

Rheni Eo



¹⁸⁸W / ¹⁸⁸Re Generator: high energy β^- and γ emitting radioisotope generator for therapy

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 (18,5GBq - 55,5GBq)
- 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
- ¹⁸⁸W breakthrough < 10⁻⁶
- > 99% ¹⁸⁸Re in the form of ¹⁸⁸ReO₄⁻

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

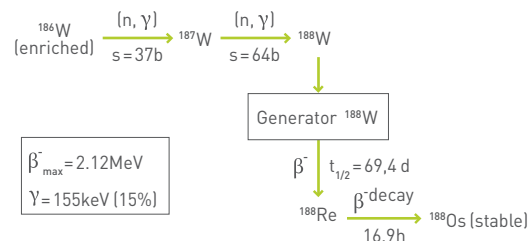
Non exhaustive list of preparation and clinical use of ¹⁸⁸Re radiolabelled compounds*:

- 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

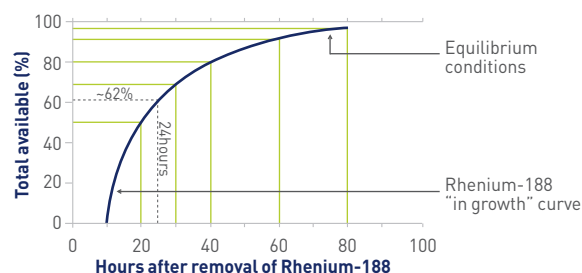
PRODUCT SPECIFICATIONS

PHYSICAL FACTS

DECAY SCHEME FOR ¹⁸⁸Re PRODUCTION



ELUTION YIELDS OF ¹⁸⁸Re IN THE ¹⁸⁸W / ¹⁸⁸Re GENERATOR



CHEMICAL FACTS

Generator

Chemical Form: Na ¹⁸⁸ReO₄

Eluent: 0.9 % NaCl

Elution Volume: from 1 to 5 ml

Activity: 0.5 - 1.5 Ci (18,5GBq - 55,5GBq)

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 ¹⁸⁸ReO₄⁻

Chemical Purity:

Al, Fe, W ≤ 0.1 ppm individually

Bacterial endotoxins:

≤ 1,75 UE/ml

Delivery: 3 months after order

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