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## (54) Title: METHODS FOR EVALUATING TUMOR CELL SPHEROIDS USING 3D MICROFLUIDIC CELL CULTURE DEVICE

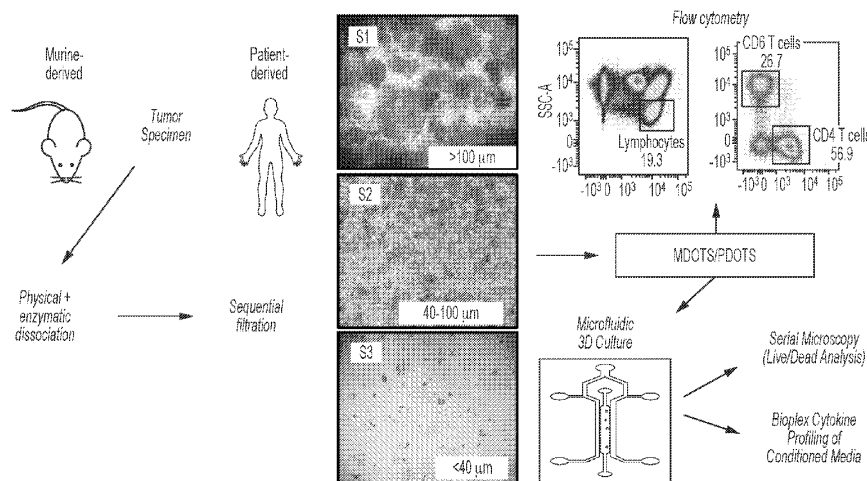


FIG. 1A

(57) **Abstract:** Provided herein are methods for evaluating tumor cell spheroids in a three-dimensional microfluidic device by determining changes in the relative levels of live cells and dead cells in aliquots cultured under different conditions. Methods described herein allow ex vivo recapitulation of the tumor microenvironment such that the in vivo effectiveness of a test compound in treating tumor tissue may be predicted.

[Continued on next page]

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