CRF Completion Guidelines

IDCRC DMID 21-0004 (MOMI-Vax)

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CRF Completion Guidelines

Protocol Name:	Observational, Prospective Cohort Study of the Immunogenicity and Safety of SARS-CoV-2 Vaccines Administered during Pregnancy or Postpartum and Evaluation of Antibody Transfer and Durability in Infants
Protocol Number:	IDCRC DMID 21-0004
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CRF Completion Guidelines

The following instructions are study-specific data completion guidelines intended to assist site staff when completing electronic case report forms (eCRFs) and paper case report forms (CRFs). Detailed guidance on general data collection, entry, navigation, and general use of Medidata Rave is provided in the Medidata Rave Electronic Data Capture (EDC) Training Manual, which is found on the IDCRC DMID 21-0004 Atlas web page:

https://atlas.scharp.org/cpas/project/IDCRC/DMID%2021-0004/begin.view?

General Guidelines

- The Participant ID is generated by Rave EDC as a 9-digit field, starting with the 3-digit site number followed by a randomly assigned 5-digit participant number, and 1-digit check number.
- All data entered in Rave must match the data on any source documents/paper CRFs.
- Complete all required data fields. Ensure that all entries are in English and are accurate, consistent, complete, and medically logical.
- If “Other” is chosen as a response, further details must be provided by responding to the “If “Other”, specify” field.
- Text box fields have character limits. Text exceeding the limit will not be saved and a “Non-conformant” icon will appear.
- Most date fields require a complete date and must be entered as Day Month Year (dd MMM yyyy) (e.g., 01 NOV 2020). Exceptions are detailed in specific form sections where applicable.
    - Visit dates should be in the order allowed by the protocol.
- Drop-down menus are available for many fields. Use these menus, when available, to select the appropriate response.
- Avoid using abbreviations, symbols or special characters.
- Avoid hitting the return or enter key in text fields, as it may prematurely save the form.
- Log forms allow you to make multiple entries over the course of the study. All entries may be viewed at the same time in “Complete View”. Individual entries may be viewed in “Portrait View” for ease of entry. The following are log forms or have the log format within the form for this study:
    - Adverse Event
    - Baseline Medical History
    - Concomitant Medications
    - Inclusion/Exclusion Criteria
    - Medical Event
    - Pregnancy Outcome
    - Prenatal Testing
    - Protocol Deviations
    - SARS-CoV-2 Test Results
    - SARS-CoV-2 Vaccination

- Specimen Collection – Breast Milk
- Ultrasound Results

- To correct/update data fields, click the "pencil" icon next to a field, correct/update the value and give the reason for the change, if applicable. Save the form to capture changes made.
- If an incorrect data entry is made, a system query will fire. Correct the error and save the form.
  - System generated queries with no query response will automatically close with a form correction.
  - System generated queries with a query response will need to be closed by the data management team.
- All actions performed on a data field are tracked in the audit trail. All data modifications can be viewed in the field specific audit trail.
- The Investigator of Record (IoR) will electronically sign all forms after the participant's data have been reviewed. After the signature is applied, no further changes or additions to the forms are expected.
  - The SCHARP Clinical Data Manager will provide direction for when the Investigator should perform the final review and sign the forms.
  - Any modifications that are made to forms after the IoR has signed off will remove the signature. Once the data has been reviewed, the signature will need to be applied again.

Add Event

- The Add Event drop-down menu can add select forms and folders to a participant's casebook.
- To add a form or folder to a participant's casebook: navigate to the subject-level page, select the event from the Add Event drop-down menu, then click the "Add" button.
- For IDCRC DMID 21-0004, the drop-down menu will have the following options:
  - **Interim Visit**
    - By selecting "Interim Visit" from the Add Event drop-down menu, an Interim Visit folder will appear in the participant's casebook.
    - Open the Interim Visit folder to access the Interim Visit form. On the Interim Visit form, select the forms that are completed at the interim visit. The selected forms will then load within the folder.
  - **Physical Exam – Enrollment (V1) Mother**
    - This form is only applicable to Group 1 Pregnant Participants or Group 5 Pregnant Participants Receiving Additional Vaccine(s)
    - By selecting "Physical Exam – Enrollment (V1) Mother" from the Add Event drop-down menu, a Physical Exam form will appear in the existing V1.0 – Screening/Enrollment Mother folder.
    - Open the V1.0 – Screening/Enrollment Mother folder to access the Physical Exam form.
  - **Physical Exam – Enrollment (V101) Mother**
    - This form is only applicable to Group 2 Postpartum Participants.

- By selecting “Physical Exam – Enrollment (V101) Mother” from the Add Event drop-down menu, a Physical Exam form will appear in the existing V101.0 – Screening/Enrollment Mother folder.
- Open the V101.0 – Screening/Enrollment Mother folder to access the Physical Exam form.

- **SARS-CoV-2 Vaccination – Enrollment (V101) Infant**
  - This form is only applicable to Group 4 Infants of Postpartum Participants
  - By selecting “SARS-CoV-2 Vaccination – Enrollment (V101) Infant” from the Add Event drop-down menu, a SARS-CoV-2 form will appear in the existing V101.0 – Screening/Enrollment Infant folder.
  - Open the V101.0 – Screening/Enrollment Infant folder to access the SARS-CoV-2 Vaccination form.

- Please see form-specific instructions for further guidance.

Loading Forms in Visit Folders

- Forms are added to visit folders in a participant’s casebook based on specific form responses. Below are a few key examples.
  - **Example 1**: Follow-up Visit Summary form
    - If the question “Did the participant complete this visit (or required visit procedures)?” is marked “No, visit missed”, the Missed Visit form will be added to the visit folder and the required forms for that visit will not appear in the visit folder.
  - **Example 2**: Follow-up Visit Summary form
    - To add a form to the visit folder, mark the appropriate check box under the question “Were any additional study procedures or forms completed?”. Some forms will not be added to the visit folders based on the Schedule of Forms of the specific participant (i.e., participant’s group number).
  - **Example 3**: Interim Visit form
    - To add a form to the interim visit folder, mark the appropriate check box under the question “What study procedures were completed at this visit?”. Please ensure the correct form is marked based on the specific participant (i.e., mother or infant) and their procedures.
  - **Example 4**: SARS-CoV-2 Vaccination form
    - To add an additional SARS-CoV-2 Vaccination form to the visit folder, mark the check box next to “Mark if a new SARS-CoV-2 Vaccination form is needed to record another vaccination for this visit.”

Loading Folders in Participant Casebook

- Medidata Rave will add folders to a participant’s casebook based on how certain forms are completed. See Tables 1-4 for actions required to add folders to a participant’s casebook.

Table 1. Folder Dynamics for Group 1 Pregnant Participants

Folder	Action Required to Add Folder
Participant	Save Participant Identifier form.

V1.0 – Screening/Enrollment Ongoing Logs	Select “Group 1 – pregnant participant” for “Participant’s group” on the Participant Type form in Participant folder.
V2.0 to V7.0 Discontinuations	Select “Eligible and enrolled” for “Eligibility status” on the Inclusion/Exclusion Criteria form in V1.0 folder.

Table 2. Folder Dynamics for Group 2 Postpartum Participants

Folder	Action Required to Add Folder
Participant	Save Participant Identifier form.
V101.0 – Screening/Enrollment Ongoing Logs	Select “Group 2 – post-partum participant” for “Participant’s group” on the Participant Type form in Participant folder.
V102.0 to V105.0 Discontinuations	Select “Eligible and enrolled” for “Eligibility status” on the Inclusion/Exclusion Criteria form in V101.0 folder.

Table 3. Folder Dynamics for Group 3 Infants of Group 1

Folder	Action Required to Add Folder
Participant	Save Participant Identifier form.
V3.0 – Delivery Ongoing Logs	Select “Group 3 – infant to group 1 mother” for “Participant’s group” on the Participant Type form in Participant folder.
V2.0 to V7.0 Discontinuations	Select “Yes” for “Did the infant enroll?” on the Infant Inclusion/Exclusion form in V3.0 folder.

Table 4. Folder Dynamics for Group 4 Infants of Group 2

Folder	Action Required to Add Folder
Participant	Save Participant Identifier form.
V101.0 – Screening/Enrollment Ongoing Logs	Select “Group 4 – infant to group 2 mother” for “Participant’s group” on the Participant Type form in Participant folder.
V102.0 to V105.0 Discontinuations	Select “Yes” for “Did the infant enroll?” on the Infant Inclusion/Exclusion form in V101.0 folder.

Table 5. Folder Dynamics for Group 5 Pregnant Participants Receiving Additional Vaccine(s)

Folder	Action Required to Add Folder
Participant	Save Participant Identifier form.
V1.0 – Screening/Enrollment Ongoing Logs	Select "Group 5 – pregnant participant receiving additional vaccine(s)" for "Participant's group" on the Participant Type form in Participant folder.
V2.0 to V7.0 Discontinuations	Select "Eligible and enrolled" for "Eligibility status" on the Inclusion/Exclusion Criteria form in V1.0 folder.

Table 6. Folder Dynamics for Group 6 Infants of Group 5

Folder	Action Required to Add Folder
Participant	Save Participant Identifier form.
V3.0 – Delivery Ongoing Logs	Select "Group 6 – infant to group 5 mother" for "Participant's group" on the Participant Type form in Participant folder.
V2.0 to V7.0 Discontinuations	Select "Yes" for "Did the infant enroll?" on the Infant Inclusion/Exclusion form in V3.0 folder.

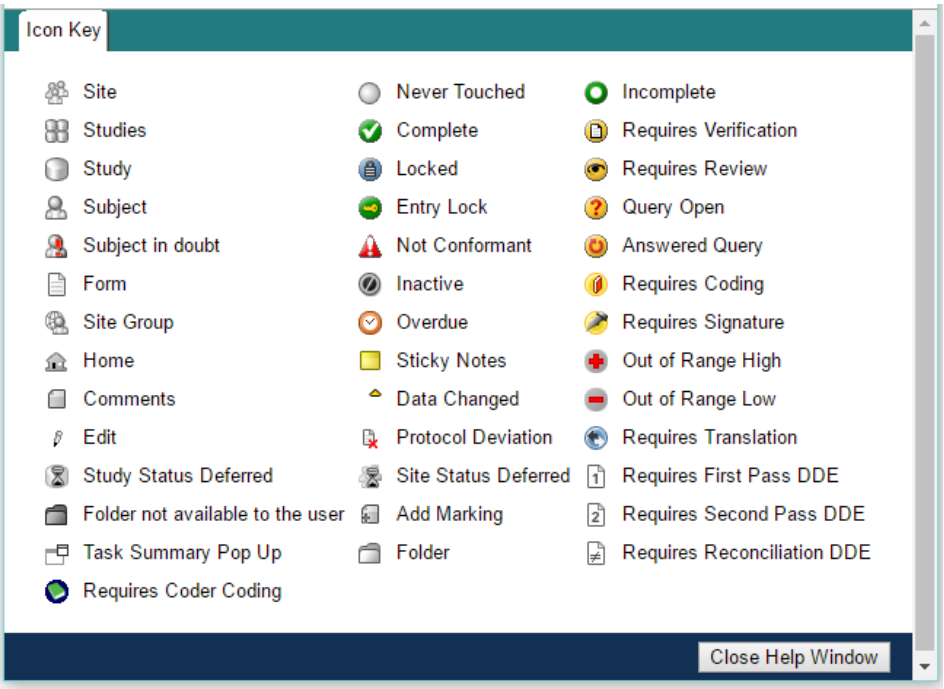
Dynamic Search Lists

- Some forms have data fields with dynamic drop-down lists of available options. Options are populated by corresponding log form entries.
- Dynamic drop-down lists will be blank until entries are made and saved in the corresponding log form.
- Your selection in the dynamic search list can be deleted if entered in error.
- Changing the original log data or inactivating a log form entry that has been selected for a dynamic search list field will make that field non-conformant. To resolve the non-conformant data, make a new selection in the dynamic search list.
- For Example:
    - An AE of '*Bruising*' started on 05 DEC 2020 is reported on the Adverse Events log form.
    - A medication was used for this AE and is entered on the Concomitant Medications form.
    - The applicable AE is linked to this medication by selecting it from the dynamic search list on the Concomitant Medications log entry.
    - The start date for AE *'Bruising'* is corrected to 06 DEC 2020 on the Adverse Events log form.
    - The selection from the dynamic search list on the Concomitant Medications log entry becomes non-conformant.
    - Re-select the AE '*Bruising'* from the dynamic search list with the corrected start date to resolve the non-conformant data.

