Abstract

The present disclosure relates to systems and methods for determining the renal glomerular filtration rate or assessing the renal function in a patient in need thereof. The method includes administering a pyrazine compound of Formula (I) to a patient 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 is detected using one or more sensors. The rate in which the fluorescence decreases in the patient is used to calculate the renal glomerular filtration rate in the patient.

FIG. 3A