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(54) Title: NON-INVASIVE IN VIVO OPTICAL IMAGING METHOD

(57) Abstract: The present invention relates to a non-invasive method of determining the presence, quantifying the blood level, and/or monitoring or determining the blood clearance of a fluorescent analyte which comprises a fluorescent entity and a second entity, in the blood of a subject, comprising or consisting of the steps: (a) directing excitation light of at least one predetermined wavelength onto a delineated region comprising at least a portion of the pupil of said subject, to excite the fluorescent entity, (b) receiving light emitted from said fluorescent analyte with a wavelength distinguishable from the predetermined wavelength of (a), through the eye of said subject, thereby determining the presence, quantifying the blood level, and/or monitoring or determining the blood clearance of said fluorescent analyte in the blood of said subject. The present invention further relates to a fluorescent analyte or fluorescent label as defined in any one of the preceding claims for use in any one of the preceding methods. The present invention furthermore relates to the use of a fluorescent analyte or fluorescent label as defined in any one of the preceding claims for the preparation of a diagnostic composition which is to be employed in any one of the preceding methods. The present invention furthermore relates to a device for use in any of the methods defined herein.

