



## Instructions for Confirmation of HLA Typing Form 2005

All transplant centers (both TED-only and Comprehensive Report Form) must complete the Form 2005 for all non-NMDP allogeneic or syngeneic donors, non-NMDP cord blood units, and recipients of non-NMDP products. If the donor was secured through the NMDP, report the donor's HLA typing on NMDP Form 22 (Confirmation of Donor HLA Typing) and the recipient's HLA typing on NMDP Form 117 (Final Recipient HLA Typing).

DNA technology can be used to type for a single allele, combinations of alleles (allele strings), or a "generic" allele designation that is similar to a serologic typing result. For this reason, the number of digits, as well as the number of alleles for reporting will vary. Boxes are provided for reporting several possible allele combinations for each allele at a locus. Laboratories may report results that contain a combination of numbers and letters. The letters are called allele codes, and will be 2-4 characters in length which represent a combination of possible alleles at a locus. The laboratory may report allele combinations several different ways (e.g., DRB1\*0101 or 0102, DRB1\*0101/0102 or DRB1\*01AB). Report one possible allele or allele code in each group of boxes, using as many groups of boxes as there are alleles or allele codes to report. There will be two alleles reported for each locus, unless the individual is presumed homozygous (i.e., carries two copies of the same allele) at a locus.

Generic typing, also known as low resolution typing, is similar to serologic typing as it identifies broad families of alleles. This typing allows a preliminary view of the likelihood of a match between recipient and donor, and is generally faster and less expensive than high resolution typing.

To report a generic typing for one allele at a locus, which may be reported by your laboratory as the locus followed by an asterisk then two digits (e.g., DRB1\*04), report "04XX," and leave the other boxes blank.

For a glossary of terms used in this section of the manual, see [appendix B](#).

## Key Fields

For instructions regarding the completion of the Key Fields, see [appendix K](#).

**NOTE: Form 2005**

A separate copy of this form must be completed for each recipient of a non-NMDP product **and** each non-NMDP donor and/or cord blood unit.

**Question 1: Specify the person for whom this typing is being done?**

Indicate the person whose HLA typing is reported on this form.

- If for the recipient, continue with question 5.
- If for the recipient's mother, continue with question 2.
- If for the recipient's father, continue with question 3.
- If for a non-NMDP donor, select "donor – confirmatory typing," and continue with question 5.
- If for a cord blood unit, continue with question 5.
- If for maternal HLA typing (typing of the *mother* of a cord blood unit), continue with question 5.
- If for a person other than those listed, continue with question 4 and specify the person's relationship to the recipient.
- For all other responses, continue with question 5.

**Question 2: Was the recipient's mother used as the donor?**

Check "yes" or "no" to indicate whether the recipient's mother was used as the donor. Continue with question 5.

**Question 3: Was the recipient's father used as the donor?**

Check "yes" or "no" to indicate whether the recipient's father was used as the donor. Continue with question 5.

**Question 4: Specify person and typing**

Indicate the person represented and their HLA typing (confirmatory vs. final). The "other, specify person" category should be used to report an individual that cannot be classified under one of the other options listed, such as a relative of the recipient who was typed but not selected as the donor (e.g., aunt, uncle, cousin, etc.).

## HLA Typing by DNA Technology

Six sets of boxes are provided for reporting several possible alleles for each allele at a locus. For laboratory reports that list more than six possible alleles, use the following process:

- **Paper form submission:** List the remainder of the alleles in the space above or below the boxes for that locus.
- **FormsNet™2 application:** Report as many alleles as the application allows **and** submit a copy of laboratory report using the Log of Appended Documents Form 2800.

### Question 5: Is a copy of the laboratory report attached?

Attaching a copy of the laboratory report assists in HLA testing confirmation and reduces the need for later data queries. If a copy of the laboratory report is submitted with the form, check “yes” and complete the Log of Appended Documents Form (Form 2800). For more information regarding the Form 2800, see General Instructions, [Log of Appended Documents](#).

#### NOTE: Questions 6-16

**FormsNet™2 Application:** There are two versions of questions 6-16 on the Form 2005: one version for DNA typing, and one version for serologic typing. For the purposes of this manual, the questions involving DNA typing will be labeled 6d-16d; the questions for serologic typing will be 6s-16s. Questions 6d-16d are listed first, then questions 6s-16s.

**Paper Form Submission:** Question numbering restarts with question 6 for Serologic typing.

## Class I

### Question 6d: Locus A

Check either “one” or “two” to indicate the number of HLA-A alleles that were tested by DNA-based methods. For First A\*, report the allele designation for HLA-A in the first set of boxes. Report a single allele, a string of alleles, or an allele code. For Second A\*, report the allele designation for HLA-A in the second set of boxes. A set of boxes is considered the series of 36 boxes. If the person is homozygous, leave the second set of boxes blank.

