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(54) Title: SUBCUTANEOUS AND INTRAMUSCULAR ADMINISTRATION OF PYRAZINE COMPOUNDS

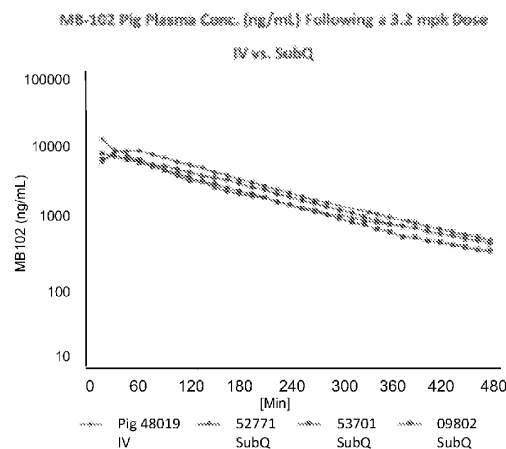


FIG. 1

(57) Abstract: The present disclosure relates to methods for determining the renal glomerular filtration rate or assessing the renal function in a patient in need thereof. The method comprises administering, subcutaneously or intramuscularly, a pyrazine compound of Formula I to a patient, wherein the administration produces a plasma concentration of the compound that is substantially similar to a plasma concentration produced by intravenous administration of an identical amount of the compound; and monitoring the rate in which the kidneys of the patient eliminate the pyrazine from the systemic circulation of the patient. The pyrazine compound fluoresces when exposed to electromagnetic radiation which may be detected using one or more sensors. The rate in which the fluorescence decreases in the patient may be used to calculate the renal glomerular filtration rate in the patient.

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