Recipient Histocompatibility (RHS) Record Field Descriptions

Recipient Histocompatibility (RHS) records are generated as soon as the Recipient Feedback is completed in Tiedi[®]. For living donors, the RHS record is generated when Living Donor Feedback has been completed in Tiedi. The RHS record is to be completed by the histocompatibility laboratory responsible for performing tissue typing on the recipient and crossmatch testing between the donor and recipient once an organ becomes available.

The RHS record must be completed within 30 days from the record generation date. See OPTN/UNOS Policies for additional information. Use the search feature to locate specific policy information on Data Submission Requirements.

To correct information that is already displayed in an electronic record, call the UNOS Help Desk at 1-800-978-4334.

Provider Information

<u>Lab</u>: The lab, from Donor Organ Disposition in DonorNet, displays.

TX Center: The center, from Recipient Feedback, displays.

Recipient Information

Name: The recipient's name, from Recipient Feedback, displays.

DOB: The recipient's date of birth, from Recipient Feedback, displays.

Transplant Date: The recipient's transplant date, from Recipient Feedback, displays.

Note: The transplant date is the date of the beginning of the first anastomosis. If the operation started in the evening and the first anastomosis began early the next morning, the transplant date is the date that the first anastomosis began. The transplant is considered complete when the cavity is closed and the final skin stitch/staple is applied.

SSN: The recipient's social security number, from Recipient Feedback, displays.

Gender: The recipient's gender, from Recipient Feedback, displays.

HIC: The recipient's Health Insurance Claim (HIC) number, from Recipient Feedback, displays.

Organ(s): The recipient's transplanted organ(s), from Recipient Feedback, displays.

Donor Information

UNOS Donor ID #: The donor's identification number, from Recipient Feedback, displays.

Donor Type: The donor type, from Recipient Feedback, displays.

Deceased indicates the donor was not living at the time of donation.

Living indicates the donor was living at the time of donation.

Test Information

<u>HLA typing Done</u>: If HLA typing was performed on this recipient, select **Yes**. If HLA typing was not performed, select **No**. If it is unknown if the recipient was typed, select **UNK**. This field is **required**. If HLA typing was done on the recipient, complete Section I.

HLA Antibody Screening Done: If HLA antibody screening was done on the recipient, select **Yes**. If not, select **No**. This field is **required**. If screening was done on the recipient, complete Section II.

<u>Crossmatch Done</u>: If crossmatch testing was done on the recipient, select **Yes**. If not, select **No**. This field is **required**. If crossmatch testing was done on the recipient, complete Section III.

If yes, was the crossmatch prospective to transplant: If the crossmatch was prospective, select Yes. If not, select No. If unknown, select UNK. If Yes is selected for Crossmatch Done, this field is required.

Donor Retyped at Your Center: If the donor was retyped at your laboratory, select **Yes**. If not, select **No**. This field is **required**. If the donor was retyped at your laboratory, complete Section IV.

Section I - Recipient HLA Typing

Note: If Yes is selected for HLA typing Done, the fields in Section I are required.

<u>Date Typing Complete Class I</u>: Enter the date that the recipient was tissue-typed by the histocompatibility laboratory for Class I antigens. Use the standard 8-digit numeric format of MM/DD/YYYY.

Typing Method Class I: Select, as appropriate, the typing method. (<u>List of Typing Method</u> codes)

Serology DNA Serology and DNA

Select the antigens from the drop-down lists. If the second antigen at a locus is blank, select **No second antigen detected**. If the donor was not tested for a particular antigen, select **Not tested**.

Note: If the split of an antigen is known, enter the split rather than the parent.

A Locus Codes: (<u>List of A Locus codes</u>) 1, 2, 3, 9, 10, 11, 19, 23, 24, 25, 26, 28, 29, 30, 31, 32, 33, 34, 36, 43, 66, 68, 69, 74, 80, 203, 210, 2403, 6601, 6602, Unknown, No second antigen detected, Not Tested

B Locus Codes: (<u>List of B Locus codes</u>) 5, 7, 8, 12, 13, 14, 15, 16, 17, 18, 21, 22, 27, 35, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 67, 70, 71, 72, 73, 75, 76, 77, 78, 81, 703, 804, 1304, 2708, 3901, 3902, 3905, 4005, 5102, 5103, 8201, Unknown, No second antigen detected, Not Tested

Bw4 HLA Codes: (List of Workgroup HLA codes) Positive, Negative, Not Tested

Bw6 HLA Codes: (List of Workgroup HLA codes) Positive, Negative, Not Tested

Cw HLA Codes: (<u>List of Cw HLA codes</u>) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, No second antigen detected, Not tested, No antigen detected

<u>Date Typing Complete Class II</u>: Enter the date that the recipient was tissue typed by the histocompatibility laboratory for Class I antigens. Use the standard 8-digit numeric format of MM/DD/YYYY. This field is **required**.

