Moderate signs/ symptoms	Severe signs/ symptoms	NA			
PID (if Gonorrhea or Chlamydia identified use that category)	None	NA	Cervicitis with mild uterine tenderness, ± mild cervical motion tenderness, no signs of peritoneal irritation	More diffuse tenderness, any signs of peritoneal irritation, or indications for hospitalization	Tubo-ovarian abscess or surgery required for resolution			

Addendum 1 Female Genital Grading Table for Use in Microbicide Studies

	INFECTIONS AND DYSPLASIA							
PARAMETER	GRADE 0 NORMAL	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE- THREATENING			
GENITOURINARY INF	ECTIONS							
Genital herpes	No lesions	Characteristic ulcerative or vesicular lesions confirmed by culture, PCR, Tzanck prep or other diagnostic test of lesion or previous type- specific serology, covering < 25% of vulva, vagina, or cervix	Same criteria as mild but covering 25-50% of vulvar, vaginal, or cervical surface	Same criteria as mild but covering > 50% of vulvar, vaginal, or cervical surface	Symptoms of significant systemic involvement, e.g., encephalitis, hepatitis			
Candida	Absence of symptoms regardless of candida test results	Positive culture, wet mount, or other laboratory test for yeast, with mild symptoms	Positive culture, wet mount, or other laboratory test for yeast, with moderate to severe symptoms	NA	NA			
Trichomonas	Negative	NA	Positive wet mount, culture, PCR or other licensed test, excluding pap smear, showing T. vaginalis, regardless of symptoms	NA	NA			
Bacterial Vaginosis (BV)	Negative	Asymptomatic BV diagnosed by Amsel criteria, wet mount, Gram stain, or licensed diagnostic test	Symptomatic confirmed by wet mount, Gram stain, or any licensed diagnostic test	NA	NA			

Addendum 1 Female Genital Grading Table for Use in Microbicide Studies

INFECTIONS AND DYSPLASIA							
PARAMETER	GRADE 0 NORMAL	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE- THREATENING		
Chlamydia	Negative	NA	Positive culture or other diagnostic test for Chlamydia, asymptomatic or with mild uterine or cervical motion tenderness (no signs of peritoneal irritation)	Positive test for Chlamydia with abdominal or uterine or adnexal tenderness on examination, with or without adnexal mass, diffuse tenderness, any signs of peritoneal irritation, or indications for hospitalization	Tubo-ovarian abscess or surgery required for resolution		
Gonorrhea	Negative	NA	Positive culture or other diagnostic test for Gonorrhea, asymptomatic or with mild uterine or cervical motion tenderness (no signs of peritoneal irritation)	Positive test for Gonorrhea with abdominal or uterine or adnexal tenderness on examination, with or without adnexal mass, diffuse tenderness, any signs of peritoneal irritation, or indications for hospitalization	Tubo-ovarian abscess or surgery required for resolution or disseminated gonococcal infection		
Urinary tract infection (by urinalysis and urine culture)	Negative	5-10 WBC/hpf on urinalysis with a negative culture per protocol definition (with or without symptoms)	> 10 WBC/hpf on urinalysis OR a positive culture per protocol definition (with or without symptoms)	Pyelonephritis	Sepsis (septicemia) due to urinary tract infection		

Addendum 1 Female Genital Grading Table for Use in Microbicide Studies

	INFECTIONS AND DYSPLASIA							
PARAMETER	GRADE 0 NORMAL	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE- THREATENING			
Syphilis	Negative treponemal or non- treponemal test or both positive with known treatment and stable titers (< 4 fold increase)	NA	Syphilis diagnosed by a positive treponemal test along with a positive non-treponemal test and no previous treatment or a fourfold rise in titer on the non-treponemal test after previous treatment regardless of symptoms or non-oral lesions positive by darkfield exam for treponemes	Criteria for Grade 2 Syphilis in the presence of neurologic symptoms or a positive CSF VDRL or FTA-ABS	NA			
GENITAL DYSPLASIA								
Condyloma (specify site: cervical, vaginal, vulvar, perianal)	None	Condylomata causing no or mild interference with daily function	Condylomata causing moderate interference with daily function	Condylomata causing severe interference with daily function, secondary infection, or hospitalization indicated	NA			
Intraepithelial Neoplasia by biopsy (VIN, CIN, VAIN)	None	Intraepithelial Neoplasia 1 (IN1)	Intraepithelial Neoplasia 2 (IN2)	Carcinoma in situ (CIS)	Invasive carcinoma			
Pap (use this category only if treatment performed without diagnostic testing, otherwise use biopsy category above)	nl PAP	ASCUS or LSIL	HSIL	Carcinoma in situ or Carcinoma	NA			

