

PET kinetic analysis—compartmental model

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PET enables not only visualization of the distribution of radiotracer, but also has ability to quantify several biomedical functions. Compartmental model is a basic idea to analyze dynamic PET data. This review describes the principle of the compartmental model and categorizes the techniques and approaches for the compartmental model according to various aspects: model design, experimental design, invasiveness, and mathematical solution. We also discussed advanced applications of the compartmental analysis with PET.

Key words: PET, compartmental model, pharmacokinetics