

BOOK REVIEW

LABELLED COMPOUNDS AND PHARMACEUTICALS Applied in Nuclear Medicine

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The authors of this text are experts with many years experience in the uses of radioactive products and especially those used as radiopharmaceuticals in routine diagnostic nuclear medical applications. The 27 chapters of this text are therefore mainly concerned with labelled compounds used in nuclear medicine and in many respects is a sequel to the text Radiopharmacy (edited by M Tubis and W Wolf) published by John Wiley and Sons in 1976.

The text is divided into 4 major parts. Part 1 consists of 6 chapters relating to general atomic structure and radiation, production methods for isotopes, methods for preparing labelled compounds and radiopharmaceuticals, quality control, and also a chapter on stable isotopes and other biomedical applications. Part 2 consists of 10 chapters devoted to radiopharmaceuticals used routinely in tumour location, studies of thyroid function, bronchopulmonary exploration, cardiovascular, renal, digestive tract, haematology, bone studies and studies of the central nervous system. Part 3 consists of 5 chapters relating to in vitro diagnostic methods of analysis with labelled compounds focussing especially on radioimmunoassay. Finally in Part 4 applications of radioimmunoassay to human medicine is discussed in 6 chapters covering cerebral peptides, hormones of the anterior pituitary, neurohypophyseal and pineal hormones, iodotyrosines, iodothyronines and thyroglobulins, the renin-angiotensin-aldosterone system and steroid hormones. Each chapter has numerous cited references with a total of 3429 in the text.

The Subject Index is rather "sparse" for a book of this size occupying only 8 pages and as may be expected from multiple author texts, a number of inconsistencies arise. Some examples are in nomenclature with isotopic labelling some in square brackets (or not) and in formulae sometimes by numbers or by asterisks. SI units for radioactivity are referred to but not standard throughout the text. The unit of absorbed dose (Gray) is in error referred to as "grey"

(p 65). There are numerous such uncorrected errors but as these are usually obvious, for example mCu for mCi (p 348), the sense of the text is normally preserved. Some parts of the texts are too lengthy and repetitious. In this respect cross referencing could have been used more effectively to reduce the volume of text. For example, Chapter 6 on Quality Control could have included segments of chapters 1 and 3 to avoid repetition. However, these are all minor irritations to the reader as in general the text is presented in an easy to read style and the authors are to be congratulated on bringing such a vast amount of information together. Finally, readers should always remember that new techniques and products utilising radioisotopes are changing continually and while much of the information in the text is fundamental and basic, other information especially concerning applications does not necessarily represent the current state of the art.

The text is recommended as a good addition to most medical and university libraries as a reference.

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