Icon Key

A link to an Icon Key is available on the subject-level page and at the bottom of each eCRF. The key contains pictures and descriptions of the icons used in Rave. Below is a screen shot of the Icon Key.

Figure 1. Icon Key

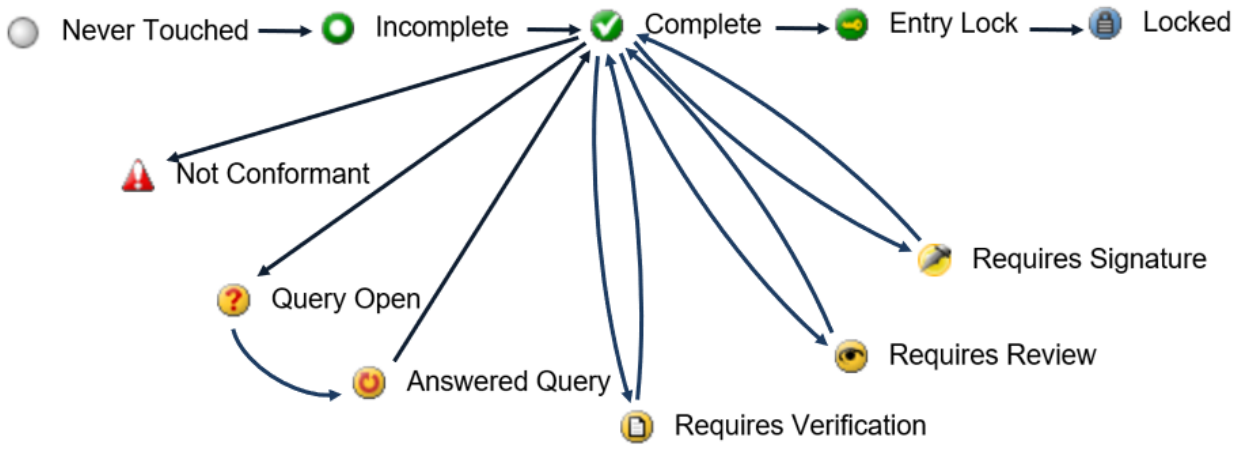


Icon Progression

The life cycle of participants, folders, forms, and fields follows a logical progression starting with “Never Touched” and moving toward “Complete” and “Locked”. Icons are used throughout Rave to show status.

The following figure illustrates the status represented by each icon and the progression of icons through the life cycle.

Figure 2. Icon Progression



Task Summary

The Task Summary displays all pending tasks for a study. At the site level, the Task Summary displays the participants with outstanding tasks that need site review (see Figure 3). For example, click on "Open Queries" to expand the list of participants with open queries (see Figure 4). Click on a PTID to open the participant's casebook.

Figure 3. Site-Level Task Summary

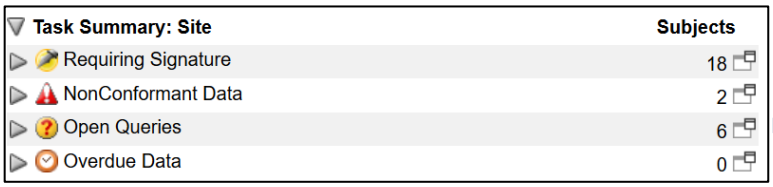
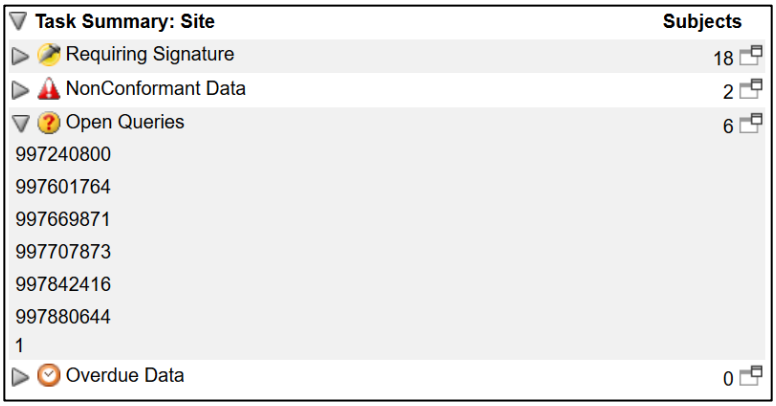
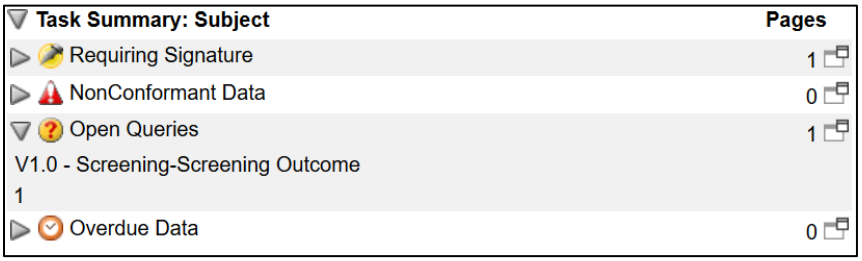


Figure 4. Site-Level Task Summary



At the subject level, the Task Summary displays the forms that need site review. In Figure 5 below, there is one open query for this participant on the Screening Outcome form at V1.0 – Screening. Click on this form in the expanded task summary view to navigate to the open query.

Figure 5. Subject-Level Task Summary



General Guidelines – Paper CRF Completion

CRF PDFs are generated from Rave and posted on the IDCRC DMID 21-0004 Atlas web page. When completing a CRF, refer to form-specific instructions in sections below.

- Based on Good Clinical Practices (GCPs), refer to the following guidelines to complete paper CRFs:
  - Use a black or dark blue medium ballpoint pen. Do not use any other type of writing tool.
  - Print all data and comments legibly by hand. Do not use cursive/script handwriting.
  - Record data on the front side of the paper only.
  - If the spaces/lines provided for a response are not large enough, continue in another blank area of the paper CRF.
  - Mark only one answer unless instructions state to mark or select all that apply.
  - A response is required for every data field unless skip instructions are provided.
  - Do not use correction fluid ("White-Out") or correction tape on paper CRFs.
  - Many items on CRFs have a box or series of boxes for recording a response. Mark the box clearly with an **X**. Do not fill in the box with shading or mark it with a check mark, slash or other character.

Correct: ☒

Incorrect: ■ ☐ ☒ ☑ ☑

Recording Dates – Rave Form and/or Paper CRF

Dates are entered using the "dd MMM yyyy" format, where "dd" represents the two-digit day, "MMM" represents the three-letter abbreviation of the month (in capital letters on paper CRFs), and "yyyy" represents the four digits of the year.

Month abbreviations are shown below. In Rave EDC, these abbreviations are in a drop-down list in the month field.

Month	Abbreviation	Month	Abbreviation
January	JAN	July	JUL
February	FEB	August	AUG
March	MAR	September	SEP
April	APR	October	OCT
May	MAY	November	NOV
June	JUN	December	DEC

For example, record September 20, 2016 as: 20 Sep 2016

Recording Time - Rave Form and/or Paper CRF

Time is recorded using the **24-hour clock** (00:00-23:59), in which hours are designated from 0–23. Midnight is recorded as 00:00, not 24:00.

The following chart shows equivalencies between the 12- and 24-hour clocks:

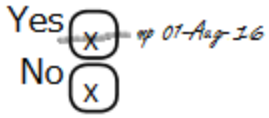
12-hour clock (a.m.)	24-hour clock	12-hour clock (p.m.)	24-hour clock
Midnight	00:00	Noon	12:00
1:00 a.m.	01:00	1:00 p.m.	13:00
2:00 a.m.	02:00	2:00 p.m.	14:00
3:00 a.m.	03:00	3:00 p.m.	15:00
4:00 a.m.	04:00	4:00 p.m.	16:00
5:00 a.m.	05:00	5:00 p.m.	17:00
6:00 a.m.	06:00	6:00 p.m.	18:00
7:00 a.m.	07:00	7:00 p.m.	19:00
8:00 a.m.	08:00	8:00 p.m.	20:00
9:00 a.m.	09:00	9:00 p.m.	21:00
10:00 a.m.	10:00	10:00 p.m.	22:00
11:00 a.m.	11:00	11:00 p.m.	23:00

For example, record 2:25 p.m. as: 14 : 25

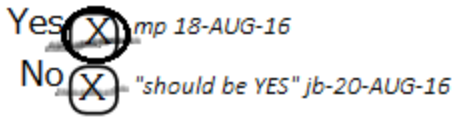
Data Corrections and Additions - Rave Form and/or Paper CRF

- Data fields may need to be updated or corrected, such as in response to a query or after site review.
- If the source document is non-CRF in nature (i.e., lab report), it is sufficient to make data updates in the study database itself. If a paper CRF was completed, make changes to the paper CRF first and then enter the updated data into Rave.
- Use the standards below when changing, clarifying, or amending data on paper CRFs:
    - Draw a single horizontal line through the incorrect entry. Do not obscure the entry or make it unreadable with multiple cross-outs.
    - Place the correct or clarified answer near the previous response.
    - If an **X** is marked in the wrong response box, correct it by doing the following:
        - draw a single horizontal line through the incorrectly marked box
        - mark the correct box

- initial and date the correction as shown below:



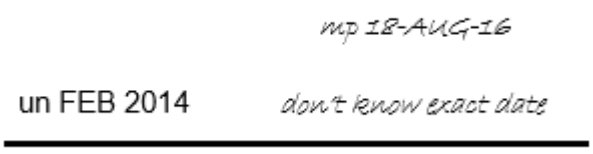
  - If the correct answer has previously been crossed out, do the following:
    - circle the correct response
    - write an explanation in the white space near the response
    - initial and date all corrections as shown below:



- Use the standards below when changing, clarifying, or amending data in Rave:
  - Data previously submitted in an eCRF data field can be updated and resubmitted unless the field is locked.
  - To edit a data field, click on the pencil icon to the right of the field.
  - To edit all data fields on a form, click on the pencil icon at the top right corner of the form. **This is the best method to use if multiple fields need to be edited.**
  - Enter the updated data.
  - Select a reason for the data change from the dropdown menu.
  - Click “Save” at the bottom of the form to save the changes.
  - Otherwise, click “Cancel” to reset the form with the last saved data.
  - Updated data fields will be marked with a delta icon:

Missing and Unknown Data - Rave Form and/or Paper CRF

- Complete dates are required for most date fields unless specified in form-specific instructions below.
- On paper CRFs, if a date is unknown, unavailable, or if the participant refuses to answer, draw a single horizontal line through the applicable question and initial and date. It is helpful to write “don’t know,” “refuses to answer,” “UNK” (unknown), “N/A” (not applicable), or “REF” (refused) near the fields.
  - For example, when recording a date, if the exact day is not known, write “un” to designate the “dd” (or date) and write “don’t know” next to the response, as shown below.



- Initials and date are required for any data that are refused, missing, unknown, or not applicable, regardless of whether they are marked as such during the initial form completion, or as an update to the form.

- In Rave, where the data are missing or unknown, enter “UN” for the day and/or select ‘UNK’ from the drop-down list for the month.

Form-Specific Instructions

Adverse Event Y/N

Participant Type: Mother and Infant

Purpose:
This form documents if an adverse event **in association with** study procedures was experienced by the participant during the study. This form is used to trigger the Adverse Event log.

General Instructions:
This form is in the "Ongoing Logs" folder and is only completed once, at the time the first adverse event is reported or at the end of the study if no adverse events are reported.

Field-specific Instructions:

Field	Instructions
Has the participant experienced an adverse event in association with study procedures during the study?	• If "Yes" is selected, the **Adverse Event** log is added to the Ongoing Logs folder. • At the end of study participation, mark "No" if no adverse events have occurred.

Adverse Event

Participant Type: Mother and Infant

Purpose:
This form documents Adverse Events (AEs) **in association with** study procedures reported by the participant or clinically observed as defined by the protocol.

General Instructions:

- Complete a separate entry (e.g., a new log line) for each adverse event (AE).
- Add additional log lines by clicking "Add a new Log line".
- Whenever possible, report a diagnosis instead of listing a cluster of symptoms. If no diagnosis is identified, each symptom must be recorded as separate AE log entries as applicable. If a cluster of symptoms reported on separate AE Log pages is later attributed to a single diagnosis, change/update the earliest reported symptom page to the diagnosis.
- Inactivate log lines by clicking "Inactivate" and selecting the applicable row(s) that should be inactivated.
- Only list conditions that start on or after the enrollment date.
- Record increases in severity/frequency as new events with corresponding start/stop dates.
- Adverse Events should be reassessed and updated as applicable. For example, when an AE resolves, the status/outcome should be updated.