Addendum 1 Female Genital Grading Table for Use in Microbicide Studies

	UTERINE BLEEDING AND PREGNANCY COMPLICATIONS							
PARAMETER	GRADE 0 NORMAL	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE- THREATENING			
ABNORMAL UTERINE	BLEEDING UNREL	ATED TO PREGNA	ANCY					
Menorrhagia ² (prolonged and/or heavy menstrual bleeding)	Participant report of normal bleeding relative to her baseline	Increase from usual with no or minimal interference with usual social & functional activities (including sexual functioning)	Increase from usual with moderate interference with usual social & functional activities (including sexual)	Incapacitating or severe interference with usual social & functional activities (including sexual functioning), transfusion indicated	Life threatening hemorrhage with or without shock			
Metrorrhagia ² (intermenstrual or frequent bleeding)	None or any expected nonmenstrual bleeding	Increase from usual with no or minimal interference with usual social & functional activities (including sexual functioning)	Increase from usual with moderate interference with usual social & functional activities (including sexual)	Incapacitating or severe interference with usual social & functional activities (including sexual functioning), transfusion indicated	Life threatening hemorrhage with or without shock			
Unexplained infrequent bleeding (excludes expected absence of menses due to hormonal contraception or pregnancy/postpartum)	Participant report of normal or expected bleeding frequency	No menses for 1-3 months (missed menses)	No menses for > 3 months (oligomenorrhea/ amenorrhea)	NA	NA			
Postcoital bleeding	None	Occasional (< 25% of coital acts) OR Increase from usual with no or minimal interference with usual social functioning (including sexual functioning)	Frequent (25-75% of coital acts) OR Increase from usual with moderate interference with usual social functioning (including sexual)	Consistent (> 75% of coital acts) OR Incapacitating or severe interference with usual social functioning (including sexual functioning), transfusion indicated	Life threatening hemorrhage with or without shock			

² If both Menorrhagia and Metrorrhagia are present, a single adverse event should be reported as "Menometrorrhagia" and graded per the Menorrhagia grading scale.

Addendum 1 Female Genital Grading Table for Use in Microbicide Studies

	UTERINE BLEEDING AND PREGNANCY COMPLICATIONS							
PARAMETER	GRADE 0 NORMAL	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE- THREATENING			
COMPLICATIONS OF	PREGNANCY							
First trimester bleeding	None	Spotting or bleeding less than menses with continuation of pregnancy	Bleeding like menses or heavier with continuation of pregnancy	Spontaneous abortion, or profuse bleeding with dizziness or orthostatic hypotension, transfusion indicated	Spontaneous abortion with profuse bleeding and/or shock			
Postabortal endometritis/salpingitis	None	Low grade fever and uterine tenderness, resolved with oral antibiotics	Moderate symptoms, requiring ≤ 3 days of parenteral antibiotics	Severe symptoms requiring > 3 days of IV antibiotics or development of tubo-ovarian abscess	Ruptured TOA or diffuse peritonitis or severe uterine infection for which operative intervention indicated			
Postpartum hemorrhage	EBL < 500 cc for vaginal delivery or < 1000 cc after CS or reported as normal	EBL 500-1000 for vaginal delivery or 1000-1500 for CS or reported as slightly increased	EBL > 1000 for vaginal delivery or > 1500 for CS, with or without mild dizziness, no transfusion required	Hemorrhage at a level for which transfusion of 1-2 units of packed cells, but no other blood products indicated	Hemorrhage with shock or coagulopathy, for which transfusion of > 2 units of packed cells or any amount of other blood components is indicated			
Postpartum endometritis	None	Low grade fever and uterine tenderness, resolved with oral antibiotics	Moderate symptoms, treated by ≤ 3 days of parenteral antibiotics	Severe symptoms treated with > 3 days of IV antibiotics or addition of heparin	Severe infection or infection for which operative intervention is indicated			
Chorioamnionitis	None	Fever (38°C – 38.4°C or 100.4°F – 100.9°F) with two or more: FHR > 160 BPM, maternal HR > 120, uterine tenderness between contractions or purulent AF or preterm labor	Same as Grade 1 plus fever 38.5°C – 40°C or 101°F – 104°F	Criteria for Grade 2 plus fetal distress or fever > 40°C or 104°F	Criteria for Grade 3 plus either fetal demise or maternal symptoms of shock			

