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(54) Title: HYPOIMMUNE BETA CELLS DIFFERENTIATED FROM PLURIPOTENT STEM CELLS AND RELATED USES
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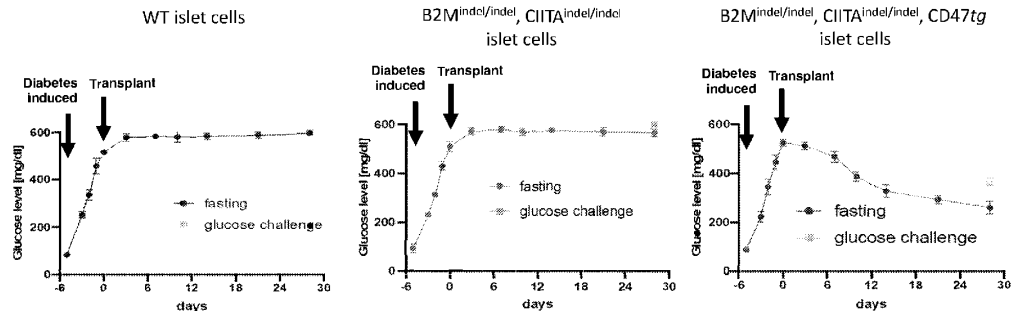


FIG. 1A

(57) Abstract: Provided are functional modified stem cell-derived beta (β) cells (SC-beta cells) containing one or more modifications, such as genetic modifications, and related methods of their use and generation. In some embodiments, the modified cells are hypoi-munogenic cells. In some embodiments, the modified SC-beta cells are cells differentiated in vitro from a modified or hypoi-munogenic pluripotent stem cell that contains the one or more modifications. In some embodiments, the one or more modifications reduce or eliminate expression of MHC class I and/or MHC class II human leukocyte antigens and also exogenously express one or more tolerogenic factors such as CD47.

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