APPENDIX I
Form Specific Instructions

Recipient Demographics (DEM)

1. Date of birth.

Complete the date of birth for this recipient, indicating all four digits for the year. Make sure you enter month followed by the day (mm/dd/yyyy). If the month of birth is unknown, enter '06.' If the day of birth is unknown, enter '15.' If you cannot obtain the year of birth notify the Coordinating Center Data Manager (DM).

2. Place of primary residence.

Indicate the primary place the recipient resided in at the time of his/her first islet transplant. If the specific place of primary residence is not listed, choose 'Other,' and if you are unable to determine this information choose 'Unknown.' If the recipient resides in more than one place, choose the "main" place of residence. For example, the recipient may live in Pennsylvania during the summer months and have a second home in Florida where they live during the winter months. The Coordinator and the recipient should determine the primary residence in these situations. This question captures information on how close or far a recipient must travel to receive an islet transplant.

3. Gender.

Indicate if the participant is 'Male' or 'Female.' If you do not have the information on gender indicate 'Unknown.'

The Office of Management and Budget (OMB) Directive of October 30, 1997 for the Federal Data on Race and Ethnicity Standards were released on the collection of data on race and ethnicity. Federal programs were to adopt OMB's standards as soon as possible, but no later than January 1, 2003. The concept of the standards is to provide a minimum set of categories for data on race and ethnicity. The standards specifically state that an investigator or data collector should not tell an individual who he or she is, or specify how an individual should classify himself or herself. OMB has accepted the recommendation that a person may report more than one race in order to capture information about the increasing diversity of the population while at the same time respecting each individual's dignity. To this respect, multiple choices for race will be captured by CITR.

4. Ethnicity.

Indicate the ethnicity of the islet transplant recipient. If this information cannot be determined, choose 'Unknown.'

> **Hispanic or Latino:** A person of Cuban, Mexican, Puerto Rican, South or Central American, or other culture or origin, regardless of race. The term "Spanish origin" can be used in addition to "Hispanic or Latino."

Non Hispanic or Latino: A person without Cuban, Mexican, Puerto Rican, South or Central American origin, regardless of their race.

5. Race.

Indicate 'No' or 'Yes' for each Race category as best describes the race of the islet transplant recipient. At least one category must be indicated as 'Yes.' If race is "Unknown," indicate 'Unknown' for each race category, or if the race is not listed, choose 'Other' and specify the race of the recipient in the textfield. If you are performing record review and a race is indicated, check 'Yes' for the races indicated. If you do not know if the person falls under any of the other race categories, you may choose 'Unknown' for those categories.

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. This category includes Native/Inuit Canadians.

Asian: A person having origins in any of the original peoples of the Far East or Southeast Asia (for example, China, Japan, Korea).

Black or African American: A person having origins in any of the black racial groups of Africa. The term "Haitian" can be used in addition to "Black or African American."

Indian Sub-continent: A person having origins in any of the peoples of the Indian sub-continent. Examples of this area include India and Pakistan.

Mideast or Arabian: A person having origins in any of the peoples of the Middle East and Northern Africa. Examples of these areas include Egypt, Israel, Iran, Iraq, Saudi Arabia, Jordan and Kuwait.

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 peoples of Europe.

Other: If the race of the person is not listed above, indicate the 'Other' category and specify the race in the textfield following the 'Other' choice. This category should not be used if the recipient's race is more than one choice from the list above. This category is only used when the recipient's race has not been listed above.

Registration (ENR)

1. Diabetes type.

You must indicate the diabetes type of the recipient using one of the following categories:

Type 1: The type of diabetes that was known as Type I, juvenile-onset diabetes, or insulin-dependent diabetes mellitus (IDDM) is now Type 1 diabetes.

Pancreatectomy induced: The process in which surgeons first remove most of a diseased pancreas, leaving behind a small portion of the organ, which may continue to produce enough insulin to support the patient's need to metabolize sugar. However, approximately 30 percent of patients who undergo this surgery develop diabetes. This is termed pancreatectomy-induced diabetes.

Cystic fibrosis related: There is a broad spectrum of conditions that are placed under the umbrella term "CF-related diabetes." This includes individuals who must always take insulin; those who need insulin intermittently; and others with sporadic glucose abnormalities. Such a wide-ranging definition can lead to confusion over which patients "have diabetes." Even though it shares features of each, CF-related diabetes mellitus (CFRDM) differs from IDDM and non insulin-dependent diabetes (NIDDM.) In CF, thick, sticky secretions obstruct and damage many organs including the pancreas. This mucus plugging destroys many, but not all, of the insulin-producing cells. By the time they are young adults, virtually all individuals with CF make less insulin than normal. Their bodies partially compensate for insulin deficiency by becoming very sensitive to insulin. Individuals who have the most severe insulin deficiency need to take insulin injections to control their glucose levels; this is called CF-related diabetes.

Type 2: The type of diabetes that was known as Type II, non insulin-dependent diabetes mellitus (NIDDM), or adult-onset diabetes is now Type 2 diabetes.

MODY: Maturity-Onset Diabetes of the Young (MODY). Term for non insulin-dependent or Type 2 diabetes in youngsters. MODY was initially reported in families with an autosomal-dominant inherited disorder, where there were several children with obesity and diabetes which could be controlled with weight reduction and oral hypoglycemic medications.

Other: If the diabetes diagnosis for the recipient is not mentioned above, indicate 'Other.' Upon receipt of your data, the Coordinating Center will contact you to obtain more information about the diagnosis.

Indicate year of onset.

Year of onset of diabetes must also be specified using a four-digit year format (YYYY). If it is unknown, leave the field blank on the screen and place a note to this effect in your CITR records at the transplant center.

2. ABO blood group.

Indicate the islet transplant recipient's blood type. Acceptable values are A, B, AB or O. If the subgroup of A is known, it can be specified by choosing one of the following: A_1, A_2, A_1B, or A_2B. If the blood group is not recorded or unknown, select 'Unknown' from the pull down list.

HLA Information

3. HLA typing conducted.

Indicate if HLA typing was conducted on this recipient. If you are unable to determine if HLA typing was conducted, indicate 'Unknown.'

If YES, typing was conducted:

a. Date typed: Indicate the date HLA typing was initiated. Formatting for all date variables is mm/dd/yyyy.

b. Class I: Complete the matrix for the antigens. **Do not leave any boxes within the matrix blank.** Acceptable antigens and their splits are available in Appendix 3 of this User's Guide and on the password-protected CITR website. When known, it is preferable to enter the split of the antigen rather than the parent. For Bw4 and Bw6, if the antigen is present, indicate 'Positive,' if the antigen is absent, indicate 'Negative.' If an antigen is 'Unknown or Not Determined,' or 'Confirmed Blank,' either type that description into the textbox or select the appropriate response from the dropdown menu. For example, if the following results are obtained for BW:

Participant 1		Participant 2		Participant 3	
BW(1)	BW(2)	BW(1)	BW(2)	BW(1)	BW(2)
4	4	6	6	4	6

The following results should be entered:

For participant #1 enter under BW4: Positive, and under BW6: Negative
For participant #2 enter under BW4: Negative, and under BW6: Positive
For participant #3 enter under BW4: Positive, and under BW6: Positive

If family studies have not been performed and the antigen is not known, indicate 'Unknown or Not Determined.' If family studies have been performed and the blank is confirmed, indicate 'Confirmed Blank.'

c. **Class II:** Complete the matrix for the antigens. **Do not leave any boxes within the matrix blank.** Acceptable antigens and their splits are available in Appendix 3 of this User's Guide and on the password-protected CITR website. When known, it is preferable to enter the split of the antigen rather than the parent. If an antigen is 'Unknown or Not Determined,' or 'Confirmed Blank,' either type that description into the textbox or select the appropriate response from the dropdown menu.

Deceased Donor (CAD)

Database/Keyfields

Infusion Date: Enter the date the infusion recipient received the islets from this donor pancreas. Date is entered in mm/dd/yyyy format.

Pancreas Number for this infusion: If only one pancreas was processed for this infusion, indicate '1' and complete this form just once for the donor from which the pancreas was processed. If there was more than one pancreas processed and used for this infusion, indicate '1' for the first pancreas processed and complete the form for that donor pancreas. For the second pancreas processed, complete a new donor pancreas form for that particular pancreas and indicate '2' for pancreas number. The infusion date will remain the same for pancreas 1 and pancreas 2. Follow this method of numbering for all pancreata processed and used for infusion during a single infusion. Please note that if a pancreas was processed and it was never used for infusion, you do not complete this donor form.

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

If there was more than one donor pancreas processed and infused during the same procedure, the transplant center must complete one donor pancreas form for each pancreas processed.

Occasionally a value will need to be rounded to the nearest whole number or closest decimal point for entry in the database system. When the value is equal to 5 or greater, round up. When the value is less than 5, round down.

If a UNOS Donor ID is available for the donor, record this information on the form. If this UNOS donor ID is provided, most data elements will be obtained directly from UNOS. Therefore, you may skip all UNOS-designated fields. Once the data are received from UNOS, they will be entered in the form and the transplant center may view and update the information as necessary. UNOS data elements on the CITR forms are designated with an asterisk (*) following the CITR question. For example, weight will be obtained from UNOS if a UNOS Donor ID is provided. In this User's Guide, this data collection is designated by the following: **Weight***.

UNOS and CORR Donor IDs may also help facilitate future ancillary studies where additional information may be gathered from other entities, or sharing of information back to these respective agencies.

For the majority of the questions on this form you have the choice of selecting 'Not Done/Unknown' if the answer or test result is not available or unknown at your transplant center. However, there may be cases where an answer or result is required in a textfield and 'Not Done/Unknown' is not an available choice. This textfield will then require you to request an exception for this field. To request an

exception, type an '∗' in the textfield. Upon doing this, a pop-up box will appear. Enter the information you have about this question or the reason why you do not have an answer to this question. By requesting this exception you will avoid having the Coordinating Center query you on why the question was left blank.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Deceased Donor** form to highlight it and then click on **[Select]**. The **Key Selection** screen will appear next. To enter data for a new form, in the first textfield enter the infusion date and then select the appropriate pancreas number for this infusion from the pull down box. Then click on the **[Add Record]** button to enter the new data. For proper definitions of the infusion date and pancreas number, refer to the Database/Keyfields section above.

If you are modifying data for a previously entered CAD form for this participant, the **Key Selection** screen displays a listing of the CAD forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

Donor Information

1. Donor type.

It is necessary to choose a selection from each of the two drop down boxes. For the first drop down box indicate if the donor was Adult/pediatric, Fetal/embryonic, or Other. Next, indicate the type of islets that were used for the infusion from the following list: Islets (the type of islet you expect at the end of processing after purification, it has not been manipulated beyond the processing phase), Stem/progenitor/precursor cell derived islets, Engineered cell line, Unknown or Other.

If 'Fetal/embryonic' is chosen from the first drop down box, save and submit the form. No further questions need to be completed on this form.

2. Specify UNOS Donor ID.

If the donor was registered with the United Network for Organ Sharing (UNOS), indicate the donor's UNOS ID in all capital letters and numbers. If they were registered with UNOS and you are unable to obtain the Donor ID, check the 'Not Available' box. If the donor was not registered with UNOS, check the 'Not Applicable' box.

3. Specify CORR Donor ID.

If the donor was registered with the Canadian Organ Replacement Register (CORR), indicate the donor's CORR ID. If they were registered with CORR and you are unable to obtain the Donor ID, check the 'Not Available' box. If the donor was not registered with CORR, check the 'Not Applicable' box.

If a UNOS ID is entered the CORR ID is automatically recorded as 'Not Applicable' and if a CORR ID is entered, the UNOS ID is automatically recorded as 'Not Applicable.'

If a UNOS ID was provided above, all '*' questions may be skipped.

4. Date of birth. *

Enter the date the donor was born using the standard 8-digit numeric format of mm/dd/yyyy. If the complete date of birth is unknown, indicate the donor's age at the time of procurement in the next field.

Age: If the complete date of birth is unknown, indicate the donor's age in years at the time of infusion (not organ recovery) in whole numbers.

If a date of birth is entered, the age will automatically populate the field. If date of birth and age are unknown, check the box indicating 'Unknown.'

5. Gender. *

Indicate if the donor is 'Male,' 'Female,' or if gender is 'Unknown.'

6. Ethnicity. *

Indicate the ethnicity of the donor. If the ethnicity is unknown, indicate this. Please note that ethnicity is not routinely collected for donors in Canada, so for those donors where ethnicity is not recorded in the donor records, 'Unknown' should be indicated.

Hispanic or Latino: A person of Cuban, Mexican, Puerto Rican, South or Central American, or other culture or origin, regardless of race. The term "Spanish origin" can be used in addition to "Hispanic or Latino."

Non Hispanic or Latino: A person without Cuban, Mexican, Puerto Rican, South or Central American origin, regardless of their race.

7. Race. *

Indicate 'No' or 'Yes' for each race category as best describes the race of the deceased donor. If race is unknown, indicate 'Unknown' for each of the race categories. If the race is not listed, choose 'Other' and specify the race of the donor in the textfield.

American Indian or Alaska Native: A donor having origins in any of the original peoples of North and South America (including Central America), and

who maintains tribal affiliation or community attachment. This category includes Native/Inuit Canadians.

Asian: A donor having origins in any of the original peoples of the Far East or Southeast Asia (for example, China, Japan, Korea).

Black or African American: A donor having origins in any of the black racial groups of Africa.

Indian Sub-continent: A donor having origins in any of the peoples of the Indian sub-continent. Examples of this area include India and Pakistan.

Mideast or Arabian: A donor having origins in any of the peoples of the Middle East and Northern Africa. Examples of these areas include Egypt, Israel, Iran, Iraq, Saudi Arabia, Jordan and Kuwait.

Native Hawaiian or Other Pacific Islander: A donor 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 peoples of Europe.

Other: If the race of the donor is not listed above, indicate the 'Other' category and specify the race in the textfield following the 'Other' choice. This category should not be used if the donor's race is more than one choice from above. If this is the case, each race should be checked 'Yes.' This category is only used when the donor's race has not been listed above.

8. Weight. *

Enter the weight of the donor at the time of recovery in kilograms or pounds. Round to the nearest tenth. If the weight of the donor is unknown, check the 'Unknown' box.

9. Height. *

Enter the height of the donor at the time of recovery in centimeters or in inches. Round to the nearest tenth. If the height of the donor is unknown, check the 'Unknown' box.

10. ABO blood group. *

Indicate the donor's blood type. Acceptable values are A, B, AB, or O. If the subgroup of A is known, it can be specified as A_1, A_2, A_1B, or A_2B. If the blood group is not recorded for this donor, select 'Unknown' from the pull down list.

11. Cause of death. *

Indicate the donor's cause of death. This information may be obtained from the donor records. If the cause of death is not listed among the choices given on the form, select 'Other' and specify the cause of death in the textfield following the list of choices. The cause may be specified as narrative text or an ICD-9 code. The ICD-9 code is preferred. If the cause of death is unknown, indicate 'Unknown.'

12. Mechanism of death. *

Indicate the donor's mechanism of death. This information may be obtained from the donor records. If the mechanism of death is not listed among the choices given on the form, select 'None of the Above.' If the mechanism of death is unknown, indicate 'Unknown.'

13. Circumstances of death. *

Indicate the donor's circumstances of death. This information may be obtained from the donor records. If the circumstance of death is not listed, select 'None of the Above.' If the circumstances of death are unknown, indicate 'Unknown.'

Donor Medical History

14. History of hypertension. *

Select 'Yes' if the donor has documented history of hypertension prior to this hospitalization. If not, select 'No' and if unknown, select 'Unknown.' Documented history only includes hypertension diagnosed and recorded in the donor's medical chart.

a. **If YES, duration:** If 'Yes,' select one duration category to indicate the number of years the donor has had a documented history of hypertension. If the duration is unknown, select 'Unknown.' Choices are 0-5 years (one day up to 72 months), 6-10 years (72 months through 120 months) and >10 years (greater than 120 months). For duration, categories extend to the next category. For example, if a donor has been diagnosed with hypertension for 5 years and 11 months, you would select category '0-5 years,' and if a donor was diagnosed with hypertension for 10 years and 1 month you would choose the category '>10 years.'

b. **If YES, method of control:** If the donor has a documented history of hypertension, indicate if diet, diuretics and other anti-hypertensive medications were used for control. Select 'Yes,' 'No' or 'Unknown' for each method of hypertension control listed (Diet, Diuretics and Other hypertensive medication).

15. History of alcohol dependency. *

Select 'Yes,' 'No' or 'Unknown' to indicate if the donor has a documented history of alcohol dependency. If 'Yes,' select 'Yes,' 'No' or 'Unknown' if there was continued use in the past six months prior to organ recovery.

16. History of diabetes. *

Select 'Yes,' 'No' or 'Unknown' to indicate if the donor has a documented history of diabetes.

a. **If YES, duration:** If 'Yes,' select one duration category to indicate the number of years the donor has had a documented history of diabetes. If the duration is unknown, select 'Unknown.' Choices are 0-5 years (one day up to 72 months), 6-10 years (72 months through 120 months) and >10 years (greater than 120 months). For duration, categories extend to the next category. For example, if a donor has been diagnosed with diabetes for one month, you would select category '0-5 years,' and if a donor was diagnosed with diabetes for 10 years and 1 month you would choose the category '>10 years.'

b. **If YES, is the donor insulin dependent:** If the donor had a documented history of diabetes, also indicate 'Yes,' 'No,' or 'Unknown' if the donor was insulin dependent. If the donor was insulin dependent, select one duration category to indicate the number of years the donor had been taking insulin. If the duration is unknown, select 'Unknown.' Choices are 0-5 years (one day through 72 months), 6-10 years (72 months through 120 months) and >10 years (greater than 120 months). For duration, categories extend to the next category.

Transfusion Information

17. During this hospitalization, total number of transfusion units given prior to surgery. *

Indicate the number of units of packed red cells or whole blood transfused prior to the organ recovery during this hospitalization. Units are categorized as 0 units, 0-5 units (0.01-5.99), 6-10 units (6.0-10.00) and >10 units (greater than 10.00). To categorize partial units, choose the closest unit in the category. For example, if 5.5 units were used, choose category 0-5 units. If 0.5 units were used, choose 0-5 units. If the donor did not require any transfusions, indicate 0 units. If the donor records are incomplete and transfusion units cannot be determined, indicate 'Unknown.'

18. Number of transfusion units given intraoperatively. *

Indicate the number of units of packed red cells or whole blood transfused during the organ recovery procedure. Units are categorized as 0 units, 0-5 units (0.01-5.99), 6-10 units (6.0-10.00) and >10 units (greater than 10.00). To categorize partial units, choose the closest unit within the same category. For example, if 7.5 units were used choose category 6-10 units. If 0.3 units were used, choose 0-5 units. If the donor did not require any transfusions, indicate 0 units. If the donor records are incomplete and transfusion units cannot be determined, indicate 'Unknown.'

Medications Given to Donor

19. Was Pitressin/DDAVP given. *

Within the 24 hour period prior to cross clamp, indicate if pitressin/desmopressin acetate (DDAVP) was not given ('No'), was given ('Yes'), or if it is 'Unknown' if the medication was given.

20. Were vasopressors used.

Indicate if vasopressors were used during this hospitalization. If this information is unknown, check the 'Unknown' box. If vasopressors were used, up to four vasopressors may be recorded (a - d). Choose the name of the vasopressor, indicate the maximum (peak) dose (round to the nearest tenth), and the dose units. If less than four vasopressors were used, indicate all vasopressors used and then select 'Not Applicable' for the vasopressor subsequent to the last vasopressor recorded. If more than four vasopressors were used, please contact the Coordinating Center (CC). In cases where the vasopressor was used and none of the doses can be obtained, check the 'Dose Unknown' box for maximum dose.

21. From time of admission, were steroids given.

From the time of admission for this hospitalization, indicate if steroids were given to the donor. Specify 'No,' 'Yes,' or 'Unknown.'

22. From time of admission, was insulin given.

From the time of admission for this hospitalization, indicate if insulin was given to the donor. Specify 'No,' 'Yes,' or 'Unknown.'

HLA Typing

23. HLA typing conducted. *

Indicate if HLA typing was conducted on the donor. If you are unable to determine if HLA typing was conducted, indicate 'Unknown.'

If YES, typing was conducted:

a. **Date typed:** Enter the date that the donor was tissue typed by the histocompatibility laboratory of the recipient. Use the standard 8-digit numeric format of mm/dd/yyyy.

b. **Class I:** Complete the matrix for the antigens. **Do not leave any boxes within the matrix blank.** Acceptable antigens and their splits are available in Appendix 3 of this User's Guide and on the password-protected CITR website. When known, it is preferable to enter the split of the antigen rather than the parent. For Bw4 and Bw6, if the antigen is present, indicate 'Positive,' if the antigen is absent, indicate 'Negative.' If an antigen is 'Unknown or Not Determined,' or 'Confirmed Blank,' either

type that description into the textbox or select the appropriate response from the dropdown menu. For example, if the following results are obtained for BW:

Donor 1		Donor 2		Donor 3	
BW(1)	BW(2)	BW(1)	BW(2)	BW(1)	BW(2)
4	4	6	6	4	6

The following results should be entered:

For donor #1 enter under BW4: Positive, and under BW6: Negative
For donor #2 enter under BW4: Negative, and under BW6: Positive
For donor #3 enter under BW4: Positive, and under BW6: Positive

If family studies have not been performed and the antigen is not known, indicate 'Unknown or Not Determined.' If family studies have been performed and the blank is confirmed, indicate 'Confirmed Blank.'

c. **Class II:** Complete the matrix for the antigens. **Do not leave any boxes within the matrix blank.** Acceptable antigens and their splits are available in Appendix 3 of this User's Guide and on the password-protected CITR website. When known, it is preferable to enter the split of the antigen rather than the parent. If an antigen is 'Unknown or Not Determined,' or 'Confirmed Blank,' either type that description into the textbox or select the appropriate response from the dropdown menu.

24. Pre infusion crossmatch date.

Indicate the date of the serum that was most recently collected and tested to obtain crossmatch results before the islet infusion was performed. Use the standard mm/dd/yyyy format. If a crossmatch was not performed, check the box indicating 'Not Done/Unknown' and skip the remaining questions.

a. **Crossmatch method and results:** For each method listed (Cytotoxicity - which includes NIH, Wash and AHG; Fluorescent antibody - which includes Flow cytometry and ELISA) indicate if the crossmatch results from the most recent serum were 'Negative,' 'Positive,' 'Unknown,' or 'Not Done.' Results should be indicated for Unseparated (Mix), T cell and B cell samples. If the method is not indicated in the clinical record/results, check with your local lab and they will be able to tell you the method they use.

b. **Were any of the crossmatches positive:** Indicate if any of the crossmatches were positive or if it is unknown. If any of the crossmatches were positive, indicate if the recipient was treated to reduce antibody levels by choosing 'No,' 'Yes,' or 'Unknown.'

If TREATED, indicate all treatments:

If the recipient was treated for a positive crossmatch, indicate if each one of the listed treatments (Immunoglobulin,

Plasmapheresis, and Other treatment) was used. If 'Other treatment' was used, indicate what these treatments were in the given textfield.

Donor Blood Glucose and HbA_{1c} Information

25. Minimum pre-insulin blood glucose.

During the terminal hospitalization of the donor, indicate the minimum pre-insulin blood glucose level either in mg/dL or mmol/L. You do not have to indicate the result in both units. If using mmol/L, round to the nearest tenth. If a pre-insulin blood glucose was not done or is unknown, check the box indicating 'Not Done/Unknown.'

