Prepare prescribed radioactive and non-radioactive medicinal products from raw materials



Overview

This standard relates to the manufacture of prescribed (including unlicensed) radiopharmaceutical products for patient use, and for research purposes. It involves the preparation of products from raw materials and non standard procedures which may require further interpretation and amendment during the process due to the limitations imposed by radioactive half life. This may include preparation of highly complex positron emitting radiopharmaceuticals. This will be undertaken in a suitable containment area. This process may involve a change in chemical entity. It may include both licensed and unlicensed radionuclides and raw materials such as antibodies, peptides and drugs.

Users of this standard will need to ensure that practice reflects up to date information and policies.

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Performance criteria

You must be able to:

- P1 confirm that the national guidelines for non standard procedures has been followed
- P2 confirm suitability and safety of environment and equipment for producing product
- P3 prepare or select radionuclide of correct identity and chemical form
- P4 select sufficient starting material of suitable quality and purity
- P5 conduct end process checks to confirm that activity, volume and appearance complies with specification
- P6 if required, transfer aliquots of correct volume to suitable containers taking appropriate radiation protection measures
- P7 ensure primary container, and secondary container where appropriate, is labelled according to approved procedures
- P8 place products securely and safely in correct location for next stage of use
- P9 complete relevant records accurately
- P10 dispose of waste in accordance with local procedures
- P11 leave work area in clean condition free from contaminants and ready for
- P12 take relevant corrective action to resolve risks, discrepancies and deficiencies in quality
- P13 correctly interpret and apply relevant standard operating procedures
- P14 interpret in process measurements and adjust procedure accordingly

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Knowledge and understanding

You need to know and understand:

- K1 principles of Good Manufacturing Practice principles and their application
- K2 regulatory requirements for the use of non licensed materials
- K3 aseptic techniques and their application
- K4 radiation protection guidelines and their application, including Local Rules
- K5 the national guidelines for non standard procedures
- K6 risks associated with the use of unlicensed raw materials
- K7 the range of relevant radionuclides and their use
- K8 methods for preparation of radionuclides
- K9 the range of equipment and facilities, purpose and correct use
- K10 radiolabelling mechanisms and their underlying chemistry
- K11 your own level of responsibility relating to each part of this standard
- K12 product specifications and their application
- K13 requirements for storage, handling and disposal of radioactive medicinal products
- K14 range of relevant standard operating procedures

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Additional Information

External links

This standard has indicative links with the following dimension within the NHS Knowledge and Skills Framework (October 2004):

Dimension: HWB10 Products to meet health and wellbeing needs

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