Addendum 1 Female Genital Grading Table for Use in Microbicide Studies

	UTERINE BLEEDING AND PREGNANCY COMPLICATIONS						
PARAMETER	GRADE 0 NORMAL	GRADE 1 MILD	GRADE 2 MODERATE	GRADE 3 SEVERE	GRADE 4 POTENTIALLY LIFE- THREATENING		
Episiotomy infection	None	Mild erythema, edema, and tenderness of wound	Fever > 38°C or 100.4°F with erythema, edema, and tenderness of wound	Fever with wound dehiscence or debridement required	Fever with signs of wound infection and shock or necrotizing fasciitis		
Second/third trimester bleeding	None	Bleeding less than menses	Bleeding like menses or greater, but not requiring intervention	Bleeding requiring delivery or other intervention, e.g., transfusion	Bleeding with fetal demise or coagulopathy		
Preterm rupture of membranes	None	NA	Preterm rupture with hospitalization but not resulting in delivery at less than 37 weeks' gestation	Delivery at 33-36 weeks' gestation or 1501-2500 grams birth weight	Delivery < 33 weeks' gestation or ≤ 1500 grams birth weight		
Preterm contractions	None	Preterm contractions which resolve without medical intervention	Preterm contractions with cervical change which result in medical intervention but not resulting in preterm delivery	Delivery at 33-36 weeks' gestation or 1501-2500 grams birth weight	Delivery < 33 weeks' gestation or ≤ 1500 grams birth weight		
Poor fetal growth	At or above 10th percentile	Fetal growth < 10th percentile but ≥ 3rd percentile for gestational age by ultrasound or newborn exam	NA	Fetal growth < 3rd percentile for gestational age by ultrasound or newborn exam	NA		

Section Appendix 11-3 MTN 004 Protocol Safety Review Team Plan

Roles and Responsibilities of the PSRT

Per the MTN 004 protocol, the roles and responsibilities of the MTN 004 Protocol Safety Review Team (PSRT) are to:

- 1. Conduct regular reviews of standardized study safety data reports (protocol Section 8). Once the SDMC begins receiving study follow-up safety data, the PSRT will convene via regularly scheduled conference calls every two weeks. The frequency of calls may be adjusted throughout the period of study implementation as agreed upon by the PSRT. Should any safety concerns be identified by the PSRT, these will be referred to the MTN Study Monitoring Committee (SMC) and/or DAIDS Vaccine and Prevention Data and Safety Monitoring Board (DSMB), as appropriate.
- 2. Respond to Investigator queries regarding temporary or permanent discontinuation of product use (protocol Section 9). The protocol specifies a limited number of situations in which study participants must discontinue product use; Investigators will implement these discontinuations in the absence of consultation with the PSRT. In other situations, however, discontinuation of product must be undertaken in consultation with the PSRT. These situations involve participants who:
 - (a) experience an AE that meets criteria for expedited reporting to DAIDS that is judged possibly related to product use;
 - (b) are unable or unwilling to comply with required study procedures; or
 - (c) otherwise might be put at undue risk to their safety and well-being by continuing product use.
- 3. Respond to Investigator queries regarding product resumption following occurrence of an AE judged probably or definitely related to study product that meets criteria for expedited reporting
- 4. Respond to Investigator queries regarding study eligibility and general AE management and reporting
- 5. Respond to Investigator requests for participant withdrawal from the study
- 6. Respond to Investigator requests for participant unblinding. There are no circumstances under which it is expected that unblinding will be necessary for the provision of medical treatment or to otherwise protect the safety of study participants. However, if an Investigator feels that specific product knowledge is necessary to protect participant safety, the Investigator may notify the PSRT to consider and rule upon the request.

