# CONTENTS

Contents	1
Purpose	1
1. HLA Typing Results	2
1.1 Manually Add HLA Typing Result	2
1.2 Verify HLA Typing Result	3
1.3 Editing Clean Results	4
1.4 Authorise HLA Typing Profile	6
2. HLA Antibody Results	8
2.1 Manually Add HLA CDC Antibody Result	8
2.2 Manually Add LSM Result	10
2.3 Verify HLA Antibody Result	13
2.4 Create Antibody Consolidation	14
3. Pinning Results	16
4. Crossmatch Results	18
4.1 Add Crossmatch Result	18
4.2 Verify Crossmatch Result	21
4.3 Delete Crossmatch Result	22
5. Non-HLA Antibody Results	23
5.1 Add Non-HLA Antibody Result	23
5.2 Verify Non-HLA Antibody Result	25
6. ABO Results	26
6.1 Add Blood Group Results	26
6.2 Confirm Blood Group Results	28
7.3 Unconfirm Blood Group Results	30
Appendix 1: Sample Type and Test Method for Manual Result Entry	32
Definitions	33
Referenced Internal Documents	33
Change History	34
Electronic Signature	34

# PURPOSE

This document describes the process of adding, verifying and authorising results in OrganMatch. System users can import scientific test data from third-party systems to create and maintain person records and to link sample and test results for the person records. For further information on importing results refer to Import Management- Laboratory Portal, OM-073. Users may also manually add test results.

The Transplantation Portal (previously known as the Clinical Portal) is accessed by transplant clinicians and nurses to view results and information of their patients and donors. The Transplantation Portal users have access to records linked to their hospital. The test results that are verified or authorised in the person record can be viewed in the Transplantation Portal.

# **1. HLA TYPING RESULTS**

# 1.1 MANUALLY ADD HLA TYPING RESULT

1. On the person's profile in OM, select the Samples & test results tab.



#### 2. Click the **Samples** tab.



3. Click **Add Test** on the required sample. See appendix 1 for sample type with HLA typing test method available in the dropdown.



4. Select **Test Method** and **Testing Laboratory** from the dropdown.

	^
Sample Reference: 356332222	
est Method *	
Please Select	~
esting Laboratory *	
Please Select V	

Note: Test date defaults to today's date.

Add the HLA typing result for each loci in Raw Results- Molecular. The format for 1 field typing must be \* and antigen family e.g. \*02. Two field results must have a colon to separate 1<sup>st</sup> and 2<sup>nd</sup> field e.g. \*02:01 and homozygous results must have \*- for Allele 2.

Locus Allele 1	Allele 2	
A		
В		
C		
DRB1		
DQB1		
DQA1		
DPB1		
DPA1		
DRB3		
DRB4		
DRB5		

#### 6. Click Save.



7. The notification *New HLA Typing test result added, please review and verify* is generated in the Laboratory Portal.

#### 1.2 VERIFY HLA TYPING RESULT

1. On the person's profile in OM, select the Samples & test results tab.



2. Click the HLA typing results tab.

Samples	HLA antibody screen results	Antibody consolidation	HLA typing results

3. Click on the result and click Verify.



4. The New HLA Typing added, please review and verify notification will automatically be archived.

# **1.3 EDITING CLEAN RESULTS**

If the molecular typing results are imported in the format of more than 2 fields, they may need to be edited prior to authorising. A clean result does not display in the **HLA typing results** tab. A user must click on the result to view the clean result.

1. On the person's profile in OM, select the **Samples & test results** tab.



2. Click the HLA typing results tab.

Samples	HLA antibody screen results	Antibody consolidation	HLA typing results

3. Click on the test result to view the details.

					Reject imported result	<b></b> ₽in
∨ Sampl	e & Test Result De	tails				
Sample Ref	ference	N-23-6808-C	Sample Date		08/04/2023	
Test Metho	d	SSO	Testing Labor	atory	NSWTT	
Test Date		13/04/2023				
aw Results	- Molecular 🟮		Clean Result	s - Molecular	🗷 Edit clean	results
	AU-1- 4	Allele 2	Locus	Allele 1	Allele 2	
ocus	Allele I					

