

FAQ: Frequently asked questions for physicians and medical personnel



PAINTING A BRIGHTER PICTURE IN NMSC



Painless¹

No pain reported during procedure.²



Non-Invasive²

No direct skin contact or incisions.²



Short duration of treatment⁵

Treatment time is generally 45 to 180 minutes.^{5†}

Rhenium-SCT (Skin Cancer Therapy) delivers precise and personalised* epidermal radioisotope therapy for patients with non-melanoma skin cancer (NMSC), and improves their quality of life (vs. baseline).^{1,3} Rhenium-SCT is a quick[†] treatment for NMSC offering optimal aesthetic outcomes and low rates of recurrence.^{2,4}

*Accurate dosing. Spares healthy tissue.³

[†] Treatment time may vary depending on lesion characteristics.⁵

Frequently Asked Questions

1

What is rhenium and how is it used?

Rhenium is a chemical element. One of its isotopes, Rhenium-188, is a beta emitter. It is used in Rhenium-SCT to treat non-melanoma skin cancer.^{1,3}

2

How does rhenium-188 work?

The therapeutic effect of Rhenium-SCT is based on the cell-destroying effect of the emitted beta particles. These particles penetrate to a maximum depth of 3 mm in skin, so this preserves underlying tissue.³ The activation of both the mitochondrial apoptosis-inducing factor (AIF) and the protein p53 are responsible for cancer cell death.³ Local immune reactions also play a role.³

The half-life of rhenium-188 is only 17 hours, which means the energy from the beta particles is delivered rapidly.³

3

For which diseases is Rhenium-SCT approved?

Since 2014, Rhenium-SCT has been CE-certified and is an approved therapy for the treatment of basal cell and squamous cell carcinoma, including Bowen's disease. It is used for all BCCs and SCCs, especially in patients with comorbidities when surgical intervention is not possible or conventional therapies cannot be expected to provide a satisfactory cosmetic result due to the anatomical location.^{1,2,4,8}

4

Which tumours are particularly suitable for Rhenium-SCT?

Rhenium-SCT may be well suited in cases where lesions are in locations that may be difficult to treat with existing standard of care options. This includes the nose, ear or lip area or locations where wound closure might be more challenging. Patients with larger lesions may benefit, as well as those with multiple lesions. The application of Rhenium-SCT is precisely tailored to each individual lesion and most cases can be treated in a single session.^{3,9}

5

What are the contraindications?

Treatment with Rhenium-SCT is contraindicated in:⁵

- Malignant melanoma
- Skin tumours affecting nerves or bony structures
- Lesions of the upper eyelid
- Lesions which, owing to the anatomical situation, do not allow the positioning of the radiotherapy source necessary for sufficient coverage
- Confirmed or suspected pregnancy or if a pregnancy cannot be ruled out
- Diseases requiring a medication that significantly suppresses wound healing or affects the immune system

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Are there any other special features or restrictions?

In principle, any tumour size can be treated with Rhenium-SCT. One Rhenium-SCT carpoule is sufficient for the treatment of a tumour area of up to 25 cm². The therapeutic range of rhenium-188 beta radiation in unshielded human tissue is about 3 mm.⁶

Frequently Asked Questions

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Who is applying the therapy?

The Rhenium-SCT is delivered in cooperation between different disciplines. Dermatologists or skin cancer specialised GP (general practitioner) and nuclear physicians or radio oncologists, work together as a multidisciplinary team to achieve the treatment goals of complete remission. In most cases a nuclear medicine physician or radio oncologist will apply the Rhenium-SCT to the patient.

Dermatologists and GPs are often first contact points for patients presenting with undiagnosed skin conditions, to perform the initial diagnosis and treatment consultations. They can also be responsible for preparation of the patient and facilitate any follow ups. Radio oncologists and nuclear physicians administer the therapy and take care of the treatment process itself.

Specialist qualifications, training and permissions are needed for the use of radioisotopes, and each treatment site must adhere to specific local requirements. This ensures the safe and proper handling of the radioactive material. These requirements may vary across different geographies, with different regulations and approval processes – Please contact us for further information about your local considerations.

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How is Rhenium-SCT used?

Step 1: Preparation

After the patient is comfortably settled, the lesion to be treated is prepared by the dermatologist. Crusts and scabs are removed with curettage if necessary. Any bleeding must be stopped. The outlines of the skin area to be treated are then marked with a dermatological pen and the size is measured. This area should include the entire tumour plus a safety margin of 5 mm.