Field-specific Instructions:

Field	Instructions
Date AE reported to site	Record the date the site became aware of the AE. A complete date is required.

Field	Instructions
Adverse event (AE)	• Describe the AE using medical terminology. • Record a diagnosis and anatomical location if available. • Do not include text on the relationship to study procedure or timing of AE onset with regards to study procedure
Is this AE related to a study procedure (e.g., blood collection, breast milk collection)?	Mark the assessment of the relationship between the AE and the study procedure. • "Related" - reasonable possibility that the AE may be related to the study procedure. • "Not related" - not a reasonable possibility that the AE is related to the study procedure. • If the AE is judged to be "Related", specify which study procedure the AE is related to in the "Comments" field. • If the AE is judged to be "Not related", provide the clinical rationale or alternate etiology in the "Comments" field.
Onset date	At minimum, month and year are required. Record one of the following, as appropriate: • The date on which the participant reports first experiencing the AE (onset of first symptom if diagnosis has multiple associated symptoms). • If the AE is discovered during a study visit, record the date of the study visit.
At which visit was this adverse event first reported?	If reporting an AE for Group 1 Pregnant Participants, Group 3 Infants of Pregnant Participants, Group 5 Pregnant Participants Receiving Additional Vaccine(s), or Group 6 Infants of Group 5, select the appropriate visit (e.g., V1.0 to V7.0) from the dropdown list. If reporting an AE for Group 2 Postpartum Participants or Group 4 Infants of Postpartum Participants, select the appropriate visit (e.g., V101.0 to V105.0) from the dropdown list.
If "Interim visit", specify interim visit code	Record the applicable interim visit code. Refer to the Manual of Procedures for more information on visit codes.
Is the AE still ongoing?	Select "Yes" if the AE is continuing at the time it is first reported. If "Yes", skip to "Severity grade".
If "No", outcome date	At minimum, month and year are required. Record one of the following as appropriate: • The date on which the participant reports no longer experiencing the AE or associated symptoms. • The date of the study visit or specimen collection at which the change in status/outcome is first noted.

Field	Instructions
Severity grade	Record the severity grade using the most current version of the *Division of AIDS (DAIDS) Table for Grading the Severity of Adult and Pediatric Adverse Events* (including relevant appendices/addendums). • Grade 1 (Mild) • Grade 2 (Moderate) • Grade 3 (Severe) • Grade 4 (Potentially life-threatening) • Grade 5 (Death)

Action taken	Indicate all treatments administered for this AE, including treatments provided by a health care professional and participant self-treatment.
	• Do not indicate treatments that were clinically indicated or prescribed but not administered.
	
	Select 'None' or check all that apply.
	• ***Medication(s):***
	  ○ Select "Medication(s)" only if the participant reports taking the medication. Report the medication(s) on the Concomitant Medications Log form.
	• ***Therapeutic procedure/surgery:***
	  ○ If "Therapeutic procedure/surgery" is selected, then record applicable details in the "Comments" field at the bottom of the form.
	• ***Diagnostic procedure:***
	  ○ If "Diagnostic procedure" is selected, then record applicable details in the "Comments" field at the bottom of the form.
	• ***Other:***
	  ○ If "Other" is selected, then specify relevant details in the "If "Other", specify" field provided.

Field	Instructions

Status/Outcome	• ***Recovered/Resolved:*** AE is no longer present or returned to the pre-enrollment severity/frequency. If a participant is taking a medication to control an AE that arose during study participation, it is not considered resolved.
	• ***Recovering/Resolving:*** Participant is improving and the adverse event is resolving. For example, the event has improved to a lower severity grade or decreased in frequency.
	• ***Recovered/Resolved with sequelae:*** Participant has recovered from the AE, but with remaining effects or impairment.
	• ***Not recovered/Not resolved:*** The participant has not recovered and the AE is not resolved. For example, the AE is continuing at the same severity grade and frequency. Select this option whenever an AE is continuing at the time of participant termination from the study.
	• ***Fatal:*** Severity of this AE is Grade 5 (Death). Update any other AEs continuing at the time of death to "Not recovered/Not resolved."
	• ***Severity/Frequency increased:*** AE increases in severity or frequency after it has been reported on the AE Log:
	  ○ On the original AE log line, update the "Status/Outcome" field to "Severity/Frequency increased." Record the date of increase in the "Outcome date" field.
	  ○ Add a new log line to report the increase in severity or frequency. For this new AE, the "Onset date" will be the date that the severity or frequency increased.
	  ○ Note: Do not record decreases in severity as a new AE. Instead, update the "Status/Outcome" field on the original AE log line to "Recovering/Resolving."

If status or outcome is "Severity/Frequency increased", select adverse event	Choose the applicable AE log entry from the drop-down list. Note: The applicable AE must first be entered on the AE form in order to be visible in the drop-down list.
Is this a serious adverse event according to ICH/GCP or protocol guidelines?	• If "Yes", mark all the SAE criteria that apply. • If "No", skip to "Comments".
Comments	Comments are required for every AE. • Record pertinent details for relationship assessments. • Record pertinent clinical information. • If hospitalization occurs due to an AE, include hospitalization admission and discharge dates.

Baseline Medical History

Participant Type: Mother

Purpose:
This form is only applicable to mother participants. This form documents any baseline medical history conditions/events reported at the screening and enrollment visit or recalled by the participant during follow-up.

Do not use this form to document conditions/events that occur after screening and enrollment. For conditions/events that occur after screening and enrollment, document on the Medical Event form located in the Ongoing Logs folder.

General Instructions:

- This form is present within the Screening/Enrollment visit folder of the mother participant's casebook.
- This form is divided into two sections – Targeted Conditions and Baseline Medical History Log. If "Yes" for any targeted condition, record details on the Baseline Medical History Log section.
- Report clinically significant conditions/events up to enrollment, including but not limited to: history of hospitalizations, surgeries, allergies, history of conditions related to pregnancy, history of conditions related to respiratory illness, and acute conditions ongoing at enrollment. Also include any history of conditions related to mental illness, alcoholism, drug abuse, and chronic conditions (controlled or not controlled by medication).
    - Do not record a history of SARS-CoV-2 or COVID-19 diagnosis on the Baseline Medical History form. Instead, record on the SARS-CoV-2 or COVID-19 Diagnosis form.
- Record baseline medical history mentioned in other study forms, if applicable.
- Complete a separate entry (e.g., a new log line) for each medical history condition/event.
- Add additional log lines by clicking "Add a new Log line".
- If a participant recalls additional medical history conditions/events after enrollment, update the Baseline Medical History Log by adding a new log line.
- Inactivate log lines by clicking "Inactivate" and selecting the applicable row from the drop down that should be inactivated.
- Reactivate log lines by clicking "Reactivate" and selecting the applicable row from the drop down that should be reactivated.

Field-specific Instructions:

Field	Instructions
Date baseline medical history collected	Record the date the medical history condition/event was reported by the participant. A complete date is required.
Hypertension Asthma Cancer Heart disease Diabetes Chronic kidney disease Autoimmune disease or immunodeficiency Obesity Substance use	• For each listed condition, mark "Yes" or "No" to indicate if the participant has the condition. • If "Yes" for any targeted condition, record details on the Baseline Medical History Log section at the bottom of this form. • If "Yes" for any targeted condition and treatment/medication is taken for the condition, record any medication use, including insulin and any immunosuppressant medications on the **Concomitant Medications** form located in the Ongoing Logs folder.

Field	Instructions
Does the participant have a history of smoking cigarettes?	• Mark “Yes” or “No”. • If “Yes”, details are not required on the Baseline Medical History Log, unless deemed clinically significant.
Does the participant currently smoke cigarettes?	• Mark “Yes” or “No”. • If “Yes”, details are not required on the Baseline Medical History Log, unless deemed clinically significant.
Does the participant have any other medical history to report?	• If "Yes", update the Baseline Medical History Log below. • If “No”, ensure that any applicable targeted conditions (hypertension, asthma, cancer, heart disease, diabetes, chronic kidney disease, autoimmune disease or immunodeficiency, obesity, substance use) are reported in the Baseline Medical History Log. Otherwise, end of form.
Description of medical history condition/event	Whenever possible, provide a diagnosis instead of listing a cluster of symptoms. If no diagnosis is identified, each symptom must be recorded as a separate entry on the Baseline Medical History Log. • Do not record a history of SARS-CoV-2 or COVID-19 diagnosis on the **Baseline Medical History** form. Instead, record on the **SARS-CoV-2 or COVID-19 Diagnosis** form. Additional information on the frequency and duration of chronic condition outbreaks can also be provided within this description. If treatment/medication is taken for the condition, record any medication use on the **Concomitant Medications** form located in the Ongoing Logs folder.

Start date of medical history condition/event	• Record the date the medical condition was first diagnosed or the date the surgery/procedure was performed as applicable.
	• If the participant is unable to recall the exact date, obtain her best estimate. At a minimum, a year is required. If the date is within the same year as study enrollment, the month and year are both required.
	  • If the exact day is unknown, enter "UN" for the day field.
	  • If the exact month is unknown, select "UNK" for the month field.
	  • Example: UN-Jan-2020 or UN-UNK-2020.

Is the condition ongoing?	Select ‘Yes’ for chronic conditions, as well as any other conditions that are ongoing at screening and enrollment. During each follow-up visit, routinely follow-up on any and all ongoing conditions. If the condition resolves during follow-up, this item should not be updated. If this item is selected ‘Yes’, then this is the end of form and the “Date medical history condition/event ended/resolved” should be left blank.

Field	Instructions
Date medical history condition/event ended/resolved	A date is required if “Is the condition ongoing?” is “No”. At a minimum, a year is required. • If the exact day is unknown, enter "UN" for the day field. • If the exact month is unknown, select "UNK" for the month field. Record the date the medical condition was considered resolved. For surgeries/procedures, record the date the surgery/procedure was completed. If the condition resolves during the study, the Baseline Medical History form should not be updated with a resolution or end date for the medical condition.
Comments	Provide any pertinent details in this field, if applicable. A maximum of 200 characters are allowable.

Concomitant Medications Y/N

Participant Type: Mother and Infant

Purpose:
This form documents if any concomitant medications were reported by the participant during the study. This form is used to trigger the Concomitant Medications log.

General Instructions:
This form is in the “Ongoing Logs” folder and is only completed once, at the time the first concomitant medication is reported or at the end of the study if no concomitant medications are reported.

Field-specific Instructions:

Field	Instructions
Were any concomitant medications taken?	• If “Yes” is selected, the **Concomitant Medications** log is added to the Ongoing Logs folder. • At the end of study participation, mark “No” if no concomitant medications were reported.

Concomitant Medications

Participant Type: Mother and Infant

Purpose:
This form documents medication(s), other than the SARS-CoV-2 vaccine, that are used by the participant as outlined by the protocol.

General Instructions:
- Record the following medication(s):
  - Treatment/medications received for COVID-19 illness
  - Treatment/medications received for medical conditions listed in the Medical History form or Medical Event form

  - Treatment/medications/therapies received for any serious vaccine adverse event through approximately 28 days (+/- 14 days) after the last vaccination
  - Other vaccines received at the time of COVID-19 vaccination through approximately 28 days (+/- 14 days) after the last vaccination
  - New vaccines received during the study other than the COVID-19 vaccination (the COVID-19 vaccination is documented on the SARS-CoV-2 Vaccination form)
- Record routine immunizations/vaccinations from pediatric medical records in the infant's casebook.
- Record concomitant medications mentioned in other study forms, if applicable.
- Complete a separate entry (e.g., log line) for each reported concomitant medication.
- Add additional log lines by clicking "Add a new Log line".
- Inactivate log lines by clicking "Inactivate" and selecting the applicable row from the drop down that should be inactivated.
- Reactivate log lines by clicking "Reactivate" and selecting the applicable row from the drop down that should be reactivated.