26. Maximum blood glucose.

During the terminal hospitalization of the donor, indicate the maximum blood glucose level either in mg/dL or mmol/L. You do not have to indicate the result in both units. If using mmol/L, round to the nearest tenth. If at least one blood glucose was not obtained, check the box indicating 'Not Done/Unknown.'

27. HbA_{1c}.

During the terminal hospitalization of the donor, indicate the percentage from the donor's glycosylated hemoglobin test. Round to the nearest tenth. If HbA_{1c} was not collected for this donor, check the box indicating 'Not Done/Unknown.'

Terminal Lab Data

28. Serum creatinine. *

Indicate the serum creatinine value closest to the time of recovery in mg/dL or μmol/L. Any results obtained during hospital admission, before organ recovery, are valid. You do not have to indicate the result in both units. If using mg/dL, round to the nearest tenth. If a serum creatinine value was not obtained or is unknown prior to recovery, check the box indicating 'Not Done/Unknown.'

29. BUN. *

Indicate the blood urea nitrogen value closest to the time of recovery in mg/dL or mmol/L. Any results obtained during hospital admission, before organ recovery, are valid. You do not have to indicate the result in both units. If using mmol/L, round to the nearest tenth. If a blood urea nitrogen value was not obtained or is unknown prior to recovery, check the box indicating 'Not Done/Unknown.'

30. Total bilirubin. *

Indicate the total bilirubin value closest to the time of recovery in mg/dL or μmol/L. Any results obtained during hospital admission, before organ recovery, are valid. You do not have to indicate the result in both units. If using mg/dL, round to the

nearest tenth. If a total bilirubin value was not obtained or is unknown prior to recovery, check the box indicating 'Not Done/Unknown.'

31. AST. *

Indicate the Aspartate aminotransferase test value closest to the time of recovery in U/L. Any results obtained during hospital admission, before organ recovery, are valid. If an Aspartate aminotransferase test was not performed prior to recovery or the result is unknown, check the box indicating 'Not Done/Unknown.'

32. ALT. *

Indicate the Alanine aminotransferase test value closest to the time of recovery in U/L. Any results obtained during hospital admission, before organ recovery, are valid. If an Alanine aminotransferase test was not performed prior to recovery or the result is unknown, check the box indicating 'Not Done/Unknown.'

33. Serum lipase. *

Indicate the serum lipase value closest to the time of recovery in mKat/L or U/L. Any results obtained during hospital admission, before organ recovery, are valid. You do not have to indicate the result in both units. If a serum lipase value was not obtained or is unknown prior to recovery, check the box indicating 'Not Done/Unknown.'

34. Serum amylase. *

Indicate the serum amylase value closest to the time of recovery in mKat/L or U/L. Any results obtained during hospital admission, before organ recovery, are valid. You do not have to indicate the result in both units. If a serum amylase value was not obtained or is unknown prior to recovery, check the box indicating 'Not Done/Unknown.'

Serology

35. Anti-HIV I/II. *

Indicate the result for the anti-HIV I/II test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate' and if the result cannot be reported to the Registry indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

36. Anti-HTLV I/II. *

Indicate the result for the anti-human T-cell lymphotropic viruses I/II test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate' and if the result cannot be reported to the Registry indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

37. RPR-VDRL. *

Indicate the result for the Rapid Plasma Reagin/Venereal Disease Research Laboratory test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate' and if the result cannot be reported to the Registry indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

38. Anti-CMV. *

Indicate the result for the cytomegalovirus antibody screen test as either 'Positive' or 'Negative.' If any test for CMV (IgG or other) is positive, please indicate 'Positive.' If all tests are negative, please indicate 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate' and if the result cannot be reported to the Registry indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

39. HBsAg. *

Indicate the result for the Hepatitis B surface antigen test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate' and if the result cannot be reported to the Registry indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

40. Anti-HBC. *

Indicate the result for the Hepatitis B test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate' and if the result cannot be reported to the Registry indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

41. Anti-HCV. *

Indicate the result for the Hepatitis C test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate' and if the result cannot be reported to the Registry indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

Terminal Hospitalization Information

42. Date and time of hospital admission.

Enter the date and time of hospital admission that resulted in the organ recovery. If the donor was transferred, enter the original admission date and time from the first hospital. If the time is unknown, check the box indicating 'Time unknown.' Standard format for date (mm/dd/yyyy) and military time (hh:mm) should be used.

43. Duration of cardiac arrest.

Enter the duration of cardiac arrest for the donor in minutes. If the duration is not reported or is unknown, check the box indicating 'Unknown.' If the donor did not experience cardiac arrest enter '0' in the textbox.

44. Date and time of brain death.

Enter the date and time of brain death. Standard format for date (mm/dd/yyyy) and military time (hh:mm) should be used. Death may be determined at clinical exam or when tests are confirmed. Enter date and time of brain death when tests are confirmed. If the time is unknown, check the box indicating 'Time unknown.'

Pancreas Procurement Information

45. Cross clamp date and time.

Enter the date and time the aorta was cross-clamped. Standard format for date (mm/dd/yyyy) and military time (hh:mm) should be used. If the date is not available, enter an '*' in the textbox and explain why it is not available. If the time is unknown, check the box indicating 'Time unknown.'

46. Date and time of pancreas recovery.

Indicate the date and time the pancreas was recovered. Standard format for date (mm/dd/yyyy) and military time (hh:mm) should be used. If the date is not available, enter an '*' in the textbox and explain why it is not available. If the time is unknown, check the box indicating 'Time unknown.'

47. Indicate all solutions used for pancreas preservation.

Indicate the type(s) of preservation used: 'UW,' 'Two Layer,' 'Eurocollins,' 'HTK,' 'Celsior,' 'Unknown,' or 'Other.' If 'Other,' specify the type of preservation used in the textfield following the list of choices. If only a modified UW is used, indicate 'UW.' If only 'Two Layer' is used, indicate the preservation used for the top layer and for the bottom layer. If the pancreas is first preserved in a "UW" solution then transferred to a "Two Layer" solution, indicate both 'UW' and 'Two Layer,'and then indicate the preservation used for the top layer and for the bottom layer.

48. Duration of cold ischemia.

Indicate the cumulative time in hours and minutes of cold ischemia from the time pancreas was placed in cold preservation solution to the start of processing. Start of processing is defined as the heating up of the organ to start the digestion process. For example, if the duration was 50 minutes, enter '0' for hours and '50' for minutes, or if it was 3 hours and 10 minutes, enter '3' for hours and '10' for minutes. If this information is not recorded in the islet processing records or is unknown, check the box indicating 'Unknown.'

Comments.

Indicate any additional comments you wish to record for the form.

Living Allo-Donor (LAL)

Database/Keyfields

Infusion Date: Enter the date the infusion recipient received the islets from this donor pancreas. Date is entered in mm/dd/yyyy format.

Pancreas Number for this infusion: If only one pancreas was processed for this infusion, indicate '1' and complete this form just once for the pancreas processed. If there was more than one pancreas processed and used for this infusion, indicate '1' for the first pancreas processed and complete the form for that donor. For the second pancreas processed, complete a new donor pancreas form for that particular pancreas and indicate '2' for pancreas number. The infusion date will remain the same for pancreas 1 and pancreas 2. Follow this method of numbering for all pancreata processed and used for this single infusion. Please note that if a pancreas was processed and it was never used for infusion, you do not complete this form.

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

If there was more than one donor pancreas processed and infused during the same procedure, the transplant center must complete the appropriate donor pancreas form for each pancreas processed. For example, if two pancreata were processed for a single infusion, indicate '1' for the first pancreas processed and '2' for the second pancreas processed.

Occasionally a value will need to be rounded to the nearest whole number or closest decimal point for entry in the database system. When the value is equal to 5 or greater, round up. When the value is less than 5, round down.

If the living allo-donor does not consent to share their data with CITR, the donor information will be incomplete. In this case, the CITR Transplant Center Coordinator should notify the Coordinating Center Data Manager when the islet infusion recipient is registered for CITR.

For the majority of the questions on this form you have the choice of selecting 'Not Done/Unknown' if the answer or test result is not available or unknown at your transplant center. However, there may be cases where an answer or result is required in a textfield and 'Not Done/Unknown' is not an available choice. This textfield will then require you to request an exception for this field. To request an exception, type an '∗' in the textfield. Upon doing this, a pop-up box will appear. Enter the information you have about this question or the reason why you do not have an answer to this question. By requesting this exception you will avoid having the Coordinating Center query you on why the question was left blank.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Living Allo-Donor** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, in the first textfield enter the infusion date and then select the appropriate pancreas number from the pull down box. For proper definitions of the infusion date and pancreas number, refer to the Database/Keyfields section above.

If you are modifying data for a previously entered LAL form, the **Key Selection** screen displays a listing of the LAL forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

Donor Information

1. Donor type.

Choose the appropriate type of islets obtained for this infusion from the following list: Islets (the type of islet you expect at the end of processing after purification, it has not been manipulated beyond the processing phase), Stem/progenitor/pre-cursor cell derived islets, Engineered cell line, Unknown, or Other.

2. Date of birth.

Enter the date the donor was born using the standard 8-digit numeric format of mm/dd/yyyy. If the complete date of birth is unknown, indicate the donor's age at the time of infusion in the next field.

Age: If the complete date of birth is unknown, indicate the donor's age in years at the time of infusion in whole numbers.

If a date of birth is entered above, the age will automatically populate the field. If date of birth and age are unknown, check the box indicating 'Unknown.'

3. Gender.

Indicate if the donor is 'Male,' 'Female,' or if gender is 'Unknown.'

4. Ethnicity.

Indicate the ethnicity of the donor. If the ethnicity is unknown, indicate this. Please note that ethnicity is not routinely collected for donors in Canada, so for those donors where ethnicity is not recorded in the donor records, 'Unknown' should be indicated.

Hispanic or Latino: A person of Cuban, Mexican, Puerto Rican, South or Central American, or other culture or origin, regardless of race. The term "Spanish origin" can be used in addition to "Hispanic or Latino."

Non Hispanic or Latino: A person without Cuban, Mexican, Puerto Rican, South or Central American origin, regardless of their race.

5. Race.

Indicate 'No' or 'Yes' for each race category as best describes the race of the donor. At least one category must be indicated as 'Yes.' If race is 'Unknown', indicate 'Unknown' for each category. If the race is not listed, choose 'Other' and specify the race of the donor in the textfield.

American Indian or Alaska Native: A donor having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment. This category includes Native/Inuit Canadians.

Asian: A donor having origins in any of the original peoples of the Far East or Southeast Asia (for example, China, Japan, Korea).

Black or African American: A donor having origins in any of the black racial groups of Africa.

Indian Sub-continent: A donor having origins in any of the peoples of the Indian sub-continent. Examples of this area include India and Pakistan.

Mideast or Arabian: A donor having origins in any of the peoples of the Middle East and Northern Africa. Examples of these areas include Egypt, Israel, Iran, Iraq, Saudi Arabia, Jordan and Kuwait.

Native Hawaiian or Other Pacific Islander: A donor 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 peoples of Europe.

Other: If the race of the donor is not listed above, indicate the 'Other' category and specify the race in the textfield following the 'Other' choice. This category should not be used if the donor's race is more than one choice from above. If this is the case, each race should be checked 'Yes.' This category is only used when the donor's race has not been listed above.

6. Weight.

Enter the weight of the donor at the time of recovery in kilograms or in pounds. Round to the nearest tenth. If the weight of the donor is unknown, check the 'Unknown' box.

7. Height.

Enter the height of the donor at the time of recovery in centimeters or in inches. Round to the nearest tenth. If the height of the donor is unknown, check the 'Unknown' box.

8. ABO blood group.

Indicate the donor's blood type. Acceptable values are A, B, AB, or O. If the subgroup of A is known, it can be specified as A_1, A_2, A_1B, or A_2B. If the blood group is not recorded for this donor, select 'Unknown' from the pull down list.

9. Rh.

Indicate the donor's Rh factor. If the Rh is positive, indicate 'Positive.' If the Rh is negative, indicate 'Negative' and if the Rh is unknown, indicate 'Unknown.'

Donor Medical History

10. History of hypertension.

Select 'Yes' if the donor has documented history of hypertension prior to this donation. If not, select 'No' and if unknown, select 'Unknown.' Documented history only includes hypertension diagnosed and recorded in the donor's medical chart.

a. **If YES, duration:** If 'Yes,' select one duration category to indicate the number of years the donor has had a documented history of hypertension. If the duration is unknown, select 'Unknown.' Choices are 0-5 years (one day up to 72 months), 6-10 years (72 months through 120 months) and >10 years (greater than 120 months). For duration, categories extend to the next category. For example, if a donor has been diagnosed with hypertension for 5 years and 11 months, you would select category '0-5 years,' and if a donor was diagnosed with hypertension for 10 years and 1 month you would choose the category '>10 years.'

b. **If YES, method of control:** If the donor has a documented history of hypertension, indicate if diet, diuretics and other anti-hypertensive medications were used for control. Select 'No,' 'Yes,' or 'Unknown' for <u>each</u> method of hypertension control listed (Diet, Diuretics and Other hypertensive medication).

11. History of alcohol dependency.

Select 'Yes,' 'No' or 'Unknown' to indicate if the donor has a documented history of alcohol dependency. If 'Yes,' select 'Yes,' 'No' or 'Unknown' if there was continued use in the past six months prior to organ recovery.

12. History of diabetes.

Select 'No,' 'Yes,' or 'Unknown' to indicate if the donor has a documented history of diabetes.

a. **If YES, duration:** If 'Yes,' select one duration category to indicate the number of years the donor has had a documented history of diabetes. If the duration is unknown, select 'Unknown.' Choices are 0-5 years (one day up to

72 months), 6-10 years (72 months through 120 months) and >10 years (greater than 120 months). For duration, categories extend to the next category. For example, if a donor has been diagnosed with diabetes for 1 month, you would select category '0-5 years,' and if a donor was diagnosed with diabetes for 10 years and 1 month you would choose the category '>10 years.'

b. If YES, is the donor insulin dependent: If the donor has a documented history of diabetes, also indicate 'Yes,' 'No,' or 'Unknown' if the donor is insulin dependent. If the donor is insulin dependent, select one duration category to indicate the number of years the donor has been taking insulin. If the duration is unknown, select 'Unknown.' Choices are 0-5 years (one day up to 72 months), 6-10 years (72 months through 120 months) and >10 years (greater than 120 months). For duration, categories extend to the next category.

Transfusion Information

13. During this hospitalization, total number of transfusion units given prior to surgery.

Indicate the number of units of packed red cells or whole blood transfused prior to the organ recovery during this hospitalization. Units are categorized as 0 units, 0-5 units (0.01-5.99), 6-10 units (6.0-10.00) and >10 units (greater than 10.00). To categorize partial units, choose the closest unit in the category. For example, if 5.5 units were used, choose category 0-5 units. If 0.5 units were used, choose 0-5 units. If the donor did not require any transfusions, indicate 0 units. If the donor records are incomplete and transfusion units cannot be determined, indicate 'Unknown.'

14. Number of transfusion units given intraoperatively.

Indicate the number of units of packed red cells or whole blood transfused during the organ recovery procedure. Units are categorized as 0 units, 0-5 units (0.01-5.99), 6-10 units (6.0-10.00) and >10 units (greater than 10.00). To categorize partial units, choose the closest unit within the same category. For example, if 7.5 units were used choose category 6-10 units. If 0.3 units were used, choose 0-5 units. If the donor did not require any transfusions, indicate 0 units. If the donor records are incomplete and transfusion units cannot be determined, indicate 'Unknown.'

HLA Typing

15. HLA typing conducted.

Indicate if HLA typing was conducted on the donor. If you are unable to determine if HLA typing was conducted, indicate 'Unknown.'

If YES, typing was conducted:

a. Date typed: Enter the date that the donor was tissue typed by the histocompatability laboratory of the recipient. Use the standard 8-digit numeric format of mm/dd/yyyy.

d. Class I: Complete the matrix for the antigens. **Do not leave any boxes within the matrix blank.** Acceptable antigens and their splits are available in Appendix 3 of this User's Guide and on the password-protected CITR website. When known, it is preferable to enter the split of the antigen rather than the parent. For Bw4 and Bw6, if the antigen is present, indicate 'Positive,' if the antigen is absent, indicate 'Negative.' If an antigen is 'Unknown or Not Determined,' or 'Confirmed Blank,' either type that description into the textbox or select the appropriate response from the dropdown menu. For example, if the following results are obtained for BW:

Donor 1		Donor 2		Donor 3	
BW(1)	BW(2)	BW(1)	BW(2)	BW(1)	BW(2)
4	4	6	6	4	6

The following results should be entered:

For donor #1 enter under BW4: Positive, and under BW6: Negative
For donor #2 enter under BW4: Negative, and under BW6: Positive
For donor #3 enter under BW4: Positive, and under BW6: Positive

If family studies have not been performed and the antigen is not known, indicate 'Unknown or Not Determined.' If family studies have been performed and the blank is confirmed, indicate 'Confirmed Blank.'

b. Class II: Complete the matrix for the antigens. Do not leave any boxes within the matrix blank. Acceptable antigens and their splits are available in Appendix 3 of this User's Guide and on the password-protected CITR website. When known, it is preferable to enter the split of the antigen rather than the parent. If an antigen is 'Unknown or Not Determined,' or 'Confirmed Blank,' either type that description into the textbox or select the appropriate response from the dropdown menu.

Pre-Donation Lab Data

For a number of the following laboratory tests, a minimal set of standardized CITR protocols is available in this User's Guide (Appendix 6) and on the CITR password protected web site.

Items in blue on the Internet Data Entry Screen (also are double starred: **) should follow the procedures outlined in the CITR Standard Guidelines. Indicate the result obtained and check the box indicating 'CITR Standard Used.' However, if this test was not performed in a very similar manner as the CITR Standard, you may still record your result, but do not check the box indicating 'CITR Standard Used.' If there is not an option to check 'CITR Standard Used,' or the question is not double starred (**) for a metabolic test, this indicates that a CITR Standard for this test has not been determined yet. Updates will be posted as needed to the password-protected CITR website.

16. Pre-donation laboratory information.

a. Fasting blood glucose:

During the hospitalization of the donor, indicate the fasting plasma glucose level either in mg/dL or mmol/L. You do not have to indicate the result in both units. If using mmol/L, round to the nearest tenth.

b. HbA_{1c}:

During the hospitalization of the donor, indicate the percentage from the donor's glycosylated hemoglobin test. Round to the nearest tenth.

c. Basal plasma C-peptide:

During the hospitalization of the donor, indicate the Basal C-peptide level either in ng/mL or nmol/L. If using nmol/L, round to the nearest hundredth.

d. Peak stimulated C-peptide after meal:

During the hospitalization of the donor, indicate the peak stimulated C-peptide after a meal in ng/mL or nmol/L. You do not have to indicate the result in both units. This 'meal' can be any type of meal (breakfast, Ensure®, Sustacal®, etc.). Round to the nearest hundredth.

e. IV glucagon:

1. Basal C-peptide before IV glucagon:

During the hospitalization of the donor, indicate the Basal C-peptide before IV glucagon in ng/mL or nmol/L. You do not have to indicate both units. Round to the nearest hundredth.

2. Peak stimulated C-peptide after IV glucagon:

During the hospitalization of the donor, indicate the peak stimulated C-peptide after IV glucagon in ng/mL or nmol/L. You do not have to indicate the result in both units. Round to the nearest hundredth.

f. Arginine Stimulation Test (AST):

1. Basal C-peptide before IV arginine: **

During the hospitalization of the donor, indicate the Basal C-peptide before IV arginine in ng/mL or nmol/L. You do not have to indicate the result in both units. Round to the nearest hundredth. Check the appropriate box if the CITR Standard was used.

2. Peak stimulated C-peptide after IV arginine: **

During the hospitalization of the donor, indicate the peak stimulated C-peptide after IV arginine in ng/mL or nmol/L. You do not have to indicate the result in both units. Round to the nearest hundredth. Check the appropriate box if the CITR Standard was used.

3. Acute C-peptide response to IV arginine: **

During the hospitalization of the donor, indicate the acute C-peptide response to IV arginine in ng/mL or nmol/L. You do not have to indicate the result in both units. Round to the nearest hundredth. Check the appropriate box if the CITR Standard was used.

4. Acute insulin response to IV arginine: **

During the hospitalization of the donor, indicate the acute insulin response to IV arginine in μU/mL. Round to the nearest tenth. Check the appropriate box if the CITR Standard was used.

g. Intravenous Glucose Tolerance Test (IVGTT):

1. Basal C-peptide before IV glucose: **

During the hospitalization of the donor, indicate the Basal C-peptide before IV glucose in ng/mL or nmol/L. You do not have to indicate the

result in both units. Round to the nearest hundredth. Check the appropriate box if the CITR Standard was used.

2. Peak stimulated C-peptide after IV glucose: **

During the hospitalization of the donor, indicate the peak stimulated C-peptide after IV glucose in ng/mL or nmol/L. You do not have to indicate the result in both units. Round to the nearest hundredth. Check the appropriate box if the CITR Standard was used.

3. Acute C-peptide response to IV glucose: **

During the hospitalization of the donor, indicate the acute C-peptide response to IV glucose in ng/mL or nmol/L. You do not have to indicate the result in both units. Round to the nearest hundredth. Check the appropriate box if the CITR Standard was used.

4. Acute insulin response to IV glucose: **

During the hospitalization of the donor, indicate the acute insulin response to IV glucose in μU/mL. Round to the nearest tenth. Check the appropriate box if the CITR Standard was used.

5. AUC insulin derived from 0.5g/kg IVGTT: **

During the hospitalization of the donor, indicate the area under the curve insulin derived from the 0.5g/kg IV glucose tolerance test in μU/mL per minute. Round to the nearest tenth. Check the appropriate box if the CITR Standard was used.

6. K_G-Value derived from 0.5g/kg IVGTT: **

During the hospitalization of the donor, indicate the K_G-Value derived from 0.5g/kg IV Glucose Tolerance Test. Check the appropriate box if the CITR Standard was used.

h. Oral Glucose Tolerance Test (OGTT):

1. 2-hr 75g OGTT plasma glucose: **

During the hospitalization of the donor, indicate the 2-hour 75g oral glucose tolerance test plasma glucose level either in mg/dL or mmol/L. You do not have to indicate the result in both units. If using mmol/L, round to the nearest tenth. Check the appropriate box if the CITR Standard was used.

2. AUC C-peptide OGTT: **

During the hospitalization of the donor, indicate the area under the curve for the oral glucose tolerance test in ng/mL per minute. Round to the

nearest hundredth. Check the appropriate box if the CITR Standard was used.

i. Mixed Meal Test:

1. AUC C-peptide MMTT: **

During the hospitalization of the donor, indicate the area under the curve for the mixed meal tolerance test in ng/mL per minute. Round to the nearest hundredth. Check the appropriate box if the CITR Standard was used.

2. Mixed meal stimulation index: **

During the hospitalization of the donor, indicate the mixed meal stimulation test in ng/mg or pmol/mg. You do not have to indicate the result in both units. Round to the nearest tenth. Check the appropriate box if the CITR Standard was used.

