# Melanoma: A GP's Guide to Management from Biopsy to Advanced Disease

## Integrating Evidence-Based Guidelines and Complex Case Management

RACGP

# The Australian Imperative: Early Diagnosis is Key

## LIFETIME RISK

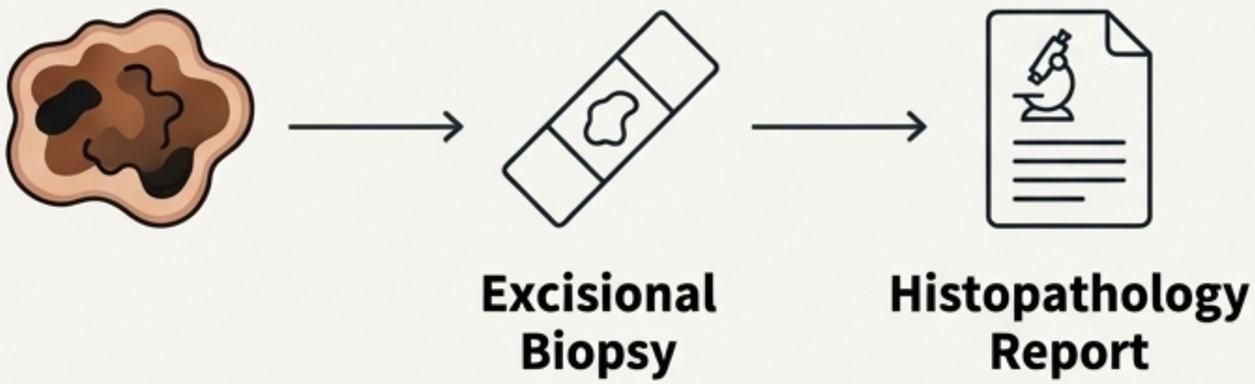
**1 in 24**

**1 in 35**

The incidence of melanoma in Australia continues to rise. Early diagnosis and management before the melanoma has metastasised provides the best opportunity for a favourable outcome.

Source Citation: Australian Institute of Health and Welfare (AIHW).

# The First Step is Critical: Suspect Melanoma? The Gold Standard is Excisional Biopsy.




**Rationale:** An excisional biopsy confirms the diagnosis and allows for rational planning of definitive treatment, including excision margins and the potential for sentinel lymph node (SLN) biopsy.

**Recommended Margin:** A 2 mm margin is recommended whenever possible for the initial excision biopsy.

**Clinical Pitfall to Avoid**

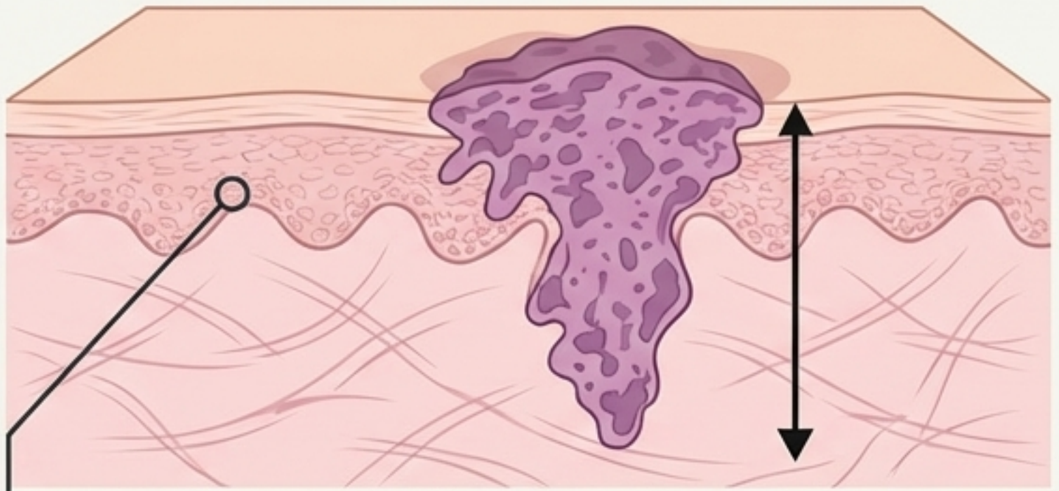
Immediate wide excision with margins based on a clinical estimate of tumour thickness is not recommended. It may result in inadequate or excessive clearance and can compromise subsequent management by making it impossible to perform accurate lymphatic mapping.

