



Diabetes Takes New Steps to Increase Transparency and Reproducibility

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Experimental reproducibility represents an essential component of scientific discourse. To ensure the integrity of the scientific process, we must ensure the ability to accurately replicate studies and to corroborate experimental results. *Diabetes* seeks to enhance the transparency, trust, and reproducibility of research reported in the journal. To support this effort, the journal has launched three new policies, effective 1 January 2019, to codify expectations for some aspects of data and research resources underlying research published in *Diabetes*.

The first two policies are intended to encourage transparent reporting and sharing of 1) underlying data reported in a *Diabetes* research article and 2) the resources used to conduct the reported experiment(s). The third policy, which has been jointly adopted by *Diabetes* and the European Association for the Study of Diabetes journal *Diabetologia*, pertains specifically to studies that report on human islet data and will require authors to report important characteristics of the human islets used for the reported research.

DATA AND RESOURCE SHARING STATEMENTS

While *Diabetes* cannot compel the unfettered sharing of data and resources and we understand that some data and reagents may not be freely available (e.g., due to concerns about privacy, intellectual property, and so forth), it is important that reviewers and readers understand how to access available resources and any limits to the accessibility of data and materials important to research published in *Diabetes*.

Hence, *Diabetes* now requires authors of original research studies to describe in their manuscripts how readers can access the underlying data and research resources supporting their reported findings, methods, and conclusions. Submitted manuscripts must provide statements about the availability of data and critical resources supporting the results reported in the article as part of the RESEARCH DESIGN AND METHODS section. “Data” is defined as the minimal data set necessary to interpret, replicate, and

build upon the methods or findings reported in the paper; especially crucial data include large data sets, as for genomic analyses. “Critical resources” include novel genetic tools (e.g., rodent models, viral or other nucleic acid–based reagents), antibodies, compounds, or other noncommercial reagents necessary to replicate the findings in the manuscript.

REPORTING ON HUMAN ISLET CHARACTERISTICS

As described in a joint editorial and policy developed by the editors of *Diabetes* and *Diabetologia* (1,2), *Diabetes* now requires authors of manuscripts that include human islet data to provide a completed checklist, as originally proposed by Hart and Powers in the February 2019 issue of *Diabetologia* (3), that reports on the critical characteristics of human islets used for the research. These characteristics include the source, isolation center, and unique identifier number for each islet preparation; the age, sex, BMI, and A1C (or other measure of glucose control) of the donor; and whether the donor had diabetes. These data should be reported in such a manner that protects the identity of the donor. Authors are encouraged but not required to provide additional data to better characterize the human islets used for experimentation, including the cause of donor death, measurements of islet purity and viability, functional measures (e.g., glucose-stimulated insulin secretion), ischemia duration, and culture time. If the manuscript is accepted for publication, the completed checklist will be published as online-only supplementary material with the published article.

The journal’s full policy on data and resource availability can be found at <http://diabetes.diabetesjournals.org/data-policy>.

The full policy on reporting human islet characteristics, along with the checklist, can be found at <http://diabetes.diabetesjournals.org/content/human-islet-policy>.

The editors of *Diabetes* believe these policies represent important steps to help improve the accessibility and reproducibility of research reported in the journal, encourage

the reporting and standardization of preparations and methods used by individual laboratories, and by extension facilitate comparisons among studies. Questions and suggestions regarding these policies can be forwarded to diabetesjournal@diabetes.org.

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