Serology

17. Anti-HIV I/II.

Indicate the result for the anti-HIV I/II test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate' and if the result cannot be reported to the Registry indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

18. Anti-HTLV I/II.

Indicate the result for the anti-human T-cell lymphotropic viruses I/II test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate' and if the result cannot be reported to the Registry indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

19. RPR-VDRL.

Indicate the result for the Rapid Plasma Reagin/Venereal Disease Research Laboratory test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done indicate 'Not Done,' if the result cannot be

determined, indicate 'Indeterminate' and if the result cannot be reported to the Registry indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

20. Anti-CMV.

Indicate the result for the cytomegalovirus antibody screen test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate' and if the result cannot be reported to the Registry indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

21. HBsAg.

Indicate the result for the Hepatitis B surface antigen test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate' and if the result cannot be reported to the Registry indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

22. Anti-HBC.

Indicate the result for the Hepatitis B test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate' and if the result cannot be reported to the Registry indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

23. Anti-HCV.

Indicate the result for the Hepatitis C test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate' and if the result cannot be reported to the Registry indicate 'Cannot Disclose.' The key difference

between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

Hospitalization Information

24. Date and time of hospital admission.

Enter the date and time of hospital admission that resulted in the organ recovery. If the time is unknown, check the box indicating 'Time unknown.' Standard format for date (mm/dd/yyyy) and military time (hh:mm) should be used.

Pancreas Procurement Information

25. Date and time of pancreas recovery.

Indicate the date and time the pancreas was recovered. If the time is unknown, check the box indicating 'Time unknown.' Standard format for date (mm/dd/yyyy) and military time (hh:mm) should be used.

26. Date and time pancreas placed in preservation.

Indicate the date and time the pancreas was placed in preservation. If the time is unknown, check the box indicating 'Time unknown.' Standard format for date (mm/dd/yyyy) and military time (hh:mm) should be used.

27. Indicate all solutions used for pancreas preservation.

28. Indicate the type(s) of preservation used: 'UW,' 'Two Layer,' 'Eurocollins,' 'HTK,' 'Celsior,' 'Unknown,' or 'Other.' If 'Other,' specify the type of preservation used in the textfield following the list of choices. If only a modified UW is used, indicate 'UW.' If only 'Two Layer' is used, indicate the preservation used for the top layer and for the bottom layer. If the pancreas is first preserved in a "UW" solution then transferred to a "Two Layer" solution, indicate both 'UW' and 'Two Layer,'and then indicate the preservation used for the top layer and for the bottom layer.Duration of cold ischemia.

Indicate the cumulative time in hours and minutes of cold ischemia from time pancreas was placed in cold preservation solution to the start of processing. Start of processing is defined as the heating up of the organ to start the digestion process. If this time is unknown, check the box indicating 'Unknown.' For example, if the duration was 50 minutes, enter '0' for hours and '50' for minutes, or if it was 140 minutes, enter '2' for hours and '20' for minutes. If this information is not recorded in the islet processing records or is unknown, check the box indicating 'Unknown'.

Comments.

Indicate any additional comments you wish to record for the form.

Living Auto-Donor (LAU)

Database/Keyfields

Infusion Date: Enter the date the infusion was performed. Date is entered in mm/dd/yyyy format.

Pancreas Number for this infusion: If only one donor pancreas was processed for this infusion, indicate '1' and complete this form just once for the donor. If there was more than one pancreas processed and used for this infusion, indicate '1' for the first pancreas processed and complete the form for that donor. For the second pancreas processed, complete a new donor form for that particular pancreas and indicate '2' for pancreas number. The infusion date will remain the same for pancreas 1 and pancreas 2. Follow this method of numbering for all pancreata processed and used for a single infusion. Please note that if a pancreas was processed and it was never used for infusion, you do not complete this form.

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

If there was more than one donor pancreas processed and infused during the same procedure, the transplant center must complete the appropriate donor form for each pancreas processed.

Occasionally a value will need to be rounded to the nearest whole number or closest decimal point for entry in the database system. When the value is equal to 5 or greater, round up. When the value is less than 5, round down.

For the majority of the questions on this form you have the choice of selecting 'Not Done/Unknown' if the answer or test result is not available or unknown at your transplant center. However, there may be cases where an answer or result is required in a textfield and 'Not Done/Unknown' is not an available choice. This textfield will then require you to request an exception for this field. To request an exception, type an '∗' in the textfield. Upon doing this, a pop-up box will appear. Enter the information you have about this question or the reason why you do not have an answer to this question. By requesting this exception you will avoid having the Coordinating Center query you on why the question was left blank.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Living Auto-Donor** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, in the first textfield enter the infusion date and then select the appropriate pancreas number

from the pull down box. For proper definitions of the infusion date and pancreas number, refer to the Database/Keyfields section above.

If you are modifying data for a previously entered LAU form, the **Key Selection** screen displays a listing of the LAU forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

Donor Information

1. Donor type.

Choose the appropriate type of islets obtained for this infusion from the following list: Islets (the type of islet you expect at the end of processing after purification, it has not been manipulated beyond the processing phase), Stem/progenitor/pre-cursor cell derived islets, Engineered cell line, Unknown or Other.

2. Is the donor on prescription narcotics.

Indicate if the donor was on prescription narcotics. If it is not indicated in the donor/medical records, check 'Unknown,' and if this information is confidential and cannot be released, indicate 'Cannot Disclose.'

If the person is on prescription narcotics, indicate the year narcotics were started. If the type of prescription narcotics has changed through time, indicate year narcotics were first started. If the year is unknown, check the box indicating 'Unknown.'

Medical History

3. History of hypertension.

Select 'Yes' if the donor has documented history of hypertension prior to this hospitalization. If not, select 'No' and if unknown, select 'Unknown.' Documented history only includes hypertension diagnosed and recorded in the donor's medical chart.

a. If YES, duration: If 'Yes,' select one duration category to indicate the number of years the donor has had a documented history of hypertension. If the duration is unknown, select 'Unknown.' Choices are 0-5 years (one day up to 72 months), 6-10 years (72 months through 120 months) and >10 years (greater than 120 months). For duration, categories extend to the next category. For example, if a donor has been diagnosed with hypertension for 5 years and 11 months, you would select category '0-5 years,' and if a donor was diagnosed with hypertension for 10 years and 1 month you would choose the category '>10 years.'

b. If YES, method of control: If the donor has a documented history of hypertension, indicate if diet, diuretics and other anti-hypertensive medications were used for control. Select 'Yes,' 'No' or 'Unknown' for each method of hypertension control listed (Diet, Diuretics and Other hypertensive medication).

4. History of alcohol dependency.

Select 'No,' 'Yes,' or 'Unknown' to indicate if the donor has a documented history of alcohol dependency. If 'Yes,' select 'No,' 'Yes,' or 'Unknown' if there was continued use in the past six months prior to organ recovery.

5. History of diabetes.

Select 'No,' 'Yes,' or 'Unknown' to indicate if the donor has a documented history of diabetes.

a. If YES, duration: If 'Yes,' select one duration category to indicate the number of years the donor has had a documented history of diabetes. If the duration is unknown, select 'Unknown.' Choices are 0-5 years (one day up to 72 months), 6-10 years (72 months through 120 months) and >10 years (greater than 120 months). For duration, categories extend to the next category. For example, if a donor has been diagnosed with diabetes for 1 month, you would select category '0-5 years,' and if a donor was diagnosed with hypertension for 10 years and 1 month you would choose the category '>10 years.'

b. If YES, is the donor insulin dependent: If the donor has a documented history of diabetes, also indicate 'No,' 'Yes,' or 'Unknown' if the donor is insulin dependent. If the donor is insulin dependent, select one duration category to indicate the number of years the donor has been taking insulin. If the duration is unknown, select 'Unknown.' Choices are 0-5 years (one day up to 72 months), 6-10 years (72 months through 120 months) and >10 years (greater than 120 months). For duration, categories extend to the next category.

Pancreatectomy Information

6. Was a pancreatectomy performed on the recipient.

Indicate if a pancreatectomy was performed on the recipient by indicating 'No,' 'Yes,' or 'Unknown.' If you are unable to determine if a pancreatectomy was performed, indicate 'Unknown.'

a. Type of pancreatectomy: If a pancreatectomy was performed, indicate the type of pancreatectomy from the following list: Total (100%, whole organ is removed), Completion (95% - 99%, but not the whole organ), Partial (<95%) or Unknown.

b. Was a pancreatectomy performed for treatment of: Indicate if the pancreatectomy was performed for the treatment of 'Pancreatitis,' 'Other,' or 'Unknown.'

If the pancreatectomy was performed for 'Pancreatitis:'

1. **Date of pancreatitis diagnosis:** Indicate the date of pancreatitis diagnosis in mm/dd/yyyy format. If the complete date of diagnosis is unknown, indicate the year of diagnosis. If the year of diagnosis is unknown, check the box indicating 'Unknown.'
2. **Cause of pancreatitis:** Indicate the cause of the pancreatitis (Small duct disease, Biliary (gall stones), Alcoholism, Pancreas divisum, Familial pancreatitis, Duct occlusion, Unknown, or Other). If 'Other,' indicate the other cause of pancreatitis in the textfield following the list of choices.
3. **Did the recipient have previous surgery for pancreatitis:** Indicate if the recipient has had previous surgery for pancreatitis by choosing one of the following choices: None, Drainage, Sphincterotomy, Sphincterplasty, Distal pancreatectomy, Pancreaticojejunostomy, Unknown, or Other. If 'Other,' indicate the other reason for the previous surgery for pancreatitis in the textfield following the list of choices.

Hospitalization Information

7. Date and time of hospital admission.

Enter the date and time of hospital admission that resulted in the organ recovery. If time is unknown, mark the box indicating 'Time unknown.' Standard format for date (mm/dd/yyyy) and military time (hh:mm) should be used.

Pancreas Procurement Information

8. Date and time of pancreas recovery.

Indicate the date and time the pancreas was recovered. If time is unknown, mark the box indicating 'Time unknown.' Standard format for date (mm/dd/yyyy) and military time (hh:mm) should be used.

9. Date and time pancreas placed in preservation.

Indicate the time the pancreas was placed in preservation. If time is unknown, mark the box indicating 'Time unknown.' Standard format for date (mm/dd/yyyy) and military time (hh:mm) should be used.

10. Indicate all solutions used for pancreas preservation.

11. Indicate the type(s) of preservation used: 'UW,' 'Two Layer,' 'Eurocollins,' 'HTK,' 'Celsior,' 'Unknown,' or 'Other.' If 'Other,' specify the type of preservation used in the textfield following the list of choices. If only a modified UW is used, indicate 'UW.' If only 'Two Layer' is used, indicate the preservation used for the top layer and for the bottom layer. If the pancreas is first preserved in a "UW" solution then transferred to a "Two Layer" solution, indicate both 'UW' and 'Two Layer,'and then indicate the preservation used for the top layer and for the bottom layer.Duration of cold ischemia.

Indicate the cumulative time in hours and minutes of cold ischemia from the time the pancreas is placed in cold preservation solution to the start of processing. Start of processing is defined as the heating up of the organ to start the digestion process. For example, if the duration was 50 minutes, enter '0' for hours and '50' for minutes, or if it was 140 minutes, enter '2' for hours and '20' for minutes. If this information is not recorded in the islet processing records or is unknown, check the box indicating 'Unknown.'

Comments.

Indicate any additional comments you wish to record for the form.

Islet Processing/Testing (IPT)

Database/Keyfields

Infusion Date: Enter the date the infusion recipient received the islets from the donor pancreas that was processed. Date is entered in mm/dd/yyyy format.

Pancreas Number of this infusion: If only one pancreas was processed for this infusion, indicate '1' and complete this form just once for the pancreas processed. If there was more than one pancreas processed and used for this infusion, indicate '1' for the first pancreas processed and complete the form for that pancreas. For the second pancreas processed, complete a new islet processing/testing form for that particular pancreas and indicate '2' for pancreas number. The infusion date will remain the same for pancreas 1 and pancreas 2. Follow this method of numbering for all pancreata processed and used for infusion. Please note that if a pancreas was processed and it was never used for infusion, you do not complete this form or a donor pancreas form (CAD, LAL, or LAU).

Processing Date: Enter the date the pancreas was processed in mm/dd/yyyy format. If the start and end time of the processing spans two days (23:30 processing began and ended at 00:30) enter the date when the processing was initiated.

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

If there was more than one donor pancreas processed and infused during the same procedure, the transplant center must complete one islet processing/testing form for each pancreas processed.

Occasionally a value will need to be rounded to the nearest whole number or closest decimal point for entry in the database system. When the value is equal to 5 or greater, round up. When the value is less than 5, round down.

For the majority of the questions on this form you have the choice of selecting 'Not Done/Unknown' if the answer or test result is not available or unknown at your transplant center. However, there may be cases where an answer or result is required in a textfield and 'Not Done/Unknown' is not an available choice. This textfield will then require you to request an exception for this field. To request an exception, type an '∗' in the textfield. Upon doing this, a pop-up box will appear. Enter the information you have about this question or the reason why you do not have an answer to this question. By requesting this exception you will avoid having the Coordinating Center query you on why the question was left blank.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Islet Processing/Testing** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, in the first textfield enter the infusion date, select the appropriate pancreas number from the pull down box and indicate the processing date in the last textfield. For proper definitions of the infusion date, pancreas number and processing date, refer to the Database/Keyfields section above.

If you are modifying data for a previously entered IPT form, the **Key Selection** displays a listing of the IPT forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

1. Pancreas procurement team.

Indicate if the pancreas procurement team was related, unrelated to the processing/infusion team, or if this information is unknown. The term "related" refers to if the procurement team resides at the same institution/hospital and in the same city as the processing/infusion team. For example, if the procurement team is affiliated with Kaiser Health System in Los Angeles and the infusion team is at the University of Texas, they are "unrelated." If the infusion team is affiliated with the Kaiser Health System in Georgia, they are also "unrelated." If one or more members of the processing/infusion team helps or performs with the procurement team, this would be defined as "related," regardless of the city in which the procurement occurs.

2. Islet processing and testing center.

Indicate if the processing/testing center is located at the CITR participating transplant center where the infusion took place, if the islets were obtained from another facility not located at, or affiliated with, the transplant center, or if this information is unknown.

Islet Processing Information

3. Collagenase type.

Various types of collagenase may be used during the islet processing. Indicate each type of collagenase used (more than one may apply). If that type is not listed, choose 'Other' and indicate the specific type or types used in the textfield following the checkbox for 'Other.' If the type(s) of collagenase used cannot be determined, check the box indicating 'Unknown.'

4. Collagenase lots and concentrations.

Indicate the type of collagenase used for each lot. Information on up to three lots may be entered. If the type of collagenase is unknown, make this selection from the pull down list. Enter the lot number of the collagenase used. If more than one was used, indicate each lot number under the appropriate columns for 'Lot 1,' 'Lot 2,' and 'Lot 3.' If the lot number cannot be determined, check the box indicating 'Lot Unknown.' Lastly, enter the collagenase concentration for each lot number used. Concentration should be rounded to the nearest hundredth. There is no need to indicate the units used for concentration as this can be determined from the lot number at a later date if needed. If the concentration cannot be determined, check the box indicating 'Concentration Unknown.' If one lot was used, enter all information for that lot under the column 'Lot 1.' If two lots were used, enter information beginning with 'Lot 1' and then 'Lot 2.'

5. Islet purification.

Indicate if there was 'None' (No Islet Purification), 'Density gradient,' 'Unknown,' or 'Other' for islet purification. If 'Density gradient,' specify whether it was discontinuous, continuous, continuous followed by discontinuous, or unknown. If 'Other,' specify the type of islet purification in the textfield following the list of choices.

6. Islet pretreatment.

Indicate if the islets went through a pretreatment process. If they did not go through a pretreatment process indicate 'None.' If the islets did go through a pretreatment process, check all that apply from 'Culture,' 'Cryopreservation,' 'Irradiation,' 'Gene Transfer,' 'Other,' or 'Unknown.' If 'Other,' specify the type of islet pretreatment in the textfield following the list of choices.

If the islets were cultured, indicate the duration in hours and minutes. For example, if the duration was 50 hours and 20 minutes, indicate '50' in the hours textfield and '20' in the minutes textfield. If the duration was 140 minutes, indicate '2' in the hours textfield and '20' in the minutes textfield. If the duration cannot be determined, check the box indicating 'Unknown.'

Indicate all additional comments you wish to record in the textfield following the list of islet pretreatments.

Islet Product Characterization for Total Final Islet Preparation

For the following questions, indicate the most IMMEDIATE pre transplant information only. This information is for the total final islet preparation.

7. Total packed cell volume.

Indicate the total packed cell volume. If two or more lots were used, include all lots when recording total packed cell volume. However, if multiple pancreata were used for this infusion, only report the packed cell volume for the individual

pancreas that was identified in the Keyfields (e.g. pancreas #1 or pancreas #2.) Estimate to the nearest tenth. If this information is not obtainable, check the box indicating 'Not Done/Unknown.'

8. Percent trapped islets.

Indicate the percent of trapped islets in the final preparation. If this information is not obtainable, check the box indicating 'Not Done/Unknown.'

9. Total islet count.

Indicate the total number of islets in the final preparation. Do not indicate the islet equivalent count for this question. If total islet count is not obtainable, check the box indicating 'Not Done/Unknown.'

10. Time of Islet Equivalent Count.

Indicate when the most recent total Islet Equivalent Count was performed. Choices include 'Post Digestion,' Post Purification (Pre-culture/cryo),' 'Post culture/cryo,' 'Unknown,' or 'Other.' If 'Other,' indicate when the islet equivalent count was performed in the textfield following the list of choices.

11. Total number of Islet Equivalents.

Indicate the total number of islet equivalents available in the final preparation at the time noted in the question above. If this information is not obtainable, check the box indicating 'Not Done/Unknown.'

12. Total number of beta cells.

Indicate the total number of beta cells in the final preparation. This number will be x 10^6. If your transplant center does not calculate the total number of beta cells in the final preparation, check the box indicating 'Not Done/Unknown.'

13. Total insulin content.

Indicate the total insulin content in μg in the final preparation. If your transplant center does not calculate the total insulin content in the final preparation, check the box indicating 'Not Done/Unknown.' If your center records total insulin content in units, the conversion to μg is 1 milliunit = 0.035 μg.

14. Total DNA content.

Indicate the total DNA content in μg in the final preparation. If your transplant center does not calculate the total DNA count in the final preparation, check the box indicating 'Not Done/Unknown.'

Islet Microbiology Results

15. Gram stain.

Indicate if the gram stain had 'No Organism Seen,' was 'Positive,' 'Unknown,' or was 'Missing.' If the gram stain was 'Positive,' indicate if it was 'Gram-negative,' 'Gram- positive,' or 'Unknown.'

16. Aerobic culture.

Indicate if the aerobic culture had 'No Growth,' was 'Positive,' 'Unknown,' or was 'Not Done.' If the culture was 'Positive,' indicate the organisms identified in the textfield beside the result.

17. Anaerobic culture.

Indicate if the anaerobic culture had 'No Growth,' was 'Positive,' 'Unknown,' or was 'Not Done.' If the culture was 'Positive,' indicate the organisms identified in the textfield beside the result.

18. Fungal culture.

Indicate if the fungal culture had 'No Growth,' was 'Positive,' 'Unknown,' or was 'Not Done.' If the culture was 'Positive,' indicate the organisms identified in the textfield beside the result.

19. Mycoplasma.

Indicate if the mycoplasma results had 'No Growth,' was 'Positive,' 'Unknown,' or was 'Not Done.' If the culture was 'Positive,' specify the results in the textfield.

20. Total endotoxin units in final preparation.

Indicate the total endotoxin units in the final preparation. If endotoxin units are recorded as EU/mL or EU/kg of recipient, convert to total endotoxin units by multiplying the value by the total volume or total weight of the recipient and record. Round to the nearest hundredth. If the endotoxin units are not obtainable, check the box indicating 'Not Done/Unknown.' If your lab does not indicate a specific value, for example it reports <0.05, then choose the '<' sign in the checkbox and then enter '0.05' in the textfield. If a specific value is indicated on the lab report, just indicate this value in the textfield, without choosing the '<' sign.

21. Islet Purity.

a. **Percent dithizone positive cells:** Indicate the percentage of dithizone positive cells in the final preparation. If this information was not assessed or is unknown, check the 'Not Done/Unknown' box.

b. **Percent beta cells:** Indicate the percentage of beta cells in the final preparation. If this information was not assessed or is unknown, check the 'Not Done/Unknown' box.

22. Islet Viability.

Indicate the type of islet viability test conducted for the final preparation from the choices of 'fluorescein diacetate/propidium iodide,' 'equivalent fluorochromes,' 'trypan blue,' or 'other.' If 'other' is selected, specify the type of islet viability test conducted. Indicate the percentage result from the test. If the result is not done or unknown, check the 'Not Done/Unknown' box.

23. Islet Potency.

Stimulation Index: Indicate the stimulation index for this final preparation. To obtain the stimulation index take the glucose-stimulated insulin release at high glucose divided by the glucose-stimulated insulin release at low glucose. If one or both pieces of this information are missing, unknown, or not assessed, check the 'Not Done/Unknown' box.

24. Mouse bioassay conducted.

Indicate 'No,' 'Yes,' or 'Unknown' if any mouse bioassays were conducted for this islet infusion. If a mouse bioassay was conducted:

a) Indicate your time to function definition (check all that apply): Check all that apply to your center's definition of time to function of the islets : Blood glucose permanently <200 mg/dL, Insulin permanently >5 µU/L, C-peptide permanently >1 ng/mL, or Other. If 'Other' is selected, please specify. If more than one definition is used, check all that apply.

b) For up to ten mice, indicate the mouse type, the number of islet equivalents infused, the sacrifice day, and the number of days to time of function. If at sacrifice, time to function was not met, indicate 'No Function.'

1. **Mouse 1:** Indicate the type of mouse used, the total number of islet equivalents infused, the day in which the mouse was sacrificed, and the number of days to function. If at sacrifice time, function was not met, indicate 'No Function.'

2. **Mouse 2:** Indicate the type of mouse used, the total number of islet equivalents infused, the day in which the mouse was sacrificed, and the number of days to function. If at sacrifice time, function was not met, indicate 'No Function.' If only one mouse was used, indicate 'Not Done' for mouse type.

3. **Mouse 3:** Indicate the type of mouse used, the total number of islet equivalents infused, the day in which the mouse was sacrificed, and the number of days to function. If at sacrifice time, function was not met, indicate 'No Function.' If only two mice were used, indicate 'Not Done' for mouse type.

4. **Mouse 4:** Indicate the type of mouse used, the total number of islet equivalents infused, the day in which the mouse was sacrificed, and the

number of days to function. If at sacrifice time, function was not met, indicate 'No Function.' If only three mice were used, indicate 'Not Done' for mouse type.

5. **Mouse 5:** Indicate the type of mouse used, the total number of islet equivalents infused, the day in which the mouse was sacrificed, and the number of days to function. If at sacrifice time, function was not met, indicate 'No Function.' If only four mice were used, indicate 'Not Done' for mouse type.

6. **Mouse 6:** Indicate the type of mouse used, the total number of islet equivalents infused, the day in which the mouse was sacrificed, and the number of days to function. If at sacrifice time, function was not met, indicate 'No Function.' If only five mice were used, indicate 'Not Done' for mouse type.

7. **Mouse 7:** Indicate the type of mouse used, the total number of islet equivalents infused, the day in which the mouse was sacrificed, and the number of days to function. If at sacrifice time, function was not met, indicate 'No Function.' If only six mice were used, indicate 'Not Done' for mouse type.

8. **Mouse 8:** Indicate the type of mouse used, the total number of islet equivalents infused, the day in which the mouse was sacrificed, and the number of days to function. If at sacrifice time, function was not met, indicate 'No Function.' If only seven mice were used, indicate 'Not Done' for mouse type.

