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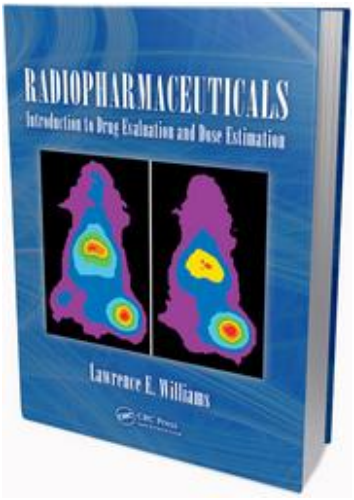
INFORMA

Reciente publicación

Radiopharmaceuticals: Introduction to Drug Evaluation and Dose Estimation



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Features

- Compares aspects of various agents and allows selection based on optimal performance for particular imaging or therapy applications
- Details the process of radiopharmaceutical development, from cellular studies to animal experiments and design/implementation of clinical trials
- Features comparison of animal and human kinetic data for a variety of agents
- Discusses future applications to nanoengineering of novel targeting agents
- Covers integration of radiopharmaceutical treatment with chemotherapeutics, radiation sensitizers, and immune agents

Summary

This comprehensive overview details the process of radiopharmaceutical development, from cellular studies to animal experiments to the design and implementation of clinical trials. It examines the relative benefits of various radiopharmaceuticals and provides guidance on dose estimation and agent selection. Utilizing figures of merit for quantitative assessment, it covers standard medical internal radiation dose (MIRD), absorbed dose method for imaging agents, *vivo* methods for obtaining activity data, errors of activity estimation techniques, phantom-based and patient-based dose estimates and their associated uncertainties, and options available to clinical physicists. Supported by numerous examples from clinical trials, it discusses two and three dimensional estimation processes, including modern hybrid scanners such as SPECT /CT and PET/CT.

Colabora con Farmacéuticos Mundi (**FarmaMundi**) **(**http://www.farmaceuticosmundi.org/**)**