

Abstract

A method of monitoring a time-varying fluorescence signal emitted from a fluorescent agent from within a medium with time-varying optical properties is provided that includes providing a measurement data set that includes a plurality of measurement entries that include at least two measurements obtained from a patient before and after administration of the fluorescent agent. The measurements may include one or more of: a DR_{ex} signal detected by an unfiltered light detector during illumination by excitatory-wavelength light from first region adjacent to the diffuse reflecting medium; a Flr signal detected by a filtered light detector during illumination by excitatory-wavelength light; and a DR_{em} signal detected by the unfiltered light detector during illumination by emission-wavelength light. The method further includes identifying a post-agent administration portion of the measurement data set; and transforming each Flr signal to an IF signal representing a detected fluorescence intensity emitted solely by the fluorescent agent.

[Fig. 2]