4. In the Test result box, click Edit clean results.



5. Enter the updated test results.

	le & lest Result D	etails		
Sample Re	ference	N-22-903731-B	Sample Date	06/07/2022
Test Methe	bd	NGS	Testing Laboratory	NSWTT
Test Date		19/07/2022		
aw Result	s - Molecular 🟮		Clean Results - Molecul	ar 🟮
	Allele 1	Allele 2	Locus Allele 1	Allele 2
.ocus				

6. Click Save.



## 1.4 AUTHORISE HLA TYPING PROFILE

- All tests for a HLA typing ever performed are included in the list, including duplicate tests.
- Test results cannot be edited if they are included in the HLA Typing Profile. Untick the test result from the HLA Typing Profile then proceed to make changes to the test result as necessary.
- Invalid HLA test results (with one blank value in any of the alleles) cannot be selected for authorisation, except for DRB3, DRB4 and DRB5.
- The HLA Typing Profile can be edited multiple times before it is authorised for matching.
- If the HLA Typing Profile is edited after it has been authorised, the **Authorised** status will no longer display, however the previous authorised typing will still be displayed in the match profile.
- 1. On the person's profile in OM, select the Typing & unacceptable antigens tab.



2. In HLA Typing profile, click Edit.



3. Select the required results for authorising via the **Include** column and click **Save**.





4. The notification *Authorise HLA Typing* is generated in the Laboratory Portal.

5. A second user can authorise the HLA typing by opening the **Typing & unacceptable antigens** tab in the persons profile.



6. In HLA Typing profile, click Edit.



7. Review results and click Authorise.



8. Click Yes.

You are authorising this HLA Typing Profile to be used in the Match Profile. Would you like to continue?	Confi	mation
No	0	You are authorising this HLA Typing Profile to be used in the Match Profile. Would you like to continue?
		No

9. The *Authorise HLA Typing* notification is automatically archived.

# 2. HLA ANTIBODY RESULTS

## 2.1 MANUALLY ADD HLA CDC ANTIBODY RESULT

1. On the person's profile in OM, select the Samples & test results tab.



2. Click the Samples tab.



3. Click **Add Test** on the required sample. See appendix 1 for sample type with HLA antibody test method available in the dropdown.



4. Select **Test Method Cytotoxicity Assay (CDC)** and **Testing Laboratory** from the dropdown.

Sample Reference: N-23-3657-A		
fest Method *		
Please Select		~
Testing Laboratory *		
Please Select	~	
fest Date *		
24/04/2023		
24/04/2020		

Note: Test date defaults to today's date.

5. Select the **Result** from the dropdown.

No Result	$\checkmark$
	Q
Negative	,
Positive	
No Result	

6. Select the Sera Treatment, Class and Ig Isotype as required.

Please 5	elect	$\sim$
Class		
Class I	Class II	
g Isotype	•	

7. Add the tray ID to **Test Reference** field.



8. Populate the **PRA** box with the CDC PRA.



9. Add any Internal Comment or Reportable Note as required.

**Note**: Any comments added to the Reportable Notes field will be viewable in the Transplantation Portal once the result is verified.

10. Click Save.



11. The notifications *New HLA Antibody result added* and *New HLA Antibody added, please review and verify* are generated in the Laboratory Portal.

#### 2.2 MANUALLY ADD LSM RESULT

1. On the person's profile in OM, select the Samples & test results tab.



2. Click the **Samples** tab.



3. Click **Add Test** on the required sample. See appendix 1 for sample type with HLA antibody test method available in the dropdown.



4. Select Test Method Luminex Mixed Screen (LSM) and Testing Laboratory from the dropdown.

Sample Reference: N-22-906814-A		
Test Method *		
Luminex Mixed Screen (LSM)		~
Testing Laboratory * Please Select	~	
Test Date *		
17/05/2023		
weanesday, may 17,		

# Note: Test date defaults to today's date.

5. Select the **Result** from the dropdown.

No Result	~
	Q
Negative	
Positive	
No Result	

6. Select the Sera Treatment, Class and Ig Isotype (IgG) as required.

Please Select		$\sim$
lass		
Class I Class II		
g Isotype		
Please Select	$\sim$	

**Note:** The LSM result has two rows, one for Class I and one for Class II. These steps need to be repeated to add the second row.

