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(54) Title: PHARMACOKINETIC AND PHARMACODYNAMIC MODELING OF ERYTHROPOIETIN ADMINISTRATION

(57) Abstract

The present invention relates to systems and methods for obtaining optimized EPO dosage regimens for a desired pharmacodynamic/pharmacokinetic response. The system includes choosing one or more EPO dosage regimens, then using a PK/PD model to determine the pharmacodynamic/pharmacokinetic profile of one or more EPO dosage regimens, and finally selecting one of the EPO dosage regimens for administration to achieve the desired pharmacodynamic/pharmacodynamic response based on the EPO profile.