Source Citation: Australian Institute of Health and Welfare (AIHW)

# Definitive Treatment: Wide Excision Margins are Guided by Breslow Thickness

| Breslow Thickness | Recommended Surgical Margin |
|---|---|
| Melanoma in situ | 5 mm |
| <1.0 mm | 1 cm |
| 1.0–4.0 mm | 1–2 cm* |
| >4.0 mm | 2 cm |

**For melanomas 2–4 mm thick, a 2 cm margin may be desirable where possible.*



Breslow thickness is the microscopically measured vertical depth of invasion of the tumour from the granular layer of the epidermis to its deepest part.
deepest part.

# Assessing Spread: The Role of Sentinel Lymph Node Biopsy (SLNB)

## When to discuss SLNB with a patient?

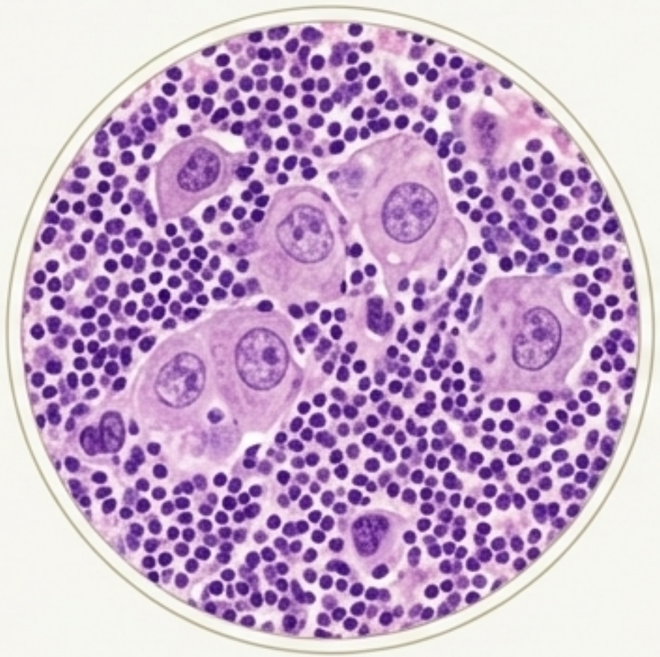
For melanomas ≥1.0 mm thick. It may also be considered for melanomas 0.75–1.0 mm thick with high-risk features (e.g., ulceration, high mitotic rate).

## Why is it important?

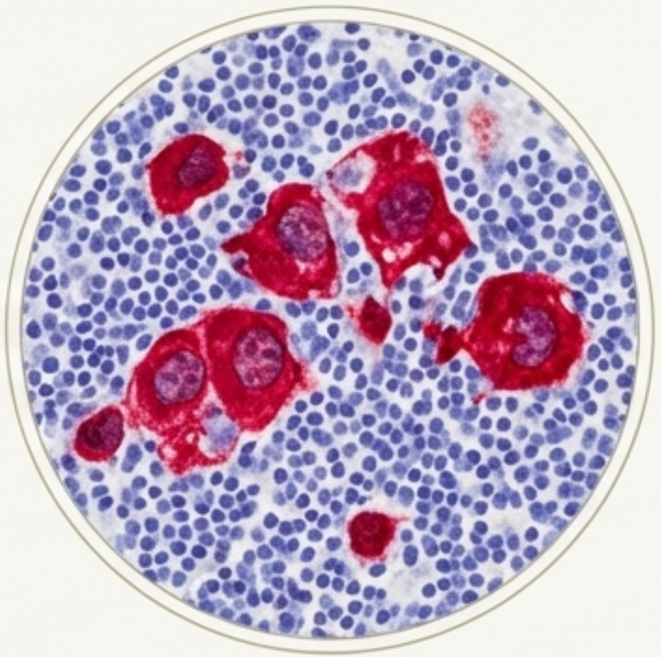
It is the most accurate prognostic information available. Early complete lymph node dissection for SLN-positive patients shows a substantial survival benefit.