7. Add the test ID to **Test Reference** field.

8. Add any Internal Comment or Reportable Note as required.

iternal Comment	Reportable Note	

**Note:** Any comments added to the **Reportable Note** field will be viewable in the Transplantation Portal once the result is verified.

9.	Click Save.		
	Cancel	Save	
			e.

10. The notifications *New HLA Antibody result added* and *New HLA Antibody added, please review and verify* are generated in the Laboratory Portal.

# 2.3 VERIFY HLA ANTIBODY RESULT

1. On the person's profile in OM, select the **Samples & test results** tab.



2. Click the HLA antibody screen results tab.



3. From the Test Method dropdown, select Cytotoxicity Assay (CDC) or Luminex Mixed Screen (LSM).



4. From the **Verified** dropdown, select **No**.



5. Click on the result and click Verify.



6. The *New HLA antibody added, please review and verify* notification is automatically archived.

#### 2.4 CREATE ANTIBODY CONSOLIDATION

- A consolidation cannot be created if there are no antibody tests marked to be included in the consolidation. The **Add Antibody consolidation** button will be disabled if no antibody tests have been marked.
- Test results need to be verified before they can form part of an antibody consolidation.
- An antibody test result cannot be selected for DSA and consolidation if the Testing Laboratory on that test result is NOT associated with an OM lab.
- CDC, LSM test results and Single Antigen results that are negative cannot be ticked for consolidation.
- An antibody consolidation cannot be deleted if it is included in an Unacceptable Antigens list.
- 1. On the person's profile in OM, select the Samples & test results tab.



2. Click the Antibody consolidation tab.



3. Click Add Antibody consolidation.



4. Click OK.



5. Click **DSA** to include the antibody consolidation for DSA assessment and click **OOL** for the antibody consolidation to appear on the Organ Offer List (OOL).

Antigen (MFI) 11	DSA ↑↓	OOL 11	
A*02:01 (600)			
« < 1 > » 10 V			
	Antigen (MFI) 11 A*02:01 (600) << < 1 > >> 10 ~	Antigen (MF)         11         DSA 11           A*02:01 (600)              << <td>&lt;</td> 1         >         >         10	<

Note: If DSA is selected on an antibody consolidation, that consolidation cannot be deleted.

6. Click the **Consolidation** to view the details. In the **View antibody consolidation** box you can filter on **MFI** or **Test Method**. Self-antigen is highlighted if present in the consolidation.

MFI Greater Than	Or Equal To		Test M	lethod		<b></b> ≢Pin 🛍 Delete
#####			All			~
						2 record/s found
Test Method ↑↓	Antigen↑↓	MFI↑↓	Sample Date †↓	Sample Reference	î↓ lg Isotype î↓	Sera Treatment ↑↓
SAG1	A*02:01	600	07/03/2023	N-23-4974-A	lgG	EDTA
SAG2	DRB1*13:02	1000	07/03/2023	N-23-4974-A	IgG	EDTA

7. Click Delete in the View antibody consolidation box to delete the consolidation.



The Unacceptable and Acceptable Antigen lists are created from consolidations of test results.

For further information on authorising Unacceptable and Acceptable Antigens refer to Patient Antibody Assessment, OM-008.

# **3. PINNING RESULTS**

Test results and antibody consolidations can be pinned so they can be viewed side-by-side.

Test results can be pinned from the following tabs in the Samples & test results section:

- Samples
- HLA antibody screen results
- HLA typing results.

Consolidations can be pinned from the Antibody consolidation tab in the Samples & test results section.

1. Click on a test result to view the details.

					ØReject imported result	Pin
✓ Sample	e & Test Result D	etails				
Sample Ref	erence	N-23-6808-C	Sample Date		08/04/2023	
Test Metho	d	SSO	Testing Labor	atory	NSWTT	
Test Date		13/04/2023				
w Results	- Molecular 🟮		Clean Result	s - Molecular	☑ Edit clean res	ults
ocus	Allele 1	Allele 2	Locus	Allele 1	Allele 2	
	*24:02	*25:01	A	*24:02	*25:01	

