# **INFORMATION REQUIRED** Any history

# Applicants With Lesions < 1 mm thick (thin lesion or low risk primary):

- . Specialist Evaluation (Dermatologist, General Surgeon) within the past 6 months to include the following
  - Date of diagnosis(s).
  - Description of lesion(s) to include size, location, and tumor stage.
  - Treatment
  - History of recurrence(s), same site or other site.
  - Statement of prognosis from treating physician.
  - Recommendations for follow-up over the next 3 years.
- Copy of pathology report(s) with interpretation.

# Applicants With Lesions 1 - 2 mm thick (intermediate risk):

- Specialist Evaluation (Dermatologist, Oncologist, General Surgeon) within the past 6 months to include the above information.
- · Copy of sentinel node biopsy report.

# Applicants With Lesion > than 2 mm thick:

- Specialist Evaluation (Oncologist) within the past 6 months to include the above information.
- Copy of sentinal node biopsy report.
- · Copy of metastatic work-up.

# If Applicable:

Discharge summary for all related hospitalizations.

CLEARANCE CRITERIA	REVIEWER	GUIDANCE
<ol> <li>No history of recurrence; same site or other site.</li> <li>No history of metastatic disease.</li> <li>Treatment complete.</li> </ol>		
Meets clearance criteria 1 - 3, AND  Tumor stage T0 (Intraepithelial/in-situ melanoma), AND  Occurrence greater than 2 years ago.	RN	CLEAR
	PCMO FOLLOW-UP Skin examination every 6-12 months.	
Meets clearance criteria 1 - 3, AND  Lesion < 1 mm deep (thin lesion or low-risk primary lesion), AND  Occurrence greater than 3 years ago.	RN	CLEAR
	PCMO FOLLOW-UP  After diagnosis, skin examination q3 months for 2 years, q 6 months until 5 years, and then annually thereafter.	
Meets clearance criteria 1 - 3, AND  Lesion 1-2 mm deep (intermediate risk), AND  Sentinel node biopsy negative, AND  Occurrence greater than 3 years ago.	RN	DEFER
	PCMO FOLLOW-UP  After diagnosis, skin examination q3 months for 2 years, q 6 months until 5 years, and then annually thereafter.	

(continued on next page)

Does not meet clearance criteria due to one or more of the following:  Lesion < 1 mm deep (thin lesion or low-risk primary lesion), AND occurrence less than 3 years ago.	RN	DEFER Until deferral period complete and/or treatment complete.	
Lesion 1-2 mm deep (intermediate risk), AND sentinel node biopsy negative,     AND occurrence less than 3 years ago			
Lesion 1-2 mm deep (intermediate risk lesion), AND sentinel node biopsy positive, AND occurrence less than 5 years ago.		A Reserved	
<ul> <li>Lesion &gt; 2mm deep (thick lesion), AND sentinel node biopsy negative, AND occurrence less than 5 years ago.</li> </ul>			
Treatment not complete.			
Does not meet clearance criteria due to one or more of the following:  Lesion 1-2 mm deep (intermediate risk lesion), AND	MED ADVISOR		
<ul> <li>Sentinel node biopsy positive, AND</li> <li>Occurrence greater than 5 years ago.</li> </ul>		Risk varies - assess based on detailed history.	
Coccurrence greater triains years ago.		Consider CLEAR WITH RESTRICTION;	
		Oncologist available in country	
Does not meet clearance criteria due to one or more of the following:  Lesion > 2mm deep (thick lesion), AND	MED ADVISOR		
<ul> <li>Sentinel node biopsy negative, AND</li> <li>Occurrence greater than 5 years ago.</li> </ul>		Risk varies - assess based on detailed history.	
		Consider CLEAR WITH	
		RESTRICTION;	
		Oncologist available in country.	
Does not meet clearance criteria due to one or more of the following:	MED ADVISOR	DEFER/MNQ	
Lesion > 2mm deep (thick lesion), AND sentinel node biopsy positive.			
<ul> <li>Lesion &gt; 4 mm deep (thick or high risk lesion).</li> <li>History of recurrence; same site or other site.</li> </ul>		Deferral/MNQ letter requires review by screening manager.	
History of metastatic disease			

