

Surface Radiation Therapy for Treatment of Non-Melanoma Skin Cancer

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Dates Reviewed: 04/2026

Developed By: Medical Necessity Criteria Committee

I. Description

Nonmelanoma skin cancer (NMSC) primarily includes basal cell carcinoma (BCC) and cutaneous squamous cell carcinoma (cSCC). NMSC is among the most diagnosed malignancies, and its incidence continues to increase. Lesions frequently occur in sun-exposed areas, particularly the head and neck (e.g., nose, ears, eyelids, and lips).

Treatment options for NMSC may include surgical management, radiation therapy, topical or systemic therapies, and other modalities based on tumor and patient factors. Surface radiation therapy (SRT) is a form of low-energy radiation (typically kilovoltage range) designed to treat superficial cutaneous lesions while limiting dose to deeper tissues.

For most low-risk NMSC, surgical excision is generally the primary treatment approach. For patients with localized disease who are not appropriate candidates for surgery (e.g., due to medical comorbidities, advanced age, tumor location, or anticipated functional or cosmetic impact), radiation therapy may be used with definitive intent. Radiation therapy may also be used in the postoperative (adjuvant) setting, such as when margins are close or positive and additional surgery is not feasible, and may be used for palliation in selected cases of advanced disease.

Surgical excision, including Mohs micrographic surgery when indicated, is generally preferred for management of NMSC because it provides high cure rates and margin assessment. SRT may be considered for appropriately selected superficial NMSC when surgery is contraindicated, not clinically appropriate, or declined after informed, documented shared decision-making.

II. Criteria: HCS

A. Moda Health considers **surface radiation therapy for the treatment of superficial nonmelanoma skin cancer** (eg, basal cell carcinoma [BCC], cutaneous squamous cell carcinoma [cSCC]) medically necessary when **ALL** of the following criteria requirements are met;

1. Tumor is superficial and localized without deep invasion or metastasis
2. Histology confirms BCC or cSCC (including SCC in situ)
3. At **least one** of the following;
 - a. Surgery is not clinically appropriate
 - b. Significant cosmetic or functional morbidity expected with surgery
 - c. Patient declines surgery after documentation that surgery is clinically appropriate but associated with significant morbidity or contraindications and after shared decision-making
4. Tumor is low-risk or select high-risk (*tumors limited to size or location without aggressive histology, perineural invasion, recurrence, or immunosuppression*) per NCCN-based criteria (*Appendix A*).
5. Treatment intent is definitive or adjuvant.

- B. SRT is considered **NOT medically necessary** for **ALL** of the following;
 - a. First line treatment option in surgical candidates that have access to standard excision or Mohs micrographic surgery that are preferred treatment for high-risk lesions
 - b. Treatment of advanced BCC and SCC
- C. **Contraindications** for use of SRT
 - a. Aggressive tumor histology or deep(>6mm) tumor invasion, or bone or cartilage involvement
 - b. Previously irradiated lesions or overlapping radiation fields
 - c. Immunosuppressed patients, including solid organ transplant recipients, unless multidisciplinary review supports use due to lack of surgical alternatives

****NOTE:** Surface radiation therapy planning and simulation is limited to one unit per course of treatment and includes all planning and simulation services necessary to establish treatment fields.

III. Information Submitted with the Prior Authorization Request:

1. Clinical documentation to establish medical necessity including pathology report, lesion characteristics, clinical rationale, decision-making and treatment plan

IV. CPT or HCPC codes covered:

Codes	Description
77436	Surface radiation therapy; superficial or orthovoltage, treatment planning and simulation-aided field setting
77437	Surface radiation therapy; superficial, delivery, =150 kV, per fraction (eg, electronic brachytherapy)
77438	Surface radiation therapy; orthovoltage, delivery, >150-500 kV, per fraction
77439	Surface radiation therapy; superficial or orthovoltage, image guidance, ultrasound for placement of radiation therapy fields for treatment of cutaneous tumors, per course of treatment (List separately in addition to code for primary procedure)

V. CPT or HCPC codes NOT covered:

Codes	Description

V. Annual Review History

Review Date	Revisions	Effective Date
04/2026	New policy	07/09/2026

VI. References

1. Nestor M.S et al (2019). Consensus Guidelines on the Use of Superficial Radiation Therapy for Treating Nonmelanoma Skin Cancers and Keloids, 2019, <https://pmc.ncbi.nlm.nih.gov/articles/PMC6415702/>
2. American society for Radiation Oncology (2020). ASTRO Guideline on Definitive and Postoperative Radiation Therapy for Basal and Squamous Cell Cancers of the Skin. Retrieved from <https://www.astro.org/provider-resources/guidelines/skin-cancer-guideline>
3. Martins RG Systemic treatment of advanced basal cell and cutaneous squamous cell carcinomas.https://www.uptodate.com/contents/systemic-treatment-of-advanced-basal-cell-and-cutaneous-squamous-cell-carcinomas?search=surface%20radiation%20therapy%20nonmelanoma%20skin%20cancer&source=search_result&selectedTitle=3~150&usage_type=default&display_rank=3
4. Erin M. McClure, MDa erin.mcclure@uhhospitals.org · Geoffrey Sedor, MD · Mairead Moloney, BSc · Yuxuan Jin, MSd · Lio Yu, MDe · Michael W. Kattan, PhD, 2024; Image Guidance is Associated with Improved Freedom From Recurrence After Superficial Radiation Therapy for Nonmelanoma Skin Cancer. Retrieved from [https://www.advancesradonc.org/article/S2452-1094\(24\)00026-5/fulltext](https://www.advancesradonc.org/article/S2452-1094(24)00026-5/fulltext)

Appendix 1 – NCCN risk stratification

Presence of ANY high-risk feature classifies the tumor as high-risk.

Basal Cell Carcinoma (BCC)

<u>Risk Factor</u>	<u>Low Risk</u>	<u>High Risk</u>
Location & Size	Trunk/extremities ≤2 cm; Head/neck ≤1 cm	Trunk/extremities >2 cm; Head/neck >1 cm; Any size H-zone
Borders	Well-defined	Poorly defined
Primary vs Recurrent	Primary	Recurrent
Immunosuppression	No	Yes
Prior Radiation	No	Yes

Histology	Nodular, superficial	Infiltrative, micronodular, morpheaform, basosquamous
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Cutaneous Squamous Cell Carcinoma (cSCC)

<u>Risk Factor</u>	<u>Low Risk</u>	<u>High Risk</u>
Location & Size	Trunk/extremities ≤2 cm; Head/neck ≤1 cm	Trunk/extremities >2 cm; Head/neck >1 cm; Any size H-zone
Borders	Well-defined	Poorly defined
Primary vs Recurrent	Primary	Recurrent
Immunosuppression	No	Yes
Rapid Growth	No	Yes
Neurologic Symptoms	None	Present
Histologic Grade	Well/moderate	Poorly differentiated
Histology	None	Desmoplastic
Depth	<2 mm	≥2 mm or Clark IV/V
Perineural Invasion	None	Present

Appendix 2 - Applicable Diagnosis Codes:

Codes	Description

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD) and Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. They can be found at: <http://www.cms.gov/medicare-coverage-database/search/advanced-search.aspx>. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD):

Jurisdiction(s): 5, 8	NCD/LCD Document (s):

NCD/LCD Document (s):

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	Applicable State/US Territory	Contractor
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC