

**Retrieval Advisory Group,
8th June 2023**

Increasing the Number of Organs Available for Research (INOAR)

1. Status – Public

2. Executive Summary

2.1 On the 13th January, 2021 the INOAR project ‘went live’. SNODs in QUOD-licensed hospitals in England, Northern Ireland and Wales and all hospitals in Scotland now discuss the opportunity with donor families to consent or provide authorisation to the removal and storage of the Heart, Lungs and Diabetic Pancreas for research.

2.2 Data from the INOAR project has been collected and analysed from 13th January 2021–30th April 2023. An additional 620 organs (Hearts, Lungs and Diabetic Pancreas) have been offered for research.

3. Action Requested

3.1 Note the data pertaining to INOAR organs offered, accepted, and removed to date (see appendix 1).

4. Background

4.1 Utilising the Liverpool Research HTA Licence to remove organs for research has increased the number of organs available for research.

4.2 In addition, the following benefits are achieved:

- Reduction in the complexities of the consent process for families
- Reduction in the complexities of the consent process for SNODs
- A more consistent and transparent research allocation system
- Reduction in the complexities for researchers by reducing the requirement for specific HTA licences

5. Update

5.1 Since the implementation of INOAR an additional 620 organs have been offered, of which 172 have been accepted and removed for research.

5.2 Heart acceptance and removal rates continue to be a concern. Since the launch of INOAR, only 11% (37/330) of the hearts offered for research have been accepted and removed for research, compared to 40% of Lungs (68/174) and 58% of diabetic pancreas (67/116).

5.3 .1 In 2022, following feedback from our research colleagues three options were appraised to increase the number of hearts accepted and removed for research (see appendix 2). It was agreed that we would implement option 1, review and then re-evaluate.

5.3.2 The “Cambridge and Edinburgh NORs abdo INOAR heart perfusion protocol” went live in Dec 2022 for DBD hearts. In the past 6 months since the two teams have been trained to perform insitu perfusion, we have only had 1 DBD INOAR heart offered for research where either team was the attending abdo team.

<https://nhsbtdbe.blob.core.windows.net/umbraco-assets-corp/28891/abod-team-heart-perfusion-approved-update-htk.pdf>

5.4 In January 2023 we celebrated the 2nd INOAR anniversary by holding an internal stakeholder engagement meeting, which was followed in May with a Researcher event. The aim of these events was to explore common themes where we could possibly look to further improve acceptance and removal rates. The general consensus from both events is if a donor family has generously given consent/authorisation to their loved ones organs being removed for research could we do more to ensure this happens? Should we continue to consider the remain two options originally discussed in 2022?

Author

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Appendix 1.

INOAR organs by organ type offered, accepted and removed 13th January 2021- 30th April 2023.

QUOD Hospitals (England, Wales, Northern Ireland) and Scotland.

Total number of organs offered	Total number of organs accepted	Total number of Organs removed for research
6	3	1
14	6	4
25	8	2
24	10	7
28	15	9
33	16	11
15	10	8
20	8	6
15	12	9
24	11	8
24	13	7
34	8	5
22	8	6
22	8	7
20	9	7
16	5	4
15	9	7
17	6	5
21	8	7
23	5	5
28	13	10
24	7	6
20	11	6
40	8	6
28	5	4
24	12	8
17	6	2
21	7	5
620	247	172

Number of lungs offered	Number of lungs accepted	Number of lungs removed for research
3	3	1
6	5	4
11	7	1
7	5	4
8	6	3
7	5	3
5	4	3
9	4	2
3	3	1
6	4	4
9	7	3
9	2	0
7	4	2
7	4	4
3	2	1
4	2	2
5	5	4
4	3	2
7	5	4
7	3	3
9	5	3
4	2	1
4	3	1
10	3	2
3	1	1
8	8	5
4	2	1
5	4	3
174	111	68

Number of diabetic pancreas offered	Number of diabetic pancreas accepted	Number of diabetic pancreas removed for research
0	0	0
0	0	0
1	1	1
3	3	3
4	3	1
8	4	3
4	3	3
3	3	2
8	8	7
7	6	3
4	3	3
7	3	2
5	3	3
2	2	2
6	6	5
3	1	1
2	2	2
0	0	0
4	3	3
2	1	1
8	6	5
7	4	4
6	6	4
4	1	1
7	3	3
4	2	2
3	2	1
4	2	2
116	81	67

Number of hearts offered	Number of hearts accepted	Number of hearts removed for research.
3	0	0
8	1	0
13	0	0
14	2	0
16	6	5
18	7	5
6	3	2
8	2	2
4	1	1
11	1	1
11	3	1
18	3	3
10	1	1
13	2	1
11	1	1
9	2	1
8	2	1
13	3	3
10	0	0
14	1	1
11	2	2
13	1	1
10	2	1
26	4	3
18	1	0
12	2	1
10	2	0
12	1	0
330	56	37

Appendix 2

Option 1.	
Abdominal NORs teams are trained to perfuse and package hearts removed for research studies in the absence of a CT NORs	A pilot is planned for Cambridge and Edinburgh Abdominal NORs teams to be trained to perfuse and package hearts for research studies in the absence of a CT NORs team. It is envisaged this pilot will run for 3- 6 months.

team. However the skill set includes the use of DLP cannula in the aortic arch (used in NRP).	
Option 2.	
Implementation of a 2 nd offering point for INOAR when hearts accepted for transplant, unsuitable for valves are declined for transplant in the donor theatre on investigation/ inspection. Cardiothoracic NORs in attendance.	HUB operations are in principle supportive of the implementation of a 2 nd offering point, however changes to process/ procedures would need to be prioritised via the OTDT Business Transition Meeting. Consensus appears to be to measure the impact of Option 1. and if this intervention does not meet the number of hearts to explore a 2 nd offering point.
Option 3.	
Researchers +/- NORs off duty surgeon attend donor theatre to perfuse and package heart removed for research study.	Early discussions have raised a number of questions around commissioning, licencing and questions referring to indemnity. Therefore, further discussion will be need before we can take this option forward.