

## 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>

| Islet preparation   | 1                     | 2                   | 3            | 4                   | 5  | 6  | 7  | 8                     |
|---|-----------------------|---------------------|--------------|---------------------|--|--|--|-----------------------|
| MANDATORY INFORMATION   |                       |                     |              |                     |  |  |  |                       |
| Unique identifier   | R391                  | SIRC - Pilot 2      | SAMN17528599 | SIRC020221          | SAMN17928660                                   | SAMN18092805                                   | SAMN18479112                                   | R403                  |
| Donor age (years)   | 67                    | 53                  | 60           | 44                  | 62   | 56   | 44   | 35                    |
| Donor sex (M/F)   | M                     | F                   | M            | F                   | M  | M  | M  | F                     |
| Donor BMI (kg/m <sup>2</sup> )                                      | 24.5                  | 27.4                | 29.9         | 23.8                | 25.9   | 21.6   | 24.4   | 37.2                  |
| Donor HbA <sub>1c</sub> or other measure of blood glucose control   | 4.9                   | 5.6                 | 5.8          | 5.3                 | 5.1  | 5.1  | 5.3  | 5.7                   |
| Origin/source of islets <sup>b</sup>                                | University of Alberta | Stanford University | IIDP         | Stanford University | IIDP   | IIDP   | IIDP   | University of Alberta |
| Islet isolation centre  | Alberta IsletCore     | Stanford University | UPenn        | Stanford University | Southern California Islet Cell Resource Center | Southern California Islet Cell Resource Center | Southern California Islet Cell Resource Center | Alberta IsletCore     |
| Donor history of diabetes? Please select yes/no from drop down list | No                    | No                  | No           | No                  | No   | No   | No   | No                    |

|   |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|
| <b>If Yes, complete the next two lines if this information is available</b> |  |  |  |  |  |  |  |  |
| Diabetes duration (years)   |  |  |  |  |  |  |  |  |
| Glucose-lowering therapy at time of death <sup>c</sup>                      |  |  |  |  |  |  |  |  |

| Islet preparation   | 9            | 10                                     | 11           | 12                  | 13                    | 14           | 15           | 16                    |
|---|--------------|--|--------------|---------------------|-----------------------|--------------|--------------|-----------------------|
| MANDATORY INFORMATION   |              |  |              |                     |                       |              |              |                       |
| Unique identifier   | SAMN18875704 | rHIP-147                               | SAMN19591106 | SIRC - Pilot 3      | R407                  | SAMN19897466 | SAMN20064638 | R410                  |
| Donor age (years)   | 37           | 47                                     | 61           | 16                  | 58                    | 28           | 66           | 59                    |
| Donor sex (M/F)   | M            | M                                      | M            | M                   | M                     | F            | M            | F                     |
| Donor BMI (kg/m <sup>2</sup> )                                    | 28.4         | 18.7                                   | 29.3         | 35                  | 27.4                  | 24.7         | 29.9         | 26.4                  |
| Donor HbA <sub>1c</sub> or other measure of blood glucose control | 5.6          | 5.7                                    | 5.9          | 5.5                 | 5.5                   | 5            | 5.8          | 4.8                   |
| Origin/source of islets <sup>b</sup>                              | IIDP         | University of California San Francisco | IIDP         | Stanford University | University of Alberta | IIDP         | IIDP         | University of Alberta |

|   |                                    |  |  |                     |                   |       |  |                   |
|---|------------------------------------|--|--|---------------------|-------------------|-------|--|-------------------|
| Islet isolation centre  | The Scharp-Lacy Research Institute | University of California San Francisco | Southern California Islet Cell Resource Center | Stanford University | Alberta IsletCore | UPenn | Southern California Islet Cell Resource Center | Alberta IsletCore |
| Donor history of diabetes?<br>Please select yes/no from drop down list      | No                                 | No                                     | No   | No                  | No                | No    | No   | No                |
| <b>If Yes, complete the next two lines if this information is available</b> |                                    |  |  |                     |                   |       |  |                   |
| Diabetes duration (years)   |                                    |  |  |                     |                   |       |  |                   |
| Glucose-lowering therapy at time of death <sup>c</sup>                      |                                    |  |  |                     |                   |       |  |                   |

