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(54) **Title**: METHODS AND SYSTEMS FOR CONVERTING PRECURSOR CELLS INTO GASTRIC TISSUES THROUGH DIRECTED DIFFERENTIATION

(57) **Abstract**: Disclosed are methods of inducing formation of a gastric cells and/or a gastric tissue, such as in the form of a gastric organoid. The formation of gastric cells and/or tissue may be carried out by the activating and/or inhibiting of one or more signaling pathways within a precursor cell. Also disclosed are methods for using the disclosed gastric cells, gastric tissues, and/or gastric organoids derived from precursor cells.