Summary of recommendations

This page provides a summary of the recommendations of the completed Melanoma guidelines contents. Other sections of the guidelines are currently in progress and will be published iteratively.

For explanation of the different types of recommendations, see below.

You may also like to refer to the Guideline development process for details on the levels of evidence and recommendation grades.

Recommendations

What are the clinical features of melanoma and how do atypical melanomas present?

Practice point?
Melanomas are generally distinguished from benign lesions by their history of change and thick melanomas often do not conform to the 'ABCD' rule, but are Elevated, Firm and Growing. Therefore, careful history taking is important and any lesion that continues to grow or change in size, shape, colour or elevation over a period of more than one month should be biopsied and assessed histologically or referred for expert opinion.

Practice point?
Avoid 'monitoring' raised lesions.

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What type of biopsy should be performed for a suspicious pigmented skin lesion?

Evidence-based recommendation?	Grade

The optimal biopsy approach for a suspicious pigmented lesion is complete excision with a 2 mm clinical margin and upper subcutis.	C

Evidence-based recommendation?	Grade
Partial biopsies may not be fully representative of the lesion and need to be interpreted with caution and in light of the clinical findings to minimise incorrect false negative diagnoses and understaging.	C

Evidence-based recommendation?	Grade
In carefully selected clinical circumstances (such as large in situ lesions, large facial or acral lesions or where the suspicion of melanoma is low) and in the hands of experienced clinicians, partial incisional, punch or shave biopsies may be appropriate.	C

Practice point?

It is advisable to discuss unexpected pathology results with the reporting pathologist.

Practice point?

Punch biopsy should not be utilised for the routine diagnosis of suspected melanoma because this technique is associated with high rates of histopathological incorrect false negative diagnosis. Where a punch biopsy has been used for the diagnosis of a suspected BCC or SCC, and the diagnosis has been found to be melanocytic, then consideration should be given to excision of the entire lesion.

Practice point?

The use of deep shave excision (saucerisation) should be limited to in situ or superficially invasive melanomas to preserve prognostic features and optimise accurate planning of therapy.

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When is a sentinel node biopsy indicated?

Evidence-based recommendation	Grade
Sentinel lymph node biopsy should be considered for all patients with melanoma greater than 1 mm in thickness and for patients with melanoma greater than 0.75 mm with other high risk pathological features to provide optimal staging and prognostic information and to maximise management options for patients who are node positive.	B

Practice point

Sentinel lymph node biopsy (SLNB) should be performed at the time of the primary wide excision.

Practice point

Sentinel lymph node biopsy (SLNB) should be performed in a centre with expertise in the procedure, including nuclear medicine, surgery and pathology to optimise the accuracy of the test.

Practice point

Patients being considered for sentinel lymph node biopsy (SLNB) should be given an opportunity to fully discuss the risks and benefits with a clinician who performs this procedure.

Practice point

A consideration of sentinel lymph node biopsy (SLNB) forms an important part of the multidisciplinary management of patients with clinically node negative cutaneous melanoma.

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What are the recommended safety margins for radical excision of primary melanoma?/In Situ

Evidence-based recommendation	Grade
After initial excision biopsy, the radial excision margins, measured clinically from the edge of the melanoma, should be 5-10 mm (measured with good lighting and magnification) with the aim of achieving complete histological clearance. Melanoma *in situ* of non-lentigo maligna type is likely to be completely excised with 5mm margins whereas lentigo maligna may require wider excision. Minimum clearances from all margins should be stated/assessed. Consideration should be given to further excision if necessary; positive histological margins are unacceptable.	D

Practice point

Excisions should have vertical edges to ensure consistent margins.

Practice point

For all melanomas, minimum clearances from all margins should be stated/assessed. When necessary, further excision should be performed in order to achieve the appropriate margin of clearance.

Practice point

Excision biopsy of the complete lesion with a narrow (2–5 mm) margin is appropriate for definitive diagnosis of

primary melanoma. Once the diagnosis of melanoma has been made, re-excision of the lesion (biopsy site) should then be performed in order to achieve the definitive, wider margins that are recommended in these guidelines.

Practice point

Depth of excision in usual clinical practice is excision down to but not including the deep fascia unless it is involved or has been reached during the diagnostic excision. For body sites where there is particularly deep subcutis, it is usual practice to excise to a depth equal to the recommended lateral (radial) excision margins for that specific melanoma; in these cases it is not deemed necessary to excise right down to fascia.

Practice point

Where tissue flexibility is limited, a flap repair or skin graft may be necessary subsequent to an adequate margin of removal.

Practice point

Most primary melanomas can be treated as an outpatient under local anaesthesia or as a day-case.

Practice point

Patients should be informed that surgical excision may be followed by wound infection, bleeding, haematoma, failure of the skin graft or flap, risk of numbness, a non-cosmetic scar, dehiscence and the possibility of further surgery.

Practice point

Some tumours may be incompletely excised despite using the above-recommended margins. These include

melanomas occurring in severely sun-damaged skin (e.g. LM) and those with difficult-to-define margins (eg amelanotic and desmoplastic melanomas). In these categories, the presence of atypical melanocytes at the margins of excision should be detected by comprehensive histological examination (including immunohistochemical staining) and followed by wider excision as appropriate. Alternatively, staged serial excision (also known as 'slow Mohs' surgery) may be utilised to achieve complete histological clearance of melanoma *in situ*/lentigo maligna. Pre-operative mapping of the extent of some lesions with confocal microscopy may be useful and is available in some centres. Referral to a specialist melanoma centre or discussion in a multidisciplinary meeting should be considered for difficult or complicated cases.

Practice point
Amelanotic melanoma can present significant difficulties for defining a margin with up to one third of subungual and nodular melanomas being non-pigmented. This may dictate choice of a wider margin, or further re-excision, where practicable.