Typing Method Class II: Select, as appropriate, the typing method(s). This field is **required**. (<u>List of Typing Method codes</u>)

Serology DNA Select the antigens from the drop-down lists. If the second antigen at a locus is blank, select **No second antigen detected**. If the donor was not tested for a particular antigen, select **Not tested**. These fields are **required**.

Note: If the split of an antigen is known, enter the split rather than the parent.

DR Locus Codes: (<u>List of DR Locus codes</u>) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 103, 1403, 1404, No second antigen detected, Not tested

DR51 HLA Code: (<u>List of Workgroup HLA codes</u>) Positive, Negative, Not Tested

DR52 HLA Code: (<u>List of Workgroup HLA codes</u>) Positive, Negative, Not Tested

DR53 HLA Code: (<u>List of Workgroup HLA codes</u>) Positive, Negative, Not Tested

DQ HLA Codes: (List of DQ HLA codes) 1, 2, 3, 4, 5, 6, 7, 8, 9, No second antigen detected,

Not tested

DPW HLA Codes: (List of DP HLA codes) 1, 2, 3, 4, 5, 6, No second antigen detected, Not

tested

Note: Not tested is not a valid option for the DR locus codes for kidney, pancreas or kidney/pancreas recipients on a kidney record.

Section II - HLA Antibody Screening

Note: If Yes is selected for HLA Antibody Screening Done, the fields in Section II are required.

<u>A. Most Recent</u> Complete the most recent anti-HLA Class I antibodies and PRA data for the Class I section. If the serum was screened for anti-HLA Class II antibodies then complete the Class II section.

Serum Date - Most Recent Class I: Enter the date the serum was most recently collected and tested to obtain Class I antigen results before the transplant was performed. Use the standard 8-digit numeric format of MM/DD/YYYY. This field is **required**. If date is unavailable, select the reason from the status (**ST**) drop-down list (**N/A**, **Not Done**, **Missing**, **Unknown**). (List of Status codes)

Target - Most Recent Class I: Select the target from the drop-down list. This field is **required**. (<u>List</u> of PRA Target codes)

Cells

Purified HLA antigens, pooled Purified HLA antigens from individual phenotypes Purified single HLA antigens

Technique - Most Recent Class I: Select the technique from the drop-down list. This field is **required**. If **Other, specify** is selected, enter the technique in the **Specify** field. If **Other, specify** is selected, the **Specify** field is **required**. (<u>List of PRA Technique codes</u>)

Cytotoxity testing - extended incubation
Cytotoxity testing - wash
Cytotoxity testing - wash and extended incubation
Cytotoxity testing - AHG
Flow cytometry with cell targets
Flow cytometry with bead targets

ELISA Other, specify

Technique Measures - Most Recent Class I: Select the technique from the drop-down list. This field is **required**. (<u>List of PRA Measure codes</u>)

IgG IgM Both IgG and IgM

PRA (%) - Most Recent Class I: Enter the Class I PRA (%) value obtained from the most recent serum. This field is **required**. If percentage is unavailable, select the reason from the status (**ST**) drop-down list (**N/A**, **Not Done**, **Missing**, **Unknown**). (<u>List of Status codes</u>)

Anti-HLA Interpretation - Most Recent Class I: Select the result from the drop-down list. This field is required. (List of Anti-HLA Interpretation codes - Class I)

Class I antibody present No Class I antibody present Unknown

Was serum screened for anti-HLA Class II antibody: If serum was screened for anti-HLA Class II antibody, select **Yes**. If not, select **No**. This field is **required**. If **Yes** is selected, complete the Class II section.

