

Evidence-Based Recommendations on Mohs Micrographic Surgery for the Treatment of Skin Cancer

cadth.info/mohs-surgery-for-skin-cancer

Mohs micrographic surgery involves progressively removing thin layers of a tumour and examining them until only cancer-free tissue remains. CADTH identified the following recommendations on the use of this surgery by conducting a search of the available evidence-based guidelines. The guidelines that met CADTH's criteria for inclusion were assessed using the Appraisal of Guidelines for REsearch & Evaluation (AGREE) II Instrument.¹ Because the majority of the recommendations were based on evidence of limited quality, they should be interpreted with caution.

The strength of the evidence is indicated as follows:

■ High-quality evidence
 ■ Moderate-quality evidence
 ■ Low-quality evidence
 ■ Quality of evidence not reported

Skin Cancer Type	Recommendation
Squamous cell carcinoma	"Treatment options for recurrent or otherwise high-risk SCC lesions include the following: <ul style="list-style-type: none"> • Mohs micrographic surgery • Surgical excision with a 6- to 13-mm margin • Radiation therapy (in selected patients with contraindications to surgery, when surgery would be disfiguring, or when radiation therapy is needed for palliation)."²
	"MMS is recommended for high-risk cSCC." ³
	"[MMS] should be considered at the multidisciplinary team meeting, for selected patients with high-risk tumours where tissue preservation or margin control is challenging, and on an individual case basis for patients with any tumour at a critical anatomical site." ⁴
	"[MMS] may be indicated for digital SCC in situ [Bowen's Disease] (around the nail in particular) and for some cases of genital (especially penile) SCC in situ for its tissue-sparing benefits. There may also be a role for [MMS] in recurrent or incompletely excised lesions." ⁵
Basal cell carcinoma	"MMS, if available, may be considered as a first-line option for high-risk primary BCC, incompletely excised high-risk BCC, and most recurrent BCCs amenable to surgery." ⁶
	"MMS is recommended for those with histologically confirmed [BCC] of the face, and is appropriate for primary BCC of the face that are >1 cm, have aggressive histology, or are located on the H zone of the face." ⁷
Melanoma	"[MMS] or staged excision with paraffin-embedded permanent sections may be utilized for MIS, LM type, on the face, ears, or scalp for tissue-sparing excision and exhaustive histologic assessment of peripheral margins." ⁸
	"[MMS] has shown to improve complete clearance rates and reduced recurrences over conventional surgical removal of LM." ⁹
Merkel cell carcinoma	"[MMS] is appropriate as a tissue-sparing technique when the tumour is in a sensitive area such as head and neck area and there are concerns of functional impairment from too radical an excision." ¹⁰

BCC= basal cell carcinoma; cSCC = cutaneous squamous cell carcinoma; LM = lentigo maligna; MIS = melanoma in situ; MMS = Mohs micrographic surgery; SCC = squamous cell carcinoma.

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