| Islet preparation   | 17           | 18   | 19             | 20           | 21   | 22       | 23   | 24           |
|---|--------------|------|----------------|--------------|------|----------|------|--------------|
| MANDATORY INFORMATION   |              |      |                |              |      |          |      |              |
| Unique identifier   | SAMN20478103 | R412 | SIRC - Pilot 4 | SAMN21855451 | R415 | rHIP-150 | R430 | SAMN25860453 |
| Donor age (years)   | 30           | 42   | 15             | 55           | 32   | 36       | 49   | 44           |
| Donor sex (M/F)   | M            | M    | F              | M            | M    | F        | M    | M            |
| Donor BMI (kg/m <sup>2</sup> )                                    | 25.4         | 29.9 | 22.9           | 35.1         | 26.6 | 27.9     | 24.4 | 25.8         |
| Donor HbA <sub>1c</sub> or other measure of blood glucose control | 5.8          | 4.8  | 5.3            | 5.1          | 5.9  | 5.6      | 4.8  | 6            |

|   |       |                       |                     |       |                       |  |                       |       |
|---|-------|-----------------------|---------------------|-------|-----------------------|--|-----------------------|-------|
| Origin/source of islets <sup>b</sup>  | IIDP  | University of Alberta | Stanford University | IIDP  | University of Alberta | University of California San Francisco | University of Alberta | IIDP  |
| Islet isolation centre  | UPenn | Alberta IsletCore     | Stanford University | UPenn | Alberta IsletCore     | University of California San Francisco | Alberta IsletCore     | UPenn |
| Donor history of diabetes? Please select yes/no from drop down list         | No    | No                    | No                  | No    | No                    | No                                     | No                    | No    |
| <b>If Yes, complete the next two lines if this information is available</b> |       |                       |                     |       |                       |  |                       |       |
| Diabetes duration (years)   |       |                       |                     |       |                       |  |                       |       |
| Glucose-lowering therapy at time of death <sup>c</sup>                      |       |                       |                     |       |                       |  |                       |       |

| Islet preparation              | 25           | 26   | 27       | 28           | 29           | 30   | 31           | 32           |
|--------------------------------|--------------|------|----------|--------------|--------------|------|--------------|--------------|
| <b>MANDATORY INFORMATION</b>   |              |      |          |              |              |      |              |              |
| Unique identifier              | SAMN26177826 | R440 | rHIP-152 | SAMN28673685 | SAMN28867622 | R450 | SAMN29657580 | SAMN29771427 |
| Donor age (years)              | 52           | 35   | 32       | 37           | 36           | 66   | 40           | 44           |
| Donor sex (M/F)                | M            | F    | F        | M            | M            | F    | M            | M            |
| Donor BMI (kg/m <sup>2</sup> ) | 25.1         | 26.7 | 29.1     | 28.4         | 29.6         | 21.9 | 23           | 27.9         |

|  |                                       |                          |   |  |  |                          |       |                     |
|--|---------------------------------------|--------------------------|---|--|--|--------------------------|-------|---------------------|
| Donor HbA <sub>1c</sub><br>or other<br>measure of<br>blood<br>glucose<br>control   | 4.2                                   | 3.8                      | 5   | 5.3  | 5.4  | 4.3                      | 5.2   | 5.3                 |
| Origin/source<br>of islets <sup>b</sup>  | IIDP                                  | University<br>of Alberta | University<br>of California<br>San<br>Francisco | IIDP   | IIDP   | University<br>of Alberta | IIDP  | IIDP                |
| Islet isolation<br>centre  | The Scharp-Lacy<br>Research Institute | Alberta<br>IsletCore     | University<br>of California<br>San<br>Francisco | Southern California<br>Islet Cell Resource<br>Center | Southern California<br>Islet Cell Resource<br>Center | Alberta<br>IsletCore     | UPenn | University of Miami |
| Donor history<br>of diabetes?<br>Please select<br>yes/no from<br>drop down<br>list | No                                    | No                       | No  | No   | No   | No                       | No    | No                  |
| <b>If Yes, complete the next two lines if this information is available</b>        |                                       |                          |   |  |  |                          |       |                     |
| Diabetes<br>duration<br>(years)  |                                       |                          |   |  |  |                          |       |                     |
| Glucose-<br>lowering<br>therapy at<br>time of<br>death <sup>c</sup>                |                                       |                          |   |  |  |                          |       |                     |

