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(54) Title: MANUFACTURING SYSTEMS, METHODS, AND AI MODELS FOR CAR T DRUG PRODUCTS WITH IMPROVED
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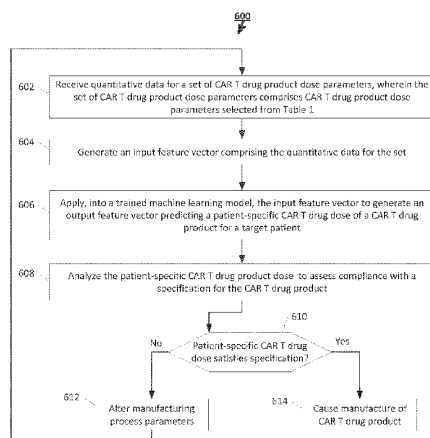


FIG. 6A

(57) Abstract: Systems and methods are disclosed for predicting a vector copy number (VCN) per transduced cell of a patient-specific CAR T drug product for a target patient. An example method includes: receiving quantitative data for a set of VCN parameters; generating an input feature vector comprising the quantitative data for the set of VCN parameters; and applying, into a trained machine learning model, the input feature vector to generate an output feature vector predicting the VCN per transduced cell of the patient-specific CAR T drug product for the target patient.

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