9. **Mouse 9:** Indicate the type of mouse used, the total number of islet equivalents infused, the day in which the mouse was sacrificed, and the number of days to function. If at sacrifice time, function was not met, indicate 'No Function.' If only eight mice were used, indicate 'Not Done' for mouse type.

10. **Mouse 10:** Indicate the type of mouse used, the total number of islet equivalents infused, the day in which the mouse was sacrificed, and the number of days to function. If at sacrifice time, function was not met, indicate 'No Function.' If only nine mice were used, indicate 'Not Done' for mouse type.

Comments.

Include any comments you wish to add regarding the data on this form, islet preparation or islet processing.

Comments.

Include any additional test results or comments on these test results.

Pre Infusion (PRE)

Database/Keyfields

Infusion Date: Enter the date the recipient received the islet infusion. Date is entered in mm/dd/yyyy format.

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

Please report information that was obtained at the time closest to infusion. If this is the recipient's second or third infusion, do not report information that was obtained before the previous infusion. If this is the recipient's first infusion, any results obtained during the screening and evaluation period are valid.

Occasionally a value will need to be rounded to the nearest whole number or closest decimal point for entry in the database system. When the value is equal to 5 or greater, round up. When the value is less than 5, round down.

For the majority of the questions on this form you have the choice of selecting 'Not Done/Unknown' if the answer or test result is not available or unknown at your transplant center. However, there may be cases where an answer or result is required in a textfield and 'Not Done/Unknown' is not an available choice. This textfield will then require you to request an exception for this field. To request an exception, type an '∗' in the textfield. Upon doing this, a pop-up box will appear. Enter the information you have about this question or the reason why you do not have an answer to this question. By requesting this exception you will avoid having the Coordinating Center query you on why the question was left blank.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Pre Infusion** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, enter the infusion date in the textfield.

If you are modifying data for a previously entered PRE form, the **Key Selection** displays a listing of the PRE forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

1. Date person was listed by transplant center for this islet infusion.

Indicate the date the islet infusion candidate was added to the transplant center's active wait-list for this infusion. Date is entered as mm/dd/yyyy. If this is the patient's second or third islet infusion, and they were never removed from the transplant center's wait-list since their last infusion, use the date of their last infusion in this field. For example, this recipient had an islet infusion on July 1, 2001 and you are completing this form for their second infusion that occurred on November 5, 2001 and they were never removed from the wait-list between infusions, you would record 07/01/2001 in this field. If a patient is listed but then develops an infection and is converted to an "inactive" state for the wait-list, you should not consider this as being removed from the wait-list. In the previous example, if the patient went "inactive" between their 07/01/2001 and 11/05/2001 infusions, you would still record 07/01/2001 in this field.

2. Type of infusion.

Indicate the type of infusion performed: Autograft, Allograft, or Xenograft. If the infusion is a xenograft, you may save the information entered and submit the form to the Coordinating Center. A special xenograft form will be developed in the future to collect additional relevant information.

3. Was there a simultaneous transplant within 7 days of this islet infusion.

Indicate if the islet infusion recipient received another type of transplant at the same time the islet infusion was performed. If more than 7 days elapsed between the other transplant and the islet infusion, do not list as a simultaneous transplant.

If 'Yes,' indicate the type of simultaneous transplant.

Indicate the type of transplant that was performed with this islet infusion. If the choice is not listed indicate 'Other' and specify the type of simultaneous transplant in the textfield following the list of choices.

For all simultaneous transplants, you should also complete the Non-Islet Transplant (NIT) form. For example, if the islet infusion recipient has a simultaneous islet/kidney transplant, you would indicate 'Kidney' on this form and then complete the information for the kidney transplant on the NIT form.

4. Indicate the one primary source of payment for the islet infusion and all secondary forms of payment.

a. **Medicare:** Refers to the United States' federal Medicare funds.

b. **Medicaid:** Refers to the United States' state Medicaid funds.

c. **US/State Government Agency:** Refers to funds other than Medicare and Medicaid issued by a US or state government agency (not

including Veterans' Affairs.) This includes the National Institutes of Health.

d. **Private Insurance:** Refers to the funds from agencies such as Blue Cross/Blue Shield, etc.

e. **HMO/PPO:** Refers to managed care plans.

f. **Self:** Indicates that the cost of the infusion will be paid for by the recipient.

g. **Donation:** Indicates that a company, institution, or individual(s) donated funds for the costs of the islet infusion.

h. **Institutional Contribution:** Indicates that the transplant hospital/organization will not charge the recipient for the costs of the islet infusion.

i. **Non-government Research Grant Funding:** Indicates that the transplant center has obtained research funds to cover the islet infusion procedures and/or follow-up. These funds may come from Industry or private entities (e.g. Juvenile Diabetes Research Foundation).

j. **Department of Veterans' Affairs:** Refers to Veterans' Affairs funds (applies only to primary payment).

k. **Pending:** Source of payment has not been established yet.

l. **Provincial Government (Canada):** Indicates that payment is made through one of the Canadian provincial governments.

m. **Non-US/Canada Government:** Payment is made by a government entity outside of the United States and Canada. If this choice is made, indicate the name of the country in the textfield.

5. Employment status.

Select the one option that describes the recipient's employment status at the time of the islet infusion from the following list: Working full time, Working part time by choice, Working part time due to disease, Working part time reason unknown, Not working by choice, Not working due to disease, Not working unable to find employment, Not working reason unknown, Retired, Student, Employment status unknown, or Not applicable, less than 5 years old. Definitions of working and not working are as follows:

Working: Indicates that the recipient is employed inside or outside the home, attending school, or if a child, living at home.

Non Working: Indicates the recipient is unemployed, not working inside the home or not attending school.

6. Weight.

Indicate the recipient's weight at the time of admission for infusion. This is the weight of the recipient prior to any fluids or medications being started (dry weight). Record weight in kilograms or in pounds and round to the nearest tenth. If the weight of the recipient is unknown, check the 'Unknown' box.

7. Height.

Indicate the recipient's height at the time of admission for infusion. Record height in centimeters or in inches and round to the nearest tenth. If the height of the recipient is unknown, check the 'Unknown' box.

8. Record recipient's visual acuity for both eyes in either feet or meters.

Indicate the visual acuity with correction expressed in Snellen values, for each eye of the islet infusion recipient at the time closest to infusion in feet or in meters. Any results obtained as part of the screening and evaluation period are valid. If visual acuity tests were not performed, or the results cannot be obtained, for either or both eyes, check the box indicating 'Unknown' for each eye. The password-protected CITR website includes a visual acuity chart (with corrected Snellen values) for your reference and the hard copy is located in Appendix 4 of this User's Guide.

9. Blood Pressure (SBP/DBP).

Indicate the recipient's blood pressure at the time closest to infusion. Record systolic blood pressure followed by the recipient's diastolic blood pressure. If systolic and diastolic blood pressure is not reported or unknown, check the box indicating 'Unknown.' If only one of the values is unknown, then request an exception in the system for the unknown value.

10. Is the recipient currently taking blood pressure medication specifically for the control of hypertension.

Indicate 'Yes,' 'No' or 'Unknown' if the recipient is taking blood pressure medication specifically for control of their hypertension (no other indication) at the time of pre infusion. If 'Yes,' indicate 'No,' 'Yes,' or 'Unknown' for each medication from the following list: ACE inhibitors, Alpha adrenergic blockers, Angiotensin II receptor blockers, Beta adrenergic blockers, Calcium channel blockers, Centrally acting agents Diuretics, Vasodilators, Unknown, or Other. Click on the blue text for a listing of current anti-hypertensive medications located in Appendix 5. If 'Other' is chosen, indicate the name of the medication(s) in the textfield following this choice.

11. Is the recipient currently taking lipid lowering medication.

Indicate 'No,' 'Yes,' or 'Unknown' if the recipient is taking lipid lowering agents at the time of pre infusion. If 'Yes,' indicate 'No,' 'Yes,' or 'Unknown' for each agent

from the following list: Bile acid sequestrants, Cholesterol absorption inhibitor, Fibric acid derivatives , HMG CoA reductase inhibitors, Neomycin, Nicotinic acid, Probucol, Unknown, or Other. Click on the blue text for a listing of current lipid lowering medications located in Appendix 5. If 'Other' is chosen, indicate the name of the agent(s) in the textfield following this choice.

12. Did the recipient experience any severe hypoglycemic episodes (requiring the assistance of another person) in the 12 months prior to this islet infusion (or since 30 days after last infusion if prior infusion was within 12 months.)

a. Indicate the total number of hypoglycemic episodes requiring the assistance of another person that the recipient had in the 12 months preceding their islet infusion. Choose from '1-2 episodes', '3-5 episodes', '6 or more episodes', and 'Unknown'. If these data are obtained during the recipient's Screening/Evaluation visit and not immediately prior to infusion, you may still record this information. If this is the recipient's second or third infusion please report the number of episodes since the last CITR follow-up. If no CITR follow-up occurred between the previous infusion and this infusion, indicate the number of episodes since the 30-day assessment following the previous infusion. If this information is not recorded or is unknown, check the box indicating 'Unknown.'

b. Indicate the total number of episodes of hypoglycemia requiring the assistance of another person. If the total is unknown, check the 'Unknown' box.

c. Indicate the total number of episodes of hypoglycemia requiring the assistance of another person AND resulting in the loss of consciousness and/or seizures. If the total is unknown, check the 'Unknown' box.

13. Total number of hospital admissions in the past 12 months (or since 30 days after last infusion if prior infusion was within 12 months.)

Indicate the total number of hospital admissions the recipient had in the 12 months preceding the islet infusion. Indicate only times where the recipient was "admitted" to the hospital ($\geq$24 hour stay) and do not include emergency room visits that did not result in a hospital admission. Regardless of the cause for hospital admission (e.g. broken leg), please include in the total number. If these data are obtained during the recipient's Screening/Evaluation visit and not immediately prior to infusion, you may still record this information. If this is the recipient's second or third infusion please report the number of admissions since the last CITR follow-up. If no CITR follow-up occurred between the previous infusion and this infusion, indicate the number of admissions since the 30-day assessment following the previous infusion.

If the recipient did not have any hospital admissions, indicate '0' in this textfield. If the number of hospital admissions cannot be determined or is unknown, check the box indicating 'Unknown.'

If one or more hospital admissions:

Total number of hospitalized days in the past 12 months (or since 30 days after last infusion if prior infusion was within 12 months.)

Indicate the total number of hospitalized days of the recipient in the 12 months preceding their islet infusion. Include all hospital admissions for all causes, as previously listed in this question. Do not include emergency room visits where a hospital admission did not result. Total the number of days and record number in the textfield. To calculate the total number of hospitalized days, it may be necessary to obtain the discharge summary for each hospital admission. If this is the recipient's second or third infusion please report the number of admissions since the last CITR follow-up. If no CITR follow-up occurred between the previous infusion and this infusion, indicate the number of admissions since the 30-day assessment following the previous infusion. If it is not possible to calculate the total number of days, check the box indicating 'Unknown.'

14. Indicate average daily insulin requirement (including basal, bolus and correction sliding scale) given before this infusion.

Prior to this islet infusion, indicate the average daily insulin requirement of the recipient in total units. Include basal, bolus and correction sliding scale in the total. If the recipient did not require any insulin before this infusion, enter '0' for total units. If the average daily insulin requirement cannot be calculated or cannot be obtained, check the box indicating 'Unknown.'

If insulin treatment was required prior to this infusion:

a. Indicate if the recipient needed to use an insulin pump by choosing 'No,' 'Yes,' or 'Unknown.'

b. Indicate the number of injections per day given to this recipient. If the number of injections cannot be determined, check the box indicating 'Unknown.' This question should be skipped if the participant is using an insulin pump.

c. If an insulin pump was used, or three or more injections were required per day, this is considered INTENSIVE therapy. Indicate the duration of this intensive therapy in weeks, months, or years. If this is a recipient's second or third infusion, indicate the duration of intensive therapy between day 0 of the previous infusion and day 0 of this infusion. If the duration is unknown, indicate 'Unknown.'

15. Prior to infusion, not including induction therapy, was the recipient on immunosuppression.

Indicate if the recipient is/was on immunosuppression prior to this infusion. If the recipient was started on immunosuppression specifically for this infusion prior to infusion, **do not** indicate 'Yes' for this question. For example, the recipient had a previous islet infusion and has been on immunosuppression since their first

infusion, you would indicate 'Yes' for this question. If immunosuppression therapy was initiated for this islet infusion only, you would indicate 'No' for this question. If there is no indication in the records, indicate 'Unknown.'

16. Secondary complications at the time of islet infusion and year of onset.

At the time immediately prior to islet infusion, indicate if the recipient had any of the following secondary complications and indicate the year of onset for each complication. If year is unknown, check the box indicating 'Year Unknown.' If the recipient has experienced more than one type of secondary complication (e.g. two different autonomic neuropathies), record the complication with the worst severity and the year of onset for this complication. If the recipient has experienced more than one type of secondary complication (e.g. two different autonomic neuropathies) with the same severity, record that severity and the earliest year of onset.

No occurrence indicates that the recipient was not diagnosed with this secondary complication and/or signs and symptoms did not occur.

Reduced awareness is defined as a decreased magnitude of autonomic symptoms or elevated threshold for autonomic symptoms with a lower glucose level.

Unawareness is defined as a lack of autonomic warning symptoms, no warning symptoms or a glucose level of <54 mg/dL.

Asymptomatic is defined as a person without symptoms but the disease is diagnosed based on diagnostic tests.

Symptomatic is defined as a person who experiences symptoms of the disease (e.g. sweating after meals) consistent with the definition of the disease.

Disabling is defined as a person who experiences significant losses in their motor or sensory functions. These may include: symptoms of muscle weakness of sufficient severity that the person cannot walk independently; symptoms of sensory loss of sufficient severity that the person cannot walk independently because of sensory ataxia; absence of feeling in hands so that the person is disabled; symptoms of pain having the characteristics of neuropathic pain that is disabling (person has previously attended physicians for pain relief, work and recreational activities have been curtailed because of pain, or medication for pain relief has been taken on a continual basis).

a. **Hypoglycemia:** Indicate if the recipient has not had an occurrence of hypoglycemia, if they have reduced awareness, they are unaware, or if it is unknown if they have hypoglycemia at the time immediately prior to infusion.

b. **Peripheral neuropathy:** Indicate if the recipient had peripheral neuropathy at the time immediately prior to infusion. If not, indicate 'No Occurrence.' If 'Yes,' indicate the type (Asymptomatic, Symptomatic, or Disabling). If it is unknown, indicate 'Unknown.'

c. **Autonomic neuropathy:** Indicate if the recipient had autonomic neuropathy at the time immediately prior to infusion. If not, indicate 'No Occurrence.' If 'Yes,' indicate the type (Asymptomatic, Symptomatic, or Disabling.) If it is unknown, indicate 'Unknown.'

d. **Nephropathy:** Indicate if the recipient had nephropathy at the time immediately prior to infusion. If not, indicate 'No Occurrence.' If 'Yes,' indicate the type (Microalbuminuria, Macroalbuminuria, End stage renal disease, or Stable allograft.) If it is unknown, indicate 'Unknown.'

e. **CAD:** Indicate if the recipient had diagnosed coronary artery disease at the time immediately prior to this infusion. If it is unknown, indicate 'Unknown.'

f. **CVA:** Indicate if the recipient had diagnosed cerebrovascular disease at the time immediately prior to infusion. If it is unknown, indicate 'Unknown.'

g. **PVD:** Indicate if the recipient had diagnosed peripheral vascular disease at the time immediately prior to this infusion. If it is unknown, indicate 'Unknown.'

h. **Treated hypertension:** Indicate if the recipient had hypertension that was being treated immediately prior to this infusion. If it is unknown, indicate 'Unknown.'

i. **Retinopathy:** Indicate if the recipient was diagnosed with diabetic retinopathy prior to this infusion. Record for each eye separately (**right** and **left**). If the recipient was not diagnosed with retinopathy, indicate 'None' for that eye. If they have been diagnosed, choose from the following list: Non Proliferative, Proliferative or Unknown. If one or both eyes were diagnosed with retinopathy, indicate the year an ophthalmologist first diagnosed any diabetic retinopathy for that eye in YYYY format. If the year of onset is unknown, check the box indicating 'Year Unknown.'

j. **Diabetic macular edema:** Indicate if the recipient was diagnosed with diabetic macular edema prior to this infusion. Record for each eye separately (**right** and **left**). If the recipient was not diagnosed with diabetic macular edema, indicate 'None' for that eye. If they have been diagnosed, choose from the following list: Mild (some edema but far from the center of the macula), Moderate (macular edema that is near the center but does not involve it yet), Severe (macular edema that involves the center of the macula) or Unknown. If one or both eyes were diagnosed with diabetic macular edema, indicate the year an ophthalmologist first diagnosed any diabetic macular edema for that eye in YYYY format. If the year of onset is unknown, check the box indicating 'Year Unknown.'

17. Eye surgery performed.

Indicate if the recipient had any of the following eye surgeries prior to this infusion. If the same surgery was performed more than once in the same eye, record the most recent surgery date. Check 'No,' 'Yes,' or 'Unknown' for each surgery and for

each eye (**right** and **left**): Laser photocoagulation for proliferative diabetic retinopathy, Laser photocoagulation for diabetic macular edema, Vitrectomy and Other. If 'Other,' specify the other type of eye surgery performed for treatment of the diabetic retinopathy. If 'Yes,' include the year the surgery was performed for each treatment and for each eye (**right** and **left**) in YYYY format. If the year of surgery is unknown, check the box indicating 'Year Unknown.'

18. Has the recipient ever experienced the following diabetes-related foot problems.

Indicate if the recipient has ever had any of the following diabetes-related foot problems: 'Ulcers,' 'Lower limb amputation,' 'Foot deformity,' and 'Dysesthesia.' Dysesthesia may be defined as altered feelings such as burning, wetness, electric shock, pins and needles, itching, or creepy-crawly sensation caused by neurological malfunction. If it is unknown whether the recipient had one of these problems, check the box indicating 'Unknown.'

19. Have any of the following events occurred in the past 12 months (or since last infusion if prior infusion was within 12 months).

Indicate if the recipient has experienced any of the following events: 'Orthostatic hypotension,' 'Gastroparesis,' 'Constipation,' 'Diabetic diarrhea,' 'Fecal incontinence,' 'Diabetic bladder dysfunction,' and 'Sexual dysfunction.' If it is unknown whether the recipient has experienced any of these events, check the box indicating 'Unknown.'

20. Pre infusion autoantibody data.

Indicate the results for all pre infusion autoantibody tests. If the test was not performed or it is unknown, indicate 'Not Done/Unknown.'

a. **GAD 65:** glutamic acid decarboxylase antibodies (Negative or Positive).
b. **IA-2:** islet antigen 2 antibodies (Negative or Positive).
c. **Insulin:** insulin antibodies (Negative or Positive).
d. **ICA:** islet cell antibodies. If this test was performed, indicate the result in JDF units. First choose if the value is expressed as a > (greater than) or < (less than) value. For example, your test result is >10 JDF units. First choose '>' and then enter '10' in the next textfield. If the result was 40, just enter '40' in the textfield. To calculate JDF units, multiply the titer by 5 (1:8 titer; 8x5= 40 JDF units).

21. Most recent serum date and result for PRA (Class I/T cell.)

Indicate the date the serum was most recently collected and tested to obtain PRA results before the islet infusion was performed. Use mm/dd/yyyy for the date format. Enter the PRA percentage result obtained from the most recent serum. This percentage should be from the Class I/T cell result. If the PRA result cannot

be obtained or the test was not performed, check the box indicating 'Not Done/Unknown.'

If the infusion was an autograft, questions 22 and 23 should be skipped.

22. Peak serum date and result for PRA (Class I/T cell.)

Peak PRA is the highest PRA value from all tested sera. Enter the date sera was collected in mm/dd/yyyy format. If two or more sera with different dates have the same peak PRA, use the most recent date. If only one PRA determination has been done, enter the date and information used in the 'Most Recent Serum' question (Question 20) for this question (Peak Serum) as well. This percentage should be from the Class I/T cell result. If the PRA result cannot be obtained or the test was not performed, check the box indicating 'Not Done/Unknown.'

Comments.

Indicate any additional comments you wish to record for the form.

Pre Infusion Lab Info (PRL)

Database/Keyfields

Infusion Date: Enter the date the recipient received the islet infusion. Date is entered in mm/dd/yyyy format.

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

All tests listed in the Pre Infusion laboratory information and Metabolic Assessment information sections of this form should include the most recent results prior to this infusion. You may include those test results that were performed as part of the Screening/Evaluation period and have not been repeated prior to this infusion as the most recent results. However, this option does not apply to HbA_{1c} results. Results recorded for this test must be no older than 60 days prior to this infusion. If you are completing the Pre Infusion Lab Info form for a second or third infusion, then the results of the Laboratory/Metabolic tests must be obtained post last infusion performed and prior to this infusion.

Occasionally a value will need to be rounded to the nearest whole number or closest decimal point for entry in the database system. When the value is equal to 5 or greater, round up. When the value is less than 5, round down.

For the majority of the questions on this form you have the choice of selecting 'Not Done/Unknown' if the answer or test result is not available or unknown at your transplant center. However, there may be cases where an answer or result is required in a textfield and 'Not Done/Unknown' is not an available choice. This textfield will then require you to request an exception for this field. To request an exception, type an '*' in the textfield. Upon doing this, a pop-up box will appear. Enter the information you have about this question or the reason why you do not have an answer to this question. By requesting this exception you will avoid having the Coordinating Center query you on why the question was left blank.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Pre Infusion Lab Info** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, enter the infusion date in the textfield.

If you are modifying data for a previously entered PRL form, the **Key Selection** displays a listing of the PRL forms that have already been added at your site for

this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

1. Pre infusion laboratory information (Most recent lab results prior to infusion).

For each of the laboratory tests listed, indicate the most recent results reported immediately prior to this islet infusion. If the most recent laboratory test prior to this infusion were the tests performed during the Screening/Evaluation process, these results may be recorded. Fields for both conventional and international units are given; however you are required only to complete the field in which your results are reported. Do not complete both fields.

If for some reason the test was not performed as part of the Screening/Evaluation process or immediately prior to this islet infusion (for second or third infusions), indicate 'Not Done/Unknown' for that particular test. If the results cannot be found or obtained, indicate 'Not Done/Unknown.'

a. **Fasting blood glucose:** Indicate the test result in mg/dL or mmol/L. If using mmol/L, round to the nearest tenth. Results from glucometers are acceptable as long as they are the most recent results obtained. If your lab does not indicate a specific value, for example it reports <0.05, then choose the '<' sign in the checkbox and then enter '0.05' in the textfield. If a specific value is indicated on the lab report, just indicate this value in the textfield, without choosing the '<' sign.

b. **HbA_{1c}:** Indicate the percentage and round to the nearest tenth.

c. **ALT:** Indicate the results in Units/L. If your lab does not indicate a specific value, for example it reports <0.05, then choose the '<' sign in the checkbox and then enter '0.05' in the textfield. If a specific value is indicated on the lab report, just indicate this value in the textfield, without choosing the '<' sign.

d. **AST:** Indicate the results in Units/L. If your lab does not indicate a specific value, for example it reports <0.05, then choose the '<' sign in the checkbox and then enter '0.05' in the textfield. If a specific value is indicated on the lab report, just indicate this value in the textfield, without choosing the '<' sign.

e. **Alkaline phosphatase:** Indicate the results in Units/L. If your lab does not indicate a specific value, for example it reports <0.05, then choose the '<' sign in the checkbox and then enter '0.05' in the textfield. If a specific value is indicated on the lab report, just indicate this value in the textfield, without choosing the '<' sign.

f. **Total bilirubin:** Indicate the result in mg/dL or μmol/L. If using mg/dL, round to the nearest tenth.

g. **Total cholesterol:** Indicate the result in mg/dL or mmol/L. If using mmol/L, round to the nearest tenth. If your lab does not indicate a specific value, for example it reports <0.05, then choose the '<' sign in the checkbox and then enter '0.05' in the textfield. If a specific value is indicated on the lab report, just indicate this value in the textfield, without choosing the '<' sign.

h. **HDL:** Indicate the result in mg/dL or mmol/L. If using mmol/L, round to the nearest hundredth.

i. **LDL:** Indicate the result in mg/dL or mmol/L. If using mmol/L, round to the nearest hundredth.

j. **Triglycerides:** Indicate the result in mg/dL or mmol/L. If using mmol/L, round to the nearest tenth.

k. **Serum creatinine:** Indicate the result in mg/dL or μmol/L. If using mg/dL, round to the nearest tenth.

l. **Calculated creatinine clearance:** Indicate the result in mL/min/1.73m^2 or mL/s/1.73m^2. If using mL/s/1.73m^2, round to the nearest hundredth. To obtain the calculated creatinine clearance, you may refer to a medical calculator found at http://www-users.med.cornell.edu/~spon/picu/calc and choose "Creatinine Clearance (Measured)" under the "Metabolic" heading.