#### 2. Click Pin.



**Note**: To remove a result from the **Pinned results**, click **Unpin**.



3. Click Pinned results.



4. From the dropdown select the two results to be compared and click **Compare**.



5. The results are displayed side-by-side.

Test Method	SAG1	Test	Method	SS	0		
Sample Reference	N-23-6808-A	Sam	ple Reference	N-	23-6808-C		
Sample Date	08/04/2023	Sam	ple Date	08	/04/2023		
Sample Tag		Sam	ple Tag				
lg lsotype	IgG	lg Iso	otype				
	CDTA						
cus	EDIA	Sera	Treatment				
Sera Treatment	EDIA	> Precord/s found Raw F	Treatment	cular	Clean R	esults - Mo	lecular
Sera Treatment All Clean Results - Molecu	EDIA (	> Precord/s found Raw R	Results - Mole Allele 1	cular Allele 2	Clean R Locus	esults - Mo	lecular Allele 2
Sera Treatment	tar MFI 11	> Precord/s found Locus A	Allele 1 *24:02	Allele 2 *25:01	Clean R Locus A	esults - Mo Allele 1 *24:02	Allele 2 *25:01

# 4. CROSSMATCH RESULTS

Crossmatch results are added via the **Add Test** button in the **Samples** tab. Crossmatch results for deceased donors can be added via the **XM results** tab on the **Transplant waiting list matching** screen. For further information refer to *OM-063 Deceased Donor Matching- Laboratory Portal*.

# 4.1 ADD CROSSMATCH RESULT

1. On the person's profile in OM, select the Samples & test results tab.



#### 2. Click the **Samples** tab.



3. Click Add Test on the required sample.



4. Select **Crossmatch** from the **Test Method** dropdown and select the **Testing Laboratory**.

Sample Reference: N-23-7639-A	
Test Method *	
Crossmatch (XM)	~
Testing Laboratory *	
Please Select	
Tiedse Selection	
Test Date *	
Test Date * 01/05/2023	

#### **Note:** Test date defaults to today's date.

5. Serum or cell details are prepopulated based on the sample selection.

Serum Details	Cell Details
Serum Name *	Cell Name *
Date of Birth	Date of Birth
29/10/1992	
Laboratory Reference	Laboratory Reference
P0004899 KR	
Sample Reference *	Sample Reference *
N-23-7639-A	
Sample Type	Sample Type
Serum	
Sample Date	Sample Date
18/04/2023	
Peak	
No	
Internal Comment	Reportable Note

6. Search for the person in the **Cell Name** or **Serum Name** search box and select the person from the dropdown.

Cell Details		
Cell Name *		
Owdz		
OwdZ	inWq	01/01/1938 09075 KR 0000675

7. In the Sample Reference dropdown, select the cell or serum sample used for the crossmatched person.

ease Select			$\sim$
384238	PBL	01/05/2018	
OM Sample	PBL	01/01/1900	

8. In the Crossmatch Results section, click Add Crossmatch Result.



9. Select the type of crossmatch from the Crossmatch Type dropdown.



10. Select the result from the **Result** dropdown.



11. If required select Additive, Cell Treatment and Result Score from the dropdowns. Populate the Test Reference and Channel Shift from Threshold as required.

Crossmatch Type *			
CDC - T cell crossmatch		$\sim$	
Additive		Cell Treatment	
Please Select	~	Please Select	$\sim$
Result Score		Result *	
Please Select	~	Positive	$\sim$
Channel Shift from threshold		XM Date *	
		01/05/2023	
		Monday, May 1, 2023	
Test Reference			
		Cance	Save

## 12. Click Save.



13. Add the remaining crossmatch as per steps 8 to 12 and click **Save** when complete.



14. The notification *New crossmatch added, please review and verify* is generated in the Laboratory Portal.

# 4.2 VERIFY CROSSMATCH RESULT

1. On the person's profile in OM, select the **Samples & test results** tab.



2. Click the **Crossmatch** tab.

Samples HLA antibody screen results Antibody consolidation HLA typing results Non-HLA antibody results Crossmatch	Samples	s & test results				
	Samples	HLA antibody screen results	Antibody consolidation	HLA typing results	Non-HLA antibody results	Crossmatch

3. Click on the result and click Verify.



4. The *New Crossmatch added, please review and verify* notification is automatically archived.

# 4.3 DELETE CROSSMATCH RESULT

If a result is verified the user has to unverify it before having access to delete the result.