If HLA-A alleles were not tested, check “not tested” and continue with question 7d.

### Question 7d: Locus B

Check either “one” or “two” to indicate the number of HLA-B alleles that were tested by DNA-based methods. For First B\*, report the allele designation for

National Marrow Donor Program® and The Medical College of Wisconsin

HLA-B in the first set of boxes. Report a single allele, a string of alleles or an allele code. For Second B\*, report the allele designation for HLA-B in the second set boxes. A set of boxes is considered the series of 36 boxes. If the person is homozygous, leave the second set of boxes blank.

If HLA-B alleles were not tested, check “not tested” and continue with question 8d.

**Question 8d: Locus C**

Check either “one” or “two” to indicate the number of HLA-C alleles that were tested by DNA-based methods. For First C\*, report the allele designation for HLA-C in the first set of boxes. Report a single allele, a string of alleles or an allele code. For Second C\*, report the allele designation for HLA-C in the second set boxes. A set of boxes is considered the series of 36 boxes. If the person is homozygous, leave the second set of boxes blank.

If HLA-C alleles were not tested, check “not tested” and continue with question 9d.

<b>Class II</b>
-----------------

**Question 9d: Locus DRB1**

Check either “one” or “two” to indicate the number of HLA-DRB1 alleles that were tested by DNA-based methods. For First DRB1\*, report the allele designation for HLA-DRB1 in the first set of boxes. Report a single allele, a string of alleles or an allele code. For Second DRB1\*, report the allele designation for HLA-DRB1 in the second set boxes. A set of boxes is considered the series of 36 boxes. If the person is homozygous, leave the second set of boxes blank.

If HLA-DRB1 alleles were not tested, check “not tested” and continue with question 10d.

<b>Class II (Optional)</b>
----------------------------

**Question 10d: Locus DRB3**

Check either “one” or “two” to indicate the number of HLA-DRB3 alleles that were tested by DNA-based methods. For First DRB3\*, report the allele designation for HLA-DRB3 in the first set of boxes. Report a single allele, a string of alleles or an allele code. For Second DRB3\*, report the allele designation for HLA-DRB3 in the second set boxes. A set of boxes is considered the series of 36 boxes. If the person is homozygous, leave the second set of boxes blank.

If there were no HLA-DRB3 alleles, or the DRB3 alleles were not tested, check “none” or “not tested” and continue with question 11d.

**Question 11d: Locus DRB4**

Check either “one” or “two” to indicate the number of HLA-DRB4 alleles that were tested by DNA-based methods. For First DRB4\*, report the allele designation for HLA-DRB4 in the first set of boxes. Report a single allele, a string of alleles or an allele code. For Second DRB4\*, report the allele designation for HLA-DRB4 in the second set boxes. A set of boxes is considered the series of 36 boxes. If the person is homozygous, leave the second set of boxes blank.

If there were no HLA-DRB4 alleles, or the DRB4 alleles were not tested, check “none” or “not tested” and continue with question 12d.

**Question 12d: Locus DRB5**

Check either “one” or “two” to indicate the number of HLA-DRB5 alleles that were tested by DNA-based methods. For First DRB5\*, report the allele designation for HLA-DRB5 in the first set of boxes. Report a single allele, a string of alleles or an allele code. For Second DRB5\*, report the allele designation for HLA-DRB5 in the second set boxes. A set of boxes is considered the series of 36 boxes. If the person is homozygous, leave the second set of boxes blank.

If there were no HLA-DRB5 alleles, or the DRB5 alleles were not tested, check “none” or “not tested” and continue with question 13d.

**Question 13d: Locus DQB1**

Check either “one” or “two” to indicate the number of HLA-DQB1 alleles that were tested by DNA-based methods. For First DQB1\*, report the allele designation for HLA-DQB1 in the first set of boxes. Report a single allele, a string of alleles or an allele code. For Second DQB1\*, report the allele designation for HLA-DQB1 in the second set boxes. A set of boxes is considered the series of 36 boxes. If the person is homozygous, leave the second set of boxes blank.

If there were no HLA-DQB1 alleles, leave the boxes blank and continue with question 14d.

**Question 14d: Locus DPB1**

Check either “one” or “two” to indicate the number of HLA-DPB1 alleles that were tested by DNA-based methods. For First DPB1\*, report the allele designation for HLA-DPB1 in the first set of boxes. Report a single allele, a string of alleles or an allele code. For Second DPB1\*, report the allele designation for HLA-DPB1 in the second set boxes. A set of boxes is considered the series of 36 boxes. If the person is homozygous, leave the second set of boxes blank.

If there were no HLA-DPB1 alleles, leave the boxes blank and continue with question 15d.