2. Metabolic assessment pre infusion.

Please make the note that the area of metabolic monitoring will be standardized in the future. CITR wishes to be inclusive of the data captured while maintaining standardization for the tests. To begin, a minimal set of metabolic monitoring protocols are posted to the password-protected CITR website and included as Appendix 6 to this User's Guide. Items in blue on the Internet Data Entry Screen (also are double starred: **) should follow the procedures outlined in the CITR Guidelines for Metabolic Testing. Indicate the result obtained, the units of measurement and check the box indicating 'CITR Standard Used.' However, if this test was not performed in the same or very similar manner as the CITR Standard, you may still record your result and the units of measurement, but do not check the box indicating 'CITR Standard Used.' If there is not an option to check 'CITR Standard Used,' or the question is not double starred (**) for a metabolic test, this indicates that a CITR Standard for this test has not been determined yet. Updates will be posted as needed to the password-protected CITR website concerning metabolic monitoring.

For each of the metabolic assessments listed, indicate the most recent results reported immediately prior to this islet infusion. If the most recent metabolic tests prior to this infusion were the tests performed during the Screening/Evaluation process, these results may be recorded. If for some reason the metabolic assessment was not performed as part of the Screening/Evaluation process or immediately prior to this islet infusion (for second or third infusions), indicate 'Not

Done/Unknown' for that particular test. If the results cannot be found or obtained, indicate 'Not Done/Unknown.'

a. Basal plasma C-peptide: Indicate the test result in ng/mL or nmol/L. Round the value to the nearest hundredth. If your lab does not indicate a specific value, for example it reports <0.05, then choose the '<' sign in the checkbox and then enter '0.05' in the textfield. If a specific value is indicated on the lab report, just indicate this value in the textfield, without choosing the '<' sign.

b. Indicate the **peak stimulated C-peptide after meal** result in ng/mL or nmol/L. This 'meal' can be any type of meal (breakfast, Ensure®, Sustacal®, etc.). Round to the nearest hundredth. If your lab result does not indicate a specific value, for example it reports <0.5, then choose the '<' sign in the checkbox and then enter '0.5' in the textfield. If a value is given, just indicate the value in the textfield without choosing the '<' sign.

c. IV Glucagon.

1. **Basal C-peptide before IV glucagon:** Indicate the test result in ng/mL or nmol/L. Round the value to the nearest hundredth. If your lab does not indicate a specific value, for example it reports <0.05, then choose the '<' sign in the checkbox and then enter '0.05' in the textfield. If a specific value is indicated on the lab report, just indicate this value in the textfield, without choosing the '<' sign.
2. Indicate the **peak stimulated C-peptide after IV glucagon** result in ng/mL or nmol/L. Round to the nearest hundredth. If your lab result does not indicate a specific value, for example it reports <0.5, then choose the '<' sign in the checkbox and then enter '0.5' in the textfield. If a value is given, just indicate the value in the textfield without choosing the '<' sign.

d. Arginine Stimulation Test (AST).

1. **Basal C-peptide before IV arginine:** Indicate the test result in ng/mL or nmol/L. Round the value to the nearest hundredth. If your lab does not indicate a specific value, for example it reports <0.05, then choose the '<' sign in the checkbox and then enter '0.05' in the textfield. If a specific value is indicated on the lab report, just indicate this value in the textfield, without choosing the '<' sign.
2. Indicate the **peak stimulated C-peptide after IV arginine** ** result in ng/mL or nmol/L. Round to the nearest hundredth. If your lab result does not indicate a specific value, for example it reports <0.5, then choose the '<' sign in the checkbox and then enter '0.5' in the textfield. If a value is given, just indicate the value in the textfield without choosing the '<' sign.
3. Report the **acute C-peptide response to IV arginine** ** result in ng/mL or nmol/L. Round to the nearest hundredth.

4. Report the **acute insulin response to IV arginine** ** result in μU/mL. Round the nearest tenth.

e. Intravenous Glucose Tolerance Test (IVGTT).

1. **Basal C-peptide before IV glucose:** Indicate the test result in ng/mL or nmol/L. Round the value to the nearest hundredth. If your lab does not indicate a specific value, for example it reports <0.05, then choose the '<' sign in the checkbox and then enter '0.05' in the textfield. If a specific value is indicated on the lab report, just indicate this value in the textfield, without choosing the '<' sign.
2. Indicate the **peak stimulated C-peptide after IV glucose** ** result in ng/mL or nmol/L. Round to the nearest hundredth. If your lab result does not indicate a specific value, for example it reports <0.5, then choose the '<' sign in the checkbox and then enter '0.5' in the textfield. If a value is given, just indicate the value in the textfield without choosing the '<' sign.
3. Report the **acute C-peptide response to IV glucose** ** result in ng/mL or nmol/L. Round to the nearest hundredth.
4. Report the **acute insulin response to IV glucose** ** result in μU/mL. Round the nearest tenth.
5. Report the **area under the curve insulin** result derived **from the 0.5g/kg IVGTT** ** in μU/mL x min. Round the nearest tenth.
6. Report the **K_G-value derived from 0.5 g/kg IVGTT.** **

f. Oral Glucose Tolerance Test (OGTT).

1. **2-hr 75 g OGTT plasma glucose.** ** Report in mg/dL or mmol/L. Round to the nearest tenth.
2. Report the **area under the curve result for C-peptide OGTT** ** in ng/mL x min. Round to the nearest hundredth.

g. Mixed Meal Test.

1. Report the **area under the curve result for C-peptide Mixed Meal Tolerance Test (MMTT)** ** in ng/mL x min. Round to the nearest hundredth.
2. Report the **Mixed Meal Stimulation Index** ** in either ng/mg or pmol/mg. Round the nearest tenth.

3. Pre infusion serology.

For each of the tests listed, choose the appropriate result at the time of pre infusion. **Do not skip any tests.** Indicate if the result is 'Negative,' 'Positive,' 'Indeterminate,' 'Unknown' or 'Not Done.'

If the test(s) are below the threshold considered positive, the result should be marked 'Negative.' If the testing was done, but for a rare reason results are inconclusive, choose 'Indeterminate.' If testing was not done, choose 'Not Done' or if the results are not known or cannot be found choose 'Unknown.'

Comments.

Indicate any comments you have for the responses on this form.

Infusion (TRN)

Database/Keyfields

Infusion Date: Enter the date the recipient received the islet infusion. Date is entered in mm/dd/yyyy format.

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

This form is completed for each islet infusion the recipient receives. Definitions of "islet transplant" may vary from center to center. For example, a transplant center may define an "islet transplant" as two infusions performed within four weeks of each other. However, for the purpose of the Registry, each islet infusion will be treated as a transplant (regardless of timing or center protocols) and will have the appropriate forms completed.

Occasionally a value will need to be rounded to the nearest whole number or closest decimal point for entry in the database system. When the value is equal to 5 or greater, round up. When the value is less than 5, round down.

For the majority of the questions on this form you have the choice of selecting 'Not Done/Unknown' if the answer or test result is not available or unknown at your transplant center. However, there may be cases where an answer or result is required in a textfield and 'Not Done/Unknown' is not an available choice. This textfield will then require you to request an exception for this field. To request an exception, type an '*' in the textfield. Upon doing this, a pop-up box will appear. Enter the information you have about this question or the reason why you do not have an answer to this question. By requesting this exception you will avoid having the Coordinating Center query you on why the question was left blank.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Infusion** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, enter the infusion date.

If you are modifying data for a previously entered TRN form, the **Key Selection** displays a listing of the TRN forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

1. Number of prior islet infusions.

Prior to this islet infusion, indicate the number of islet infusions this recipient received. Include simultaneous islet/organ transplants (e.g. islet/kidney).

If the recipient has had at least one prior islet infusion, indicate the date of their last islet infusion in mm/dd/yyyy format.

2. Protocol information.

a. **IND number:** Indicate the IND number that this infusion recipient was infused under. The information you enter may consist of letters, numbers and hyphens. If your transplant center did not infuse this recipient under an IND, mark the box indicated 'Not Applicable.'

b. **Protocol number:** Indicate your transplant center's protocol number under which this recipient was infused. The information you enter may consist of letters, numbers and hyphens. If your transplant center did not infuse the recipient under a center protocol, enter '*' in the textfield. Upon entering '*' you will be asked to enter a reason why the field is to remain blank.

3. This infusion was performed as:

Indicate if this current islet infusion was performed as an 'Outpatient' procedure, an 'Inpatient' procedure, or if it cannot be determined from the records, 'Unknown.' Follow local hospital guidelines for defining outpatient and inpatient.

If it was an INPATIENT procedure:

a. **Admission date:** Indicate the admission date for the islet infusion in mm/dd/yyyy format if this was an inpatient procedure.

b. **Discharge date:** Indicate the discharge date for the islet infusion in mm/dd/yyyy format if this was an inpatient procedure.

Day 0 Data (Infusion Day)

4. IEs planned for infusion.

Indicate the total number of islet equivalents planned for this infusion. If the value is unknown or cannot be obtained, check the box indicating 'Unknown.'

5. IEs infused.

Of the number of islet equivalents planned for this infusion, indicate the total number of islet equivalents actually infused. If the value is unknown or cannot be obtained, check the box indicating 'Unknown.'

6. Packed cell volume infused.

Of the total packed cell volume (including multiple lots, if applicable) indicate the actual total volume infused in mL. Estimate to the nearest hundredth. If the value is unknown or cannot be obtained, check the box indicating 'Unknown.'

7. Was an immunobarrier device used.

Indicate if an immunobarrier device was used by indicating 'No' or 'Yes.' If this information is unknown, indicate 'Unknown.'

If YES, specify the device.

If an immunobarrier device was used, choose the type of device used from the following list: Microencapsulation, Macroencapsulation, Micro and Macro Encapsulation, Unknown, or Other. If 'Other' is chosen, specify the type of device in the textfield following the list of choices.

8. Infusion site.

Islets may be infused at various sites of the body. Indicate the infusion site from the following list: Liver, Spleen, Kidney capsule, Intraperitoneal cavity, Subcutaneous, Intramuscular, Epiploic flap, Omental pouch or Other.

If OTHER, specify infusion site:

If 'Other' is chosen, specify the infusion site in the textfield following the list of choices.

If the infusion site is LIVER:

Infusion technique: Indicate the infusion technique used when the infusion site is the liver. Techniques include Open/laparoscopy, Intrahepatic Portal Systemic (TIPS), Percutaneous, Unknown, or Other.

Number of passes (attempts) necessary to obtain adequate access for islet infusion: Indicate the total number of passes or attempts necessary to obtain adequate access for islet infusion. Include the successful pass in the total number. For example, if two attempts were made prior to the successful attempt, indicate '3' in the textfield. If successful on the first attempt, indicate '1.' If this information is unknown or cannot be obtained, check the box indicating 'Unknown.'

Pre infusion portal pressure: Indicate the pre infusion portal pressure in either mmHg or cmH_20. Intraportal pressure is taken prior to infusion. If the portal pressure is not recorded and cannot be obtained, check the box indicating 'Unknown.'

Peak portal pressure: During the infusion, a peak portal pressure will be recorded. Indicate this pressure in either mmHg or cmH_20. If the portal pressure is not recorded and cannot be obtained, check the box indicating 'Unknown.'

Closure portal pressure: At closure, a portal pressure is taken. Indicate this pressure in either mmHg or cmH_20. If the portal pressure is not recorded and cannot be obtained, check the box indicating 'Unknown.'

9. Total daily units of insulin at Day 0 (Infusion Day) including basal, bolus and correction sliding scale.

On the day of infusion, indicate the total daily amount of all insulin (until Midnight, or 24:00) this recipient was taking. Record this value in total units. If the amount cannot be obtained, check the box indicating 'Unknown.'

Day 7 and Day 30 Data: Graft Function Summary

10. Total daily units of insulin at post infusion Day 7, including basal, bolus and correction sliding scale.

On post-islet infusion Day 7 (± 1 day), indicate the total daily units of all insulin given to the recipient. When calculating the total daily units, include basal, bolus and correction sliding scale.

11. Was a subsequent infusion given prior to Day 30.

Indicate if the recipient received another islet infusion prior to Day 30 of this infusion.

12. Total daily units of insulin at post infusion Day 30, including basal, bolus, and correction sliding scale.

On post-islet infusion Day 30 (± 3 days), indicate the total daily units of all insulin given to the recipient. When calculating the total daily units, include basal, bolus and correction sliding scale.

For the following three tests, C-peptide and glucose levels should be taken from the same sample, or at least drawn at the same time.

13. HbA_{1c} Value at Day 30.

On post-islet infusion Day 30 (±3 days), indicate the value of HbA_{1c}. If the value is unknown, mark the box indicating 'Unknown.'

14. Fasting plasma glucose.

Indicate if a fasting plasma glucose test was conducted at Day 7 (± 1 day) and at Day 30 (± 3 days). If 'Yes,' indicate the results in mg/mL or mmol/L for each day. If the test was not conducted, indicate 'No.' If the records cannot be obtained to determine if the test was conducted, indicate 'Unknown.' Results from glucometers are acceptable as long as they are the most recent results obtained. Round the results to the nearest tenth. If the patient was subsequently infused prior to Day 30, indicate 'No' for the Day 30 fasting plasma glucose test.

15. Fasting C-peptide.

Indicate if the fasting C-peptide test was conducted at Day 7 (± 1 day) and at Day 30 (± 3 days). If 'Yes,' indicate the results in ng/mL or nmol/L for each day. If the test was not conducted, indicate 'No.' If the records cannot be obtained to determine if the test was conducted, indicate 'Unknown.' If results are given using a less than sign (<), you must first indicate '<' in the checkbox and then record the result. For example, the value may be <0.5. You will first check the '<' sign and then record 0.5 in the textfield. Round the results to the nearest hundredth. If the patient was subsequently infused prior to Day 30, skip the Day 30 data.

16. Peak stimulated C-peptide.

Indicate if a peak stimulated C-peptide test was conducted at Day 7 (± 1 day) and at Day 30 (± 3 days). If 'Yes,' indicate the results in ng/mL or nmol/L for each day. If the test was not conducted, indicate 'No.' If the records cannot be obtained to determine if the test was conducted, indicate 'Unknown.' If results are given using a less than sign (<), you must first indicate '<' in the checkbox and then record the result. For example, the value may be <0.5. You will first check the '<' sign and then record 0.5 in the textfield. Any stimulus may be used for this test (meal, glucagon, glucose, arginine, etc). Round the results to the nearest hundredth. If the patient was subsequently infused prior to Day 30, skip the fields for this section.

17. Was insulin administered prior to stimulation test.

Indicate if insulin was given prior to the stimulation test at Day 7 (± 1 day) and Day 30 (± 3 days) If 'Yes,' indicate in hours and minutes how far in advance the insulin was given. If the recipient had a subsequent infusion prior to Day 30, then skip the fields for Day 30.

18. Total number of hospitalized days from islet infusion date to Day 30 post infusion.

From the day of infusion to 30 days post-infusion, indicate the total number of hospitalized days for this recipient. Include any days the recipient was hospitalized for the islet infusion. For example, if the recipient was admitted for the islet infusion procedure and remained in the hospital for two days and was not hospitalized any other days up to Day 30, record '2' in the textfield. If the recipient had an emergency room visit, but was not admitted, do not include this in the total. Hospitalization is defined as ≥ 24 hours. If, at Day 30 the recipient has been hospitalized the entire time since the admission for the islet infusion, record '30' in the textfield. If hospitalized days are unknown, check the 'Unknown' box. If the patient received a second infusion prior to Day 30, indicate the total number of hospitalized days for this recipient from the day of their first infusion up to, but not including, the day of admission for their subsequent infusion.

19. Did the recipient experience any severe hypoglycemic episodes (requiring the assistance of another person) in the 30 days post infusion (or until the day of subsequent infusion if subsequent infusion was within 30 days.

a. Indicate the total number of hypoglycemic episodes requiring the assistance of another person that the recipient had in the 30 days post islet infusion, or until day of subsequent infusion if infusion was within 30 days. Chose from '1-2 episodes,' '3-5 episodes,' '6 or more episodes,' and 'Unknown.'

b. Indicate the total number of episodes of hypoglycemia requiring the assistance of another person. If the total is unknown, check the 'Unknown' box.

c. Indicate the total number of episodes of hypoglycemia require the assistance of another person AND resulting in the loss of consciousness and/or seizures. If this is unknown, check the 'Unknown' box.

20. Did any adverse events (Grade 3, 4 or 5) occur during the first 30 days post infusion.

Grading of the adverse event is based on the National Cancer Institute's Common Terminology Criteria for Adverse Events. Definitions and online guidance can be found on the CITR password protected website. Indicate if any adverse events (Grade 3, 4 or 5) occurred during the first 30 days post-infusion. If one or more adverse events occurred, complete the CITR adverse event form for each event. If the patient received a second infusion prior to Day 30, indicate if any adverse events occurred from day of first infusion up to admission day for their subsequent infusion.

21. Is recipient compliant with protocol regulated medications/therapy at Day 30.

Indicate if the recipient had been compliant with all protocol regulated medications/therapy at Day 30. If they were not compliant early in the period but were compliant at Day 30, indicate 'Yes.' If they were compliant up to Day 25, for example, and are not compliant at Day 30, you would indicate 'No.' You will assess compliance <u>on</u> Day 30 for this question. If the patient received a second infusion prior to Day 30, indicate whether or not the recipient was compliant with protocol regulated medications/therapy from time of first infusion up to admission day of their subsequent infusion.

Comments.

Indicate any comments you wish to record for this form.

Induction Therapy (IND)

Database/Keyfields

Infusion Date: Enter the date the recipient received the islet infusion. Date is entered in mm/dd/yyyy format.

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

This form is completed for each islet infusion the recipient receives. Definitions of "islet transplant" may vary from center to center. For example, a transplant center may define an "islet transplant" as two infusions performed within four weeks of each other. However, for the purpose of the Registry, each islet infusion will be treated as a transplant (regardless of timing or center protocols) and will have the appropriate forms completed.

Occasionally a value will need to be rounded to the nearest whole number or closest decimal point for entry in the database system. When the value is equal to 5 or greater, round up. When the value is less than 5, round down.

For the majority of the questions on this form you have the choice of selecting 'Not Done/Unknown' if the answer or test result is not available or unknown at your transplant center. However, there may be cases where an answer or result is required in a textfield and 'Not Done/Unknown' is not an available choice. This textfield will then require you to request an exception for this field. To request an exception, type an '*' in the textfield. Upon doing this, a pop-up box will appear. Enter the information you have about this question or the reason why you do not have an answer to this question. By requesting this exception you will avoid having the Coordinating Center query you on why the question was left blank.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Induction Therapy** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, enter the infusion date.

If you are modifying data for a previously entered IND form, the **Key Selection** displays a listing of the IND forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

1. Peri-infusion Immunosuppression Therapy.

a. Were any chemical immunosuppressants given peri-infusion.

Indicate if any chemical immunosuppressants were **given peri-infusion** by choosing 'No,' 'Yes,' 'Unknown,' or 'Not Applicable.' Peri-infusion is defined as a chemical immunosuppressant initiated or administered during the week prior to infusion, or initiated or administered during the first two weeks post infusion. There is no CITR time limit on how long peri-infusion therapy may last and is drug/therapy dependent. Duration of peri-infusion therapy is to be determined by the protocol/center. However, if a dose is given after transplant and within one week prior to a subsequent infusion, that dose should be recorded as peri-infusion therapy for the second infusion, not the first.

If immunosuppressants were used, indicate 'Yes' or 'No' for each of the immunosuppressant medications listed (Sirolimus, Tacrolimus, Cyclosporine, Mycophenolate mofetil, Steroid, DSG, and Everolimus) and indicate the doses given peri-infusion. First, indicate when the first dose was given by using the Infusion Day as Day 0. If peri-infusion therapy was given 2 days prior to infusion, then indicate '-2' for this question. If therapy was started one day after the Infusion date, indicate '1' in the textfield. If the immunosuppressant was given, but the dose day is unknown, check the box indicating 'Day Unknown.' Next, indicate the dose given on the first day of peri-infusion therapy in mg/day. The first day dose represents the total amount given until midnight of the first dose day. Next, indicate the dose given on Day 30 post infusion in mg/day and indicate the Day 30 trough level in ng/mL. Day 30 information may be obtained ± 3 days from 30 days post infusion. If a subsequent infusion is performed prior to 30 days after this infusion, indicate 'Unknown' for the Day 30 information. If any of these values cannot be obtained, check the corresponding box indicating 'Unknown.' If Cyclosporine and/or Steroids were used, specify the type of Cyclosporine and/or Steroids used under the section heading 'Specify Medication.' If it was used, but the type is unknown, select 'Unknown' from the pull down list. Sometimes peri-infusion therapy may begin prior to the islet infusion. In these cases, you will still record the actual first day dose, even if it occurred prior to infusion.

If other chemical immunosuppressants were given peri-infusion, specify the names, first dose days, first day doses, and Day 30 doses in the last five lines of the table. Day 30 information may be obtained ± 3 days from 30 days post infusion. If a subsequent infusion is performed prior to 30 days after this infusion, indicate 'Unknown' for the Day 30 information.

b. Were any T Cell Antibodies given peri-infusion.

Indicate if T cell antibodies were given peri-infusion by choosing 'No,' 'Yes,' 'Unknown,' or 'Not Applicable.' Peri-infusion is defined as a T cell antibody

initiated or administered during the week prior to infusion, or initiated or administered during the first two weeks post infusion. There is no CITR time limit on how long peri-infusion therapy may last and is drug/therapy dependent. Duration of peri-infusion therapy is to be determined by the protocol/center. However, if a dose is given after infusion and within one week prior to a subsequent infusion, that dose should be recorded as peri-infusion therapy for the second infusion, not the first.

