MEDIA AND METHODS FOR MAKING AND MAINTAINING PORCINE PLURIPOTENT STEM CELLS

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4. **Abstract: The present disclosure relates to methods for making porcine pluripotent stem cells. The present disclosure also relates to methods for gene-editing porcine pluripotent stem cells, generating animals from porcine pluripotent stem cells, and maintaining porcine pluripotent stem cells in culture over many passages. The present disclosure further relates to methods for making porcine induced pluripotent stem cells.**
5. **BACKGROUND: Genetically modified pigs can be created through the process of cloning or somatic cell nuclear transfer (SCNT) in which a cell is edited and then the whole cell or just its nucleus is fused into an enucleated zygote to then develop into an embryo proper. Cloning and gene editing can be done with fibroblast lines, which can be edited once before needing rejuvenation; thus, the cost to create a gene edited animal can be significantly higher when multiple edits need to be made. Stem cells can be used in regenerative medicine and cell therapy space because, e.g., of their ability to differentiate into various cell and tissue types. They can also desirable due to their longevity and capacity for multiple genetic edits, thereby reducing cost for animal models of disease and xenotransplantation. There exists need for new and improved methods and compositions for the development of pluripotent porcine stem cell lines.**