Separate and radiolabel autologous blood components for re-administration to patients



Overview

This standard relates to the preparation of radiolabelled autologous blood components for re-introduction into a patient for diagnostic purposes. It does not include collection of the blood sample.

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

Separate and radiolabel autologous blood components for readministration to patients

Performance criteria

You must be able to:

- P1 confirm that correct blood collection method and anticoagulant were used to obtain sample
- P2 check appearance of sample for absence of clots and possible contaminants
- P3 operate aseptically and avoid cross-contamination
- P4 separate blood components using centrifugation techniques and isolate correct fraction for radiolabelling
- P5 add appropriate activity of desired radiopharmaceutical
- P6 measure activity and confirm that appearance of sample indicates absence of contaminants
- P7 calculate labelling efficiency
- P8 decontaminate work area and non-disposable items
- P9 ensure sample is clearly labelled and identified for administration to correct patient according to local procedures
- P10 take relevant action in case of personal injury, needle-stick or unforeseen incident
- P11 complete relevant records accurately
- P12 leave work area in clear condition, free from contamination and ready for use
- P13 correctly interpret and apply relevant standard operating procedures
- P14 take relevant corrective action to resolve risks, discrepancies and deficiencies in quality

Separate and radiolabel autologous blood components for readministration to patients

Knowledge and understanding

You need to know and understand:

- K1 manipulation of cells without compromising integrity/function
- K2 how to identify and comply with relevant national and international legislation and guidelines
- K3 sampling and pipetting techniques
- K4 pitfalls and problems of cell labelling
- K5 radiolabelling techniques for different radiopharmaceuticals
- K6 local Diagnostic Reference Levels and their relevance to radiolabelling
- K7 radiation protection guidelines and their application, including Local Rules
- K8 risks associated with radiolabelling of blood components for patient administration and local control/response procedures
- K9 aseptic techniques and their use
- K10 requirements relating to biohazards
- K11 range of relevant standard operating procedures

Separate and radiolabel autologous blood components for readministration to patients

Additional Information

External links

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

Dimension: HWB10 Products to meet health and wellbeing needs

Separate and radiolabel autologous blood components for readministration to patients

Developed by	Skills for Health
Version number	1
Date approved	June 2010
Indicative review date	June 2012
Validity	Current
Status	Original
Originating organisation	Skills for Health
Original URN	RAD12
Relevant occupations	Health, Public Services and Care; Medicine and Dentistry; Healthcare and Related Personal Services
Suite	Radiopharmacy
Key words	radiopharmaceuticals, radiopharmacy