# **DIAGNOSTIC CODES**

172

ICD

Cross Reference ICD.9.CM

# NOTES AND INSTRUCTIONS FOR REVIEWERS

# Reviewers to Consider:

None

# COMMENTS

Adapted from emedicine.com Malignant Melanoma. Author: Susan M Swetter, MD, Director of Pigmented Lesion and Cutaneous Melanoma Clinic, Assistant Professor, Department of Dermatology, Stanford University Medical Center/VA Palo Alto Health Care System]

Background: Melanoma is a malignancy of pigment-producing cells (melanocytes) occurring in the skin, eyes, ears, GI tract,

leptomeninges of the central nervous system (CNS), and oral and genital mucous membranes. Melanoma accounts for only 4% of all skin cancers; however, it causes the greatest number of skin cancer-related deaths worldwide. Early detection of thin cutaneous melanoma is the best means of reducing mortality.

Pathophysiology: Transformation of melanocytes to melanoma cells is understood poorly. Primary cutaneous melanoma may develop in precursor melanocytic nevi (common acquired, congenital, and atypical/dysplastic types), although more than 50% of cases are believed to arise de novo without a preexisting pigmented lesion. Melanoma is multifactorial and appears to be related to multiple risk factors including (1) fair complexion, (2) excessive childhood sun exposure and blistering childhood sunburns, (3) increased number of common acquired and dysplastic moles, (4) family history of melanoma, and (5) presence of a changing mole on the skin.

**History:** A changing mole is the most common symptom of melanoma. Variation in color and/or increase in diameter, height, or asymmetry of borders of a pigmented lesion are noted by more than 80% of patients with melanoma at the time of diagnosis. Symptoms, such as bleeding, itching, ulceration, and pain in a pigmented lesion, are less common but warrant evaluation. Information regarding the changes noted in any of the following is relevant to the patient's history. Physician and patient education regarding the warning signs of early melanoma has been achieved successfully through the use of the ABCD criteria for a changing mole, which is as follows:

- Asymmetry
- Border notching
- Color variegation with black, brown, red, or white hue
- Diameter >6 mm
- Consider lesions exhibiting these features to be potential melanomas, although severely atypical nevi may be difficult to distinguish clinically.

**Physical:** In primary cutaneous melanoma, 4 major clinical-histopathologic subtypes have been identified and include superficial spreading, nodular, lentigo maligna, and acral lentiginous melanomas.

# Superficial spreading melanoma characteristics are as follows:

- Most common subtype of melanoma, occurring in approximately 70% of patients
- · Most common on the trunk in men and women and on the legs in women.
- · Presents as a flat or slightly elevated brown lesion, with variegate pigmentation (black, blue, or pink discoloration)
- Size of >6 mm in diameter
- Irregular asymmetric borders

#### Nodular melanoma characteristics are as follows:

- Occurs in 15-30% of patients
- Most commonly seen on the legs and trunk
- Rapid growth over weeks to months
- · Presents as a dark brown-to-black papule or dome-shaped nodule, which may ulcerate and bleed with minor trauma

#### Lentigo maligna melanoma characteristics are as follows:

- Accounts for 4-15% of cutaneous melanoma
- Typically located on the head, neck, and arms (sun-damaged skin) of fair-skinned older individuals (average age 65 y) (Picture 3)
- Grows slowly over 5-20 years
- Arises in only a small percentage (estimated 5-8%) of the intraepithelial precursor lesion, lentigo maligna
- In situ precursor lesion usually large (>3 cm diameter), existing for a minimum of 10-15 years, with dermal invasion characterized by development of dark brown-to-black macular pigmentation or raised blue-black nodules

