

Checklist for Reporting Human Islet Preparations Used in Research

Adapted from Hart NJ, Powers AC (2018) Progress, challenges, and suggestions for using human islets to understand islet biology and human diabetes. Diabetologia https://doi.org/10.1007/s00125-018-4772-2.

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Title: Potential protection against type 2 diabetes in obesity through lower CD36 expression and improved exocytosis in β-cells

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| Islet preparation | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 ^a |
|-----------------------|------|------|------|------|------|------|------|-----------------|
| MANDATORY INFORMATION | | | | | | | | |
| Unique identifier | 90 | 92 | 93 | 96 | 97 | 102 | 105 | 108 |
| Donor age (years) | 55 | 47 | 62 | 57 | 60 | 62 | 57 | 67 |
| Donor sex (M/F) | F | М | М | М | М | М | М | М |
| Donor BMI (kg/m²) | 24.2 | 22.2 | 34.9 | 24.5 | 40.1 | 21.3 | 30.9 | 24.7 |

| Donor HbA _{1c} (%) | 6.1 | 6.1 | 6.4 | 6 | 5.8 | 5.5 | 6.7 | 6 |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Origin/source of islets ^b | NICS |
| Islet isolation centre | Uppsala University |
| Donor history of diabetes? Yes/No | No | No | Yes | No | No | No | No | No |
| If Yes, complete the next two lines if this information is available | | | | | | | | |
| Diabetes duration (years) | | | | | | | | |
| Glucose-lowering therapy at time of death ^c | | | | | | | | |

| RECOMMENDED INFORMATION | | | | | | | | |
|-------------------------|--|--|--|--|--|--|--|--|
| Donor cause of death | | | | | | | | |
| Warm ischaemia time (h) | | | | | | | | |
| Cold ischaemia time (h) | | | | | | | | |

| Estimated purity (%) | 50 | 70 | 70 | 35 | 95 | 85 | 74 | 91 |
|---|----|-----|------|------|-----|------|-----|-----|
| Estimated viability (%) | | | | | | | | |
| Total culture time (h)d | | | | | | | | |
| Glucose-stimulated insulin secretion (Stimulation index) ^e | | 2.6 | 18.4 | 19.8 | 2.2 | 21.1 | 1.8 | 3.4 |
| Handpicked to purity? Yes/No | | | | | | | | |
| Additional notes | | | | | | | | |

^alf you have used more than eight islet preparations, please complete additional forms as necessary
^bFor example, IIDP, ECIT, Alberta IsletCore
^cPlease specify the therapy/therapies
^dTime of islet culture at the isolation centre, during shipment and at the receiving laboratory
^ePlease specify the test and the results Stimulation index was calculated by dividing the average insulin concentration of the high-glucose phase by that of the low-glucose phase in a dynamic perfusion.