Field-specific Instructions:

Field	Instructions
Medication name	Record the medication name as reported by the participant. For example, if the participant reports taking a trade name medication, report the trade name. If a trade name is not available or not reportable per national guidelines, record the generic name of the medication. A combination medication can be recorded as one entry using the generic name. If a combination medication does not have a generic name or the generic name is unknown, each active ingredient must be reported as a separate entry. • Do not record the SARS-CoV-2 vaccine on the **Concomitant Medications** form. Instead, record on the **SARS-CoV-2 Vaccination** form.
Indication	• Record the indication for each medication as initially prescribed or self-treated. • For health supplements, such as multivitamins, record "general health". • For preventive medications, record "prevention of [insert condition]" (e.g., for flu shot, record "prevention of influenza"). • For recreational drugs, record "recreation". • If a medication previously recorded for one indication is then taken for another, record this use as a new entry (with the new indication and new date started). • In most instances (excluding health supplements and/or prophylactic treatments), the indication should correspond to an item on the Baseline Medical History, Medical Event, and/or Adverse Event form(s).

Date started	• If the participant is unable to recall the exact date, obtain participant's best estimate. At a minimum, month and year is required.
	  ○ If the exact day is unknown, enter 'UN' for the day field.
	• For injections
	  ○ If it is a one-time injection (including contraception), record each injection as a separate entry, with the same date used for date started and stopped.
	  ○ If it is a series of injections, record the date of the first injection as date started and the date of the last injection as the date stopped.
	• For oral contraceptive birth control pills
	  ○ Record each pill pack confirmed by the participant to have been taken on a new log line. Indicate the start date as the date the first pill of the pack was taken.
	• For implants/devices
	  ○ Record the date the implant/device was inserted as the date started and the date it was removed as the date stopped.

Date stopped
 	
Or
 	
Ongoing
	• If a medication is stopped for a clinically significant period of time, record a stop date. At a minimum, the month and year is required.
	  ○ If the exact day is unknown, enter 'UN' for the day field.
	• If the medication is later restarted, record on a new log line.
	• At the participant's Termination visit, the "Date Stopped" must be recorded for each medication or "Ongoing" must be checked.
	• For injections
	  ○ If it is a one-time injection (including contraception), record each injection as a separate entry, with the same date used for date started and stopped.
	  ○ If it is a series of injections, record the date of the first injection as date started and the date of the last injection as the date stopped.
	• For oral contraceptive birth control pills
	  ○ Record each pill pack confirmed by the participant to have been taken on a new log line. Indicate the start date as the date the first pill of the pack was taken.
	• For implants/devices
	  ○ Record the date the implant/device was inserted as the date started and the date it was removed as the date stopped.

Dose	Record the dose. If the participant does not know the exact dose units (e.g., "250 mg"), record an estimate (e.g., "1 tablet"). For combination drugs, use the '/' or '-' to distinguish the different doses (i.e., hydrocodone/acetaminophen 5/500). For multivitamin tablets or liquids, record the number of tablets or liquid measurement (e.g. "1" pill or "1" tablespoon") if the exact dosage is unknown. • When documenting medical devices with no active medication, such as an IUCD, enter the dose as "1", the dose unit as "Other", and indicate "device" in the text field.

Dose units	Select/record the applicable dose units provided in the drop-down list. If the participant does not know the exact dose units (e.g., “250 mg”), record an estimate (e.g., “1 tablet”). If no information on units is known, select the ‘Unknown’ option. • When documenting medical devices with no active medication, such as an IUCD, mark the dose unit as “Other” and specify “device” in the “If “Other”, specify” text field provided.
Frequency	Select the frequency from options provided in the drop-down list. Below is a list of common frequency abbreviations: • PRN: As needed • QD: Daily • BID: Twice per day • TID: Three times per day • QID: Four times per day • QM: At hour of wake • QHS: At hour of sleep • Other: Alternative dosing schedule or unknown If “Other” is selected, specify in the corresponding “If “Other”, specify” text field provided. For implants/devices • Indicate the frequency as “Other” and specify “continuous” in the text field.
Route	Select the route from options provided in the drop-down list. If “Other” is selected, specify in the corresponding “If “Other”, specify” text field provided. For implants/devices • Indicate route as “Other” and specify as appropriate (e.g., “sub-dermal” or “intrauterine”).
Taken for a reported AE?	• If the concomitant medication was administered to treat a reported AE, select “Yes”. • If the concomitant medication was not administered to treat an AE, select “No”, and end the form.
If "Yes", select adverse event.	Choose the applicable AE log entry from the drop-down list. Note: The applicable AE must first be entered on the AE form in order to be visible in the drop-down list.

Demographics

Participant Type: Mother and Infant

Purpose:

This form documents a participant's demographic information.

General Instructions:

- Complete and submit this form for participants who have signed a study-specific consent form, regardless if they enroll in the study or not.
- If the participant does not understand the question, read the response options to the participant.
- Responses should reflect the participant's status at screening and should not be changed after screening unless correction is needed.
- If the participant is found to be ineligible prior to the collection of all demographic data, enter all available data and respond to system queries with "Not collected".

Field-specific Instructions:

Field	Instructions
Date of birth	If the entire date of birth is unknown, record participant's best estimate. At a minimum, year is required.
Age	The age field (in years) is calculated automatically based on the participant's date of birth and the enrollment date of the study. No data entry is required. • For participants that do not enroll, this field will remain empty. • For infant participants, this field will be "0" yrs.
Sex assigned at birth	Record the sex that the participant was assigned at birth.
Ethnicity	Record the participant's ethnicity based on self-definition.
Race	Record the participant's race based on self-definition. Race categories are based on the 1997 Office of Management and Budget (OMB) standards on race and ethnicity. • **American Indian or Alaska Native** – A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment. • **Asian** – A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. • **Black or African American** – A person having origins in any of the Black racial groups of Africa. • **Native Hawaiian or Other Pacific Islander** – A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. • **White** – A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

Enrollment

Participant Type: Mother and Infant

Purpose:
This form is used to document a participant's enrollment date.

General Instructions:
Complete this form for each mother and infant participant who is eligible and enrolled into IDCRC DMID 21-0004.

Field-specific Instructions:

Field	Instructions
Enrollment date	• Record the date the participant enrolled into IDCRC DMID 21-0004. A complete date is required. • If Group 3 infant or Group 6 infant, record the enrollment date and end of form.

Was the participant enrolled post-vaccination?	This question is only applicable to participants in Group 1, Group 2, Group 4, and Group 5, and is used to document whether the participant enrolled post-vaccination. For Group 5, "post-vaccination" means "post-booster vaccination".
	
	For participants enrolled prior to completing the required dose(s) of a SARS-CoV-2 vaccination:
	• The response to this question should be "No". Proceed with the V1.0 or V101.0 CRFs as normal.
	  • Complete the Specimen Collection – Blood CRF in the database that is located in V1.0 or V101.0 to document whether a pre-vaccination serology sample was collected at the screening and enrollment visit.
	
	For participants enrolled after completing the required dose(s) of a SARS-CoV-2 vaccination:
	• The response to this question should be "Yes". V1.0 and V2.0 may be combined, if applicable for Group 1 and Group 5 and V101.0 and V103.0 may be combined, if applicable for Group 2.
	  • Complete the Specimen Collection – Blood CRF in the database that is located in V2.0 or V103.0
	
	For Group 1, Group 2, or Group 4 participants enrolled in between the first and second dose of a primary two-dose vaccination series:
	• The response to this question should be "No". Mark the checkbox in the next question.

If applicable, mark if the participant enrolled in between the first and second dose of a two-dose vaccination series.	This question is only applicable for Group 1, Group 2, or Group 4 participants enrolled in between the first and second dose of a primary two-dose vaccination series.

Follow-up Visit Summary

Participant Type: Mother and Infant

Purpose:
These forms are used to summarize information from each participant follow-up study visit.

General Instructions:

This form is completed for each scheduled follow-up visit and is present in each follow-up visit folder, from V2.0 to V7.0 for Groups 1,3, 5, and 6 and from V102.0 to V105.0 for Groups 2 and 4.

Field-specific Instructions:

Field	Instructions
Did the participant complete this visit (or required visit procedures)?	For mother participants enrolled prior to receiving a SARS-CoV-2 vaccination: • Only “Yes, visit completed” or “No, visit missed” are expected for V2.0 or V103.0. For mother participants enrolled after completing the required dose(s) of a SARS-CoV-2 vaccination • Only “Yes, procedures completed as part of another visit” is expected for V2.0 or V103.0. For mother participants who have consented to breast milk collection • “No, visit skipped” is NOT expected for V4.0 or V102.0 For mother participants who have not consented to breast milk collection: • Only “No, visit skipped” is expected for V4.0 or V102.0. If “No, visit missed” or “No, visit skipped”, end of form. If “No, visit missed”, the Missed Visit CRF will populate for completion.

Visit Date	A complete date is required.
	
	• If “Yes, procedures completed as part of another visit”:
	  • the visit date will be the same or within the same visit window as the other visit that it was combined with.
	  • end of form.

Did the participant exit/terminate the study at this visit?	Select “Yes” or “No”. If “Yes”, then complete the Study Discontinuation CRF within the Discontinuations folder.
Were any new medical conditions/events (including hospitalizations or prolongation of existing hospitalizations) reported at this visit? Include any conditions reported after reviewing with the participant any medical history, obstetric history, and history of respiratory illnesses. *If "Yes", update the Medical Event log.*	Select “Yes” or “No”. Select “Yes” if at least one medical condition/event was newly completed for this visit. Navigate to the Ongoing Logs folder to complete a log line for the applicable medical condition(s)/event(s).

Were any new adverse events (AEs) reported at this visit?	Select "Yes" or "No". Select "Yes" if at least one Adverse Event (AE) was newly completed for this visit. Navigate to the Ongoing Logs folder to complete a log line for the applicable AE(s).
Were any new concomitant medications (as described in the protocol) reported at this visit?	Select "Yes" or "No". Select "Yes" if at least one concomitant medication was newly completed on the Concomitant Medications log for this visit or if there are any changes to a previously reported medication. For pediatric immunization records obtained and completed once or in batches, select "Yes" at the visit that it is being recorded on the Concomitant Medications log (e.g., at the final visit or when the infant discontinues).
Were any protocol deviations reported at this visit?	Select "Yes" or "No". Select 'Yes' if at least one protocol deviation was newly completed for this visit. Navigate to the Ongoing Logs folder to complete a log line for the applicable protocol deviation(s).
Were any additional study procedures or forms completed?	If additional 'as-needed' study procedures were completed at this visit, select "Yes" and mark the applicable CRF(s) to be dynamically added to the visit folder.

Inclusion/Exclusion Criteria

Participant Type: Mother

Purpose:
This form documents a mother participant's eligibility and enrollment status.

General Instructions:
Complete this form for each mother participant who have signed a study-specific consent form, regardless if they enroll in the study.

Field-specific Instructions:

Field	Instructions
Did the participant meet all eligibility criteria?	• Select "Yes" if the participant met all eligibility criteria regardless of whether they enrolled in the study. • Select "No" if the participant did not meet all eligibility criteria or one or more eligibility criteria was not assessed.

Field	Instructions
Eligibility status	• Eligible and enrolled: Participant met all eligibility criteria and enrolled in the study. • If “Eligible and enrolled” is marked, end of form. • Eligible/Not enrolled: Participant met all eligibility criteria but did not enroll in the study. • Ineligible: One or more eligibility criteria was not met. • Incomplete screening: One or more eligibility criteria was not assessed. • Ineligible and enrolled: Participant enrolled in the study,but was later discovered to be ineligible (one or more eligibility criteria was not met).
Date participant was found "Eligible/Not Enrolled", "Ineligible", or "Incomplete Screening".	A complete date is required.
If "Eligible/Not enrolled", specify (max. 200 characters):	• If participant is deemed “Eligible/Not enrolled”, specify the reason in the text field. A maximum 200 characters is allowable.
Select reason(s) why participant is "Ineligible".	• If participant is deemed “Ineligible”, select the reason from the dropdown menu. • If there is more than one reason, click on the “Add a new Log line” and select the other reason(s). Add as many log lines as necessary.
If "Investigator decision", specify (max. 200 characters):	• This field is required if “E2. Any condition, which, in the opinion of the investigators, may pose a health risk or interfere with the evaluation of the study objectives” is selected for the reason why the participant is ineligible. A maximum 200 characters is allowable.

Infant Assessment

Participant Type: Infant

Purpose:
This form is used to document the infant participant’s assessment.

General Instructions:
Complete this form to document the infant participant’s length, head circumference, weight, and any fetal/infant congenital anomalies.

Field-specific Instructions:

Field	Instructions
Date of assessment	• Record the date the participant was assessed. A complete date is required.