#### Acral lentiginous melanoma characteristics are as follows:

- Least common subtype of melanoma (2-8% of melanoma in white persons)
- Accounts for 29-72% of melanoma in dark-skinned individuals (African American, Asian, and Hispanic persons)
- · Occurs on the palms, soles, or beneath the nail plate (subungual variant) (Picture 2)
- Subungual melanoma presenting as diffuse nail discoloration or a longitudinal pigmented band within the nail plate
- Must be differentiated from a benign junctional melanocytic nevus of the nail bed (similar appearance)
- Pigment spread to the proximal or lateral nailfolds (Hutchinson sign, a hallmark for acral lentiginous melanoma)

# Rare melanoma variants (<2% of melanomas) include the following:

- Desmoplastic/neurotropic melanoma
- Mucosal (lentiginous) melanoma
- Malignant blue nevus
- Melanoma arising in a giant congenital nevus
- Melanoma of soft parts (clear cell sarcoma)
- Amelanotic melanoma (<2% of melanomas) characteristics are as follows:</li>
- Nonpigmented and appearing clinically as pink or flesh colored and often mimicking basal cell or squamous cell carcinoma
- Most commonly occurs in the setting of melanoma metastasis to the skin, presumably because of the inability of these poorly differentiated cancer cells to synthesize melanin pigment

Melanoma can occur on any skin or mucosal surface. Melanoma occurs most commonly on the trunk in white males and the lower legs and back in white females. In African American and Asian persons, the most common site is the plantar foot, followed by subungual, palmar, and mucosal sites. All except nodular melanoma are characterized by a radial growth phase, which may last for months to years before a dermal expansile nodule (vertical growth) occurs.

#### Lab Studies:

- The routine practice of ordering baseline and surveillance liver function tests, lactate dehydrogenase (LDH) levels, and albumin
  levels in patients with cutaneous melanoma has come under scrutiny with no evidence to support its usefulness in patients without
  signs or symptoms of disease. Likewise, studies have shown that abnormal laboratory test results are never the sole indicator of
  metastatic disease and that the majority of recurrences are diagnosed clinically.
- These tests may be ordered every 6-12 months in patients with deeper primary melanomas (tumor depth >1 mm).
- · Laboratory tests should not take the place of careful history and physical examination.

Serum S-100 protein levels may be a useful tumor marker in patients with metastatic disease.

#### naging Studies:

- Studies have confirmed that extensive radiologic studies such as CT, MRI, positron emission tomography, ultrasonography, and bone scans, have an extremely low yield in asymptomatic patients with primary cutaneous melanoma (American Joint Committee on Cancer [AJCC] stages I and II) and are not indicated.
- Baseline metastatic staging for melanoma patients with primary tumors more than 1 mm in depth may include a chest x-ray, which
  typically is repeated every 6-12 months for routine surveillance (optional in absence of symptoms of metastatic disease).

#### Procedures:

- The criterion standard for melanoma diagnosis is histopathologic examination of skin or mucosal lesions that are suggestive of cancer.
- An excisional biopsy with narrow margins is preferred to ascertain the following information:
  - Assessment of tumor depth (Breslow depth)
  - Ulceration
  - Anatomic level of invasion (Clark level)
  - Presence of mitoses
  - Regression
  - Lymphatic/vessel invasion or vascular involvement
  - Host response (tumor-infiltrating lymphocytes)
- Immunohistochemical staining for lineage (S-100, homatropine methylbromide 45) or proliferation markers (proliferating cell nuclear antigen, Ki67) may be helpful in some cases for histologic differentiation from melanoma simulators.
- Generally, 2-3 mm of normal skin surrounding the pigmented lesion should be removed to provide accurate diagnosis and histologic
  microstaging. Wider margins (>1 cm) may disrupt afferent cutaneous lymphatic flow and affect the ability to identify the sentinel
  node(s) accurately in patients eligible for this staging procedure.
  - Shave biopsies of suspected melanomas are discouraged because partial removal of the primary melanoma may not provide accurate Breslow-depth measurement, which is the most important histologic prognostic factor for cutaneous melanoma

Staging: The melanoma staging system initially developed in 1983 by the AJCC and the Union Internationale Contre le Cancer (UICC) divided melanoma into 4 stages and incorporated tumor thickness and anatomic level of invasion for stages I and II (localized cutaneous disease) with the later recommendation to follow Breslow depth over Clark level when any discordance arose. Stage III disease involved the regional lymph nodes, and stage IV disease included distant skin, subcutaneous, nodal, visceral, skeletal, or CNS metastasis.