If 'Yes,' specify up to three different antibodies that were used under the section heading 'Specify Medication.' If the antibody given peri-infusion is not listed, indicate 'Other' and specify the antibody in the textfield below the list of choices. For each antibody given peri-infusion, indicate the first dose day. Starting with Day 0 as the Infusion Day, indicate the first dose day. If T cell antibodies were given 2 days prior to infusion, then indicate '-2' for this question. If T cell antibodies were given one day after the Infusion date, indicate '1' in the textfield. If the T cell antibody was given, but the dose day is unknown, check the box indicating 'Day Unknown.' Also indicate the number of dose days and the total dose given in mg over the entire peri-infusion period from the first to last dose day. Number of dose days is the total number of days the drug was taken during the peri-infusion period. For example, if a drug was taken four times over a period of two weeks, the total number of dose days would be equal to four. Peri-infusion period is defined per the protocol the patient was infused under. However, if a dose is given after infusion and within one week prior to a subsequent infusion, that dose should be recorded as peri-infusion therapy for the second infusion, not the first. If either of these values is unknown, check the corresponding box indicating 'Unknown.'

c. Were any Cytokine Inhibitors and Cytokines given peri-infusion.

Indicate if cytokine inhibitors or cytokines were used for peri-infusion therapy by choosing 'No,' Yes,' or 'Unknown.' Peri-infusion is defined as a cytokine inhibitor and/or cytokine initiated or administered during the week prior to infusion, or initiated or administered during the first two weeks post infusion. There is no CITR time limit on how long peri-infusion therapy may last and is drug/therapy dependent. Duration of peri-infusion therapy is to be determined by the protocol/center. However, if a dose is given after infusion and one week prior to a subsequent infusion, that dose should be recorded as peri-infusion therapy for the second infusion, not the first.

If 'Yes,' indicate the first dose day, the number of dose days and the total dose given over the entire period from the first to last dose day in mg. For each cytokine inhibitor and cytokine given peri-infusion, start with Day 0 as the Infusion Day. If they were given 1 day prior to infusion, then indicate '-1' for this question. If they were given four days after the Infusion date, indicate '4' in the textfield. If a drug was taken four times over a period of two weeks, the total number of dose days would be equal to four. Indicate this information for each cytokine inhibitor and cytokine listed. If it is listed and was not used, leave the entire row blank. If it was given peri-infusion but any of the values

(first dose day, number of dose days or total dose) are unknown, check the appropriate boxes indicating 'Unknown.'

Adjunctive Therapy

2. Was any other protocol-regulated medication/therapy given peri-infusion.

Indicate if any other protocol-regulated medications or therapies were used peri-infusion, other than the ones listed above as peri-infusion therapies. If it is unknown, indicate 'Unknown,' otherwise indicate 'No' or 'Yes.' Peri-infusion is defined as any time between the time of the infusion admission through day 14 post infusion, including infusion time. For example, if the protocol specifically stated that heparin is to be given during the infusion, you would check the box indicating 'Heparin.' The categories should only be checked if it was written into the protocol.

If YES, indicate all medications/therapies:

If there were other medications or therapies used peri-infusion, indicate 'No,' 'Yes,' or 'Unknown' for each of the medications on the given list. If the medication or therapy is not listed, indicate 'Yes' for 'Other' and specify the other in the textfield following this choice.

Comments.

Indicate any comments you wish to record for this form.

Follow-up Post First Infusion (FOI)

Database/Keyfields

Infusion Date: Enter the date the recipient received the islet infusion that you are reporting the follow-up data for on this form. Date is entered in mm/dd/yyyy format.

Assessment Date: Enter the date of assessment in mm/dd/yyyy format. This date is defined as the date associated with the collection and recording of the form's information.

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

This form should be completed when a recipient receives their second infusion within 12 months of their first infusion. If the recipient did not receive a second infusion, or received their second infusion 12 months after their first infusion, then this form does not need to be completed. This form should be completed at 6 and 12 months post first infusion if and only if the Follow-up Post Last Infusion (FOL) form is not due on the same date.

Occasionally a value will need to be rounded to the nearest whole number or closest decimal point for entry in the database system. When the value is equal to 5 or greater, round up. When the value is less than 5, round down.

It is understandable that the follow-up of autograft patients is sometimes difficult as many come to the transplant center for their infusion and return home for follow-up care. As with all CITR follow-up, it is encouraged to contact the participant and if applicable, their primary care physician, to continue to obtain CITR follow-up data post islet infusion. On the password-protected CITR website you will find sample follow-up materials to aid you in this data collection. However, as soon as the last visit is conducted or when you no longer can obtain data for this participant, CITR would expect you to complete the **Lost to Follow-up (LTF)** form and submit it through the Internet Data Entry System. Upon receipt of the LTF form, the Coordinating Center would not expect any additional Follow-up forms.

A participant may experience islet graft failure (complete dysfunction) during CITR follow-up. If this occurs, CITR would like you to continue follow-up with the participant if it is possible on the normal CITR schedule.

For the majority of the questions on this form you have the choice of selecting 'Not Done/Unknown' if the answer or test result is not available or unknown at your transplant center. However, there may be cases where an answer or result is required in a textfield and 'Not Done/Unknown' is not an available choice. This textfield will then require you to request an exception for this field. To request an exception, type an '∗' in the textfield. Upon doing this, a pop-up box will appear.

Enter the information you have about this question or the reason why you do not have an answer to this question. By requesting this exception you will avoid having the Coordinating Center query you on why the question was left blank.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Follow-up Post First Infusion** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, in the first textfield enter the infusion date and then the assessment date. For proper definitions of the assessment date and the infusion date, refer to the Database/Keyfields section above.

If you are modifying data for a previously entered FOI form, the **Key Selection** screen displays a listing of the FOI forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

1. Is the recipient currently taking insulin.

At this CITR assessment, indicate if the recipient is currently taking insulin as 'No,' 'Yes,' or 'Unknown.'

2. Indicate results closest to this assessment. (C-peptide and glucose levels should be taken from the same sample or at least drawn at the same time.)

- **a. Fasting plasma glucose:** Indicate the test result in mg/dL or mmol/L. If using mmol/L, round to the nearest tenth. Results from glucometers are acceptable as long as they are the most recent results obtained. If your lab does not indicate a specific value, for example it reports <0.05, then choose the '<' sign in the checkbox and then enter '0.05' in the textfield. If a specific value is indicated on the lab report, just indicate this value in the textfield, without choosing the '<' sign.
- **b. Basal plasma C-peptide:** Indicate the test result in ng/mL or nmol/L. Round the value to the nearest hundredth. If your lab result does not indicate a specific value, for example it reports <0.5, then choose the '<' sign in the checkbox and then enter '0.5' in the textfield. If a value is given, just indicate the value in the textfield without choosing the '<' sign.
- **c. HbA_{1c}:** Indicate the percentage rounded to the nearest tenth.

Comments.

Indicate any comments you wish to record for this form.

Follow-up Post Last Infusion (FOL)

Database/Keyfields

Infusion Date: Enter the date the recipient received the islet infusion that you are reporting the follow-up data for on this form. Date is entered in mm/dd/yyyy format.

Assessment Date: Enter the date of assessment in mm/dd/yyyy format. This date is defined as the date associated with the collection and recording of the form's information. Each recipient registered for CITR will have data collected at 6 months post last islet infusion, 12 months post last islet infusion and then yearly thereafter. The date of assessment should be close to these target dates and data reported on the form are the most recent values associated with this date.

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

All data captured on this form should be reported ± 30 days of the scheduled assessment date. Results obtained from a date greater than ± 30 days of the scheduled assessment date should not be reported. If data are not reported ± 30 days from the scheduled assessment dates, the Coordinating Center Data Manager will contact the center in regards to why this recipient's follow-up data were not recorded.

Occasionally a value will need to be rounded to the nearest whole number or closest decimal point for entry in the database system. When the value is equal to 5 or greater, round up. When the value is less than 5, round down.

It is understandable that the follow-up of autograft patients is sometimes difficult as many come to the transplant center for their infusion and return home for follow-up care. As with all CITR follow-up, it is encouraged to contact the participant and if applicable, their primary care physician, to continue to obtain CITR follow-up data post islet infusion. On the password-protected CITR website you will find sample follow-up materials to aid you in this data collection. However, as soon as the last visit is conducted or when you no longer can obtain data for this participant, CITR would expect you to complete the Lost to Follow-up (LTF) form and submit it through the Internet Data Entry System. Upon receipt of the LTF form, the Coordinating Center would not expect any additional Follow-up forms.

A participant may experience islet graft failure (complete dysfunction) during CITR follow-up. If this occurs, CITR would like you to continue follow-up with the participant if it is possible on the normal CITR schedule.

For the majority of the questions on this form you have the choice of selecting 'Not Done/Unknown' if the answer or test result is not available or unknown at your transplant center. However, there may be cases where an answer or result is

required in a textfield and 'Not Done/Unknown' is not an available choice. This textfield will then require you to request an exception for this field. To request an exception, type an '∗' in the textfield. Upon doing this, a pop-up box will appear. Enter the information you have about this question or the reason why you do not have an answer to this question. By requesting this exception you will avoid having the Coordinating Center query you on why the question was left blank.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Follow-up** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, in the first textfield enter the infusion date and then the assessment date. For proper definitions of the assessment date and the infusion date, refer to the Database/Keyfields section above.

If you are modifying data for a previously entered FOL form, the **Key Selection** screen displays a listing of the FOL forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

1. Weight.

Enter the weight of the recipient at the time of assessment in kilograms or pounds. Round to the nearest tenth. If the weight of the recipient is unknown or cannot be obtained, check the box indicating 'Unknown.'

2. Record recipient's Visual Acuity for both eyes in either feet or meters.

Indicate the visual acuity with correction expressed in Snellen values, for each eye of the islet infusion recipient at the time closest to assessment. If visual acuity tests were not performed, or the results cannot be obtained, for either or both eyes, check the box indicating 'Unknown' for each eye. Visual acuity should be expressed in feet or in meters. The password-protected CITR website includes a visual acuity chart (with corrected Snellen values) for your reference and the hard copy is located in Appendix 4 of the User's Guide.

3. Blood Pressure (SBP/DBP-).

Indicate the recipient's blood pressure at the time closest to infusion. Record systolic blood pressure followed by the recipient's diastolic blood pressure. If systolic and diastolic blood pressure is not reported or unknown, check the box indicating 'Unknown.' If only one of the values is unknown, then request an exception in the system for this value.

4. Is the recipient currently taking blood pressure medication specifically for control of their hypertension.

Indicate 'No,' Yes,' or 'Unknown' if the recipient is taking blood pressure medication specifically for control of their hypertension (no other indication) at the time of this assessment. If 'Yes,' indicate 'No,' 'Yes,' or 'Unknown' for each medication from the following list: ACE inhibitors, Alpha adrenergic blockers, Angiotensin II receptor blockers, Beta adrenergic blockers, Calcium channel blockers, Centrally acting agents (Clonidine), Diuretics, Vasodilators, Unknown, or Other. Click on the blue text for a listing of current anti-hypertensive medications. This list is also located in Appendix 5 of the User's Guide. If 'Other' is chosen, indicate the name of the medication(s) in the textfield following this choice.

5. Is the recipient currently taking lipid lowering medication specifically for control of their lipids.

Indicate 'No,' Yes,' or 'Unknown' if the recipient is taking lipid lowering agents at the time of this assessment. If 'Yes,' indicate 'No,' 'Yes,' or 'Unknown' for each agent from the following list: Bile acid sequestrants, Cholesterol absorption inhibitors, Fibric acid derivatives, HMG CoA reductase inhibitors, Neomycin, Nicotinic acid, Probucol, Unknown, or Other. Click on the blue text for a listing of current lipid lowering medications. This list is also located in Appendix 5 of the User's Guide. If 'Other' is chosen, indicate the name of the agent(s) in the textfield following this choice.

6. Did the recipient experience any severe hypoglycemic episodes (requiring the assistance of another person) since the last CITR assessment.

- **a.** Indicate the total number of hypoglycemic episodes requiring the assistance of another person that the recipient had since the last CITR assessment. Chose from '1-2 episodes,' '3-5 episodes,' '6 or more episodes,' and 'Unknown.'
- **b.** Indicate the total number of episodes of hypoglycemia requiring the assistance of another person. If the total is unknown, check the 'Unknown' box.
- **c.** Indicate the total number of episodes of hypoglycemia require the assistance of another person AND resulting in the loss of consciousness and/or seizures. If this is unknown, check the 'Unknown' box.

7. Total number of hospital admissions since last CITR assessment.

Indicate the total number of hospital admissions the recipient has had since the last CITR assessment. If this is the first follow-up assessment, indicate the total number of hospital admissions since the islet infusion (not including any time hospitalized for the islet infusion). Indicate only times where the recipient was admitted to the hospital (≥ 24 hour stay) and do not include emergency room visits

that did not lead to a hospital admission. If the recipient did not have any hospital admissions, indicate '0.' If the number of hospital admissions cannot be determined or is unknown, check the box indicating 'Unknown.'

If one or more hospital admissions:

Total number of hospitalized days since last CITR assessment.

If the recipient was hospitalized, indicate the total number of hospital days that resulted from these admissions. To calculate the total number of hospital days, it may be necessary to obtain the discharge summary for each hospital admission. If it is not possible to calculate the total number of days, check the box indicating 'Unknown.'

Total number of islet infusion-related hospitalization days.

Of the total number of hospitalized days (from previous question), indicate the total number of these days that were related to the islet infusion or procedure (i.e., infection or adverse event). If none of the hospitalized days were related to the islet infusion, indicate '0' for this field. Do not record hospitalizations for non-related items such as a broken leg. Use your site's best judgment for determining relation to the islet infusion. If the total number of hospitalized days is unknown or if it is not possible to determine why the patient was admitted, check the box indicating 'Unknown.'

Insulin Administration

8. Was insulin administered at the last CITR assessment.

Indicate if insulin was administered at the last CITR assessment as 'No,' 'Yes,' or 'Unknown.' If this is the participant's first follow-up assessment post islet infusion, indicate if insulin was administered at the time of the islet infusion (Day 0).

9. Was insulin administered for more than 14 consecutive days at any time between the last CITR assessment and this CITR assessment.

Indicate 'No,' 'Yes,' or 'Unknown' if insulin was administered for more than 14 consecutive days at any time between the last CITR assessment and this CITR assessment. If this is the participant's first follow-up assessment post islet infusion, use infusion date (Day 0) as your last CITR assessment date to determine insulin administration.

10. At this CITR assessment, is the recipient currently taking insulin.

At this CITR assessment, indicate if the recipient is currently taking insulin as 'No,' 'Yes,' or 'Unknown.'

If YES to Questions 8, 9,or 10, complete the Insulin Administration Form (INS).

Islet Graft Dysfunction

11. Since the last CITR assessment, has the recipient been treated for islet graft dysfunction or suspected islet graft dysfunction.

Islet graft dysfunction or suspected dysfunction is defined as follows:

In an insulin independent recipient (after completion of induction immunotherapy), islet graft dysfunction will be suspected if the recipient displays, with no evidence of infection or drug toxicity, three consecutive blood glucose readings of 200 mg/dL over any 12 hour period.

In an insulin dependent recipient (after completion of induction immunotherapy), islet graft dysfunction will be suspected if the recipient displays, with no evidence of infection or drug toxicity over any 12-hour period, a 100% increase in the average insulin dose required to maintain preprandial blood glucose levels of 120 mg/dL.

Indicate if the recipient has been treated by noting 'No,' 'Yes' or 'Unknown.' If this recipient has been treated for either islet graft dysfunction or suspected islet graft dysfunction, complete the Islet Graft Dysfunction (IGD) form.

Maintenance Immunosuppression

12. Were immunosuppressants used for maintenance.

Indicate if immunosuppressants were used for maintenance therapy by choosing 'No,' 'Yes,' or 'Unknown.' Indicate 'Yes' or 'No' for each of the immunosuppressant medications listed (Sirolimus, Tacrolimus, Cyclosporine, Mycophenolate mofetil, Daclizumab, Steroid, DSG, and Everolimus). Indicate the dose given for maintenance therapy in mg/day. Indicate the trough level for the immunosuppressant in ng/mL. If Cyclosporine and/or steroids were used, specify the type of Cyclosporine and/or steroids under the section heading 'Specify Medication.' If an immunosuppressant was used and the dose is unknown, check the box indicating 'Dose Unknown.' For Sirolimus, Tacrolimus, Cyclosporine, if the trough level is unknown, check the box indicating 'Trough Unknown.'

If other chemical immunosuppressants were used as maintenance therapy, specify the names and dose (mg/day) in the last five lines of the table.

13. Were any protocol regulated anti-hyperglycemic medications or other protocol regulated therapies (except antibiotic, anti-viral, or anti-fungal prophylaxis) given since the last CITR assessment.

Indicate if any protocol-related anti-hyperglycemic medications or other protocol-related therapies were given to this recipient since the last CITR assessment. Do not include antibiotic, anti-viral, or anti-fungal prophylaxis. Please note that these anti-hyperglycemic medications or therapies must be specified in the transplant center protocol to be reported for this question. Indicate your answer with a 'No,'

'Yes' or 'Unknown.' If the answer is 'Yes,' list up to five protocol regulated medications or protocol regulated therapies that were given since the last CITR assessment. If the protocol calls for more than one vitamin to be administered, please indicate all of these vitamins as a single entry. For example, Vitamin A, Vitamin B_6, Vitamin C and Vitamin E can be summarized as Vitamin A, B_6, C and E in the same textfield.

14. Were any malignancies newly diagnosed since last CITR assessment.

Indicate if the recipient has been newly diagnosed with any form of malignant cancer since the last follow-up assessment by choosing 'No,' 'Yes' or 'Unknown'. Please note that if you choose 'Yes' and the tumor continues into the next follow-up period without going away, the tumor should only be reported on that first follow-up form. The tumor should be reported on subsequent follow-up forms ONLY if the tumor goes away and then comes back in the next follow-up period.

If 'Yes' is chosen:

a. **Indicate date of diagnosis:** Indicate the diagnosis date in mm/dd/yyyy format. If the complete date is unknown, indicate the year the diagnosis was made. If the year is unknown, but a malignancy was diagnosed, check the box indicating 'Unknown.'

b. **Indicate diagnosis:** Using narrative text or an IDC-9 code, indicate the diagnosis. ICD-9 codes are preferred. If the diagnosis is unknown, check the box indicating 'Unknown.'

c. **Was the malignancy:** Indicate if the malignancy was thought to be Transplanted from the donor, a Recurrence of a pre transplant malignancy, Post transplant malignancy occurring since last CITR assessment, Unknown, or Other. If, after the transplantation of organs from a donor it is determined that the donor suffered from a malignancy, or if more than one recipient from the same donor shows the same cancer after transplantation, indicate 'Transplanted from the donor.'

15. Has the recipient experienced any adverse events (Grade 3, 4 or 5) since last CITR assessment, including portal vein thrombosis or complications at the site of the islet graft infusion.

Grading of the adverse event is based on the National Cancer Institute's Common Terminology Criteria for Averse Events. Definitions and online guidance can be found on the password-protected CITR website. Indicate 'No,' 'Yes' or 'Unknown.' If the recipient has experienced an adverse event (Grade 3, 4 or 5), complete the Adverse Event form (AEF) for each event.

16. Has the recipient received a transplant since last CITR assessment (other than an islet infusion).

Indicate if the recipient has received a transplant, other than an islet infusion, since the last CITR assessment. If 'Yes,' complete the Non Islet Transplant form (NIT) for each transplant.

17. What is the current status of each of the following secondary complications.

Indicate the current condition of the recipient for each of the secondary complications listed at the time of this CITR assessment. If the recipient has experienced more than one type of secondary complication (e.g. two different autonomic neuropathies), record the complication with the worst severity.

No occurrence indicates that the recipient was not diagnosed with this secondary complication and/or signs and symptoms did not occur.

Reduced awareness is defined as a decreased magnitude of autonomic symptoms or elevated threshold for autonomic symptoms with a lower glucose level.

Unawareness is defined as a lack of autonomic warning symptoms, no warning symptoms or a glucose level of <54 mg/dL.

Asymptomatic is defined as a person without symptoms but the disease is diagnosed based on diagnostic tests.

Symptomatic is defined as a person who experiences symptoms of the disease (e.g. sweating after meals) consistent with the definition of the disease.

Disabling is defined as a person who experiences significant losses in their motor or sensory functions. These may include: symptoms of muscle weakness of sufficient severity that the person cannot walk independently; symptoms of sensory loss of sufficient severity that the person cannot walk independently because of sensory ataxia; absence of feeling in hands so that the person is disabled; symptoms of pain having the characteristics of neuropathic pain that is disabling (person has previously attended physicians for pain relief, work and recreational activities have been curtailed because of pain, or medication for pain relief has been taken on a continual basis).

a. **Hypoglycemia:** Indicate if the recipient has not had an occurrence of hypoglycemia, if they have reduced awareness, they are unaware, or if it is unknown if they have hypoglycemia at the time of this assessment.

b. **Peripheral neuropathy:** Indicate if the recipient has peripheral neuropathy at the time of this assessment. If not, indicate 'No Occurrence.' If 'Yes,' indicate the type (Asymptomatic, Symptomatic, or Disabling). If it is unknown, indicate 'Unknown.'

c. **Autonomic neuropathy:** Indicate if the recipient has autonomic neuropathy at the time of this assessment. If not, indicate 'No Occurrence.' If 'Yes,' indicate the type (Asymptomatic, Symptomatic, or Disabling). If it is unknown, indicate 'Unknown.'

d. **Nephropathy:** Indicate if the recipient has nephropathy at the time of this assessment. If not, indicate 'No Occurrence.' If 'Yes,' indicate the type (Microalbuminuria, Macroalbuminuria, End stage renal disease, or Stable allograft). If it is unknown, indicate 'Unknown.'

e. **CAD:** Indicate if the recipient has diagnosed coronary artery disease at the time of this assessment. If it is unknown, indicate 'Unknown.'

f. **CVA:** Indicate if the recipient has diagnosed cerebrovascular disease at the time of this assessment. If it is unknown, indicate 'Unknown.'

g. **PVD:** Indicate if the recipient has diagnosed peripheral vascular disease at the time of this assessment. If it is unknown, indicate 'Unknown.'

h. **Treated hypertension:** Indicate if the recipient has hypertension that is being treated at the time of this assessment. If it is unknown, indicate 'Unknown.'

i. **Retinopathy:** Indicate if the recipient was diagnosed with diabetic retinopathy since the last assessment. Record for each eye separately (**right** and **left**). If the recipient was not diagnosed with retinopathy, indicate 'None.' If they have been diagnosed, choose the diagnosis from the following list: Non Proliferative, Proliferative or Unknown.

j. **Diabetic macular edema:** Indicate if the recipient was diagnosed with diabetic macular edema since the last assessment. Record for each eye separately (**right** and **left**). If the recipient was not diagnosed with diabetic macular edema, indicate 'None.' If they have been diagnosed, choose from the following list: Mild (some edema but far from the center of the macula), Moderate (macular edema that is near the center but does not involve it yet), Severe (macular edema that involves the center of the macula) or Unknown.

18. Eye surgery performed for treatment of diabetic retinopathy since the last assessment.

Indicate if the recipient had any of the following eye surgeries for diabetic retinopathy since the last assessment by checking 'Yes,' 'No,' or 'Unknown' for each surgery and for each eye: Laser photocoagulation for proliferative diabetic retinopathy, Laser photocoagulation for diabetic macular edema, Vitrectomy and Other. If 'Yes,' include the year the surgery was performed for each treatment and for each eye (right and left) in YYYY format.

19. Has the recipient ever experienced the following diabetes-related foot problems.

Indicate if the recipient has ever had any of the following diabetic-related foot problems: 'Ulcers,' 'Lower limb amputation,' 'Foot deformity,' and 'Dysesthesia.' Dysesthesia may be defined as altered feelings such as burning, wetness, electric shock, pins and needles, itching, or creepy-crawly sensation caused by neurological malfunction. If it is unknown whether the recipient had one of these problems, check the box indicating 'Unknown.'

