FULLY AUTOMATED PROCESS FOR HIGHEST ACTIVITY CONCENTRATION

SIMPLE
Minimize training and staff: time and cost saver solution

HIGH POTENTIAL
Reduce dose to the operator: a convenient solution

FULL SERVICES
Go beyond the generator with a suitable elution-concentration module: a global solution

High concentration & purity
- Loaded activity: 0.5 - 1.5 Ci (18,56Bq - 55,56Bq)
- Volumic activity for 1 Ci generator:
  - without concentration 9 mCi/ml (370 MBq/ml)
  - with concentration > 750 mCi/ml (28 GBq/ml) for a final volume of 1 ml
- Adjustable volume of concentrated solution from 1 to 5 ml
- 186W breakthrough < 10^-4
- > 99% 188Re in the form of 188ReO_4^-

Design minimizing risks of mistakes
- Pre-run test
- Monitoring with a real time display of process through graphic interface
- Device requires utility commonly available in hospitals

Easier and complete installation
- Faster processing time: after elution, the concentration process takes an additional 10 minutes
- One single kit for both elution and concentration (single use)
- Plug-in cassette
- Full traceability of the operations: no need to install additional software
- Automatic reports to support batch release
- Maintenance & assistance via web interface

CLINICAL PERSPECTIVES
Non exhaustive list of preparation and clinical use of 188Re radiolabelled compounds:
- 188Re-DMSA (dimercaptosuccinic acid) for the Treatment of Medullary Carcinoma
- 188Re-HEDP: Bone Pain Palliation Agents
- 188Re Labeled Antibodies
- 188Re Labeled Peptides
- 188Re-lipiodol for Hepatic Carcinoma (HCC)
- 188Re Patches for Therapy of Skin Cancer
- 188Re for Intravascular Radionuclide Therapy (IVRNT)
- 188Re-colloids for Radiosynovectomy

CHEMICAL FACTS
Generator
- Chemical Form: Na_3188ReO_4
- Eluent: 0.9 % NaCl
- Elution Volume: from 1 to 5 ml
- Activity: 0.5 - 1.5 Ci (18,56Bq - 55,56Bq)
- Generator Yield: 90 - 95 %
- at production date
- Shelf life: 6 months after 1st elution

Eluate
- Appearance: clear and colorless solution, precipitate free

PRACTICAL FACTS
- 35mm Tungsten shielding
- Calibration: at shipping date / time
- Specific Activity: No-carrier-added
- Radionuclide purity:
  - 188W breakthrough ≤ 1.10^-6
  - 191Os / 188Re ≤ 1.10^-4
  - 192Ir / 188Re ≤ 1.10^-4
- Radiochemical purity:
  - 99% 188Re in the form of 188ReO_4^-
- Chemical Purity:
  - Al, Fe, W ≤ 0.1 ppm individually
  - Bacterial endotoxins:
    - ≤ 1.75 UE/ml

Delivery: 3 months after order
Contact: RheniEo@ire-elit.eu