Length	• Record the participant's body length in centimeters (cm).
Head circumference	• Record the participant's head circumference measured at forehead and occiput in centimeters (cm).
Weight	• Record the participant's weight in kilograms (kg).
Were any previously unreported fetal/infant congenital anomalies identified?	• If "Yes", select all that apply. • If "No" or "Not assessed" is marked, end of form.
Describe congenital anomaly/defect (max. 200 characters):	• If previously unreported fetal/infant congenital anomalies were identified, describe and provide pertinent details in the text field. A maximum 200 characters is allowable.
If fetal/infant congenital anomalies were identified, select Medical Event log line. If additional fetal/infant congenital anomalies were identified, select Medical Event log line.	• Choose the applicable Medical Event log entry from the drop-down list. Note: The applicable Medical Event must first be entered on the Medical Event form in order to be visible in the drop-down list. • Select up to two congenital anomalies.

Infant Feeding Assessment

Participant Type: Infant

Purpose:
This form is used to document feeding practices for the infant.

General Instructions:
Complete this form to document the infant's breastfeeding status in the infant's casebook.

Field-specific Instructions:

Field	Instructions
Date of assessment	A complete date is required.
Has the infant ever breastfed?	If "No" is selected, end of form.
Is the infant currently breastfeeding?	Select "Yes" or "No".
Is the breastfeeding being supplemented with formula?	Select "Yes" or "No".
Has your baby completely weaned from breast milk? (Defined as at least one week	Select "Yes" or "No". • If "No" is selected, end of form.

without breast milk and no intention of restarting) If "Yes", date infant last received breast milk	
If "Yes", date infant last received breast milk	If completely weaned from breast milk, record the date infant last received breast milk. At a minimum, a month and year are required.

Infant Inclusion/Exclusion

Participant Type: Infant

Purpose:
This form documents an infant participant's enrollment status.

General Instructions:
Complete this form for the infant participant in V3.0 for Group 3 and 6 and in V101.0 for Group 4. This form is used to document the infant participant's enrollment status, and if not enrolled, the reason why.

Field-specific Instructions:

Field	Instructions
Did the infant enroll?	Select "Yes" or "No". • If "Yes" is selected, end of form.
If "No", why did the infant not enroll?	If infant participant did not enroll, select a reason from the dropdown menu.
If "Other", explain.	If "Other" is selected as the reason participant did not enroll, specify in the text field.
If "No", date determined:	If infant participant did not enroll, record the date determined. A complete date is required.

Infant Specimen Collection

Participant Type: Infant

Purpose:
This form is used to document collection and storage of cord blood and serum for infant participants.

General Instructions:
Complete this form to document the infant's specimen collection and storage at the visits specified by the protocol.

Field-specific Instructions:

Field	Instructions
Was specimen collected?	Select "Yes" or "No".

	• If “Yes”, go to “Specimen collection date”.
If "No", record reason why sample was not collected (max. 200 characters).	If specimen was not collected, record the reason why the specimen sample was not collected in the text field. A maximum 200 character is allowable.
Specimen collection date	Record the date that the specimen was collected, NOT the date the results were reported or recorded on the form for this visit. A complete date is required.
Specimen collection time	Record the time that the specimen was collected.
Was the minimum required volume obtained?	If "No", record reason why minimum required volume was not obtained in the text field provided and complete a Protocol Deviation. Refer to the Collection of Specimens section of the Manual of Operations (MOP) for further guidance.
Was sample stored?	Select “Stored” for specimens that are collected and sent to the lab for processing. If the specimen is required to be stored, but for some reason it is not stored, select “Not stored”.
If "Not stored", record reason why sample was not stored (max. 200 characters).	If specimen sample is not stored, record the reason in the text field. A maximum 200 characters is allowable.

Informed Consent

Participant Type: Mother and Infant

Purpose:
This form is used to document a participant’s study consent. This includes consent for specimen storage/use in secondary research and consent for breast milk sample collection.

General Instructions:

- This form is present within the Participant Type folder.
- Complete this form for each mother participant, and her infant, who screens for IDCRC DMID 21-0004. Record the initial consent information. Use the log to record any additional consents that occur during the study.
- Complete a separate entry (e.g., a new log line) for each additional consent.
- Add additional log lines by clicking “Add a new Log line”.

Field-specific Instructions:

Field	Instructions
Date initial informed consent signed	Record the date when the initial informed consent is signed. A complete date is required. If a separate screening consent form and enrollment consent form are completed, indicate the date that the screening informed consent date was signed.
Time initial informed consent signed	Record the time when the initial informed consent is signed.

Part 1 consent version	Record the version of Part 1.
Part 2 consent version	Record the version of Part 2.
Was consent provided for specimen storage/use in secondary research?	Select “Yes” or “No”. Consent for specimen storage/use in secondary research can be changed if the participant and/or parent/guardian changes her consent decision after enrollment. If consent is updated, do not update this field. Instead, complete a new log entry under the “ADDITIONAL INFORMED CONSENTS” section.
If mother participant, was consent provided for breast milk sample collection?	This question is only applicable to mother participants. Select “Yes” or “No”. Consent for breast milk sample collection can be changed if the participant changes her consent decision after enrollment. If consent is updated, do not update this field. Instead, complete a new log entry under the “ADDITIONAL INFORMED CONSENTS” section.
Informed consent date	For additional consents, record the date when the additional informed consent is signed. A complete date is required.
Informed consent time	For additional consents, record the time when the additional informed consent is signed.
Part 1 consent version	For additional consents, record the version of Part 1.
Part 2 consent version	For additional consents, record the version of Part 2.
Was consent provided for specimen storage/use in secondary research?	For additional consents, select “Yes” or “No”.
If mother participant, was consent provided for breast milk sample collection?	For additional consents, select “Yes” or “No”.

Interim Visit Summary

Participant Type: Mother and Infant

Purpose:
This form is used to summarize information at an interim visit and to record all procedures or assessments the participant receives at any interim study visit (e.g., if a clinically indicated physical exam is performed) during the study.

General Instructions:
This form is required for each interim visit completed for a participant.

Field-specific Instructions:

Field	Instructions
Visit date	A complete date is required.

Interim visit code	Record the applicable interim visit code. Refer to the Manual of Procedures for more information on visit codes.
Did the participant exit/terminate the study at this visit?	Select “Yes” or “No”. • If “Yes”, then complete the Study Discontinuation CRF within the Discontinuations folder.
Were any new medical conditions/events (including hospitalizations or prolongation of existing hospitalizations) reported at this visit? Include any conditions reported after reviewing with the participant any medical history, obstetric history, and history of respiratory illnesses.	Select “Yes” or “No”. • Select “Yes” if at least one medical condition/event was newly completed for this visit. Navigate to the Ongoing Logs folder to complete a log line for the applicable medical condition(s)/event(s).
Were any new adverse events (AEs) reported at this visit?	Select “Yes” or “No”. • Select “Yes” if at least one Adverse Event (AE) was newly completed for this visit. Navigate to the Ongoing Logs folder to complete a log line for the applicable AE(s).
Were any new concomitant medications (as described in the protocol) reported at this visit?	Select “Yes” or “No”. Select “Yes” if at least one concomitant medication was newly completed on the Concomitant Medications log for this visit or if there are any changes to a previously reported medication. For pediatric immunization records obtained and completed once or in batches, select “Yes” at the visit that it is being recorded on the Concomitant Medications log (e.g., at the final visit or when the infant discontinues).
Were any protocol deviations reported at this visit? *If "Yes", update the Protocol Deviations log.*	Select “Yes” or “No”. • Select ‘Yes’ if at least one protocol deviation was newly completed for this visit. Navigate to the Ongoing Logs folder to complete a log line for the applicable protocol deviation(s).
What was the reason for this interim visit?	Select the applicable checkboxes for the reason for interim visit. If “Completion of missed visit procedures”, select the appropriate missed visit from the dropdown menu. If “Other” is selected, specify in the corresponding “If “Other”, specify” text field provided.
What study procedures were completed at this visit?	Select the applicable checkboxes for the study procedures that were completed at the interim visit. The applicable form(s) will then be dynamically added to the interim visit folder. • Ensure the correct form is marked based on the specific participant (i.e. mother or infant) and their procedures.

	• Procedures that were not completed at this visit should be left blank.

Medical Event Y/N

Participant Type: Mother and Infant

Purpose:
This form documents if a medical condition/event was experienced by the participant during the study. This form is used to trigger the Medical Event log.

General Instructions:
This form is in the "Ongoing Logs" folder and is only completed once, at the time the first medical condition/event is reported or at the end of the study if no medical conditions/events are reported.

Field-specific Instructions:

Field	Instructions
Does the participant have any new medical conditions/events to report?	• If "Yes" is selected, the Medical Event CRF is added to the Ongoing Logs folder. • At the end of study participant, mark "No" if no medical events/conditions have occurred.

Medical Event

Participant Type: Mother and Infant

Purpose:
For mother participants, this form documents any medical conditions/events experienced during follow-up only.

For mother participants, do not use this form to document pre-existing conditions/events. For conditions/events that occur prior to screening and enrollment, document on the Baseline Medical History form located in the V1.0 or V101.0 folder.

For infant participants, this form documents any baseline medical history conditions/events reported at the screening and enrollment visit AND any medical conditions/events experienced during follow-up.

General Instructions:

- This form is present within the Ongoing Logs folder.
- For mother participants, report clinically significant targeted conditions/events that occur after enrollment: hypertension, asthma, cancer, heart disease, diabetes, chronic kidney disease, autoimmune disease or immunodeficiency, obesity, and substance use.
- For mother participants, report clinically significant conditions/events that occur after enrollment, including but not limited to: hospitalizations, surgeries, allergies, conditions related to pregnancy, conditions related to respiratory illness, and acute conditions. Also include any conditions related to mental illness, alcoholism, and drug abuse.
    - Do not record a SARS-CoV-2 or COVID-19 diagnosis on the Medical Event form. Instead, record on the SARS-CoV-2 or COVID-19 Diagnosis form.

- For infant participants, report clinically significant conditions/events existing prior to enrollment AND occurring after enrollment, including but not limited to: hospitalizations, surgeries, allergies, conditions related to respiratory illness, and acute conditions.
    - Do not record a SARS-CoV-2 or COVID-19 diagnosis on the Medical Event form. Instead, record on the SARS-CoV-2 or COVID-19 Diagnosis form.
- Record medical events mentioned in other study forms, if applicable.
- Complete a separate entry (e.g., a new log line) for each medical condition/event.
- Add additional log lines by clicking “Add a new Log line”.
- Inactivate log lines by clicking “Inactivate” and selecting the applicable row from the drop down that should be inactivated.
- Reactivate log lines by clicking “Reactivate” and selecting the applicable row from the drop down that should be reactivated.

Field-specific Instructions:

Field	Instructions
Date medical condition/event reported	Record the date the medical condition/event was reported. A complete date is required.
At which visit was this medical condition/event first reported?	If reporting a medical condition/event for Group 1 Pregnant Participants, Group 3 Infants of Pregnant Participants, Group 5 Pregnant Participants Receiving Additional Vaccine(s), or Group 6 Infants of Group 5, select the appropriate visit (e.g., V1.0 to V7.0) from the dropdown list. If reporting a medical condition/event for Group 2 Postpartum Participants or Group 4 Infants of Postpartum Participants, select the appropriate visit (e.g., V101.0 to V105.0) from the dropdown list.
If "Interim visit", specify interim visit code	Record the applicable interim visit code. Refer to the Manual of Procedures for more information on visit codes.
Description of medical condition/event	Whenever possible, provide a diagnosis instead of listing a cluster of symptoms. If no diagnosis is identified, each symptom must be recorded as a separate entry. ○ Do not record a SARS-CoV-2 or COVID-19 diagnosis on the Medical Event form. Instead, record on the SARS-CoV-2 or COVID-19 Diagnosis form. • Additional information on the frequency and duration of chronic condition outbreaks can also be provided within this description.

