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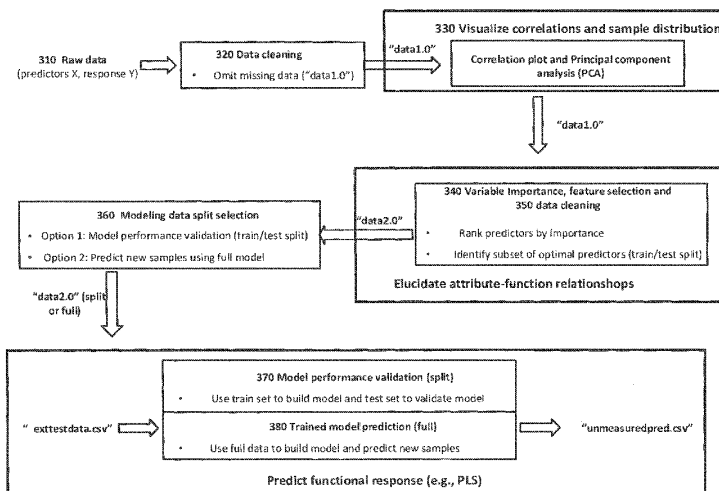


FIG. 3

(57) Abstract: Methods and systems may be provided to predict functional response based on a set of predictors for therapeutic proteins. For example, a method can comprise receiving input data comprising first input data related to a set of predictors and corresponding measured functional response associated with the set of predictors obtained from a first set of therapeutic protein samples and second input data related to the set of predictors and a second set of therapeutic protein samples for prediction of a functional response, wherein the set of predictors were selected as a combination of related biophysical attributes of therapeutic proteins based on a pre-determined criterion; training a machine learning model with the first input data; and using the machine learning model and the set of predictors to predict a functional response of the second set of therapeutic protein samples based on the second input data.

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