Serum Date - Most Recent Class II: Enter the date the serum was most recently collected and tested to obtain Class II antigen results before the transplant was performed. Use the standard 8-digit numeric format of MM/DD/YYYY. This field is **required**. If date is unavailable, select the reason from the status (**ST**) drop-down list (**N/A**, **Not Done**, **Missing**, **Unknown**). (List of Status codes)

Target - Most Recent Class II: Select the target from the drop-down list. This field is **required**. (<u>List of PRA Target codes</u>)

Cells

Purified HLA antigens, pooled Purified HLA antigens from individual phenotypes Purified single HLA antigens

Technique - Most Recent Class II: Select the technique from the drop-down list. This field is **required**. If **Other, specify** is selected, enter the technique in the **Specify** field. If **Other, specify** is selected, the **Specify** field is **required**. (<u>List of PRA Technique codes</u>)

Cytotoxity testing - extended incubation
Cytotoxity testing - wash
Cytotoxity testing - wash and extended incubation
Cytotoxity testing - AHG
Flow cytometry with cell targets
Flow cytometry with bead targets
ELISA
Other, specify

Technique Measures - Most Recent Class II: Select the technique from the drop-down list. This field is **required**. (<u>List of PRA Measure codes</u>)

IgG IgM Both IgG and IgM PRA (%) - Most Recent Class II: Enter the Class II PRA (%) value obtained from the most recent serum. This field is required. If percentage is unavailable, select the reason from the status (ST) drop-down list (N/A, Not Done, Missing, Unknown). (List of Status codes)

Anti-HLA Interpretation - Most Recent Serum Class II: Select the result from the drop-down list. This field is required. (<u>List of Anti-HLA Interpretation codes - Class II</u>)

Class II antibody present No Class II antibody present Unknown

<u>B. Peak</u> Complete the peak anti-HLA Class I antibodies and PRA data for the Class I section. If the serum was screened for anti-HLA Class II antibodies then complete the Class II section.

Were any sera tested pre-transplant that contain anti-HLA Class I antibody: If sera was tested prior to the transplant that contained anti-HLA Class I antibodies, select Yes. If not, select No.

Serum Date - Peak Serum Class I antibody: If sera was tested prior to the transplant that contained anti-HLA Class I antibodies, enter the date for the highest PRA value from all tested sera. If date is unavailable, select the reason from the status (**ST**) drop-down list (**N/A**, **Not Done**, **Missing**, **Unknown**). (<u>List of Status codes</u>)

Note: Give the date this serum was collected. If two or more sera with different dates have the same peak PRA, use the most recent date. Use the standard 8-digit numeric format of MM/DD/YYYY. If only one PRA determination has been done, transcribe the date and all other information from the Most Recent Serum section to the Peak Serum section.

Target - Peak Serum Class I: Select the target from the drop-down list. (<u>List of PRA Target</u> codes)

Cells

Purified HLA antigens, pooled Purified HLA antigens from individual phenotypes Purified single HLA antigens

Technique - Peak Serum Class I: Select the technique from the drop-down list. If **Other**, **specify** is selected, enter the technique in the **Specify** field. (<u>List of PRA Technique codes</u>)

Cytotoxity testing - extended incubation
Cytotoxity testing - wash
Cytotoxity testing - wash and extended incubation
Cytotoxity testing - AHG
Flow cytometry with cell targets
Flow cytometry with bead targets
ELISA
Micro Array
Other, specify

Measures - Peak Serum Class I: Select the technique from the drop-down list. (<u>List of PRA Measure codes</u>)

IgG IgM Both IgG and IgM

PRA (%) - Peak Serum Class I: Enter the Peak Class I PRA (%) value obtained from the peak serum. If percentage is unavailable, select the reason from the status (ST) drop-down list (N/A, Not Done, Missing, Unknown).

Anti-HLA Interpretation - Peak Serum Class I: Select the result from the drop-down list. (List of Anti-HLA Interpretation codes - Class I)

Class I antibody present No Class I antibody present Unknown

Were any sera tested pre-transplant that contain anti-HLA Class II antibody: If sera was tested prior to the transplant that contained anti-HLA Class II antibodies, select **Yes**. If not, select **No**.

Serum Date - Peak Serum Class II antibody: If sera was tested prior to the transplant that contained anti-HLA Class II antibodies, enter the date for the highest PRA value from all tested sera. If date is unavailable, select the reason from the status (**ST**) drop-down list (**N/A**, **Not Done**, **Missing**, **Unknown**). (List of Status codes)

Note: Give the date this serum was collected. If two or more sera with different dates have the same peak PRA, use the most recent date. Use the standard 8-digit numeric format of MM/DD/YYYY. If only one PRA determination has been done, transcribe the date and all other information from the Most Recent Serum section to the Peak Serum section.