Start date of medical condition/event	• Record the date the medical condition was first diagnosed or the date the surgery/procedure was performed as applicable.
	• If the participant is unable to recall the exact date, obtain her best estimate. At a minimum, month and year are required.
	  • If the exact day is unknown, enter "UN" for the day field.
	  • Example: UN-Jan-2020

Field	Instructions
Is the condition ongoing?	Select “Yes” for any condition that is ongoing at the visit it was reported. If this item is selected “Yes”, go to “Did this medical condition/event result in a new hospitalization or prolongation of existing hospitalization?” During each follow-up visit, routinely follow-up on any and all ongoing conditions. If the condition resolves during follow-up, update this item and complete the “Date medical condition/event ended/resolved”.
Date medical condition/event ended/resolved	A date is required if “Is the condition ongoing?” is “No”. At a minimum, month and year are required. • If the exact day is unknown, enter "UN" for the day field.
Did this medical condition/event result in a new hospitalization or prolongation of existing hospitalization?	Select “Yes” or “No”. • If the infant participant was admitted to the NICU, please select “Yes”. • If “No”, go to “Comments”.
Date of admission	Record the date of hospital admission. A complete date is required.
Reason for admission	Record the reason for admission. This may be different than the final diagnosis.
Primary diagnosis (name)	Record the ICD diagnosis code name for the primary diagnosis
Primary diagnosis (ICD#)	Record the ICD diagnosis code number for the primary diagnosis
Secondary diagnosis (name)	Record the ICD diagnosis code name for the secondary diagnosis, if applicable
Secondary diagnosis (ICD#)	Record the ICD diagnosis code number for the primary diagnosis, if applicable
Any additional diagnoses (names and ICD#'s)	Record the ICD diagnosis code names and numbers for any additional diagnoses. Separate each diagnosis with a semi-colon.
Date of discharge	Record the date of hospital discharge. A complete date is required.
Select if medical condition/event was fatal:	Select this checkbox if the medical condition/event was fatal.
Comments (max. 200 characters):	Provide any pertinent details in this field, if applicable. A maximum of 200 characters are allowable.

Missed Visit

Participant Type: Mother and Infant

Purpose:
Complete this form in the event that an enrolled participant misses a required visit according to the visit window outlined in the protocol or Manual of Procedures (MOP).

General Instructions:

A missed visit form will be dynamically added to a visit folder if the response to "Did the participant complete this visit (or required visit procedures)?" on the Follow-up Visit Summary from is "No, visit missed". Complete the Missed Visit form only for this visit.

Field-specific Instructions:

Field	Instructions
Target visit date	• Record the target date of the visit. A complete date is required.
Reason visit was missed	• Select the reason that the participant missed the visit from the drop-down list. If the reason that the participant missed the visit is not included in this list, select "Other", and specify the reason that the visit was missed in the corresponding "If "Other", specify" text field provided. • The reasons from the drop-down list applies to either mother participant or infant participant or both. • Unable to contact (mother) participant (for herself and/or for the infant) • Participant (mother) unable to schedule visit within window (for herself and/or for the infant) • Participant (mother) refused visit (for herself and/or for the infant) • Participant (mother) incarcerated • Participant (participant of the casebook) admitted to healthcare facility • Participant (mother) withdrew from study (for herself and/or for the infant) • Participant (participant of the casebook) deceased
Steps taken to address the missed visit (corrective action plan)	• Record the corrective steps that have been taken or will be taken to address the missed visit and help prevent future missed visits.

Neonatal Assessment

Participant Type: Infant

Purpose:
This form is used to document the neonatal assessment for Group 3, Group 4, and Group 6.

General Instructions:
Complete this form at V3.0 for Group 3 and Group 6 or V101.0 for Group 4.

Field-specific Instructions:

Field	Instructions
Date of assessment	Record the date of the neonatal assessment obtained from medical records. A complete date is required.
Birth weight	Record the participant's weight in kilograms (kg).
Birth length	Record the participant's body length in centimeters (cm).

Field	Instructions
Birth head circumference	Record the participant's head circumference measured at forehead and occiput in centimeters (cm).
Gestational age by examination in weeks	• Record the infant participant's gestation age by examination in weeks. • If prior to 37 weeks, report preterm birth on the Medical Event log in both the mother's casebook and the infant's casebook.
Gestational age by examination in days	Record the infant participant's gestation age by examination in days.
1 minute Apgar score	Record the infant's 1-minute Apgar score (0 to 10).
5 minute Apgar score	Record the infant's 5-minute Apgar score (0 to 10).
Was the infant admitted to the nursery for a notable medical condition/event?	Select "Yes" or "No".
If "Yes", select applicable Medical Event log line.	Choose the applicable medical condition/event log entry from the drop-down list. Note: The applicable medical condition/event must first be entered on the Medical Event form in order to be visible in the drop-down list.
Was the infant admitted to neonatal intensive care unit (NICU)?	Select "Yes" or "No".
If "Yes", select applicable Medical Event log line.	Choose the applicable Medical Event log entry from the drop-down list. Note: The applicable Medical Event must first be entered on the Medical Event form in order to be visible in the drop-down list.
Was there a need for respiratory support or other life sustaining interventions?	Select "Yes" or "No".
If "Yes", select applicable Medical Event log line.	Choose the applicable medical condition/event log entry from the drop-down list. Note: The applicable medical condition/event must first be entered on the Medical Event form in order to be visible in the drop-down list.

Participant Identifier

Participant Type: Mother and Infant

Purpose:
The Participant Identifier page within Medidata Rave will generate each participant's PTID. This page is the first form completed within Medidata Rave for each participant.

General Instructions:
Complete this form for every IDCRC DMID 21-0004 participant once informed consent is provided for study screening and enrollment.

Field-specific Instructions:

Field	Instructions
Participant ID:	• To add a participant to the study database, select the "Add Subject" link on the site-specific home page for the study. The Participant Identifier form will appear. • No data entry is required on this form. • Click the "Save" button at the bottom of the form. A pop-up box will appear to indicate that a participant has been added to the database and the home page for the participant's file will appear. The link to refer back to the Participant Identifier page is located at the top of each participant's home page. The participant ID will appear on each form generated in Medidata Rave. The participant ID should be written at the top of each paper form completed for a participant. • Refer to the Manual of Procedures for more information on participant IDs.

Participant Receipt

Participant Type: Mother and Infant

Purpose:
This form documents when a transferred participant has signed informed consent at the receiving study site.

General Instructions:

- The participant will retain the PTID assigned by the original study site. **Do not assign a new PTID.**
- The receiving site will gain access to the participant's electronic casebook after the transfer procedures are complete at the transferring site.
- The receiving site adds the Participant Receipt form to the visit folder by marking it on the Follow-up Visit Summary form or the Interim Visit Summary form.
- The Participant Receipt form must be added to the same visit folder as the corresponding Participant Transfer form.

Field-specific Instructions:

Field	Instructions
Name of receiving study site	Record the name of the receiving site.
Name of transferring study site	Record the name of the transferring site.
Date participant received at receiving site	A complete date is required.

Participant Transfer

Participant Type: Mother and Infant

Purpose:
This form documents when a participant is permanently transferring to another study site.

General Instructions:

- The transferring site adds the Participant Transfer form to the appropriate visit folder by marking it on the Follow-up Visit Summary form or the Interim Visit Summary form.
- For more information, contact the CDM.

Field-specific Instructions:

Field	Instructions
Name of transferring study site	Record the name of the transferring site.
Name of receiving study site	Record the name of the receiving site.
Visit of last completed contact with participant	Select the last completed visit at the transferring site with the participant. For Group 1 Pregnant Participants, Group 3 Infants of Pregnant Participants, Group 5 Pregnant Participants Receiving Additional Vaccine(s), or Group 6 Infants of Group 5, select the appropriate visit (e.g., V1.0 to V7.0) from the dropdown list. For Group 2 Postpartum Participants or Group 4 Infants of Postpartum Participants, select the appropriate visit (e.g., V101.0 to V105.0) from the dropdown list.
If "Interim visit", specify Interim visit code	If “Interim visit”, record the applicable interim visit code. Refer to the Manual of Procedures for more information on visit codes.
Date participant's records were sent to receiving study site	Enter the date that the source documents were sent from the transferring site to the receiving site.

Participant Type

Participant Type: Mother and Infant

Purpose:
This form is used to indicate if a participant is a mother or an infant, as well as their assigned group in the study. This will determine which visit folders are added to the participant’s casebook. This form is within the Participant folder and is the second form completed within Medidata Rave for each participant.

Field-specific Instructions:

Field	Instructions
Is this participant a mother or an infant?	Select “Mother” or “Infant”.
Participant's group	Select the participant’s group in the study.
If this participant is a mother, what is the infant's PTID?	• If participant is a mother, record the infant’s PTID and end of form. • If multiple infants, add a new log line for each infant being enrolled.
If this participant is an infant, what is the mother's PTID?	If participant is an infant, record the infant’s mother’s PTID.
If applicable, mark if the participant was previously enrolled in this study.	This question is only applicable for participants who have previously enrolled, but was later determined to be ineligible (i.e., “Ineligible and enrolled”) and have since terminated the study. If marked, complete the next question.
What was the previous PTID?	This question is only applicable for participants who have previously enrolled, but was later determined to be ineligible (i.e., “Ineligible and enrolled”) and have since terminated the study. Document the original PTID.

Physical Exam

Participant Type: Mother and Infant

Purpose:
This form documents physical exam findings.

General Instructions:
Complete this form when clinically indicated. If abnormal findings are found for any of the assessments, record information on the Baseline Medical History log for mother participants at enrollment or on the Medical Event log for mother and infant participants during follow-up.

Field-specific Instructions

Field	Instructions
Date of exam	A complete date is required.
BODY SYSTEM	For each organ system or body part evaluated, indicate whether the findings were “Normal” or “Abnormal”. If “Abnormal”, describe the abnormality in the corresponding “If “Abnormal”, specify” text field. • If not evaluated, select “Not done”.
Other system finding	• If other systems were assessed not covered by the pre-defined assessments, then please specify whether findings were “Normal” or “Abnormal” under the “Other system finding” section. • Specify the body system being referenced in the “If "Other system", specify” text field.

Field	Instructions
	• If “Abnormal”, describe findings in the corresponding “If "Abnormal", specify” text field. • If no additional body system is evaluated, select “Not done”.
Comments (max. 200 characters):	Provide any pertinent details in this field, if applicable. A maximum of 200 characters are allowable.

Pregnancy Assessment

Participant Type: Mother

Purpose:
This form is only applicable to Group 1 Pregnant Participants and Group 5 Pregnant Participants Receiving Additional Vaccine(s). This form documents information about the participant’s pregnancy of the infant(s) being enrolled in the study.

General Instructions:
Complete this form at the Screening/Enrollment visit for Group 1 and Group 5.

Field-specific Instructions:

Field	Instructions
Date of assessment	Record the date of the pregnancy assessment. A complete date is required.
Date of onset of last menstrual period	Record a complete date if possible. At minimum, month and year are required.
Estimated date of delivery	A complete date is required.
Estimated gestational age – weeks Estimated gestational age - days	Record the participant’s estimated gestation age at the Screening/Enrollment visit.
Method used to determine gestational age	Select the method used to determine gestational age. If “Other” is selected, specify in the corresponding “If “Other”, specify” text field provided.

Pregnancy History

Participant Type: Mother

Purpose:
This form is used to document the participant’s pregnancy history.

General Instructions:

Complete this form at the Screening/Enrollment visit for Group 1 Pregnant Participants, Group 2 Postpartum Participants, and Group 5 Pregnant Participants Receiving Additional Vaccine(s)

Field-specific Instructions:

Field	Instructions
Date pregnancy history collected	A complete date is required.
Has the participant ever been pregnant before?	Do not include the current pregnancy (Group 1 or Group 5) or the pregnancy for which the infant participant is being enrolled in the study (Group 2). If the participant has never been pregnant before, select "No" and end the form. If the participant has been pregnant before, an entry is required for each of the following: Number of full term live births (>=37 weeks), Number of premature live births (less than 37 weeks), Number of spontaneous fetal deaths and/or still births (>=20 weeks), Number of spontaneous abortions (less than 20 weeks), Number of therapeutic/elective abortions, Number of ectopic pregnancies. Enter "0" for any that do not apply.
Does the participant have a history of pregnancy complications or fetal/infant congenital anomalies?	If the participant does not have a history of pregnancy complications, select "No" and end the form. • If "Yes", then include information on pregnancy complications and fetal/infant congenital anomalies experienced prior to enrolling in the study and specify in the corresponding text field provided. Also document any pregnancy complications on the Baseline Medical History log.

Pregnancy Outcome

Participant Type: Mother

Purpose:
This form is used to document pregnancy outcome information of the infant(s) being enrolled in the study.