PSRT Composition

The following individuals currently comprise the MTN 004 PSRT:

- Ian McGowan, Protocol Chair, PSRT Chair
- Kailazarid Gomez, MTN CORE Clinical Research Manager
- Nancy Connolly, MTN Protocol Safety Physician
- Katherine Bunge, MTN Protocol Safety Physician
- Ross Cranston, MTN Protocol Safety Physician
- Mala S Shah, MTN Protocol Specialist
- Missy Cianciola, MTN SDMC Project Manager
- Yevgeny Grigoriev, MTN SDMC Clinical Affairs Research Nurse
- Barbra Richardson, MTN SDMC Co-Principal Investigator
- Alain Kouda, DAIDS Clinical Operations Coordinator
- Jeanna Piper, DAIDS Medical Officer
- Bill Kapogiannis, NICHD Health Science Administrator
- Patrician Emmanuel, Investigator of Record, University of South Florida
- Irma Febo, Investigator of Record, University of Puerto Rico
- Beatrice Chen, Investigator of Record, University of Pittsburgh

Ideally all of the above-listed PSRT members will take part in routine PSRT conference calls. At a minimum, the DAIDS and NICHD Medical Officers and one MTN Safety Physician must take part in all calls. If these three members are not present, the call may be deferred until the next scheduled call time unless a PSRT member requests a more immediate call.

MTN CORE Clinical Research Managers, SDMC Project Managers, and SDMC Statistical Research Associates may attend PSRT calls as observers and/or discussants.

Routine Safety Data Summary Reports: Content, Format and Frequency

The SDMC will generate and distribute standard safety data reports to the PSRT via e-mail one week prior to each scheduled PSRT conference call. Tabulations will be generated for all study participants combined (i.e., across all treatment groups) and will include:

- Listings of new AEs by body system (using MedDRA terms), severity, and relationship to study product
- A cumulative listing of all SAEs and EAEs reported to date
- A cumulative listing of all AEs reported to date as probably or definitely related to study product by body system and severity
- A cumulative listing of all grade 2, grade 3, and grade 4 AEs reported to date by body system and relationship to study product

During PSRT conference calls, the DAIDS Medical Officer or an MTN Protocol Safety Physician will summarize any additional EAE Forms received at the DAIDS Safety Office after the cut-off date for the SDMC data summary.

PSRT Communications

An email alias (mtnstopshiv.org) will be used to facilitate communication with the PSRT. All safety data summary reports from the SDMC will be distributed via this alias. A standard PSRT query form (below) will be used to elicit sufficient information to allow the PSRT to respond to each query. To ensure a timely PSRT response, one of the MTN Protocol Safety Physicians is responsible for providing a final response to the query or a request for more information from the study site (via email) within three business days after receipt of the query. All members of the PSRT are encouraged to review the information provided by the site and to offer their advice; however final determination rests with the PSRT Chair or Alternate Chair.

MTN 004 Protocol Safety Review Team Query Form, page 1 of 2 Instructions: Email completed form to rdc27@pitt.edu, kbunge@mail.magee.edu and

nancycsc@gmail.com.

<u>IMPORTANT</u>: Complete all required fields so the PSRT has all information needed to respond to your query.

Site: Completed by:		Query Date (dd-MMM-yy): Email address:		
PTID: Enrollment Date (d	d-MMM-yy):	Participant Age (in years):		
Reason for query: Product use consultation: Should use of study gel be temporarily discontinued (held)? Should use of study gel be permanently discontinued (held)? Should use of study gel be resumed? Request for consultation on AE management Request to withdraw participant from the study Request to unblind participant's gel assignment Other, specify:				
	completing this page	t on an adverse event (AE)?		
Primary AE of con	cern:			
AE onset date (dd-l	MMM-yy):	AE severity grade at onset:		
Relatedness to stud Definitely related Probably related Possibly related Probably not related Definitely not related	ted	Current study gel administration: No change On hold Permanently discontinued Not applicable		
Has this AE been r o ☐ Yes ☐ No	eported on a SCHARP AE	Log form?		
Has this AE been re Yes No	eported as an EAE?	Has this AE been assessed more than once? ☐ Yes ☐ No → skip to Comments on page 2		
Date of most recent	assessment (dd-MMM-yy):		
☐ Continuing, stabi☐ Continuing, impr	st recent assessment: lized (severity grade unchan roving → severity grade decreased on the severity grade increased on the s	reased to		