1. Click on the result and click Unverify.



2. Type in the **Reason for unverifying** and click **Save**.

Reason for unverifying	×
	Cancel Save

3. Click on the result and click **Delete**.



4. Click Yes.

Conf	irmation
0	Are you sure that you want to delete this item?
	No

# 5. NON-HLA ANTIBODY RESULTS

Non-HLA antibody results are not used in matching or anywhere else in OrganMatch. Tests cannot be imported, only manually created. AT1R (angiotensin II receptor type 1) results are added in this section.

# 5.1 ADD NON-HLA ANTIBODY RESULT

1. On the person's profile in OM, select the Samples & test results tab.



## 2. Click the **Samples** tab.

✓ Samples	s & test results
	- 1
Samples	HI A antibody screen
	They antibody screen
🗄 Add Sam	nple

3. Click Add Test on the required sample.



4. Select Angiotensin II Type 1 Receptor ELISA from the Test Method drop-down. Select the Testing Laboratory.

dd test result	×
Sample Reference: 567554444	
Test Method *	
Angiotensin II Type 1 Receptor ELISA (AT1R-ELISA)	~
Testing Laboratory *	
Testing Laboratory * Please Select	
Testing Laboratory * Please Select Test Date *	
Testing Laboratory * Please Select Test Date * 09/05/2023	

**Note:** Test date defaults to today's date.

5. Add the Interpretation, Test Result and Test Reference as required.

Test Result			
Test Reference			

6. Add any Internal Comment or Reportable Note as required.

Internal Comment	Reportable Note	
	h	A

**Note**: Any comments added to the Reportable Notes field will be viewable in the Transplantation Portal once the result is verified.

7. Click Save.

Cancel	Save

8. The notification *New Non-HLA Antibody added, please review and verify* is generated in the Laboratory Portal.

# 5.2 VERIFY NON-HLA ANTIBODY RESULT

1. On the person's profile in OM, select the Samples & test results tab.



2. Click the Non-HLA antibody results tab.

Samples	HLA antibody screen results	Antibody consolidation	HLA typing results	Non-HLA antibody results

3. Click on the result and click Verify.



4. The *New Non-HLA Antibody added, please review and verify* notification is automatically archived.

# 6. ABO RESULTS

# 6.1 ADD BLOOD GROUP RESULTS

1. On the person's profile in OM, select the **Samples & test results** tab.



# 2. Click the **Blood group** tab.

✓ Samples	s & test results					
Samples	HLA antibody screen results	Antibody consolidation	HLA typing results	Non-HLA antibody results	Crossmatch	Blood group
-						_

3. Click Edit.



4. Select result for **ABO**, **Rhesus** and **ABO Subtype** (if applicable). These results can be entered independently so if an ABO subtype is obtained later, it can be added after the ABO has been confirmed.

A B	AB Unknown	Pos Neg Unknown	N/A	$\sim$
	AU OTIKIOWI	Tos Neg Olikilowi	N/A	•

 If the warning message "Please add note and attach supporting document(s) via the View Notes button" appears, click View Notes. Attach the ABO report in as an attachment in the note with the Sub-Category ABO Forms. Results cannot be saved without the attachment.

View Notes		
Add Note		×
Note Attachments		
Title *		
ABO Form Attachment		
Category	Sub-Category *	
5 ,		

6. Click Save.

Cancel	Save	
_		eľ

The results will appear as interim and require confirmation.

Samples HLA antibody screen result	ts Antibody consolidation HLA typing results	Non-HLA antibody results	Crossmatch	Blood group	Extended acceptance criteria
ABO <b>1</b>	Rhesus 🕄 Positive Interim		ABO Subtype A Not defined	e <b>()</b> d/tested Interim	1

7. The notification *Confirm Interim ABO values* is generated in the Laboratory Portal.

# 6.2 CONFIRM BLOOD GROUP RESULTS

1. On the person's profile in OM, select the **Samples & test results** tab.



2. Click the **Blood group** tab.

3. Click Edit.



4. Click Confirm.



5. Select the result in **Final ABO**, **Final Rhesus** and **ABO Subtype** from the dropdown where applicable and click **Confirm ABO**. A second user must confirm the results, as the same user cannot enter and confirm results.