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What are the recommended safety margins for radical excision of primary melanoma?

Evidence-based recommendation	Grade
(pT1) melanoma < 1.0 mm After initial excision biopsy, the radial excision margins, measured clinically from the edge of the melanoma, should be 1 cm. Minimum clearances from all margins should be stated/assessed. Consideration should be given to further excision if necessary; positive histological margins are unacceptable.	B

Evidence-based recommendation	Grade
(pT2) melanoma 1.01 mm–2.00 mm After initial excision biopsy, the radial excision margins, measured clinically from the edge of the melanoma, should be 1–2 cm. Minimum clearances from all margins should be stated/assessed. Consideration should be given to further excision if necessary; positive histological margins are	B

unacceptable.	
Evidence-based recommendation?	Grade
(pT3) melanoma 2.01 mm–4.00 mm After initial excision biopsy, the radial excision margins, measured clinically from the edge of the melanoma, should be 1–2 cm. Minimum clearances from all margins should be stated/assessed. Consideration should be given to further excision if necessary; positive histological margins are unacceptable. Caution should be exercised for melanomas 2.01–4.00 mm thick, especially with adverse prognostic factors, because evidence concerning optimal excision margins is unclear. Where possible, it may be desirable to take a wider margin (2 cm) for these tumours depending on the tumour site and characteristics, and prevailing surgeon/patient preferences.	B
Evidence-based recommendation?	Grade
(pT4) melanoma > 4.0 mm After initial excision biopsy, the radial excision margins, measured clinically from the edge of the melanoma, should be 2 cm. Minimum clearances from all margins should be stated/assessed. Consideration should be given to further excision if necessary; positive histological margins are unacceptable.	B
Evidence-based recommendation?	Grade
Acral lentiginous and subungual melanoma are usually treated with a minimum margin as set out above, where practicable, including partial digital amputation usually incorporating the joint immediately proximal to the melanoma.	D
Evidence-based recommendation?	Grade

Excision margins might be modified to accommodate individual anatomic sites or functional considerations, but this practice would be based solely on case-series information, and individual factors, rather than RCT evidence which is currently lacking.	D

Practice point?

Excisions should have vertical edges to ensure consistent margins.

Practice point?

For all melanomas, minimum clearances from all margins should be stated/assessed. Consideration should be given to further excision if necessary because positive histological margins are unacceptable.

Practice point?

Excision biopsy of the complete lesion with a narrow (2–5 mm) margin is appropriate for the definitive diagnosis of primary melanoma. Once the diagnosis of melanoma has been made, re-excision of the lesion (biopsy site) should then be performed in order to achieve the definitive, wider margins that are recommended in these guidelines.

Practice point?

Depth of excision in usual clinical practice is excision down to but not including the deep fascia unless it is involved or has been reached during the diagnostic excision. For body sites where there is particularly deep subcutis, it is usual practice to excise to a depth equal to the recommended lateral (radial) excision margins for that specific melanoma; in these cases it is not deemed necessary to excise right down to fascia.

Practice point?

Where tissue flexibility is limited, a flap repair or skin graft is often necessary subsequent to an adequate margin of removal.

Practice point

Most primary melanomas can be treated as an outpatient under local anaesthesia or as a day-case.

Practice point

Patients should be informed that surgical excision may be followed by wound infection, bleeding, haematoma, failure of the skin graft or flap, risk of numbness, a non-cosmetic scar, dehiscence and the possibility of further surgery.

Practice point

Some tumours may be incompletely excised despite using the above-recommended margins. These include melanomas occurring in severely sun-damaged skin (e.g. lentigo maligna) and those with difficult-to-define margins (e.g. amelanotic and desmoplastic melanomas). In these categories, the presence of atypical melanocytes at the margins of excision should be detected by comprehensive histological examination (including immunohistochemical staining) and followed by wider excision.

Practice point

Amelanotic melanoma can present significant difficulties for defining a margin with up to one third of subungual and nodular melanomas being non-pigmented. This may dictate choice of a wider margin, or further re-excision, where practicable.

Practice point

For patients with deeper invasive melanomas (> 1 mm thick), referral to a specialised melanoma centre or discussion in a multidisciplinary meeting should be considered to ensure that best practice is implemented and for the collection of national outcome data. This may present logistic difficulties in regional and remote areas, but input from a specialist melanoma centre.

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This guideline includes evidence-based recommendations (EBR), consensus-based recommendations (CBR) and practice points (PP) as defined in the table below. Recommendations and practice points were developed by working party members and sub-committee members.

Each EBR was assigned a grade by the expert working group, taking into account the volume, consistency, generalisability, applicability and clinical impact of the body of evidence according to NHMRC Level and Grades for Recommendations for Guidelines Developers.[1]

NHMRC approved recommendation types and definitions

Type of recommendation	Definition
Evidence-based recommendation	A recommendation formulated after a systematic review of the evidence, indicating supporting references
Consensus-based recommendation	A recommendation formulated in the absence of quality evidence, after a systematic review of the evidence was conducted and failed to identify admissible evidence on the clinical question
Practice point	A recommendation on a subject that is outside the scope of the search strategy for the systematic review, based on expert opinion and formulated by a consensus process

Source: National Health and Medical Research Council. Procedures and requirements for meeting the NHMRC standard for clinical practice guidelines. Melbourne: National Health and Medical Research Council, 2011

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References

1. Jump up National Health and Medical Research Council. *NHMRC levels of evidence and grades for recommendations for guideline developers.* Canberra: National Health and Medical Research Council; 2009 Available from: https://www.nhmrc.gov.au/_files_nhmrc/file/guidelines/developers/nhmrc_levels_grades_evidence_120423.pdf.