20. Have any of the following events occurred since the last CITR assessment.

Indicate if the recipient has experienced any of the following events: 'Orthostatic hypotension,' 'Gastroparesis,' 'Constipation,' 'Diabetic diarrhea,' 'Fecal incontinence,' 'Diabetic bladder dysfunction,' and 'Sexual dysfunction.' If it is unknown whether the recipient has experienced any of these events, check the box indicating 'Unknown.'

21. Current employment status of islet infusion recipient.

Select the one option that describes the recipient's employment status at the time of this assessment from the following list: Working full time, Working part time by choice, Working part time due to disease, Working part-time reason unknown, Not working by choice, Not working due to disease, Not working unable to find employment, Not working reason unknown, Retired, Student, Employment status unknown, or Not applicable, less than 5 years old. Definitions of working and not working are as follows:

Working: Indicates that the recipient is employed inside or outside the home, attending school, or if a child, living at home.

Non Working: Indicates the recipient is unemployed, not working inside the home or not attending school.

22. Since the last assessment, has the recipient been compliant during the follow-up period (post islet infusion) with protocol-regulated medications/therapy.

If the recipient is not on any protocol-regulated medication or therapies, indicate 'Not applicable.' If it is unknown, indicate 'Unknown.' Else, indicate if they have or have not been compliant since the last assessment (or since infusion if this is the first Follow-up form completed).

Comments.

Indicate any comments you wish to record for this form.

Follow-up Post Last Infusion Lab Info (FUL)

Database/Keyfields

Infusion Date: Enter the date the recipient received the islet infusion that you are reporting the follow-up data for on this form. Date is entered in mm/dd/yyyy format.

Assessment Date: Enter the date of assessment in mm/dd/yyyy format. This date is defined as the date associated with the collection and recording of the form's information. Each recipient registered for CITR will have data collected at 6 months post last islet infusion, 12 months post last islet infusion and then yearly thereafter. The date of assessment should be close to these target dates and data reported on the form are the most recent values associated with this date.

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

All data captured on this form should be reported ± 30 days of the scheduled assessment date. Results obtained from a date greater than ± 30 days of the scheduled assessment date should not be reported. If data are not reported ± 30 days from the scheduled assessment dates, the Coordinating Center Data Manager will contact the center in regards to why this recipient's follow-up data were not recorded.

Occasionally a value will need to be rounded to the nearest whole number or closest decimal point for entry in the database system. When the value is equal to 5 or greater, round up. When the value is less than 5, round down.

It is understandable that the follow-up of autograft patients is sometimes difficult as many come to the transplant center for their infusion and return home for follow-up care. As with all CITR follow-up, it is encouraged to contact the participant and if applicable, their primary care physician, to continue to obtain CITR follow-up data post islet infusion. On the password-protected CITR website you will find sample follow-up materials to aid you in this data collection. However, as soon as the last visit is conducted or when you no longer can obtain data for this participant, CITR would expect you to complete the Lost to Follow-up (LTF) form and submit it through the Internet Data Entry System. Upon receipt of the LTF form, the Coordinating Center would not expect any additional Follow-up forms.

A participant may experience islet graft failure (complete dysfunction) during CITR follow-up. If this occurs, CITR would like you to continue follow-up with the participant if it is possible on the normal CITR schedule.

For the majority of the questions on this form you have the choice of selecting 'Not Done/Unknown' if the answer or test result is not available or unknown at your transplant center. However, there may be cases where an answer or result is

required in a textfield and 'Not Done/Unknown' is not an available choice. This textfield will then require you to request an exception for this field. To request an exception, type an '*' in the textfield. Upon doing this, a pop-up box will appear. Enter the information you have about this question or the reason why you do not have an answer to this question. By requesting this exception you will avoid having the Coordinating Center query you on why the question was left blank.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Follow-up** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, in the first textfield enter the infusion date and then the assessment date. For proper definitions of the assessment date and the infusion date, refer to the Database/Keyfields section above.

If you are modifying data for a previously entered FUL form, the **Key Selection** screen displays a listing of the FUL forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

Laboratory Information

1. Indicate results closest to this assessment.

For each of the following laboratory tests, indicate the most recent results closest to this assessment date. C-peptide and glucose levels should be taken from the same sample or at least drawn at the same time.

Fields for both standard and international units are given; however you should only complete the field in which your results are reported. Do not complete both fields.

If for some reason the test was not performed ± 30 days to this assessment date, indicate 'Not Done/Unknown' for that particular test. If the results cannot be found or obtained, indicate 'Not Done/Unknown.'

a. **Fasting blood glucose:** Indicate the test result in mg/dL or mmol/L. If using mmol/L, round to the nearest tenth. Results from glucometers are acceptable as long as they are the most recent results obtained. If your lab does not indicate a specific value, for example it reports <0.05, then choose the '<' sign in the checkbox and then enter '0.05' in the textfield. If a specific value is indicated on the lab report, just indicate this value in the textfield, without choosing the '<' sign.

b. **HbA_{1c}:** Indicate the percentage rounded to the nearest tenth.

c. **ALT:** Indicate the results in Units/L. If your lab does not indicate a specific value, for example it reports <0.05, then choose the '<' sign in the checkbox and then enter '0.05' in the textfield. If a specific value is indicated on the lab report, just indicate this value in the textfield, without choosing the '<' sign.

d. **AST:** Indicate the results in Units/L. If your lab does not indicate a specific value, for example it reports <0.05, then choose the '<' sign in the checkbox and then enter '0.05' in the textfield. If a specific value is indicated on the lab report, just indicate this value in the textfield, without choosing the '<' sign.

e. **Alkaline phosphatase:** Indicate the results in Units/L. If your lab does not indicate a specific value, for example it reports <0.05, then choose the '<' sign in the checkbox and then enter '0.05' in the textfield. If a specific value is indicated on the lab report, just indicate this value in the textfield, without choosing the '<' sign.

f. **Total bilirubin:** Indicate the result in mg/dL or μmol/L. If using mg/dL, round to the nearest tenth.

g. **Total cholesterol:** Indicate the result in mg/dL or mmol/L. If using mmol/L, round to the nearest tenth. If your lab does not indicate a specific value, for example it reports <0.05, then choose the '<' sign in the checkbox and then enter '0.05' in the textfield. If a specific value is indicated on the lab report, just indicate this value in the textfield, without choosing the '<' sign.

h. **HDL:** Indicate the result in mg/dL or mmol/L. If using mmol/L, round to the nearest hundredth.

i. **LDL:** Indicate the result in mg/dL or mmol/L. If using mmol/L, round to the nearest hundredth.

j. **Triglycerides:** Indicate the result in mg/dL or mmol/L. If using mmol/L, round to the nearest tenth.

k. **Serum creatinine:** Indicate the result in mg/dL or μmol/L. If using mg/dL, round to the nearest tenth.

m. **Calculated creatinine clearance:** Indicate the result in mL/min/1.73m^2 or mL/s/m^2. If using mL/min/1.73m^2, round to the nearest hundredth. To obtain the standard creatinine clearance, you may refer to a medical calculator found at http://www-users.med.cornell.edu/~spon/picu/calc and choose "Creatinine Clearance" under the "Metabolic" heading.

Metabolic Assessment of Islet Infusion Function

2. Indicate results closest to this assessment.

For each of the metabolic assessments listed, indicate the most recent results reported for this assessment. If for some reason the metabolic assessment was

not performed ± 30 days from this assessment, indicate 'Not Done/Unknown' for that particular test. If the results cannot be found or obtained, indicate 'Not Done/Unknown.'

Please make note that the area of metabolic monitoring will be standardized in the future. CITR wishes to be inclusive of the data captured while maintaining standardization for the tests. To begin, a minimal set of metabolic monitoring protocols are posted to the password-protected CITR website and included as Appendix 6 to this User's Guide. Items in blue on the Internet Data Entry Screen (also are double starred: **) should follow the procedures outlined in the CITR Guidelines for Metabolic Testing. Indicate the result obtained, the units of measurement and check the box indicating 'CITR Standard Used.' However, if this test was not performed in the same or very similar manner as the CITR Standard, you may still record your result and the units of measurement, but do not check the box indicating 'CITR Standard Used.' If there is not an option to check 'CITR Standard Used,' or the question is not double starred (**), this indicates that a CITR Standard for this test has not been determined yet. Updates will be posted as needed to the password-protected CITR website concerning metabolic monitoring.

a. **Basal plasma C-peptide:** Indicate the test result in ng/mL or nmol/L. Round the value to the nearest hundredth. If your lab result does not indicate a specific value, for example it reports <0.5, then choose the '<' sign in the checkbox and then enter '0.5' in the textfield. If a value is given, just indicate the value in the textfield without choosing the '<' sign.

b. Indicate the **peak stimulated C-peptide after meal** result in ng/mL or nmol/L. This 'meal' can be any type of meal (breakfast, Ensure®, Sustacal®, etc.). Round to the nearest hundredth. If your lab result does not indicate a specific value, for example it reports <0.5, then choose the '<' sign in the checkbox and then enter '0.5' in the textfield. If a value is given, just indicate the value in the textfield without choosing the '<' sign.

c. **IV glucagon:**

   1. **Basal C-peptide before IG glucagon.** Indicate the test result for Basal C-peptide level before IV glucagon in mg/mL or nmol/L. Round the value to the nearest hundredth. If your lab result does not indicate a specific value, for example it reports <0.5, then choose the '<' sign in the checkbox and then enter '0.5' in the textfield. If a value is given, just indicate the value in the textfield without choosing the '<' sign.

   2. Indicate the **peak stimulated C-peptide after IV glucagon** result in ng/mL or nmol/L. Round to the nearest hundredth. If your lab result does not indicate a specific value, for example it reports <0.5, then choose the '<' sign in the checkbox and then enter '0.5' in the textfield. If a value is given, just indicate the value in the textfield without choosing the '<' sign.

d. Arginine Stimulation Test (AST)

1. **Basal C-peptide before IV arginine **.** Indicate the test result for Basal C-peptide level before IV arginine in mg/mL or nmol/L. Round the value to the nearest hundredth. If your lab result does not indicate a specific value, for example it reports <0.5, then choose the '<' sign in the checkbox and then enter '0.5' in the textfield. If a value is given, just indicate the value in the textfield without choosing the '<' sign.
2. Indicate the **peak stimulated C-peptide after IV arginine** ** result in ng/mL or nmol/L. Round to the nearest hundredth. If your lab result does not indicate a specific value, for example it reports <0.5, then choose the '<' sign in the checkbox and then enter '0.5' in the textfield. If a value is given, just indicate the value in the textfield without choosing the '<' sign.
3. Report the **acute C-peptide response to IV arginine** ** result in ng/mL or nmol/L. Round to the nearest hundredth.
4. Report the **acute insulin response to IV arginine** ** result in μU/mL. Round to the nearest tenth.

e. Intravenous Glucose Tolerance Test (IVGTT)

1. **Basal C-peptide before IV glucose.** Indicate the test result for Basal C-peptide level before IV glucose in mg/mL or nmol/L. Round the value to the nearest hundredth. If your lab result does not indicate a specific value, for example it reports <0.5, then choose the '<' sign in the checkbox and then enter '0.5' in the textfield. If a value is given, just indicate the value in the textfield without choosing the '<' sign.
2. Indicate the **peak stimulated C-peptide after IV glucose** ** result in ng/mL or nmol/L. Round to the nearest hundredth. If your lab result does not indicate a specific value, for example it reports <0.5, then choose the '<' sign in the checkbox and then enter '0.5' in the textfield. If a value is given, just indicate the value in the textfield without choosing the '<' sign.
3. Report the **acute C-peptide response to IV glucose** ** result in ng/mL or nmol/L. Round to the nearest hundredth.
4. Report the **acute insulin response to IV glucose** ** result in μU/mL. Round to the nearest tenth.
5. Report the **area under the curve insulin** result derived **from the 0.5g/kg IVGTT** ** in μU/mL x min. Round to the nearest tenth.
6. Report the **K_G-value derived from 0.5 g/kg IVGTT **.**

f. Oral Glucose Tolerance Test (OGTT)

1. **2-hr 75 g OGTT plasma glucose.** ** Report in mg/dL or mmol/L. Round to the nearest tenth.

2. Report the **area under the curve result for C-peptide OGTT** ** in ng/mL x min. Round to the nearest hundredth.

g. Mixed Meal Test

1. Report the **area under the curve result for C-peptide Mixed Meal Tolerance Test (MMTT)** ** in ng/mL x min. Round to the nearest hundredth.
2. Report the **mixed meal stimulation index** ** in either ng/mg or pmol/mg. Round to the nearest tenth.

Comments.

Indicate any comments you wish to record for this form.

Insulin Administration (INS)

Database/Keyfields

Infusion Date: Enter the date the recipient received the islet infusion that you are reporting the follow-up data and insulin information for on this form. Date is entered in mm/dd/yyyy format.

Assessment Date: Enter the date of assessment in mm/dd/yyyy format. This date is defined as the date associated with the collection and recording of the form's information and should be the identical date you entered for the corresponding follow-up form. Each recipient registered for CITR will have data collected at 6 months post last islet infusion, 12 months post last islet infusion and then yearly thereafter. The date of assessment should be close to these target dates and data reported on the form are the most recent values associated with this date.

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

All data captured on this form should be reported ± 30 days of the scheduled follow-up assessment date. The assessment date for this form should be the same assessment date as indicated on the follow-up form.

Occasionally a value will need to be rounded to the nearest whole number or closest decimal point for entry in the database system. When the value is equal to 5 or greater, round up. When the value is less than 5, round down.

For the majority of the questions on this form you have the choice of selecting 'Not Done/Unknown' if the answer or test result is not available or unknown at your transplant center. However, there may be cases where an answer or result is required in a textfield and 'Not Done/Unknown' is not an available choice. This textfield will then require you to request an exception for this field. To request an exception, type an '∗' in the textfield. Upon doing this, a pop-up box will appear. Enter the information you have about this question or the reason why you do not have an answer to this question. By requesting this exception you will avoid having the Coordinating Center query you on why the question was left blank.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Insulin Administration** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, in the first textfield enter the infusion date and then the assessment date. For proper

definitions of the assessment date and the infusion date, refer to the Database/Keyfields section above.

If you are modifying data for a previously entered INS form, the **Key Selection** screen displays a listing of the INS forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

Complete the table on the screen, recording insulin use for this recipient during the current CITR assessment period. Insulin use is defined as insulin administered for a period of more than 14 consecutive days. The start date is the date the participant began taking insulin. This could be as early as the date of the last CITR assessment. The end date is either the date the recipient stopped taking insulin or the current CITR assessment date, if the recipient is currently on insulin. If there were multiple periods of insulin use (insulin administered > 14 days), record each period in a separate row. Average total daily insulin requirement is the total number of units given, divided by the total number of days (e.g. Day 1-Day 9: 10 units per day; Day 10-Day 19: 5 units per day = 7.4).

For example, if a participant was on insulin at the last CITR assessment (regardless of how long they were on insulin) you would complete this table.

Episode #	Start Date	End Date	Average Total Daily Insulin Requirement (units)	Reason
1	Date of last CITR assessment (07/01/2002)	Date insulin discontinued (07/05/2002)	12.5	Infection

If the recipient was on insulin for more than 14 consecutive days at any time between the last CITR assessment and this CITR assessment, you would complete this table.

Episode #	Start Date	End Date	Average Total Daily Insulin Requirement (units)	Reason
1	05/01/2000	06/01/2000	7.5	Infection
2	09/08/2000	09/28/2000	5.5	Infection

If the recipient is currently taking insulin at this CITR assessment (regardless of how long they have been on insulin), you would complete this table.

Episode #	Start Date	End Date	Average Total Daily Insulin Requirement (units)	Reason
1	02/10/2003	Date of this CITR assessment (02/12/2003)	6.5	Infection

Comments.

Indicate any comments you wish to record for this form.

Islet Graft Dysfunction (IGD)

Database/Keyfields

Infusion Date: Enter the date the recipient received the islet infusion that you are reporting on this form. Date is entered in mm/dd/yyyy format.

Date of graft dysfunction: Enter the date of the islet graft dysfunction or suspected islet graft dysfunction in mm/dd/yyyy format.

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

The CITR Principal Investigator should be involved in completing this form and answers will be based on his or her judgment.

To determine if this form needs to be completed, the CITR Principal Investigator needs to use the following definitions:

> In an insulin independent recipient, after completion of induction immunotherapy, islet graft dysfunction will be suspected if the recipient displays, with no evidence of infection or drug toxicity three consecutive blood glucose readings of 200 mg/dL over any 12 hour period.
>
> In an insulin dependent recipient, after completion of induction immunotherapy, islet graft dysfunction will be suspected if the recipient displays, with no evidence of infection or drug toxicity over any 12-hour period, a 100% increase in the average insulin dose required to maintain preprandial blood glucose levels of 120 mg/dL.

Occasionally a value will need to be rounded to the nearest whole number or closest decimal point for entry in the database system. When the value is equal to 5 or greater, round up. When the value is less than 5, round down.

Regarding data collection and CITR follow-up, if there is a complete islet graft failure (complete dysfunction), CITR encourages continuing follow-up and reporting data on the normal CITR schedule. We would like to collect as much follow-up information (including any non-islet transplants and adverse events) as possible for all islet infusion recipients. Collection of this data will lead to a richer analysis of subgroups of islet infusion recipients.

For the majority of the questions on this form you have the choice of selecting 'Not Done/Unknown' if the answer or test result is not available or unknown at your transplant center. However, there may be cases where an answer or result is required in a textfield and 'Not Done/Unknown' is not an available choice. This textfield will then require you to request an exception for this field. To request an exception, type an '*' in the textfield. Upon doing this, a pop-up box will appear. Enter the information you have about this question or the reason why you do not

have an answer to this question. By requesting this exception you will avoid having the Coordinating Center query you on why the question was left blank.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Islet Graft Dysfunction** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, in the first textfield enter the infusion date and then the islet graft dysfunction date. For proper definitions of the infusion date and islet graft dysfunction date, refer to the Database/Keyfields section above.

If you are modifying data for a previously entered IGD form, the **Key Selection** displays a listing of the IGD forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

1. Indicate the presumed primary reason and then all secondary reason(s) why this is an islet graft dysfunction or suspected dysfunction.

The reasons for graft dysfunction are listed. Based on the CITR Principal Investigator's review, indicate the one presumed primary reason for the graft or suspected graft dysfunctionChoices are the following:

Primary nonfunction.

No C-peptide > 0.3 ng/mL in pre infusion C-peptide negative patient or no increase in C-peptide > 0.2 ng/mL compared to pre infusion baseline C-peptide.

Insufficient islet mass.

Not enough islets per kilogram of the participant's weight were infused to produce a successful islet graft.

Islet exhaustion.

Continuous deterioration of islet function in the absence of evidence or auto- or allo-immune responses directed to treating islets.

Rejection.

Graft failure associated with islet infusion directed islet immune responses or defined by sudden loss or deterioration of function.

Autoimmune reaction.

Transplant center staff discontinued medication.

Recipient discontinued medication by self.

Insulin resistance.

Islet graft dysfunction in presence of clinical laboratory or diagnostic tests indicative or suggestive of insulin resistance.

Drug toxicity.

Dietary non-compliance.

Weight gain.

Infection (e.g. CMV).

Unknown.

Other.

In the second column on the form you may choose one or more possible secondary reasons. If there are no other reasons to report, you may leave this second column blank. If there is a reason and it is not listed, indicate 'Other' and specify the reason in the textfield following the choices.

2. Outcome or resolution of the dysfunction.

Indicate the outcome or resolution of the dysfunction from the choices of: 'Full recovery,' 'Partial recovery,' 'Complete dysfunction,' or 'Unknown.'

Full recovery is defined as the recipient being able to obtain the same level of functioning prior to the islet graft dysfunction.

Partial recovery is defined as recovery achieved but not to the functional level (as assessed by glycemic control, C-peptide level, and/or insulin requirements) prior to the islet graft dysfunction.

All comments on this resolution may be listed in the comments section following the list of choices.

If 'Full recovery' was chosen, indicate the date of full recovery in mm/dd/yyyy format.

If 'Complete dysfunction' was chosen, indicate the date of failure in mm/dd/yyyy format.

3. Immediately prior to dysfunction, was the recipient on immunosuppression therapy.

If YES, indicate all current immunosuppression therapies the recipient was on and the dose given:

Immediately prior to dysfunction is defined as all medications the recipient was on within the one week prior to the islet graft dysfunction being diagnosed or suspected.

For each immunosuppressant listed indicate 'Yes' or 'No,' the dose, and trough level of the medication the recipient was taking immediately prior to dysfunction or suspected dysfunction. Indicate the dose in mg/day and the trough level in ng/mL. If Cyclosporine and/or Steroid was used, choose the specific type listed under the column heading "Specify Medication." If the immunosuppressant is not

listed, indicate the name of the immunosuppressant using the last five lines of the table. Remember to record the dose (mg/day) of these immunosuppressants also. If the doses have changed over time, indicate the most recent dose the recipient has taken immediately prior to dysfunction. Doses should be rounded to the nearest hundredth for Sirolimus, Tacrolimus and Cyclosporine, the nearest whole number for MMF, and nearest tenth for steroids. If the dose is unknown, check the box indicating 'Dose Unknown.' If the trough level for Sirolimus, Tacrolimus and Cyclosporine is unknown, check the box indicating 'Trough Unknown.'

4. In response to an islet graft dysfunction or suspected dysfunction, were <u>any anti-rejection therapies</u> used.

Indicate if any anti-rejection therapies were used in response to this islet graft or suspected islet graft dysfunction. Choices are 'No,' 'Yes' or 'Unknown.' Anti-rejection therapy is defined as a substantial increase in the induction or maintenance immunosuppression medications for the purpose of rescuing the graft presumed undergoing rejection (dysfunction).

If anti-rejection therapies were used, indicate up to four medications used, the dose in mg/day, and the total number of days used. For example, the recipient was given Infliximab, 2 mg/day for 2 days one week and 4 mg/day for 5 days. Select 'Anti TNF alpha,' '3.43 mg/day,' and '7' days. Note that to record the two different doses given, the dose was averaged over the period of time. Round the dose to the nearest hundredth when reporting. If the dose is unknown, check the box indicating 'Dose Unknown.' If the number of days used is unknown, check the box indicating '# of Days Unknown.'

5. In response to an islet graft dysfunction or suspected dysfunction, were any <u>antibody therapies</u> used.

Indicate if any antibody therapies were given in response to this islet graft of suspect graft dysfunction. Choices are 'No,' 'Yes' or 'Unknown.'

If antibodies were used, indicate up to three antibodies used, the dose in mg/day, and the total number of days used. If the antibody given is not listed among the choices, indicate 'Other' and specify the antibody in the textfield following the list of choices. If the dose is unknown, check the box indicating 'Dose Unknown.' If the number of days used is unknown, check the box indicating '# of Days Unknown.'

6. Were there any adverse events (Grade 3, 4 or 5) associated with the dysfunction.

Grading of the adverse event is based on the National Cancer Institute's Common Terminology Criteria for Adverse Events. Definitions and online guidance can be found on the password-protected CITR website. Indicate 'No,' 'Yes' or 'Unknown' as to whether there were any adverse events (Grade 3, 4 or 5) associated with the islet graft dysfunction or suspected islet graft dysfunction.

If 'Yes,' complete the Adverse Event form (AEF) for each event.