**Question 15d: Locus DQA1**

Check either “one” or “two” to indicate the number of HLA-DQA1 alleles that were tested by DNA-based methods. For First DQA1\*, report the allele designation for HLA-DQA1 in the first set of boxes. Report a single allele, a string of alleles or an allele code. For Second DQA1\*, report the allele designation for HLA-DQA1 in the second set boxes. A set of boxes is considered the series of 36 boxes. If the person is homozygous, leave the second set of boxes blank.

If there were no HLA-DQA1 alleles, leave the boxes blank and continue with question 16d.

**Question 16d: Locus DPA1**

Check either “one” or “two” to indicate the number of HLA-DPA1 alleles that were tested by DNA-based methods. For First DPA1\*, report the allele designation for HLA-DPA1 in the first set of boxes. Report a single allele, a string of alleles or an allele code. For Second DPA1\*, report the allele designation for HLA-DPA1 in the second set boxes. A set of boxes is considered the series of 36 boxes. If the person is homozygous, leave the second set of boxes blank.

If there were no HLA-DPA1 alleles, leave the boxes blank and continue with question 17.

## Antigens Defined by Serologic Typing

Use the lists provided to report antigens defined by serologic typing. Report broad antigens only if the laboratory was not able to confirm typing for a known split antigen.

### A Antigens

**Question 6s: Number of antigens provided**

Indicate the number of HLA-A antigens tested by serology. If one antigen was tested, report “one” and specify the appropriate antigen in the first column. If two antigens were tested, report “two” and specify the first antigen in the first column, and the second antigen in the second column.

If serologic testing was not performed, leave this section blank and continue with question 7s.

## B Antigens

### Question 7s: Number of antigens provided

Indicate the number of HLA-B antigens tested by serology. If one antigen was tested, report "one" and specify the appropriate antigen in the first column. If two antigens were tested, report "two" and specify the first antigen in the first column, and the second antigen in the second column.

If serology testing was not performed, leave this section blank and continue with question 8s.

## C Antigens

### Question 8s: Number of antigens provided

Indicate the number of HLA-C antigens tested by serology. If one antigen was tested, report "one" and specify the appropriate antigen in the first column. If two antigens were tested, report "two" and specify the first antigen in the first column, and the second antigen in the second column.

If serology testing was not performed, leave this section blank and continue with question 9s.

## Bw Specificity

### Question 9s: Bw4

If the laboratory report indicates HLA-Bw4 as present, check "yes." If the laboratory report indicates no presence of HLA-Bw4, check "no."

If serology testing was not performed, leave this section blank and continue with question 10s.

### Question 10s: Bw6

If the laboratory report indicates HLA-Bw6 as present, check "yes." If the laboratory report indicates no presence of HLA-Bw6, check "no."

If serology testing was not performed, leave this section blank and continue with question 11s.

## DR Antigens

### Question 11s: Number of antigens provided

Indicate the number of HLA-DR antigens tested by serology. If one antigen was tested, report "one" and specify the appropriate antigen in the first column. If two

antigens were tested, report “two” and specify the first antigen in the first column, and the second antigen in the second column.

If serology testing was not performed, leave this section blank and continue with question 12s.

### **DR51 Antigen**

#### **Question 12s: DR51**

If the laboratory report indicates DR51 as present, check “yes.” If the laboratory report indicates no presence of DR51, check “no.”

If serology testing was not performed, leave this section blank and continue with question 13s.

### **DR52 Antigen**

#### **Question 13s: DR52**

If the laboratory report indicates DR52 as present, check “yes.” If the laboratory report indicates no presence of DR52, check “no.”

If serology testing was not performed, leave this section blank and continue with question 14s.

### **DR53 Antigen**

#### **Question 14s: DR53**

If the laboratory report indicates DR53 as present, check “yes.” If the laboratory report indicates no presence of DR53, check “no.”

If serology testing was not performed, leave this section blank and continue with question 15s.

### **DQ Antigens**

#### **Question 15s: Number of antigens provided**

Indicate the number of HLA-DQ antigens tested by serology. If one antigen was tested, report “one” and specify the appropriate antigen in the first column. If two antigens were tested, report “two” and specify the first antigen in the first column, and the second antigen in the second column.

If serology testing was not performed, leave this section blank and continue with question 16s.



**DP Antigens**

**Question 16s: Number of antigens provided**

Indicate the number of HLA-DP antigens tested by serology. If one antigen was tested, report “one” and specify the appropriate antigen in the first column. If two antigens were tested, report “two” and specify the first antigen in the first column, and the second antigen in the second column.

If serology testing was not performed, leave this section blank and continue with question 17.

**Question 17: Contact information of person completing the form**

Enter the name, phone number, fax number, and e-mail address of the person completing the form.