The area needed to treat is covered by a clear plastic film (foil). Neighbouring sensitive and healthy organs, such as the eyes, are to be protected from the beta rays of the rhenium-188 with special protective measures and clothing. The activity of the rhenium-188 paste is then determined by the measuring station.

Step 2: Application of paste

Once these preparations are complete, the rhenium-188 paste is applied by thinly painting over the tumour on top of the protective foil using the specially designed applicator brush. The paste dries rapidly forming a dry sealed surface.

The rhenium-188 paste is in the form of a paste, which is applied by painting with the applicator brush. The paste dries rapidly forming a dry sealed surface. The remaining activity of the rhenium-188 paste in the applicator is subsequently determined by the measuring station. The rhenium-188 paste is left in place for a calculated time which is derived from lesion size, lesion depth and activity applied. The treatment time typically is in the range 30 – 180 minutes.⁵ Dosimetry required to calculate individual treatment times are provided by OncoBeta.

Step 3: Removal and disposal of waste

When the treatment time has ended, the foil with the rhenium-188 paste is removed. It is disposed of in a special, shielded disposal container in adherence with radiation protection guidelines. The protective clothing is then removed and any final safety measures are conducted. The patient is then able to leave the treatment room.

Frequently Asked Questions

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How are the dosimetry and calculations done?

The goal is to reach 50 Gy at the deepest point of the lesion, based on the results of the biopsy/histology. There are three variables needed for the dosimetry calculation:

- 1) applied activity,
- 2) area needed to treat: e.g. lesion size + 5mm safety margin in cm², and
- 3) depth of the lesion: e.g. information from the biopsy.

First, the activity of the whole carpoule is measured directly before and after application – the difference is the amount of applied activity. The applied activity, the depth of lesion, location of the tumour and the size of the area needed to treat are inserted into the dosimetry. The dosimetry is based on Varskin and Monte Carlo simulations, to yield precise treatment times required to reach 50 Gy at target depth (lesion's deepest point).

10

What should the patient be aware of following their Rhenium-SCT treatment?

After removal of the rhenium-coated foil, there are no special precautions for the patient associated with the treatment. There is no risk of being contaminated by radioactivity, and as a result, neither the patient nor others are at risk.

Follow ups and check ups should be planned in agreement between the patient and the consulting dermatologist or skin cancer specialised GP. The recommendations are to check the wound healing after 2 weeks, 3 months and/or after wound healing is completed.

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What side effects can occur?

- Erythema
- Swelling
- Bleeding and vascular complications
- Local infections or fever
- Nausea and vomiting
- Skin necrosis/scarring
- Fatigue/malaise
- Hair loss at the treatment site
- De-pigmentation of the treatment site
- Local tumours at the treatment site as a later consequence of radiotherapy
- Radiation ulcers
- There is a risk of incorporating the therapeutic beta emitter due to improper handling

Frequently Asked Questions

How does wound healing progress?

Wound healing can be variable from one patient to another. In most cases, a slight reddening is visible immediately after the treatment. Erythema may occur over the next few days, sometimes in conjunction with the discharge of serum, which then closes with a crust or scab. Sometimes it seems as if the condition of the wound has worsened at first. It may burn or bleed slightly. However, this usually subsides quickly.

The erythema fades over a period of 30 to 120 days. A second scab occasionally forms and itching may occur. During this time, the clinical healing process becomes clearly visible. Final results are typically observed after 60 to 180 days.³ At the end of the healing process, the treated skin may appear a little lighter and firmer than the untreated skin.

What is the level of radiation exposure for the patient and medical staff?

Radiation exposure for the patient outside of the treated area varies depending on where the tumour is located. It is usually no more than 50 to 100 μSv , with a maximum value of 170 μSv . In comparison, the average natural radiation exposure per year in Australia is 1,500 μSv . When all necessary steps with protective clothing have been taken, the exposure of medical staff is normally below 0.7 μSv per application.³

Can a patient receive multiple treatments with Rhenium-SCT?

Yes, patients with multiple tumours may have several lesions treated in the same session – the dermatologist and/or treating physician will determine a preferred treatment plan.

