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(54) Title: METHODS AND COMPOSITIONS FOR REGENERATING AND REPAIRING DAMAGED TISSUE USING NON-VIABLE IRRADIATED OR LYOPHILIZED PLURIPOTENT STEM CELLS

(57) Abstract: Compositions and methods are provided herein for regenerating and repairing damaged or aged tissue or organs using nonviable lethally irradiated or lyophilized pluripotent stem cells. In one aspect, the compositions and methods described herein provide anti-aging benefits to the skin by increasing the hydration reducing fine lines, wrinkles, and pores of the skin. Compositions and methods are also provided for promoting wound healing using lyophilized pluripotent stem cell powder. A method is provided for inducing cardiac muscle regeneration in a primate comprising delivering nonviable lethally irradiated pluripotent stem cells to damaged or aged areas of the heart. The compositions and methods include nonviable lethally irradiated or lyophilized pluripotent stem cells, in one aspect, the compositions and methods utilize nonviable pluripotent stem cells in the form of a powder, such as lyophilized stem cells.



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