Confirm ABO	×
Final ABO	
Unknown	~
Final Rhesus	
Unknown	~
ABO Subtype	
Unknown	~
	Cancel Confirm ABO
-	

Note: If only one result is confirmed the other results can still be edited until they are confirmed.

#### 6. The result is then displayed with the Final tag, indicating it has been confirmed.

Samples	HLA antibody screen results	Antibody consolidation	HLA typing results	Non-HLA antibody results	Crossmatch	Blood group
ABO 🚯		Rhesus	0		ABO Subtype	6
A Final		Positive	Final		A1 Final	•

If one of the three results is not confirmed it will display an Interim tag.

Samples	HLA antibody screen results	Antibody consolidation	HLA typing results	Non-HLA antibody results	Crossmatch	Blood group
BO 🚺		Rhesus	0		ABO Subtype	0
Final		Positive	Final		A1 Interim	

7. If a subtype is added after the ABO and Rhesus result has been confirmed, the dropdown for these boxes is disabled. Only the **ABO Subtype** dropdown is enabled to select for confirmation.



8. The notification *Confirm Interim ABO values* is automatically archived.

## 7.3 UNCONFIRM BLOOD GROUP RESULTS

Only the Lab Manager user role has access to unconfirm blood group results. The **Unconfirm** button is displayed if the user has this access role. The **Unconfirm** button is hidden for all other roles that do not have access to use it.

1. On the person's profile in OM, select the Samples & test results tab.



2. Click the **Blood group** tab.

Samples HLA antibody screen results Antibody consolidation HLA typing results Non-HLA antibody results Crossmatch Blood group	∨ Sample	s & test results					
Samples HLA antibody screen results Antibody consolidation HLA typing results Non-HLA antibody results Crossmatch Blood group							
Samples HLA antibody screen results Antibody consolidation HLA typing results Non-HLA antibody results Crossmatch Blood group							
	Samples	HLA antibody screen results	Antibody consolidation	HLA typing results	Non-HLA antibody results	Crossmatch	Blood group

3. Click Edit.



#### 4. Click Unconfirm.



5. Tick the checkbox for the result to be unconfirmed and click Unconfirm ABO.



Note: If a result is not confirmed it will not be available for selection.

6. The result returns to interim status until confirmed again.



# APPENDIX 1: SAMPLE TYPE AND TEST METHOD FOR MANUAL RESULT ENTRY

Sample Type	Test Method
DNA	HLA typing, Non-HLA antibody, Crossmatch
Frozen PBL	HLA typing, Non-HLA antibody, Crossmatch
Lymph node	HLA typing, Non-HLA antibody, Crossmatch
Lysate	HLA typing, Non-HLA antibody, Crossmatch
PBL	HLA typing, Non-HLA antibody, Crossmatch
Plasma	HLA antibody, Non-HLA antibody, Crossmatch
Serum	HLA antibody, Non-HLA antibody, Crossmatch
Spleen	HLA typing, Non-HLA antibody, Crossmatch

# DEFINITIONS

Term/abbreviation	Definition
CDC	Complement Dependent Cytotoxicity.
Clean result	A verified result that has been edited to remove data that may be considered invalid.
DSA	Donor specific antibody
EDR	Electronic Donor Record
LSM	LABScreen Mixed antibody result
MFI	Medium Fluorescence Intensity
NSR	Non-specific reactivity
ОМ	OrganMatch
OOL	Organ Offer List
Orphan	A sample for a person record that doesn't exist in OM or a result that doesn't have a sample in OM.
PBL	Peripheral blood lymphocyte (cell sample type)
SNR	Senior user in OM
Staging	A software environment in OM that is used to host records that were not successfully imported.
ХМ	Crossmatch

# **REFERENCED INTERNAL DOCUMENTS**

Document number	Source
OM-008	Patient Antibody Assessment.
OM-063	Deceased Donor Matching- Laboratory Portal
OM-073	Import Management- Laboratory Portal

# **CHANGE HISTORY**

Version number	Effective date	Summary of change
1	11/07/2024	First version of new document
2	Refer to footer	Annual document review- no changes

# **ELECTRONIC SIGNATURE**

Author	REBECCA SCAMMELL
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