MTN 004 Protocol Safety Review Team Query Form, page 2 of 2

Comments: Provide additional details relevant to this query. If gel use has been held, include date of last reported gel application prior to the hold (per participant report).
last reported get application prior to the hold (per participant report).
End of Form for Site Staff. Email completed form to the MTN 004 MTN Protocol Safety Physicians rdc27@pitt.edu, kbunge@mail.magee.edu and nancycsc@gmail.com. If an email response is not
received from the PSRT within 3 business days, re-contact the MTN Protocol Safety Physicians
and/or the MTN CORE (kgomez@fhi.org, or llevy@fhi.org) for assistance.
FOR DODT LICE ONLY A DROWING DESPONSE TO OUTDAY LIEDE
FOR PSRT USE ONLY — PROVIDE RESPONSE TO QUERY HERE
PSRT Responding Member: PSRT Response Date (dd-MMM-yy):
Query Outcome: Approved
Not approved
☐ Not applicable
PSRT Comments:

Section Appendix 11-4 MTN 004 SERIOUS ADVERSE EVENT (SAE) REPORT FORM

Protocol Number	Centre	Country	Subject Number			

Date of Report:	/	' /	'
	(DD)	(MMM)	(YYYY)

1. TYPE OF REPORT	2. DEMOGRAPHICS			
□ Initial Report	PTID:			
□ Follow-Up Report (#)	Date of Birth://			
☐ Final Report	(DD) (MMM) (YYYY)			
	RACE: Please circle one			
	American Indian or Alaskan Native			
	Asian			
	Black or African American			
	Native Hawaiian or Other Pacific Islander			
	White			
	Mixed			
	Other-Specify			
3. SERIOUS ADVERSE EVENT	4. START DATE of EVENT			
Please provide diagnosis (or signs or symptoms if diagnosis not known)	// TIME::hr			
	(DD) (MMM) (YYYY)			
	STOP DATE of EVENT			
	/ TIME::hr			
	(DD) (MMM) (YYYY)			
	("" if ongoing)			

Section Appendix 11-4 MTN 004 SERIOUS ADVERSE EVENT (SAE) REPORT FORM

Protocol Number	Centre	Country	Subject Number			

5. CRITERIA FOR SAE or REPORT	6. SEVERITY		
Please specify the criteria for considering this as a SAE, and	□ Mild/ Grade 1		
mark all that apply	□ Moderate/ Grade 2		
□ Resulted in Death	□ Severe/ Grade 3		
Was an autopsy performed ☐ Yes ☐ No	☐ Life Threatening/ Grade 4		
If Yes, please provide report			
□ Life Threatening Event			
□ Resulted in Persistent of Significant Disability/Incapacity			
□ Required or Prolonged Hospitalisation			
Admission Date / /			
(DD) (MMM) (YYYY)			
Discharge Date / /			
(DD) (MMM) (YYYY)			
□ Congenital Anomaly/Birth Defect	7. OUTCOME		
□ Medically Significant	□ Recovered		
□ Pregnancy	□ Recovered with sequelae		
□ Cancer (IND studies only)	☐ Ongoing at study conclusion		
□ Other (specify)	□ Died		
	□ Unknown		
	A DELATIONELID OF EVENT TO STUDY PRODUCT		
	8. RELATIONSHIP OF EVENT TO STUDY PRODUCT		
	□ Definitely		
	□ Probably		
	□ Possibly		
	□ Probably not		
	□ Not Related		

Section Appendix 11-4 MTN 004

SERIOUS ADVERSE EVENT (SAE) REPORT FORM

Protocol Number	Centre	Country	Subject Number			

9. ACTION TAKEN WITH STU	JDY PRODUCT(3)		
□ None				
☐ Study Product(s) administrat	ion delayed			
☐ Study Product(s) administrat	ion stopped			
□ Not Applicable				
10. REOCCURENCE OF EVE ADMINISTRATION STUDY		ГНЕК	11. WAS THE SUBJECT DUE TO THIS EVENT?	WITHDRAWN FROM STUDY
□ No Recurrence of Event			□ Yes	
□ Event Reappeared			□ No	
☐ Unknown at time report				
□ Not Applicable				
12. STUDY PRODUCT	(S) INFORMATIO	N		
Study Product Name Study Product		Dose Form & Strength	Route/Site	Start Date
(DD/MMM/YYYY)				
/				
				/
/				
				/
Indication:				_
Blinding Broken:	□ Yes			
	□ No			
	□ Not Applica	ble		