Target - Peak Serum Class II: Select the target from the drop-down list. (<u>List of PRA Target</u> codes)

Cells

Purified HLA antigens, pooled Purified HLA antigens from individual phenotypes Purified single HLA antigens

Technique - Peak Serum Class II: Select technique from the drop-down list. If **Other**, **specify** is selected, enter the technique in the **Specify** field. (<u>List of PRA Technique codes</u>)

Cytotoxity testing - extended incubation
Cytotoxity testing - wash
Cytotoxity testing - wash and extended incubation
Cytotoxity testing - AHG
Flow cytometry with cell targets
Flow cytometry with bead targets
ELISA
Micro Array
Other, specify

Measures - Peak Serum Class II: Select the measure from the drop-down list. (<u>List of PRA Measure codes</u>)

lgG lgM

Both IgG and IgM

PRA (%) - Peak Serum Class II: Enter the Peak Class I PRA (%) value obtained from the peak serum. If percentage is unavailable, select the reason from the status (ST) drop-down list (N/A, Not Done, Missing, Unknown). (<u>List of Status codes</u>)

Anti-HLA Interpretation - Peak Serum Class II: Select the anti-HLA interpretation from the drop-down list. (<u>List of Anti-HLA Interpretation codes - Class II</u>)

Class I antibody present No Class II antibody present Unknown

Section III - Crossmatch

Note: If Yes is selected for Crossmatch Done, the fields in Section III are required.

A. Most Recent

Date of crossmatch serum: Enter the date of the serum that was most recently collected and tested to obtain crossmatch results before the transplant was performed. Use the standard 8-digit numeric format of MM/DD/YYYY.

Cell Type: Select the cell type from the drop-down list. (List of Cell Type codes)

T-Cells B-Cells

Unseparated lymphocytes
Purified Class I antigen
Purified Class II antigen
Purified Class I and II antigen
Platelets
Monocytes
Endothelial cells

Target: Select the source from the drop-down list. (List of Target Cell Source codes)

Peripheral Blood Lymph Nodes Spleen Thymocytes Cell lines/clonal cells Solid Matrix

Note: To de-select an option in the Target field, hold down the Ctrl key on your keyboard and click the option you want removed.

Technique: Select the technique from the drop-down list. If **Other, specify** is selected, enter the technique in the **Specify** field. (<u>List of Histocompatibility Technique codes</u>)

NIH/Extended Wash/Extended Anti-Globulin FLow ELISA Other, specify

Measures: Select the measure from the drop-down list. (List of PRA Measure codes)

IgG IgM Both IgG and IgM

Result: Select the crossmatch results from the drop-down list. (List of Crossmatch Results codes)

Intermediate
Negative
Positive
Weak Positive

AutoXM Result Using This Target and Technique: Select the AutoXM result from the drop-down list. (<u>List of Auto-Crossmatch Results codes</u>)

Positive Negative Indeterminate Not Tested Unknown

- B. Date of crossmatch serum Least Recent (for reference purposes): Enter the date of the least recent crossmatch serum in the space provided. Use the standard 8-digit numeric format of MM/DD/YYYY. If only one date of crossmatch serum is available, enter the same date for Most Recent and Least Recent.
- C. Positive crossmatch with sera other than the most recent by any method: If there was a positive crossmatch, select Yes. If not, select No. If Yes, complete the following section:

Serum Date: If there was a positive crossmatch with sera other than the most recent by any method, enter the date of the most recent positive serum. Use the standard 8-digit numeric format of MM/DD/YYYY.

Cell Type: Select the cell type from the drop-down list. (List of Cell Type codes)

T-Cells B-Cells Unsenar

Unseparated lymphocytes
Purified Class I antigen
Purified Class II antigen
Purified Class I and II antigen
Platelets
Monocytes

Monocytes Endothelial cells

Target: Select the source from the drop-down list. (List of Target Cell Source codes)

Peripheral Blood Lymph Nodes Spleen Thymocytes Cell lines/clonal cells Solid Matrix

Technique: Select the technique from the drop-down list. If **Other, specify** is selected, enter the technique in the **Specify** field. (<u>List of Histocompatibility Technique codes</u>)

NIH/Extended Wash/Extended Anti-Globulin FLow ELISA Other, specify

Measures: Select the measure from the drop-down list. (List of PRA Measure codes)

IgG IgM Both IgG and IgM

NEG XM by any other technique with this serum: If a negative crossmatch was obtained, select **Yes**. If not, select **No**. If unknown, select **UNK**.

AutoXM Result Using This Target and Technique: Select the AutoXM result from the drop-down list. (<u>List of Auto-Crossmatch Results codes</u>)

Positive Negative Indeterminate Not Tested Unknown

D. Autocrossmatch results:

Has autocrossmatch ever been positive: Select the answer from the drop-down list.

Yes No Unknown Not Tested

If **Yes** is selected, enter the date the **AutoXM Date** using the standard 8-digit numeric format of MM/DD/YYYY.