|                          |           |           |           |           |           |           |           |           |
|--------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>Islet preparation</b> | <b>33</b> | <b>34</b> | <b>35</b> | <b>36</b> | <b>37</b> | <b>38</b> | <b>39</b> | <b>40</b> |
|--------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|

| MANDATORY INFORMATION   |                       |  |                       |                       |  |                      |                      |  |
|---|-----------------------|--|-----------------------|-----------------------|--|----------------------|----------------------|--|
| Unique identifier   | R454                  | rHIP-157                               | R464                  | R468                  | SAMN32641505   | SAMN32875450         | AKAS038              |  |
| Donor age (years)   | 66                    | 56                                     | 60                    | 66                    | 16   | 60                   | 49                   |  |
| Donor sex (M/F)   | M                     | F                                      | M                     | F                     | M  | F                    | F                    |  |
| Donor BMI (kg/m <sup>2</sup> )  | 29.6                  | 24.9                                   | 27.7                  | 27.4                  | 29.5   | 25.2                 | 28.5                 |  |
| Donor HbA <sub>1c</sub> or other measure of blood glucose control           | 5.4                   | 5.5                                    | 5.3                   | 5.4                   | 5.4  | 5.7                  | 5.2                  |  |
| Origin/source of islets <sup>b</sup>  | University of Alberta | University of California San Francisco | University of Alberta | University of Alberta | IIDP: Southern California Islet Cell Resource Center | IIDP: Imagine Pharma | IIDP: Imagine Pharma |  |
| Islet isolation centre  | Alberta IsletCore     | University of California San Francisco | Alberta IsletCore     | Alberta IsletCore     | Southern California Islet Cell Resource Center       | Imagine Pharma       | Imagine Pharma       |  |
| Donor history of diabetes? Please select yes/no from drop down list         | No                    | No                                     | No                    | No                    | No   | No                   | No                   |  |
| <b>If Yes, complete the next two lines if this information is available</b> |                       |  |                       |                       |  |                      |                      |  |
| Diabetes duration (years)   |                       |  |                       |                       |  |                      |                      |  |
| Glucose-lowering therapy at time of death <sup>c</sup>                      |                       |  |                       |                       |  |                      |                      |  |

| RECOMMENDED INFORMATION |  |  |  |  |  |  |  |  |
|-------------------------|--|--|--|--|--|--|--|--|
|-------------------------|--|--|--|--|--|--|--|--|

|   |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|
| Donor cause of death  |  |  |  |  |  |  |  |  |
| Warm ischaemia time (h)   |  |  |  |  |  |  |  |  |
| Cold ischaemia time (h)   |  |  |  |  |  |  |  |  |
| Estimated purity (%)  |  |  |  |  |  |  |  |  |
| Estimated viability (%)   |  |  |  |  |  |  |  |  |
| Total culture time (h) <sup>d</sup>   |  |  |  |  |  |  |  |  |
| Glucose-stimulated insulin secretion or other functional measurement <sup>e</sup> |  |  |  |  |  |  |  |  |
| Handpicked to purity?<br>Please select yes/no from drop down list                 |  |  |  |  |  |  |  |  |
| Additional notes  |  |  |  |  |  |  |  |  |

<sup>a</sup>If you have used more than eight islet preparations, please complete additional forms as necessary

<sup>b</sup>For example, IIDP, ECIT, Alberta IsletCore

<sup>c</sup>Please specify the therapy/therapies

<sup>d</sup>Time of islet culture at the isolation centre, during shipment and at the receiving laboratory

<sup>e</sup>Please specify the test and the results