## The Prognostic Power of SLNB

MSLT-I trial (n=1,TJA):

**H&E Stain:** Large melanoma cells seen amongst small lymphocytes.



**S-100 Stain:** Immunohistochemical stain highlights the melanoma cells (in red) for easier identification.

# For Clinically Localised Disease, Staging Tests are Not Recommended

Staging tests, including blood tests, CT scans, and PET scans, are NOT recommended for patients who present with American Joint Committee on Cancer (AJCC) Stage 1 or Stage 2 disease (i.e., no clinical evidence of metastasis).

## Focus on What Matters for Prognosis

Beyond Breslow thickness, the most important negative prognostic factors are **Ulceration** and a high tumour **Mitotic Rate**.

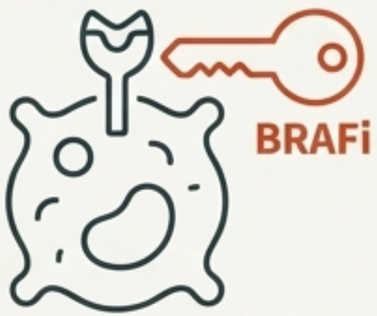
## Resource for Patient Discussions

The AJCC offers a free, web-based prognostic calculator for predicting 5 and 10-year survival rates.
www.melanomaprognosis.org

# A New Era in Managing Systemic Metastatic Disease

**New drugs are providing genuine progress and prolonging survival for patients with systemic melanoma metastases.**

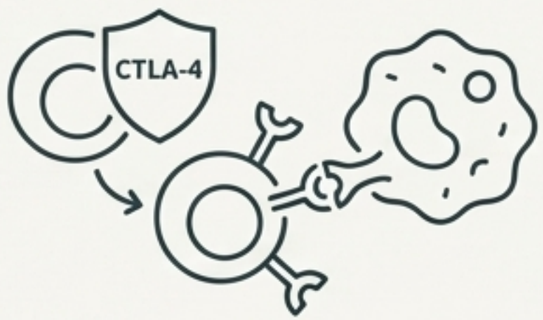
## Targeted Therapy




**Mechanism:** Targets the BRAF oncogene mutation, which is present in ~50% of melanomas.

- **Examples:** Vemurafenib, Dabrafenib.
- **Benefit:** Can produce objective remissions in **over 50%** of treated patients.

## Immunotherapy




**Mechanism:** Stimulates the patient's T-cells to attack the cancer by inhibiting regulatory molecules.

- **Example:** Ipilimumab (an anti-CTLA4 antibody).
- **Benefit:** Can prolong overall survival, with **20-30%** of patients surviving **3 years**.