7. Local transplant center's criteria or reason why this is an islet graft dysfunction.

Indicate your local transplant center's thoughts and reasoning as to why this was an islet graft dysfunction.

Comments.

Indicate any comments you wish to add to this form.

Non Islet Transplant (NIT)

Database/Keyfields

NIT Date: Indicate the date of the non islet transplant in mm/dd/yyyy format. If more than one non islet transplant occurred, complete a new form for each transplant. If this transplant occurred as a simultaneous transplant with the islet transplant, the transplant date may correspond to the islet date of transplant. Also include all non islet transplants that may have occurred prior to the recipient's first islet infusion.

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

This form is used for detailing information about non islet transplants. Once the form is completed for a transplant, a Non Islet Transplant Follow-up form should be completed each year to record functional status of the transplant. Therefore, once a year you will complete a new NIT Follow-up form with NIT date, assessment date and functional status of the transplant.

Once the transplant has failed, functional status does not need to be updated for this transplant (i.e. you no longer need to complete the NIT Follow-up form yearly). However, if the patient receives a new non islet transplant, you will need to complete all of the necessary forms and update appropriately based upon this new non islet transplant.

If a participant has complete islet graft failure (complete dysfunction) and has a non islet transplant following this failure, the non islet transplant would be reported to CITR, as well as additional follow-up for this participant on a normal CITR schedule.

Occasionally a value will need to be rounded to the nearest whole number or closest decimal point for entry in the database system. When the value is equal to 5 or greater, round up. When the value is less than 5, round down.

When a UNOS Donor ID is provided on this form most data elements will be obtained directly from UNOS. Once the data are received from UNOS, they will be entered in the form and the transplant center may view and update the information as necessary. CORR and UNOS Donor IDs are also asked for at this time in anticipation of future ancillary studies and needs to obtain additional data at a later time.

UNOS data elements on the CITR forms are designated with an asterisk (*) following the CITR question. For example, ABO blood group will be obtained from UNOS if a UNOS Donor ID is provided. In this User's Guide, this data collection is designated by the following: **ABO blood group ***.

For the majority of the questions on this form you have the choice of selecting 'Not Done/Unknown' if the answer or test result is not available or unknown at your transplant center. However, there may be cases where an answer or result is required in a textfield and 'Not Done/Unknown' is not an available choice. This textfield will then require you to request an exception for this field. To request an exception, type an '∗' in the textfield. Upon doing this, a pop-up box will appear. Enter the information you have about this question or the reason why you do not have an answer to this question. By requesting this exception you will avoid having the Coordinating Center query you on why the question was left blank.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Non Islet Transplant** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, in the first textfield enter the non islet transplant date. For the proper definition of the non islet transplant date, refer to the Database/Keyfields section above.

If you are modifying data for a previously entered NIT form, the **Key Selection** displays a listing of the NIT forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

Donor Information for Non Islet Transplants

1. Type of transplant.

From the list of choices, indicate the type of transplant (non islet) the recipient had. If they have had more than one non islet transplant, each transplant must have a separate NIT form completed. If the type of transplant is not included in this list, choose 'Other' and specify the type of transplant in the textfield following the list of choices.

2. Donor type.

Indicate if the donor for this transplant was a living donor or a deceased donor. If you cannot obtain the donor records to determine donor type, indicate 'Unknown.'

3. Specify UNOS Donor ID.

If the donor was registered with the United Network for Organ Sharing (UNOS), indicate the donor's UNOS ID in all capital letters and numbers. If they were registered with UNOS and you are unable to obtain the Donor ID, check the 'Not Available' box. If the donor was not registered with UNOS, check the 'Not Applicable' box.

4. Specify CORR Donor ID.

If the donor was registered with the Canadian Organ Replacement Register (CORR), indicate the donor's CORR ID. If they were registered with CORR and you are unable to obtain the Donor ID, check the 'Not Available' box. If the donor was not registered with CORR, check the 'Not Applicable' box.

5. ABO blood group. *

Indicate the donor's blood type. Acceptable values are A, B, AB, or O. If the subgroup of A is known, it can be specified as A_1, A_2, A_1B or A_2B. If the blood group is not recorded for this donor, select 'Unknown' from the pull down list.

6. Rh.

Indicate the donor's Rh factor. If the Rh is positive, indicate 'Positive.' If the Rh is negative, indicate 'Negative,' and if the Rh is unknown, indicate 'Unknown.'

HLA Typing

7. HLA typing conducted. *

Indicate if HLA typing was conducted on the donor. If you are unable to determine if HLA typing was conducted, indicate 'Unknown.'

If typing was conducted:

a. **Date typed:** Enter the date that the donor was tissue typed by the histocompatability laboratory of the recipient. Use the standard 8-digit numeric format of mm/dd/yyyy.

b. **Class I:** Complete the matrix for donor antigens. **Do not leave any boxes within the matrix blank.** Acceptable antigens and their splits are available in Appendix 3 of this User's Guide and on the password-protected CITR website. When known, it is preferable to enter the split of the antigen rather than the parent. For Bw4 and Bw6, if the antigen is present, indicate 'Positive,' if the antigen is absent, indicate 'Negative.' If an antigen is 'Unknown or Not Determined,' or 'Confirmed Blank,' either type that description into the textbox or select the appropriate response from the dropdown menu.

For example, if the following results are obtained for BW:

Donor 1		Donor 2		Donor 3	
BW(1)	BW(2)	BW(1)	BW(2)	BW(1)	BW(2)
4	4	6	6	4	6

The following results should be entered:

For donor #1 enter under BW4: Positive, and under BW6: Negative
For donor #2 enter under BW4: Negative, and under BW6: Positive
For donor #3 enter under BW4: Positive, and under BW6: Positive

If family studies have not been performed and an antigen is not known, indicate 'Unknown or Not Determined.' If family studies have been performed and the blank is confirmed, indicate 'Confirmed Blank.'

c. **Class II:** Complete the matrix for donor antigens. **Do not leave any boxes within the matrix blank.** Acceptable antigens and their splits are available in Appendix 3 of this User's Guide and on the password-protected CITR website. When known, it is preferable to enter the split of the antigen rather than the parent. If an antigen is 'Unknown or Not Determined,' or 'Confirmed Blank,' either type that description into the textbox or select the appropriate response from the dropdown menu.

Serology

8. Anti-HIV I/II. *

Indicate the result for the anti-HIV I/II test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done, indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate,' and if the result cannot be reported to the Registry, indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

9. Anti-HTLV I/II. *

Indicate the result for the anti-human T-cell lymphotropic viruses I/II test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done, indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate,' and if the result cannot be reported to the Registry, indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined,

'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

10. RPR-VDRL. *

Indicate the result for the Rapid Plasma Reagin/Venereal Disease Research Laboratory test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done, indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate,' and if the result cannot be reported to the Registry, indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

11. Anti-CMV. *

Indicate the result for the cytomegalovirus antibody screen test as either 'Positive' or 'Negative.' If any test for CMV (IgG or other) is positive, please indicate 'Positive.' If all tests were negative, please indicate 'Negative.' If results cannot be found, indicate 'Unknown,' if testing was not done, indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate,' and if the result cannot be reported to the Registry, indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

12. HBsAg. *

Indicate the result for the Hepatitis B surface antigen test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done, indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate,' and if the result cannot be reported to the Registry, indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

13. Anti-HBC. *

Indicate the result for the Hepatitis B test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done, indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate,' and if the result cannot be reported to the Registry, indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If

a sample was never obtained for this particular test, 'Not Done' should be indicated.

14. Anti-HCV. *

Indicate the result for the Hepatitis C test as either 'Positive' or 'Negative.' If results cannot be found indicate 'Unknown,' if testing was not done, indicate 'Not Done,' if the result cannot be determined, indicate 'Indeterminate,' and if the result cannot be reported to the Registry, indicate 'Cannot Disclose.' The key difference between the choice of 'Not Done' and 'Indeterminate' is whether or not the procedure was initiated for this particular test. If a sample from the person was obtained but results cannot be determined, 'Indeterminate' should be indicated. If a sample was never obtained for this particular test, 'Not Done' should be indicated.

Comments.

Indicate any comments you wish to add to this form.

Non Islet Transplant Follow-up (NIF)

Database/Keyfields

NIT Date: Indicate the date of the non islet transplant in mm/dd/yyyy format.

Assessment Date: Indicate the date of assessment for this non islet transplant in mm/dd/yyyy format.

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

This form should be completed once per year on or around the CITR annual follow-up assessment date. Once per year, functional status of the non islet transplant should be reported. Once the transplant has failed, functional status does not need to be updated for this transplant. Thus, you are no longer asked to complete a Non Islet Transplant Follow-up Form (NIF).

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Non Islet Transplant Follow-up** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, in the first textfield enter the non islet transplant date and then enter the assessment date. For proper definitions of the non islet transplant date and assessment date, refer to the Database/Keyfields section above.

If you are modifying data for a previously entered NIF form, the **Key Selection** displays a listing of the NIF forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

1. Functional status of non islet transplant at this assessment.

Indicate the one choice that best describes the recipient's functional status of their non-islet transplant at the time of this assessment. Choices are 'Full functioning,' 'Partial functioning,' 'Failed,' 'Unknown,' or 'Not Applicable.' Definitions are based on your local criteria.

If the transplant has failed, indicate the date of failure, specify the cause, if the failure was treated, and if drug toxicity was experienced.

Comments.

Indicate any comments you may wish to add to this form.

Adverse Event (AEF)

Database/Keyfields

Date of AE onset: Indicate the date the adverse event began. "Date began" is defined as the date the recipient first reported the symptoms to a health care professional or first sought treatment for this event, whichever is earlier. Indicate the date in mm/dd/yyyy format.

CTCAE: Briefly state the adverse event in this keyfield section of the form (e.g. Neutropenia). This short name, along with the date of onset, will be used to identify this event from other similar events or other events with the same recipient. It is not necessary to provide a long, detailed description in this section, as you will record this more detailed information later in the form (Narrative of adverse event).

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

This form is used for detailing information about adverse events. Adverse events collected for CITR are defined as Grade 3, Grade 4 or Grade 5 based on the National Cancer Institute's Common Terminology Criteria for Adverse Events. Definitions and online guidance to the criteria can be found on the password-protected CITR website.

Participating transplant centers are encouraged to submit the adverse event form as events are reported to the respective regulatory agencies. However, centers may complete this form as these events are also reported to the CITR Transplant Coordinator. Adding CITR to the list of reporting agencies may be helpful. If the center waits and submits certain adverse events (Grades 3, 4, or 5) during the annual reporting process to the FDA, the center may enter this information during this period. The center may also choose to send appropriate sections of their annual report to the Coordinating Center (with the participant's CITR ID) with all of the CITR requested information for direct loading into the system. However, all names and non-CITR identifiers must be removed prior to sending this report to the Coordinating Center. Notify the CITR Data Manager immediately if you are choosing this option.

The information provided on this form will be used to construct an adverse event report. This report will be sent to all CITR participating islet transplant centers periodically, in order to continually update the investigators in the islet transplant field with information concerning adverse events. No participant or center identifiers will be used in the reports.

Since adverse events can be persistent and most will resolve, it is important for this form to be updated periodically. CITR wishes to be informed that conditions are persistent and remain persistent and would like to know when the adverse

event resolves. At the point where an Adverse Event goes from Grade 3 to Grade 2 or lower, the event is considered to be resolved. An increase back to Grade 3 should be recorded as a new adverse event on a new adverse event form.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Adverse Event** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, in the first textfield enter the onset date of the AE and then a short description of the AE in the next textfield. For proper definitions and formatting of the AE onset date and short description, refer to the Database/Keyfields section above.

If you are modifying data for a previously entered AE form, the **Key Selection** screen displays a listing of the AE forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

1. Was AE expected.

Indicate if this adverse event is an expected event for patients who have had an islet infusion and/or need to use immunosuppression medication. To know if an event is expected or not, you may consult the immunosuppression medication package inserts, your islet transplant center's Investigational New Drug (IND) application, and/or your islet transplant center protocol.

2. Did the AE meet the definition of a serious adverse event (SAE)?

Indicate if this adverse event met the following definition of a serious adverse event: Death, Life threatening, Inpatient hospitalization, Prolongation of existing hospitalization, Persistent or significant disability/incapacity or Congenital anomaly/birth defect. Indicate 'No' or 'Yes' if it meets this definition. If 'Yes' is indicated, check all that apply from the previous list.

The following definitions apply:

Death: Report if the participant's death is suspected as being a direct outcome of the adverse event.

Life threatening: Report if the participant was at substantial risk of dying at the time of the adverse event or it is suspected that the use or continued use of the medication/product would result in the patient's death.

Inpatient hospitalization or prolongation of existing hospitalization: Report if admission to the hospital or prolongation of a hospital stay results because of the adverse event.

Persistent or significant disability/incapacity: Report if the adverse event resulted in significant, persistent or permanent change, impairment damage or disruption in the participant's body function/structure, physical activities or quality of life.

Congenital anomaly/birth defect: Report if there are suspicions that exposure to a medical product/procedure prior to conception or during pregnancy resulted in an adverse outcome in the child.

3. Severity of AE.

Each adverse event will be graded on the National Cancer Institute's Common Terminology Criteria for Adverse Events (Version 3.0, March 31, 2003, December 12, 2003 update). If your islet transplant center does not have this book, please contact the CITR Data Manager. You may also find these definitions and online guidance to the criteria on the password-protected CITR website.

Indicate if this adverse event is categorized as 'Severe' (Grade 3), 'Life threatening' (Grade 4), or 'Fatal' (Grade 5).

4. Relationship to islet infusion.

All information regarding the adverse event must be documented in the participant's medical chart. The CITR Principal Investigator (PI) must review this information and determine the relationship of the adverse event to the islet infusion. The relationship may be categorized as 'Unrelated,' 'Unlikely,' 'Possible,' 'Probable,' or 'Definite.' It is the responsibility of the center's PI to make this designation based on the information.

5. Relationship to immunosuppression therapy or protocol regulated treatment product.

The CITR Principal Investigator must review the adverse event documentation and determine the relationship of the event to the immunosuppression therapy and/or the protocol regulated treatment product. The relationship may be categorized as 'Unrelated,' 'Unlikely,' 'Possible,' 'Probable' or 'Definite.' It is the responsibility of the center's PI to make this designation based on the information.

6. Was treatment required or modified.

Upon review of the medical records, indicate if the adverse event required treatment or a modification of treatment. Treatment is defined as any new medications and/or procedures used in response to the adverse event or change in current medication and/or procedures based on the adverse event. Categorization of treatment falls into the following groups: 'No treatment or modification of treatment required for AE,' 'Required additional treatment for AE,' 'Current treatment modified based on AE,' 'Required additional treatment and current treatment modified based on AE,' and 'Other.' If 'Other' is chosen, indicate the other type of treatment or modification in the textfield listed following the choices.

Note that 'Required additional treatment for AE' is only for the addition of a new medication or procedure in response to this AE and 'Current treatment modified based on AE' is only for those cases where nothing new is added to the current treatment schedule. If the recipient is on three medications and an adverse event occurs where the PI then modifies two of the medications, stops the third medication and then adds a new medication to the recipient's regimen, you would record 'Required additional treatment for AE and current treatment modified based on AE.' If the PI only dropped the third medication and/or made changes to the dose of the other two medications, you would record 'Current treatment modified based on AE.'

7. Outcome of AE.

Indicate the outcome of the adverse event as assessed by the CITR Principal Investigator. Choices are the following: 'Resolved, no residual effects,' 'Resolved, with sequelae,' 'Persistent condition, Alive,' 'Death, related to AE,' or 'Unrelated persistent condition at time of death.' If the adverse event resolved, indicate the date of the resolution in mm/dd/yyyy format. If an adverse event declines to a Grade 2 AE, then the adverse event should be recorded as resolved and the date of resolution is the date that the AE declined to grade 2. If the AE then increased back to grade 3 or higher this should be recorded as a new event on a new adverse event form. If the choice was 'Death, related to adverse event' indicate the date of death in the 'Date of Resolution' field. If the condition persisted, indicate the date of the last assessment of this adverse event. This field should be updated periodically by the transplant center. At a minimum it should be updated monthly. If the adverse event changes from persistent to resolved, the transplant center should update this question appropriately (Resolved, no residual effects or Resolved, with sequelae) and record the resolution date.

8. Narrative of adverse event.

Using all medical chart information available, detail this adverse event in a narrative form. Do not use any information that would allow the reader to know the participant's name, where they received their islet infusion, or the medical professionals caring for this participant. All identifiers must be removed from the narrative, before sending this information to the CITR Coordinating Center. This information, along with the previous information recorded, will be used in a report sent to participating CITR islet transplant centers and researchers in the field. If this information was saved previously in a Word document or other text-based program, you may "copy" this information and "paste" it into this section.

Death (DTH)

Database/Keyfields

None.

Special Notes About Form

Although not required for data submission in the registry, the transplant coordinator should obtain the death certificate and any autopsy reports, hospitalization reports and emergency room or ambulance reports leading up to this death. These documents should be maintained in the participant's chart at the transplant center.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Death** form to highlight it and then click on **[Select]**. The **Death** form will next appear. You may begin to enter the data for this new form.

If you are modifying data for a previously entered Death form, you may access the form in the same manner as above.

Instructions

1. Date of death.

Indicate the date of death for the CITR participant in mm/dd/yyyy format. If the month of death is unknown, enter '06.' If the day of death is unknown enter '15.' If month and day of death are unknown enter the year of death (yyyy).

2. Primary cause of death.

a. Specify the narrative reason for primary cause of death in the textfield provided.

b. Categorize the primary cause of death as listed on the participant's death certificate from the choices of Cardiovascular, Cerebrovascular, Infection, Malignancy, Not Obtainable, Trauma/Accidental, Unknown cause or Other. If the death certificate is not available, primary cause of death should be determined by the transplant center Principal Investigator based on hospital/emergency/autopsy reports. If the primary cause of death is not listed, indicate 'Other.' If the primary cause of death cannot be obtained, indicate 'Not obtainable;' do not indicate 'Unknown cause.' 'Unknown cause' should be reserved for causes where records are available but the cause cannot be determined.

3. Was the death related to the islet infusion procedure.

The transplant center Principal Investigator is responsible for reviewing the appropriate medical/hospitalization/autopsy reports to determine if the death was related to the islet infusion procedure. He/she will document this information in the CITR participant's chart. The transplant coordinator (or designee) will enter the response in the database as 'No,' 'Yes,' or 'Unknown.'

4. Was the death related to the islet infusion immunosuppressive therapy.

The transplant center Principal Investigator is responsible for reviewing the appropriate medical/hospitalization/autopsy reports to determine if the death was related to the islet infusion immunosuppressive therapy. He/she will document this information in the CITR participant's chart. The transplant coordinator will enter the response in the database as 'No,' 'Yes,' or 'Unknown.'

5. Was recipient hospitalized at time of death.

Hospitalization is defined as 24 or more hours from admission to expiration. If the participant was admitted to the hospital prior to death and it meets these criteria, indicate 'Yes.' If not, indicate 'No' and if it cannot be determined by the medical records and the information is unobtainable from the family, indicate 'Unknown.'

6. Was recipient currently taking insulin at time of death.

Indicate if the CITR participant was taking insulin at any time during the one week period (7 days) prior to the time of death. If the participant was taking insulin, indicate the total units including correction sliding scale. This value should be the average daily insulin requirement. If this value cannot be obtained, it was not recorded or is unknown, check the box indicating 'Unknown.'

7. Was an autopsy performed.

Indicate if an autopsy was performed. If an autopsy was performed, can the transplant center obtain a copy for the participant's medical chart? If obtainable, obtain the report and indicate 'Yes' to this question. This report should be maintained in the participant's medical chart.

Comments.

Indicate any comments related to the report of this participant's death. Include if the complete date of death could not be obtained.

Lost to Follow-up (LTF)

Database/Keyfields

Date of last CITR contact: Enter the date of the last known contact with the CITR participant. "Known contact" is defined as contact from your transplant center, a primary care physician, a hospital visit, outpatient visit, clinic visit, mailed survey from your transplant center, telephone contact, etc. Indicate this date in mm/dd/yyyy format. If only month and year are known, indicate '15' for day. Please make a note of this value in your CITR files and in the comments field of this form.

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

Primarily, data are abstracted from hospital and clinic visits every year for CITR. However, CITR participants may miss visits set up by the transplant center or primary care physicians. When this occurs, the CITR participant may need to be contacted by the CITR transplant center. Typically with every research study, participants will be "lost" to follow-up and centers may have difficulty locating the participants. This form will be completed when the transplant center has tried different methods to locate the CITR participant and they are unable to locate them. For help in tracking CITR participants, contact the CITR Data Manager and they can guide you through the process of tracking individuals.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Lost to Follow-up** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, indicate the date of the last CITR contact. For the proper definition of this date, refer to the Database/Keyfields section above.

If you are modifying data for a previously entered LTF form, the **Key Selection** displays a listing of the LTF forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

1. Type of last known contact.

Indicate the type of the last known contact of the CITR participant. This contact may have been initiated by your transplant center, by a primary care physician, clinic, etc., in which you are aware of the contact through verbal or written correspondence. If the type of contact is not listed, indicate the choice 'Other' and specify the exact type of contact in the textfield below the choices for this question.

Comments.

Provide any comments that you would like to add to document the participant's status.

Transfer Form (TNF)

Database/Keyfields

Transfer Date: Enter the date the recipient officially transferred to another CITR transplant center. "Officially" is defined as the date after which the current transplant coordinator confirms all arrangements of the transfer with the CITR Coordinating Center, the new transplant center and finally the recipient. Once completed, the date of completion is recorded as the 'Transfer date.'

Keyfield: To change the keyfield click on the 'Request for Keyfield Change' link on the Main Menu.

Special Notes About Form

Prior to initiating a participant transfer, the transplant center must contact the Coordinating Center Data Manager with the CITR Participant ID of the recipient and the location of the new islet transplant center. The Data Manager will help facilitate the logistics of the transfer from the Coordinating Center and database information aspects. It is the responsibility of the two transplant centers to agree to the details for transferring the appropriate information for the participant.

Accessing the Form

From the **Data Entry Main** page, select the participant's ID from the pull down list, or enter the participant's ID in the textfield. Under the **Forms** heading, select the **Transfer** form to highlight it and then click on **[Select]**. The **Key Selection** screen will next appear. To enter data for a new form, enter the transfer date in the first textfield. For the proper definition of the transfer date, refer to the Database/Keyfields section above.

If you are modifying data for a previously entered TNF form, the **Key Selection** displays a listing of the TNF forms that have already been added at your site for this participant's ID under the heading of **Existing Records**. To choose one of these forms to modify, click on the **[Update]** button of the appropriate form.

Instructions

1. Date of last CITR contact by current transplant center.

Indicate the date of the last CITR contact with this recipient by your transplant center. Date of contact is the last CITR assessment where a follow-up form was completed for the recipient. Date format is mm/dd/yyyy.

2. Name of new transplant center.

Once the new transplant center has been contacted and the logistics of transferring the recipient finalized, indicate the name of the new transplant center in this textfield.

3. Date of first assessment at new transplant center.

Once the new center has been contacted and the logistics of transferring the recipient finalized, indicate the target date for the first CITR follow-up data to be captured at the new transplant center in mm/dd/yyyy format.

4. Was the transfer confirmed with the new center's Transplant Coordinator.

Confirm that the new transplant center's coordinator has been contacted concerning the transfer and has accepted this CITR participant.

Comments.

Provide any comments that are necessary to document the transfer of this islet transplant recipient to the new transplant center.