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(54) Title: ANALYZING THE EXPRESSION OF BIOMARKERS IN CELLS WITH CLUSTERS

(57) Abstract: A data set of cell profile data is stored. The cell profile data includes multiplexed biometric image data describing the expression of a plurality of biomarkers with respect to a field of view in which individual cells are delineated and segmenting into compartments. Each cell in the field is assigned to a single cluster in a selected set of clusters based on cell similarity; cell similarity is determined based on a plurality of selected cell attributes. The proportion of cells in each cluster is observed. The observed proportions are examined for an association with a diagnosis, a prognosis, or a response derived from a known association of the selected set of clusters with at least one piece of meta-information including a field of view level assessment or a patient-level assessment.