13. CONCOMITANT MEDICATIONS. A photocopy of the Concomitant Medications CRF page may be attached

Section Appendix 11-4 MTN 004

Protocol Number	Centre	Country	Subject Number		

Drug Name	Strength	Dose	Frequency	Route	Reason for Use	Start Date (DD/MMM/YYYY)	Stop Date (DD/MMM/YYYY) or Continuing
Example: Panadol	500mg	2 tabs	4 hourly	Oral	Headache	01/NOV/2004	01/NOV/2004

14. MEDICATIONS USED TO TREAT SAE

Drug Name	Strength	Dose	Frequency	Route	Reason for Use	Start Date (DD/MMM/YYYY)	Stop Date (DD/MMM/YYYY) or Continuing
Example: Panadol	500mg	2 tabs	4 hourly	Oral	Headache	01/NOV/2004	01/NOV/2004

	•		•					_
15. RELEVANT	MEDICAL H	ISTORY. F	Please provide o	details of pa	st and/or current	medical history that	may have contribut	ted to
this SAE (including	allergies)							
46 DECCRIPTION	N OF EVEN	IT Discount	_		ata Cara a COAF in			.1.1.
treatment etc.	ON OF EVER	N I . Please p	provide brief na	rrative desc	ription of SAE, inc	cluding relevant diag	gnostic findings, lab	data,
ireaiment etc.								

Section Appendix 11-4 MTN 004

SERIOUS ADVERSE EVENT (SAE) REPORT FORM

Protocol Number	Centre	Country	Subject Number				

17. SIGNATURES.	
Investigators Name:	Date:
Investigators Signature:	(DD/MMM/YYYY)
Starpharma Clinical Representative Name:	
Date:	
Starpharma Clinical Representative Signature:	(DD/MMM/YYYY):
18. STARPHARMA REVIEW	
COMMENTS:	
19. MEDICAL MONITOR EVENT CLASSIFICATION:	
a) Is the event RELATED to the study product use?	
□Yes	
□No	
If no, please	
comment:	
b) Is the event UNEXPECTED?	
yes	
□ No	
If unexpected, which criteria is the event to be identified in the Inve	petigator Prochura by?

Section Appendix 11-4 MTN 004 SERIOUS ADVERSE EVENT (SAE) REPORT FORM

Protocol Number	Centre	Country	Subject Number				

□ Nature								
□ Severity	,							
□ Frequer	псу							
20. REGULATORY REPORTING REQUIREMENTS:								
Is the eve	nt reporta	able to Loc	al and World	dwide Regulatory Authorities (Related to Study Product)?	□ No			
Rep	ortable d	lue to Une	xpected and	Life Threatening (Report within 7 days) ☐ Yes	□ No			
Rep	ortable d	lue to Une	xpected and	Non Life Threatening (Report within 15 days) ☐ Yes	□No			
Regulator	y Reports	Sent To:						
Australia Sent;			Sent By:	Date				
		□ No		Date				
				Date				
21. MEDICAL MONITOR SIGNATURE: Medical Monitor Name: Date and Time: (00:00hr) Medical Monitor Signature:								

and submit to Starpharma Complete the SCHARP AE Log form only. DO NOT complete the SAE or EAE forms. Complete the SAE form within 24 hours (one business day). DAIDS (RCC) and Starpharma within 24 hours (one business day). Complete the EAE form and submit to BOTH meet the criteria Does the AE for an SAE? N N Does the AE meet the criteria for an EAE?

Section Appendix 11-5 MTN 004 EAE/SAE Reporting Requirements

Section Appendix 11-6 MTN004 Safety Phone, Expedited Review, and Product Hold Procedures

Clinical Affairs Safety Associates (CASAs) may be alerted to events meeting expedited AE review/study product hold criteria, via a phone call from a study site, email communication from a study site, and/or pause rule alert/report produced by SCHARP reports programmers.

For each event, regardless of the notification method, CASAs are responsible for verifying the event, determining whether this event meets the expedited AE review/study product hold criteria, and taking appropriate action.