# From Principle to Practice: A Large Facial Lentigo Maligna

**Patient:**
Man in his late 70s with multiple comorbidities (type 2 diabetes, polymyalgia rheumatica, hypertension).

**History:**
11-year history of a pigmented lesion on his left cheek, recently changed in size and colour.

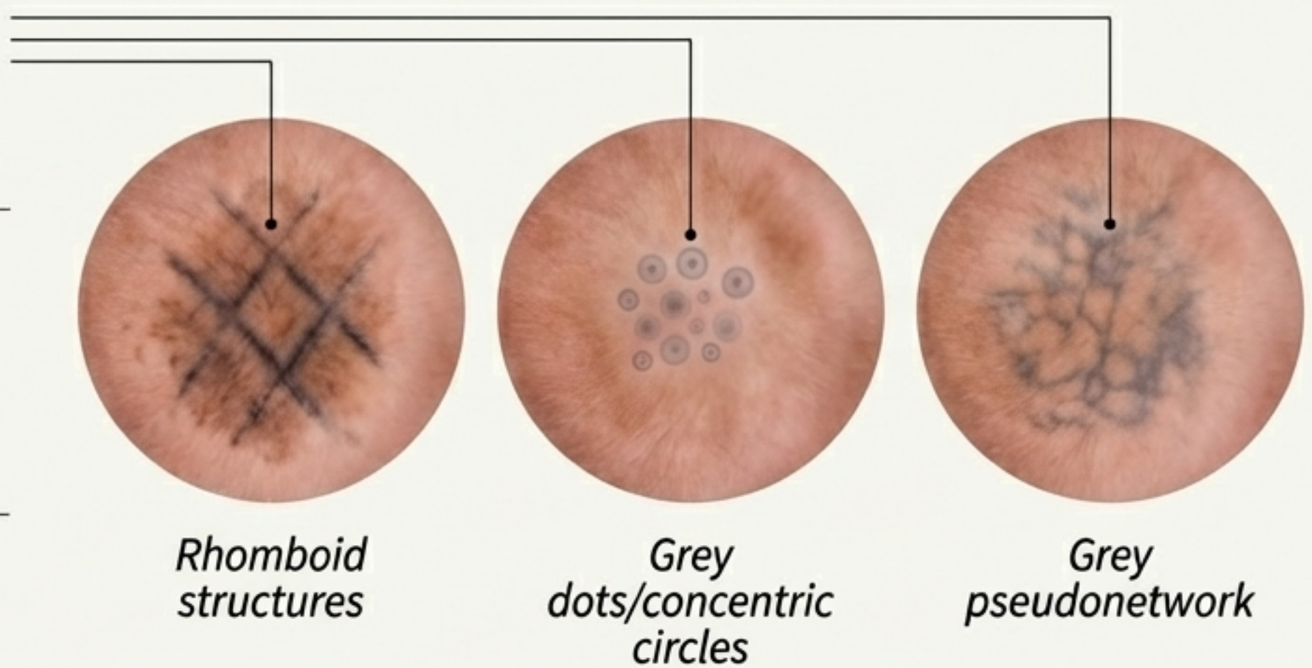
**The Lesion:**
An asymmetrical, variably pigmented patch measuring 50 mm x 45 mm.

# Navigating a Difficult Diagnosis: Delineating the True Extent

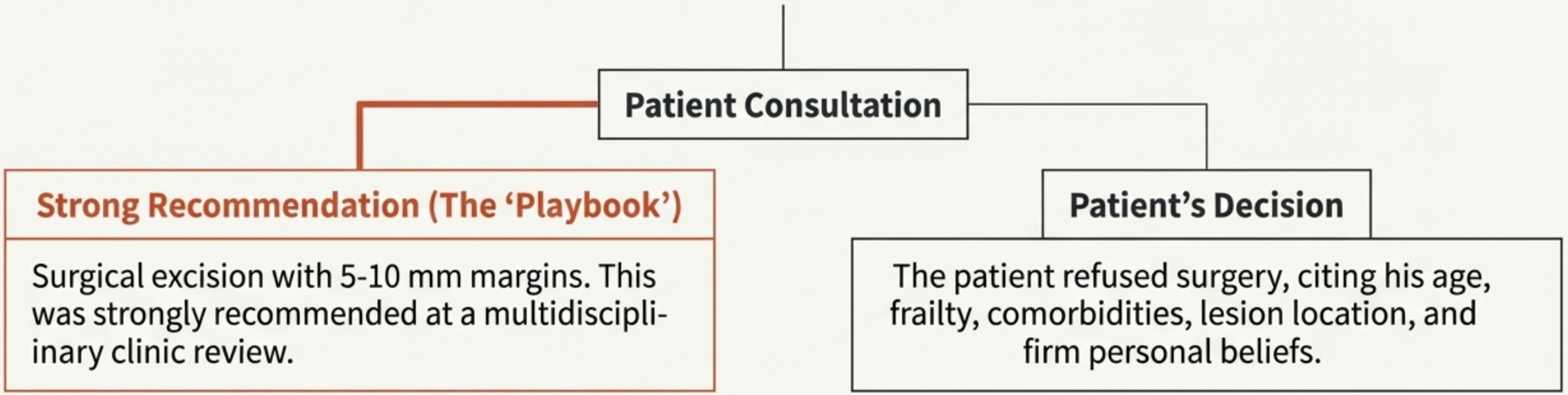
1. **Dermoscopy:** Revealed key features including rhomboid structures, grey pseudonetwork, and grey dots/concentric circles.

