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

(57) Abstract: Systems and methods are disclosed for predicting pa-
tient-specific CAR T drug product dose and optimizing CAR T drug prod-
uct manufacturing. An example method includes: receiving quantitative data
for a set of CAR T drug product dose parameters; generating an input fea-
ture vector comprising the quantitative data for the set of CAR T drug prod-
uct dose parameters; and applying, into a trained machine learning model,
the input feature vector to generate an output feature vector predicting a pa-
tient-specific CAR T drug product dose of a CAR T drug product for a target
patient.

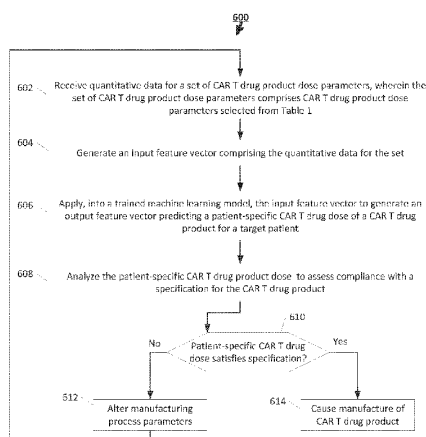


FIG. 6A

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