Major revisions in the 2002 AJCC/UICC melanoma staging system were made based on a critical analysis of prior versions of the staging. The AJCC formed an international, multidisciplinary Melanoma Staging Committee and established a new clinical-pathologic database of over 17,000 patients worldwide to test the validity of the proposed staging changes. Several important modifications in the 2002 AJCC staging system include incorporation of histologic ulceration and number of lymph nodes involved (instead of size) to better stratify metastatic risk and patient prognosis. Clark level is included only in thin primary tumors (<1 mm depth, stages IA and IB) in the revised staging system because its prognostic value is minimal in thicker primary melanoma. Microscopic regional lymph node metastasis as detected by sentinel lymph node biopsy are differentiated from macroscopic nodal metastasis. Overall survival in the staging Table below is based on the worldwide AJCC data.

Table. AJCC 2002 Revised Melanoma Staging

Stage	TNM Classification	Histologic/Clinical Features	5-year Surviva Rate (%)
0	Tis N0 M0	Intraepithelial/in situ melanoma	100
IA	T1a N0 M0	≤1 mm without ulceration and level II/III	≥95
IB ;	T1b N0 M0 T2a N0 M0	≤1 mm with ulceration or level IV/V 1.01-2 mm without ulceration	89-91
IIA	T2b N0 M0 T3a N0 M0	1.01-2 mm with ulceration 2.01-4 mm without ulceration	77-79
IIB	T3b N0 M0 T4a N0 M0	2.01-4 mm with ulceration >4 mm without ulceration	63-67
IIC	T4b N0 M0	>4 mm with ulceration	45
IIIA	T1-4a N1a M0 T1-4a N2a M0	Single regional nodal micrometastasis, nonulcerated primary 2-3 microscopic positive regional nodes, nonulcerated primary	63-69
IIIB	T1-4bN1a M0 T1-4bN2a M0 T1-4a N1b M0 T1-4a N2b M0 T1-4a/b N2c M0	Single regional nodal micrometastasis, ulcerated primary 2-3 microscopic regional nodes, nonulcerated primary Single regional nodal macrometastasis, nonulcerated primary 2-3 macroscopic regional nodes, no ulceration of primary In-transit met(s)* and/or satellite lesion(s) without metastatic lymph nodes	46-53 30-50
IIIC	T1-4b N2a M0 T1-4b N2b M0 Any T N3 M0	Single macroscopic regional node, ulcerated primary 2-3 macroscopic metastatic regional nodes, ulcerated primary 4 or more metastatic nodes, matted nodes/gross extracapsular extension, or in-transit met(s)/satellite lesion(s) and metastatic nodes	24-29
V	Any T any N M1a Any T any N M1b Any T any N M1c	Distant skin, subcutaneous, or nodal mets with normal LDH levels Lung mets with normal LDH All other visceral mets with normal LDH or any distant mets with elevated LDH	7-19

<sup>\*</sup>metastasis

#### Treatment:

**Medical Care:** Patients with localized cutaneous disease have been treated with adjuvant chemotherapy, nonspecific passive immunotherapy, radiation therapy, and biologic therapy. No increase in patient survival has been reported with these adjunctive therapies. Adjuvant interferon (IFN) alfa-2b and various experimental melanoma vaccines show promise in individuals with high-risk primary cutaneous melanoma and those with regional nodal disease.