General Instructions:
Complete this form at the Delivery visit V3.0 for Group 1 Pregnant Participants and Group 5 Pregnant Participants Receiving Additional Vaccine(s) and at the Screening/Enrollment visit V101.0 for Group 2 Postpartum Participants.

Field-specific Instructions:

Field	Instructions
Is the outcome of this pregnancy obtainable?	If pregnancy outcome is unable to be obtained, select "No" and end of form.

Field	Instructions
How many pregnancy outcomes resulted from this reported pregnancy?	Record the number of pregnancy outcomes.
If more than one outcome resulted from this pregnancy, enter the corresponding infant PTID (if applicable).	• If more than one outcome resulted from this pregnancy, document information for each infant participant as a separate log entry. • If more than one outcome results from this pregnancy, record the corresponding infant PTID.
Outcome date	A complete date is required.
Place of delivery/outcome	Enter the place of delivery/outcome from the drop-down list. • If “Other”, then specify relevant details in the corresponding “If “Other”, specify” text field provided.
Specify outcome	• Specify the outcome from the drop-down list. If the outcome is "Stillbirth/intrauterine fetal demise", "Spontaneous abortion", "Ectopic pregnancy" or "Therapeutic/elective abortion", go to "Provide a brief narrative of the circumstances". • If “Other”, then specify relevant details in the corresponding “If “Other”, specify” text field provided.
Method	Select the method from the drop-down list only if the outcome is “Full term live birth (≥ 37 weeks)” or “Premature live birth (< 37 weeks)”.
Provide a brief narrative of the circumstances (max. 400 characters).	• If “Full term live birth (≥ 37 weeks)”, a narrative is not required. • Include information on medical conditions associated with the outcome, including early contractions, rupture of membranes, and cramping, along with actions taken as a result of these conditions. • A maximum of 400 characters are allowable.
Were there any complications related to the pregnancy outcome?	Select “Yes” or “No” to indicate if there were any complications related to the pregnancy outcome. If “Yes”, report all conditions on the Baseline Medical History log (if prior to enrollment) or the Medical Event log (if after enrollment). If “No”, then skip to "Were any fetal/infant congenital anomalies identified?".
Delivery-related complications	• Mark “None” or all that apply. • If “Other”, then specify relevant details in the corresponding “If “Other”, specify” text field provided.
None-delivery related complicates	• Mark “None” or all that apply. • If “Other”, then specify relevant details in the corresponding “If “Other”, specify” text field provided.

Field	Instructions
Were any fetal/infant congenital anomalies identified?	If “Yes”, mark all that apply and describe the congenital anomaly/defect in the text field provided. Also document information in the infant’s Medical Event log in the infant’s casebook. • If “No”, “Not assessed”, or “Unknown”, end of form.

Prenatal Testing

Participant Type: Mother

Purpose:
This form is used to document information on prenatal testing as part of obstetric history.

General Instructions:
This form is in the “Ongoing Logs” folder. Complete this form at the V1.0 and V3.0 for Group 1 Pregnant Participants and Group 5 Pregnant Participants Receiving Additional Vaccine(s), or at V101.0 for Group 2 Postpartum Participants.

Field-specific Instructions:

Field	Instructions
Test type	• Do not alter the pre-defined list of test types from #1 to #11. • To document additional tests including “Other”, add additional log lines by clicking “Add a new Log line” and select the applicable test type. • If “Other”, specify the test type in the “If “Other”, specify” text field provided.
Result	• Record the result for each test (#1 to #11 and beyond, if applicable). • Mark “Not done” if a test was not done. • If “Positive”, report on the Baseline Medical History log (prior to enrollment) or the Medical Event log (after enrollment).
Date of screening	At minimum, month and year are required.
Comments (max. 200 characters):	• Provide any pertinent details in this field, if applicable. A maximum of 200 characters are allowable. • If "Screening Urine Culture" or "Prenatal Genetic Screen" is "Positive", specify what it's positive for.

Protocol Deviations Y/N

Participant Type: Mother and infant

Purpose:
This form documents if a protocol deviation has occurred. This form is used to trigger the Protocol Deviations form.

General Instructions:
This form is in the Ongoing Logs folder and is only completed once, at the time the first protocol deviation is reported or at the end of the study if no protocol deviations are reported.

Field-specific Instructions:

Field	Instructions
Have any protocol deviations been reported?	• Select “Yes” or “No”. • Selecting “Yes” will add the Protocol Deviations log to the Ongoing Logs folder.

Protocol Deviations

Participant Type: Mother and infant

Purpose:
This form documents and reports protocol deviations for IDCRC DMID 21-0004.

General Information/Instructions:
- Complete one log entry for each protocol deviation.
- Add additional log lines by clicking “Add a new Log line”.
- Refer to the Protocol Deviations section of the Manual of Operations (MOP) for further guidance.

Field-specific Instructions:

Field	Instructions
Site awareness date	Record the date the site became aware of the deviation. (Example: The date the site discovered the deviation, the date the monitor notified the site of a deviation, etc.). A complete date is required.
Deviation date	Record the date the deviation occurred (start date). (Example: The date of procedures conducted outside of the visit window, the date a participant was inappropriately enrolled, etc.). A complete date is required.
Has or will this deviation be reported to local IRB/EC?	Select “Yes” or “No”.
Type of deviation	• Select the applicable deviation from the list of available options. • *Please see table below for the types of deviations.* When entering the type of deviation, the first few letters of the description can be entered within the drop-down list to find the applicable deviation to be entered. • Select “Other” if none of the listed categories match.
Description of deviation	Use the text field to briefly describe the specific details of the deviation.
Plans and/or action taken to address the deviation	Use the text field to provide a brief description of the plans to address the deviation.
Plans and/or action taken to prevent future occurrences of the deviation	Use the text field to provide a brief description of the plans to address future deviations.

Field	Instructions
Deviation reported by	Record the name of staff member completing the form.

PROTOCOL DEVIATION LIST	
Deviation Type	**Description/Examples**
Inappropriate enrollment	The participant enrolled and not all eligibility requirements were met.
Conduct of non-protocol procedure	A clinical or administrative procedure was performed that was not specified in the protocol and was not covered under local standard of care practice.
Improper AE	An AE is not followed per protocol. For example, a clinical finding/lab result is not re-assessed as outlined in the protocol.
Unreported AE	Site staff became aware of an AE but did not report it per protocol requirements.
Breach of confidentiality	Includes potential and actual cases where participant confidentiality was breached. For example, a staff member put a participant's name on a case report form.
Physical assessment deviation	Includes when a protocol-specified exam or assessment was not performed.
Lab assessment deviation	Includes when a protocol-specified safety lab or necessary follow-up laboratory test was not collected or reported to the participant (e.g. HIV testing).
Mishandled lab specimen	Includes errors in labeling, physical handling, processing, testing, storage, or shipment of collected lab specimens.
Staff performing duties that they are not qualified to perform	Includes any instances when any study procedure, including clinical and administrative procedures, was completed by a staff member who is not adequately qualified AND delegated to perform the procedure.
Questionnaire administration deviation	Includes instances when a required questionnaire was not completed according to protocol requirements or where the wrong questionnaire was completed.

Counseling deviation	Protocol-required counseling was not done and/or not documented correctly.
Use of non-IRB/EC-approved materials	Includes use of ANY study-related material that has not received IRB or EC approval for use per site requirements.
Informed consent process deviation	Includes failure to accurately execute and/or document any part of the informed consent process.
Visit completed outside of window	Visit procedures were complete in the wrong visit window or not within a designated visit window. (e.g. visit 3.0 procedures were done in the visit 4.0 window.)
Insufficient volume of primary specimen collected	Protocol-required volume of primary specimen was not obtained/collected.

SARS-CoV-2 or COVID-19 Diagnosis

Participant Type: Mother and infant

Purpose:
This form documents if a participant is diagnosed with SARS-CoV-2 or COVID-19.

General Instructions:
Complete this form at every visit for each participant. This form has four sections – Diagnosis, Symptoms, Clinical Outcome or Severity, and Treatment.

Field-specific Instructions:

Field	Instructions
Has the participant been diagnosed with SARS-CoV-2 infection or COVID-19 disease?	• Select “Yes” or “No”. • If completing at a follow-up visit, only report any diagnoses that have not already been reported. • If participant has been diagnosed with SARS-CoV-2 infection and/or COVID-19 disease in multiple instances within the reporting period (i.e., from one visit to the next visit), report one diagnosis per form within the visit folder. • If “No”, end of form.
Date of diagnosis	• Record a complete date if possible. At minimum, month and year are required.
Was diagnosis confirmed with laboratory testing?	• Select “Yes” or “No”. • If “Yes”, complete the SARS-CoV-2 Test Results log in the Ongoing Logs folder.

Did the participant experience any COVID-19 symptoms?	• Select “Yes” or “No”.
	• If "Yes", select all the symptoms that apply.
	  • If “Fever” is selected, record the maximum temperature in degrees Fahrenheit.
	  • If “New skin findings” is selected, specify in the text field.
	  • If “Other” is selected, specify in the text field.
	• If "No", go to the Clinical Outcome or Severity section.

Overall duration of symptoms	Record the overall duration of symptoms. If multiple symptoms, calculate from the onset of the first symptom to the resolution of the last symptom.
Clinical outcome or severity on COVID-19 Ordinal Scale	Select the clinical outcome or severity on the COVID-19 Ordinal Scale from the drop-down list.
If "Hospitalized", what was the date of admission?	Record a complete date if possible. At minimum, month and year are required.
If "Hospitalized", what was the date of discharge?	Record a complete date if possible. At minimum, month and year are required.
Was the participant enrolled in any experimental treatment trials?	• Select “Yes” or “No”. • If "Yes", specify in the “Specify treatment” text field. Also document in the Concomitant Medications log.
Did the participant receive any of the following medications?	• Select “Yes” or “No”. • If "Yes", mark all that apply from the pre-defined list. Also document in the Concomitant Medications log. • If “Off-label immunomodulatory therapy (not in the context of a clinical trial)”, specify in the corresponding text field provided. • If “Off-label antiviral therapy (not in the context of a clinical trial)”, specify in the corresponding text field provided. • If “Other COVID-19 specific therapy”, specify in the corresponding text field provided.
Mark if a new SARS-CoV-2 or COVID-19 Diagnosis form is needed to record another diagnosis for this visit.	• If participant has been diagnosed with SARS-CoV-2 infection and/or COVID-19 disease in multiple instances within the reporting period (i.e., from one visit to the next visit), report one diagnosis per form within the visit folder. • Mark the checkbox to populate a new SARS-CoV-2 or COVID-19 Diagnosis form to record an additional diagnosis for the visit.

SARS-CoV-2 Risk Assessment

Participant Type: Mother and infant

Purpose:
This form is only applicable to mother participants. This form documents the participant’s SARS-CoV-2 risk.

General Instructions:

Complete this form at the Screening/Enrollment visit for mother participants. This form is also available in follow-up visits on an 'as-needed' basis to document updated information. This form has three sections – Occupation, Residence, and Exposure.

Field-specific Instructions:

Field	Instructions
Was a SARS-CoV-2 risk assessment done?	• Select "Yes" or "No". • If "No", end of form.
Date of assessment	A complete date is required.
What is the participant's occupation?	Record the participant's occupation in the text field.
What is the category of the participant's occupation?	• Categorize the participant's occupation from drop-down list. • If the participant's occupation does not fit in any of the pre-defined categories, select "Other".
Does the participant work from home?	If "Unemployed", select "Not applicable".
What is the participant's OSHA risk of occupational exposure?	Classify risk per OSHA Hazard Recognition guidelines, which should be located here: https://www.osha.gov/SLTC/covid-19/hazardrecognition.html (URL subject to change). • If "Unemployed", select "Not applicable".
Where does the participant reside?	Select all that apply for the participant's residence. If "Other", specify in the corresponding "If "Other", specify" text field.
How many individuals does the participant reside with?	Do not include the participant. If none, record 0.
Within the past month, did the participant have exposure to any individuals with confirmed SARS-CoV-2 infection or COVID-19 disease?	• Select "Yes" or "No". • If "No", end of form.
Date of last contact with individual	At minimum, month and year are required.
Exposure description (max. 200 characters):	Provide a brief description of the exposure. A minimum of 200 characters are allowable.

SARS-CoV-2 Test Results

Participant Type: Mother and infant

Purpose:

This form is used to document the participant's SARS-CoV-2 test results.

General Instructions:

- Record any tests for SARS-CoV-2 that were done prior to or after study enrollment.
- Complete one log line for each SARS-CoV-2 test.
- Add additional log lines by clicking "Add a new Log line".