Resources for Event Review

The following resources will be used when reviewing the event:

- Study Protocol
- Female Genital Toxicity Table and DAIDS Toxicity Table
- DataFax
- Clinical information provided by the site

CASA Actions upon Alert Notification

When alerted of an event, the CASA undertakes the following action steps:

Verify the event

Confirm the severity grade—verify that the grading is appropriately described based on the:

Female Genital Grading Table for clinical events and/or

DAIDS Toxicity Table for laboratory events.

In all cases, the CASA must check the description, value and calculation for accurate grading.

Confirm the relatedness of the event to the study product - Regardless of which kind of event occurs, the CASA checks the AE plate for relatedness or obtains this information from the site. The CASA must also verify that the site PI is involved in determining relatedness.

Request further information from the site as needed.

Determine that the event meets AE review/study product hold criteria

Determine if the event meets expedited AE review/study product hold criteria, and which rule it meets.

For an event that DOES meet expedited AE review/study product hold criteria

Request that study site staff send an e-mail summary of the event to SCHARP Clinical Affairs (CA).

Request that study site staff promptly fax supporting case report forms (CRFs) to SCHARP DataFax at 206.667. 4805.

Section Appendix 11-6 MTN004 Safety Phone, Expedited Review, and Product Hold Procedures

For MTN004 the following CRFs may be faxed for supporting documentation:

- Safety Lab Results (SL-1 and SL-2)
- Pelvic Laboratory Results (PLR-1)
- Follow-up Genital Symptoms (FGS-1)
- Follow-up Pelvic Exam (FPE-1 through FPE-3)
- AE Logs (AE-1)
- Genital Bleeding Assessment (GBA-1 through GBA-3)

Request that SCHARP Data Operations staff promptly validate the new plates in the database (e-mail sc.dcsups.org).

Prepare a safety history, using the DataFax Safety History Tool.

For an event that does NOT meet expedited AE review/study product hold criteria

Communicate the event to MTN Safety Physicians and Clinical Affairs staff via sc.clin.aff@scharp.org describing the event and indicating why the event does not meet the pause rules.

Determine that the event requires a study product hold

If the SCHARP Safety Associate determines that the criteria for an accrual pause and study-wide product hold are met (see above for criteria), the SCHARP Safety Associate contacts one of the MTN Safety Physicians by telephone as soon as possible to convey the details of the safety events.

Contacting the PSRT

If the Safety Physician confirms that the events may warrant an accrual pause and product hold (regardless of whether or not they meet the protocol criteria), the SCHARP Safety Associate notifies the DAIDS Medical Officer, NICHD Medical Officer, and Protocol Chair (by phone if possible).

Expedited PSRT Review

The SCHARP Safety Associate convenes an expedited PSRT review by conference call so that the PSRT can review all relevant safety information. At minimum, the PSRT quorum, consisting of the DAIDS Medical Officer, NICHD Medical Officer, and an MTN Safety Physician, are required to convene the PSRT review call. Per protocol, the PSRT makes the final decision on whether or not to pause study accrual and hold study product for all participants in the study.

Notify Clinical Sites of the Study Product hold

If the PSRT decides to pause study accrual and hold study product for all participants, the CASA notifies FHI via telephone that a study product hold has been initiated. FHI is responsible for promptly notifying the site PI

Section Appendix 11-6 MTN004 Safety Phone, Expedited Review, and Product Hold Procedures

or designee at all sites. FHI will send out an official study notification email to the entire protocol team.

Contacting the Participants

Staff at each site is responsible for contacting each participant currently using study product at their site. They will instruct these participants to immediately and permanently discontinue study product use and return to the study site as soon as possible to return all unused study product in their possession. Site staff must make every effort to contact each participant personally in order to confirm that she has received and understood instructions to permanently discontinue study product use. Site staff will continue to complete regular study visits for participants in active follow-up. However, sites must immediately discontinue study screening and enrollment activities.

Document the outcome of the expedited AE review/study product hold

Promptly document and disseminate the outcome of the expedited AE review/study product hold.

AE Review

No communication with the site is required if the PSRT's decision is to carry on with the trial with no modifications to the protocol.

If the PSRT's decision is to initiate a study product hold, refer to information above for specific activities

Study Product Hold

FHI sends an e-mail regarding the outcome of the PSRT discussion to all those who received notification of the pause. This e-mail will include further information as to the continuation of the study.