For most tumours, one treatment is usually sufficient for permanent removal. After the initial treatment, it may also be determined that additional treatment is required. This may be necessary due to the nature of the tumour, its size, depth and localisation.⁴

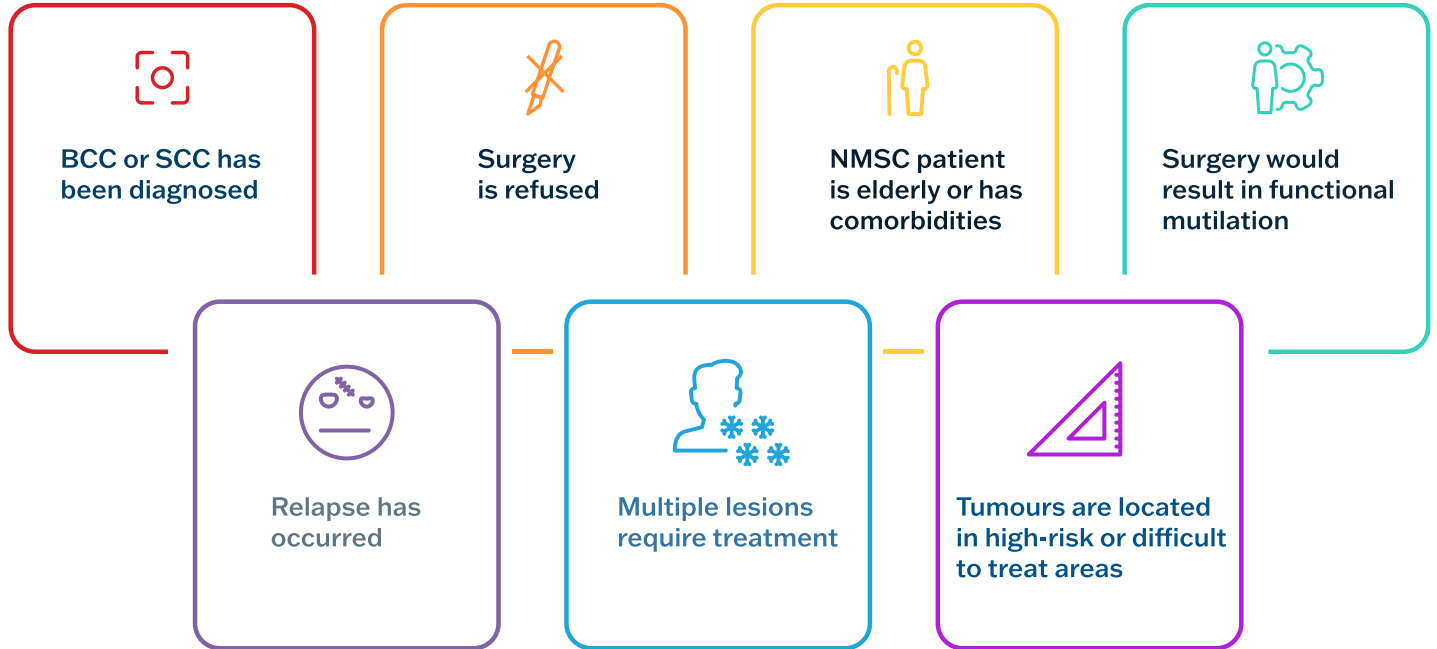
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Rhenium-SCT®: A painless* and non-invasive† treatment for non-melanoma skin cancer^{1,2}

*No pain reported during procedure.²

†No direct skin contact or incisions.²

Rhenium-SCT is suitable for patients where:^{2,3,7,8}



OncoBeta®: Precision medicine powered by radiochemistry

OncoBeta is a medical device company whose objective is to improve the quality of life for non-melanoma skin cancer patients with one of the most innovative products available to date.

Our focus is on:

- **Achieving innovation**
- **Improving patient outcomes**
- **Enhancing patients' quality of life**



For more information,
scan the QR code or visit
www.oncobeta.com

Rhenium-SCT®: Favourable cosmetic outcomes reported by both patients and clinicians¹

A patented treatment system

The treatment system is a patented suite of medical devices developed for the controlled preparation and targeted application of rhenium-188 paste in the treatment of NMSC.

It includes four key components: the base station, which prepares the therapeutic material; the measurement station, used to assess radioactivity; the applicator, which enables accurate delivery; and the carpoule containing the paste.

Together, these elements form a modular system tailored for clinical use.^{2,5}



The **Applicator** device securely holds the Carpoule, allowing physicians to precisely apply rhenium-188 paste to the area needed to treat.