Section IV - Donor Retyping

Note: If Yes is selected for Donor Retyped at Your Center, the fields in Section IV are required.

<u>Donor Retyped Class I</u>: If the donor was retyped for anti-HLA Class I antigens, select **Yes**. If not, select **No**. If unknown, select **Unk**.

If **Yes** is selected, Donor A, B, Bw4, Bw6, and Cw HLA values, selected in DonorNet® or on the Donor Histocompatibility record, display.

Enter the **Date Typing Completed for Class I** using the standard 8-digit numeric format of MM/DD/YYYY.

Target Cell Source Class I: Select the source from the drop-down list. (<u>List of Target Cell Source codes</u>)

Peripheral Blood Lymph Nodes Spleen Thymocytes Cell lines/clonal cells Solid Matrix

Typing Method Class I: Indicate if the typing method is **Serology** and/or **DNA**. If a typing for Class I was done, complete the antigen section. (<u>List of Typing Method codes</u>)

Note: If donor HLA values were selected on the donor record in DonorNet or on the Donor Histocompatibility record, the previously entered Typing Method Class I antigens display for your reference.

Select the antigens from the drop-down lists. If the second antigen at a locus is blank, select **No second antigen detected**. If the donor was not tested for a particular antigen, select **Not tested**.

Note: If the split of an antigen is known, enter the split rather than the parent.

A Locus Codes: (<u>List of A Locus codes</u>) 1, 2, 3, 9, 10, 11, 19, 23, 24, 25, 26, 28, 29, 30, 31, 32, 33, 34, 36, 43, 66, 68, 69, 74, 80, 203, 210, 2403, 6601, 6602, Unknown, No second antigen detected, Not Tested

B Locus Codes: (<u>List of B Locus codes</u>) 5, 7, 8, 12, 13, 14, 15, 16, 17, 18, 21, 22, 27, 35, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63,

64, 65, 67, 70, 71, 72, 73, 75, 76, 77, 78, 81, 703, 804, 1304, 2708, 3901, 3902, 3905, 4005, 5102, 5103, 8201, Unknown, No second antigen detected, Not Tested

Bw4 HLA Codes: (List of Workgroup HLA codes) Positive, Negative, Not Tested

Bw6 HLA Codes: (List of Workgroup HLA codes) Positive, Negative, Not Tested

Cw HLA Codes: (<u>List of Cw HLA codes</u>) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16,

17, 18, No second antigen detected, Not tested, No antigen detected

<u>Donor Retyped Class II</u>: If the donor was retyped for anti-HLA Class II antigens, select **Yes**. If not, select **No**. If unknown, select **Unk**.

If **Yes** is selected, donor DR, DR51, DR52, DR53, DQ, and DPW HLA values, selected on the donor record in DonorNet or on the Donor Histocompatibility record, display.

Enter the **Date Typing Completed for Class II** using the standard 8-digit numeric format of MM/DD/YYYY.

Target Cell Source Class II: Select the source from the drop-down list. (<u>List of Target Cell Source codes</u>)

Peripheral Blood Lymph Nodes Spleen Thymocytes Cell lines/clonal cells Solid Matrix

Typing Method Class II: Indicate if the typing method is **Serology** and/or **DNA**. If a typing for Class II was done, complete the antigen section. (List of Typing Method codes)

Note: If donor HLA values were selected on the donor record in DonorNet or on the Donor Histocompatibility record, the previously entered Typing Method Class II antigens display for your reference.

Select the antigens from the drop-down lists. If the second antigen at a locus is blank, select **No second antigen detected**. If the donor was not tested for a particular antigen, select **Not tested**.

Note: If the split of an antigen is known, select the split rather than the parent.

DR Locus Codes: (<u>List of DR Locus codes</u>) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 103, 1403, 1404, No second antigen detected, Not tested

DR51 HLA Code: (<u>List of Workgroup HLA codes</u>) Positive, Negative, Not Tested

DR52 HLA Code: (List of Workgroup HLA codes) Positive, Negative, Not Tested

DR53 HLA Code: (<u>List of Workgroup HLA codes</u>) Positive, Negative, Not Tested

DQ HLA Codes: (<u>List of DQ HLA codes</u>) 1, 2, 3, 4, 5, 6, 7, 8, 9, No second antigen detected, Not tested,

DPW HLA Codes: (<u>List of DP HLA codes</u>) 1, 2, 3, 4, 5, 6, No second antigen detected, Not tested

Note: Not tested is not a valid option for the DR locus codes for kidney, pancreas or kidney/pancreas recipients on a kidney record.