2. **Incisional Biopsy:** Due to the lesion's size and location, a central incisional biopsy was performed, confirming lentigo maligna (in situ melanoma).

3. **Mapping Biopsies:** Four 2mm circumferential punch biopsies were taken to determine the subclinical extent of the lesion.



# The Crossroads of Care: When a Patient Declines First-Line Treatment




## The Clinician's Role in this Scenario

- When a patient declines optimal treatment, their reasons must be thoroughly and sensitively examined.
- Ensure all questions are addressed, a support person is present, and comprehensive documentation of the discussion and patient consent is crucial.

# Outcome: A Non-Surgical Pathway to Clearance

## BEFORE

### The Treatment Journey

1. **Trial of Topical Imiquimod**
   Undertaken for 12 weeks but resulted in a poor clinical response with extensive residual disease.

2. **Pivoted to Radiation Therapy**
   A 6-week course was prescribed and well-tolerated, with only mild, short-term side effects.

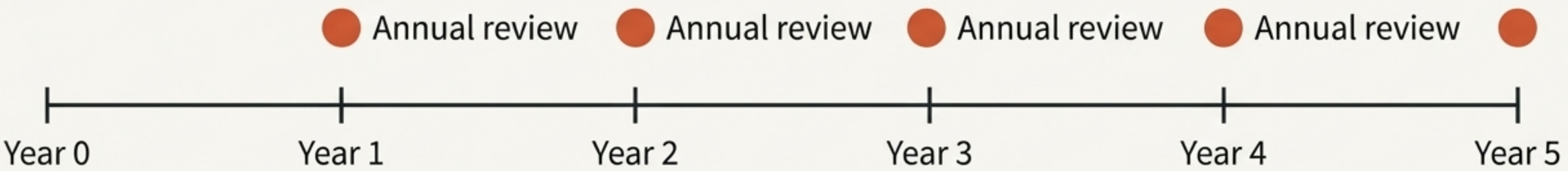
3. **Complete Clearance**
   Achieved 12 weeks after treatment completion. The patient remains free of local or systemic recurrence at 3-year follow-up.

## AFTER

# Post-Treatment Follow-Up: Vigilance is Risk-Stratified

The purpose of follow up is to detect melanoma recurrences
AND new primary melanomas.

**Low-Risk Patients (e.g., a thin melanoma, ≤1 mm)**




**High-Risk Patients (e.g., a thick melanoma, >4 mm, or ulcerated)**

Review every 4–6 months for the first 2–3 years. Less frequently thereafter.

*The risk of recurrence is greatest in the first 2–3 years for high-risk patients.*

# Key Practice Points for Melanoma Management

- ✓ Start with an excisional biopsy (2 mm margins) for diagnosis whenever possible.
- ✓ Base wide excision margins on the histologically confirmed Breslow thickness.
- ✓ Discuss SLNB for melanomas >1 mm to gain powerful prognostic data.
- ✓ Reserve staging scans for patients with clinical evidence of metastasis; they are not indicated for early-stage disease.
- ✓ Surgical excision is first-line, but alternatives like radiation therapy are effective options when surgery is declined or contraindicated.
- ✓ Patient-centered communication and documented shared decision-making are paramount, especially in complex cases.

# Resources for Your Practice

## AJCC Melanoma Prognosis Calculator

A free, web-based tool derived from a large patient dataset to predict 5 and 10-year survival outcomes.

Web Address: www.melanomaprognosis.org

## Melanoma Staging Calculator App

A free prognostic calculator available as an iPhone app for quick reference.

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**Source Articles**

- RACGP: Melanoma - A management guide for GPs
- RACGP: Treatment options for a large facial lentigo maligna

# Thank You.