The **Carpoules** contain the rhenium-188 paste, enabling targeted, single-application treatment for NMSC.



The **Base Station** and **Measurement Station** enable precise, contactless dosimetry and safe application of the rhenium-188.



Rhenium-SCT®: Precise, personalised therapy for treatment of NMSCs³



Precise³

Accurate dosing.
Spare healthy tissue.³



Non-Invasive²

No direct skin contact
or incisions.²



Painless¹

No pain reported
during procedure.²



Simple, easy²

No restriction on
anatomical location.³



Single-session⁹

Complete response in 94.7%
of lesions after a single session.^{9¶}



Short duration of treatment⁵

Treatment time is generally
45 to 180 minutes.^{5§}



Aesthetic/functional⁴

No disfiguring scarring.
Retained functionality in high-risk
and difficult to treat areas.¹



Certified medical device

ARTG number 400142.
SAHPRA approved.
CE certified.

§ Treatment time depends on lesion characteristics and may exceed 180 minutes.⁵

¶ Treatment was generally well tolerated. Adverse events were mostly mild to moderate. Twelve Grade 3/4 events occurred at earlier time points, with none persisting beyond 6 months. The most common 24-month adverse events were hypopigmentation (G1/2: 58%/5%), telangiectasia (G1: 15%), alopecia (G1/2: 10.4%/0.9%) and induration (G1/2: 9.6%/0.9%). No treatment-related adverse events led to study withdrawal.¹⁰

Abbreviations: BCC, basal cell carcinoma; SCC, squamous cell carcinoma.

References: 1. Cardaci G, *et al. Adv Radiat Oncol.* 2025;10(7):101802. 2. Castellucci P, *et al. Eur J Nucl Med Mol Imaging.* 2021;48(5):1511–1521. 3. Cipriani C, *et al. J Dermatol Treat.* 2022;33(2):969–975. Epub 22 Jul 2020. 4. Sedda AF, *et al. Clin Exp Dermatol.* 2008;33(6):745–749. 5. Rhenium-SCT® Instructions For Use, Quick Guide. https://www.oncobeta.com/fileadmin/user_upload/devices/02_IFU_REC_ENG_L.pdf (accessed March 2026). 6. Cipriani C, *et al. In Therapeutic Nuclear Medicine.* 2014. RP Baum (Ed), New York: Springer. 7. Cipriani C, *et al. Int J Nucl Med.* 2017;114–122. 8. Carrozzo AM, *et al. Eur J Dermatol.* 2013;23(2):183–188. 9. Baxi S, *et al.* 2026, Rhenium-SCT for non-melanoma skin cancer: Topline Results from EPIC-Skin, An International Phase IV Prospective Single Arm Multi-centre Study, Presentation at The American College Of Radiation Oncology Congress Orlando USA, 6th February 2026.

Rhenium-SCT® (rhenium-188 epidermal radioisotope therapy).

Please review the Instructions for Use (IFU) before using Rhenium-SCT®. The IFU is available at www.oncobeta.com or upon request via medical@oncobeta.com. **Indication:** Rhenium-SCT® is indicated for the treatment of basal cell carcinoma (BCC) and squamous cell carcinoma (SCC), especially for patients with co-morbidities for which a surgical approach is not indicated, or for lesions which anatomical position may result in a suboptimal cosmetic result using conventional approaches. **Safety Information:** Treatment with Rhenium-SCT® involves the application of beta radiation to the skin. As with any form of radiotherapy, local skin reactions may occur. Side effects may occur during or shortly after treatment. These may include, but are not limited to, radiation dermatitis, erythema, and ulceration. Late effects may occur in the months and years following radiation therapy. These may include, but are not limited to, alopecia at the treatment site, induration, changes in skin pigmentation (hypo- or hyperpigmentation) or telangiectasia. The nature and severity of these effects depend on multiple factors, including the size, depth, and location of the lesion, as well as individual patient characteristics. Most reactions are localized and occur within the treated area, but may vary in intensity and duration. Treatment should only be performed by appropriately trained healthcare professionals and in accordance with the Instructions for Use (IFU). For full safety information, including contraindications, warnings, and precautions, please refer to the IFU. **Legal Manufacturer:** OncoBeta® GmbH, Schleibheimer Straße 91, 85748 Garching bei München, Germany. **Material ID:** SHOW5671. **Date of preparation:** April 2026.

ONCOBETA®