Field-specific Instructions:

Field	Instructions
Specimen collection date	A complete date is required.
Test result	Mark "Positive" (detected), "Negative" (not detected), or "Indeterminate for the test result.
Test type	• Select the test type from the options provided. • If "Other" is selected, complete the "specify" text field.
Specimen collection type	• Select the type of specimen collection from the options provided. • If "Other" is selected, complete the "specify" text field.

SARS-CoV-2 Vaccination

Participant Type: Mother and infant

Purpose:
This form documents the participant's SARS-CoV-2 vaccination both prior to enrollment and after enrollment.

General Instructions:

- Complete this form at the visits specified by the protocol and the Manual of Procedures (MOP).
- Document information about the SARS-CoV-2 vaccination that the participant received.
- If an infant participant receives a SARS-CoV-2 vaccination (e.g. from a clinical trial), document information about the SARS-CoV-2 vaccination that the infant received on this form as well.

Field-specific Instructions:

Field	Instructions
Did the participant receive a SARS-CoV-2 vaccination, that has not already been reported?	Select "Yes" or "No". • If "Yes", report one dose per form. • If "No", end of form.
How was vaccination information obtained?	• Select from the options provided. • If "Other" is selected, complete the "specify" text field.
Date of vaccination	Record a complete date if possible. At minimum, month and year are required.

Location	• Select the location where the participant received the SARS-CoV-2 vaccination. • If “Other” is selected, complete the “specify” text field.

Dose	• For a single dose vaccination, select “First”.
	  • Additional dose(s) after a single dose vaccination is considered “Second”, then “Third”.
	• For a two-dose vaccination series, select “First” or “Second”
	  • Additional dose(s) after a two-dose vaccination series is considered “Third”, and then “Other” if applicable.
	• If “Other” is selected, complete the “specify” text field.

Vaccine manufacturer	• Select the vaccine manufacturer from the options provided. If a two-dose vaccine is reported, the manufacturers are expected to be the same. • If “Other” is selected, complete the “specify” text field.
Did the participant report any important medical events after vaccination such as allergic reactions or anaphylaxis or other events requiring treatment in an emergency room or medical clinic?	• Select “Yes” or “No”. • If “Yes”, specify in the log below. • If “No”, end of form.
Description of medical condition/event	Describe the medical condition/event that occurred after the SARS-CoV-2 vaccination.
Start date of medical condition/event	• Record the start date of the medical condition/event. • If the participant is unable to recall the exact date, obtain her best estimate. At a minimum, month and year are required. • If the exact day is unknown, enter “UN” for the day field. • Example: UN-Jan-2020
Is the condition ongoing?	Select “Yes” for any condition that is ongoing at the visit it was reported. If this item is selected “Yes”, go to “Did this condition/event result in a new hospitalization or prolongation of existing hospitalization?” • During each follow-up visit, routinely follow-up on any and all ongoing conditions. If the condition resolves during follow-up, update this item and complete the “Date medical condition/event ended/resolved”.
Date medical condition/event ended/resolved	A date is required if “Is the condition ongoing?” is “No”. At a minimum, month and year are required. • If the exact day is unknown, enter “UN” for the day field.
Did this condition/event result in a new hospitalization or	Select “Yes” or “No”. • If “Yes”, a succinct summary of events/discharge is required on the Comments field.

prolongation of existing hospitalization?	• If "No", go to "Did the participant receive medication for this medical condition/event?".
Date of admission	Record the date of hospital admission. At minimum, month and year are required.
Date of discharge	Record the date of hospital discharge. At minimum, month and year are required.
Did the participant receive medication for this medical condition/event?	If "Yes", update the Concomitant Medications log.
Did this event/condition result in death?	Select "Yes" or "No."
Comments (max. 200 characters):	Provide any pertinent details in this field, if applicable. If participant was hospitalized, a succinct summary of events/discharge is required. A maximum of 200 characters are allowable.
Mark if a new SARS-CoV-2 Vaccination form is needed to record another vaccination for the visit.	Mark the checkbox to populate a new SARS-CoV-2 Vaccination form to record an additional vaccination for the visit.

Specimen Collection – Blood

Participant Type: Mother

Purpose:
This form is applicable to mother participants only. This form is used to document collection and storage of blood specimens for mother participants.

General Instructions:
Complete this form to document the mother participant's blood specimen collection and storage at the visits specified by the protocol.

General Instructions:

- Do not use this form to document any local lab specimens. Use this form only to document the collection of research specimens that will be sent to the site processing lab.
- If a tube type is collected within a visit window but over multiple visits, contact the CDM to add a new Specimen Collection – Blood form to the visit.

Field-specific Instructions:

Field	Instructions
Was specimen collected?	If the amount of specimen collected is less than the requested volume, mark "Yes".

Field	Instructions
If “No”, record reason why sample was not collected (max. 200 characters).	If specimen was not collected, record the reason why the specimen sample was not collected in the text field. A maximum 200 character is allowable.
Specimen collection date	Record the date that the specimen was collected, NOT the date the results were reported or recorded on the form for this visit. A complete date is required.
Specimen collection time	Record the time that the specimen was collected.
Was the minimum required volume obtained?	If "No", record reason why minimum required volume was not obtained in the text field provided and complete a Protocol Deviation.
Was sample stored?	Select “Stored” for specimens that are collected and sent to the lab for processing. If the specimen is required to be stored, but for some reason it is not stored, select “Not stored”.
If “Not stored”, record reason why sample was not stored (max. 200 characters).	If specimen sample is not stored, record the reason in the text field. A maximum 200 characters is allowable.

Specimen Collection – Breast Milk

Participant Type: Mother

Purpose:
This form is applicable to mother participants who have consented to breast milk collection. This form is used to document collection and storage of breast milk specimens for mother participants.

General Instructions:
Complete this form to document the mother participant’s breast milk specimen collection and storage at the visits specified by the protocol.

- Record information for each breast milk sample collection.
- Complete one log line for each breast milk sample.
- Add additional log lines by clicking “Add a new Log line”.

Field-specific Instructions:

Field	Instructions
Were breast milk samples collected?	Select “Yes” or “No”. If “No”, end of form.
Date breast milk samples collected by site	Record the date that the specimen was collected by the site. A complete date is required.
Specimen collection date	Record the date that the specimen was collected by the participant. A complete date is required.

Field	Instructions
Specimen collection method	Select the collection method.
Was sample stored?	Select “Stored” for specimens that are collected and sent to the lab for processing. If the specimen is required to be stored, but for some reason it is not stored, select “Not stored”.
If “Not stored”, record reason why sample was not stored (max. 200 characters).	If specimen sample is not stored, record the reason in the text field. A maximum 200 characters is allowable.

Study Termination

Participant Type: Mother and infant

Purpose:
This form documents participant’s exit from the study (i.e., scheduled or early study termination).

General Instructions:

- This form is present within the Discontinuations folder.
- Complete this form for each enrolled participant at either the scheduled exit/end of study visit or when the participant is no longer participating in the study.

Field-specific Instructions:

Field	Instructions
Date of study exit	A complete date is required.
Primary reason for completion/discontinuation	• Scheduled exit visit/end of study: Select this reason if the participant completes the final study visit per protocol. If selected, end of form. • Early study closure: Only select this reason when instructed by the CDM. • If “Other”, specify in the “specify” text field.
If “Other”, specify (max. 200 characters):	Select the applicable Adverse Event (AE) log entry from the drop-down list. Note: The applicable AE must first be entered on the AE form to be visible in the drop-down list.
If “Adverse event”, select applicable adverse event.	If “Adverse event” is selected as reason for completion/discontinuation, select the applicable Adverse Event from the list of AEs in the drop-down menu. In situations where more than one AE are associated with termination, record the AE that most strongly influenced the decision to terminate. Note: The applicable AE must first be entered on the AE form in order to be visible in the drop-down list.
If “Other medical condition/event”, select applicable Medical Event log line.	If “Other medical condition/event”, select the applicable Medical Event from the list of Medical Events in the drop-down menu.

Field	Instructions
If “Death”, specify:	If “Death” is selected as reason for completion/discontinuation, select from the options in the drop-down menu.
If “Death”, enter date of death.	If the primary reason for study non-completion is “Death”, provide the date of death. A complete date is required.

Ultrasound Results

Participant Type: Mother

Purpose:
This form documents the ultrasound results.

General Instructions:

- Complete until the Delivery visit for Group 1 Pregnant Participants and Group 5 Pregnant Participants Receiving Additional Vaccine(s) or once at Screening/Enrollment for Group 2 Postpartum Participants.

Field-specific Instructions:

Field	Instructions
Was an ultrasound report available for review?	• Select “Yes” or “No”. • If “No”, end of form.
Date of ultrasound	A complete date is required.
Number of fetuses observed on ultrasound	Select “1” or “2 or more”.
Were any abnormalities observed?	Select “Yes” or “No”. If “Yes”, describe in the corresponding text field provided.
Estimated gestational age – weeks Estimated gestational age – days	Enter the estimated gestation age at the time of ultrasound.

Vital Signs

Participant Type: Mother

Purpose:
This form documents the mother participant’s vital signs, such as height, weight, and BMI.

Field-specific Instructions:

Field	Instructions
Were vital signs done?	Select “Yes” if vitals were either obtained from participant report/medical record or by measurements at the current visit.
Date of assessment	A complete date is required. Enter the date the information is captured.
Height	Record the participant’s body length in centimeters (cm).
Weight	Record the participant’s weight in kilograms (kg).
When were height and weight measured?	Select “Pre-pregnancy”, “First trimester”, “Current visit”. Pre-pregnancy weight is preferred. If “Current visit” is selected, respond to the query to explain why.
BMI calculated	The BMI field is calculated automatically based on the “Height” and “Weight” entered. No data entry is required.

Change History

Summary of Changes to CRF Completion Guidelines

Version		Affected Section(s) or Form(s)	Summary of Revisions
Number	**Date**		
1.0	02-JUL-2021	N/A	Initial version
2.0	22-OCT-2021	Loading Folders in Participant Casebook Form-Specific Instructions (See Summary of Revisions)	• Added folder dynamics tables for Group 5 and Group 6 • Included Group 5 and Group 6 for applicable forms throughout the Form-Specific Instructions section • Included instructions for inactivating and reactivating a log line for Baseline Medical History, Concomitant Medications, and Medical Event • **Concomitant Medications:** updated Purpose, General Instructions, and Field-specific Instructions to align with Protocol v3.0 • **Enrollment:** updated field to "Was the participant enrolled post-vaccination", added field for "If applicable, mark if the participant enrolled in between the first and second dose of a two-dose vaccination series." and updated corresponding Field-specific Instructions • **Follow-up Visit Summary:** updated field to "Were any new concomitant medications (as described in the protocol) reported at this visit?" and updated corresponding Field-specific Instructions • **Inclusion Exclusion Criteria:** added additional Field-specific Instructions for the new response option "Ineligible and enrolled" • **Infant Specimen Collection:** added field for "Was the minimum required volume obtained?" and corresponding Field-specific Instructions • **Interim Visit Summary:** updated field to "Were any new concomitant medications (as described in the protocol) reported at this visit?" and updated corresponding Field-specific Instructions • **Medical Event:** added "Diagnosis" fields and corresponding Field-specific Instructions; also clarified instructions for "Reason for admission" • **Participant Type:** added fields for "If applicable, mark if the participant was previously enrolled in this study." and "What was the previous PTID?" and corresponding Field-specific Instructions • **Protocol Deviations:** added "Insufficient volume of primary specimen collected" to Protocol Deviation List table

			• **SARS-CoV-2 Risk Assessment:** added additional Field-specific Instructions to clarify study participant should not be included in “How many individuals does the participant reside with?” • **SARS-CoV-2 Vaccination:** added additional Field-specific Instructions to clarify data entry for additional dose(s) and for the new response option, “Third” dose; to note that the manufacturer for a two-dose vaccination series should be the same; and if hospitalized, a brief summary is required on the Comments field • **Specimen Collection – Blood:** added field for “Was the minimum required volume obtained?” and corresponding Field-specific Instructions • **Study Termination:** rearranged the order of fields to align with CRF updates • **Vital Signs:** added additional Field-specific Instructions to clarify vitals may be obtained either from participant report/medical records or by measurements at the current visit; to clarify date of assessment is the date the information is being captured; and to note the preference for pre-pregnancy weight, but if current visit weight, to respond to query explaining why