Surgical Care: Surgery is the primary mode of therapy for localized cutaneous melanoma.

#### Surgical margins for primary melanoma

- Surgical margins of 5 mm currently are recommended for melanoma in situ, and margins of 1 cm are recommended for melanomas
  up to 1 mm in depth (low-risk primaries).
- Randomized prospective studies show that 2-cm margins are appropriate for tumors in the intermediate-risk group (1-4 mm in Breslow depth), although 1-cm margins have been proposed for tumors of 1- to 2-mm thickness.
- Margins of at least 2 cm are recommended for cutaneous melanomas greater than 4 mm in thickness (high-risk primaries) to
  prevent potential local recurrence in or around the scar site. A recently published retrospective study of high-risk primary melanomas
  showed that excisional margins greater than 2 cm have no effect on local recurrence, disease-free relapse, or overall survival rates;
  therefore, a 2-cm margin is appropriate in this subgroup.

# Elective lymph node dissection

- Prophylactic lymph node dissection for primary cutaneous melanoma of intermediate thickness initially was believed to confer a
  survival advantage on patients with tumors 1-4 mm in depth. Subsequently, prospective randomized clinical trials have shown no
  survival benefit for elective lymphadenectomy for melanomas of varying thicknesses on the extremities and marginal, if any, benefit
  for nonextremity melanomas.
- 10-year follow-up data in 2 of the trials conducted by the World Health Organization (WHO) and Melanoma Intergroup now suggest a survival benefit for certain subsets of patients studied. In particular, patients in the WHO trial who had occult metastasis detected at the time of wide local excision and immediate elective node dissection had a significantly better 5-year survival rate (48%) compared to those who underwent delayed (therapeutic) lymph node dissection when lymphadenopathy became apparent clinically (27%). The differences in overall survival rates for all patients who had delayed lymph node dissection was not statistically significant compared to the immediate node dissection group.

#### Sentinel lymph node biopsy/dissection

- Lymphatic mapping and sentinel node biopsy effectively have solved the dilemma of whether to perform regional lymphadenectomy (in absence of clinically palpable nodes) in patients with thicker melanomas (≥1 mm in depth).
- Preoperative radiographic mapping (lymphoscintigraphy) and vital blue dye injection around the primary melanoma or biopsy scar (at the time of wide local excision/reexcision) is performed to identify and remove the initial draining regional node(s).
- The sentinel node is examined for the presence of micrometastasis on both routine histology and with immunohistochemistry; if present, a therapeutic completion lymph node dissection is performed.
- A negative sentinel node biopsy prevents the morbidity associated with an unnecessary lymphadenectomy, since the histology of the sentinel node is characteristic of the entire nodal basin.
- While this procedure enhances metastatic staging for patients with deeper primaries and provides a more accurate determination of
  patient prognosis, its therapeutic role has yet to be established. Note that the status of the sentinel lymph node (positive or negative
  for micrometastasis) has been shown to be the most important prognostic factor for disease recurrence and the most powerful
  predictor of survival for patients with melanoma.

#### Consultations:

- Surgical oncology
  - Sentinel node biopsy typically performed at the time of wide local excision and following preoperative lymphoscintigraphy
  - Surgical treatment of regional lymph node disease and soft tissue and/or in-transit recurrence (stage III disease)
  - Palliative surgical treatment of visceral and CNS metastasis

### Medical oncology

- Discuss adjuvant therapy with IFN-alfa or experimental melanoma vaccines.
- Discuss and initiate treatment of metastatic melanoma (stage IV) with chemotherapy or concurrent biochemotherapy, as indicated clinically.
- Nuclear medicine Preoperative lymphoscintigraphy if selective sentinel node dissection is performed

- Pathology/dermatopathology
- Accurate histologic microstaging of primary melanoma
- Evaluation of nodal tissue for micrometastasis
- Confirmation of diagnosis of disseminated disease
- Radiation oncology
  - Adjuvant treatment of regional nodal metastasis with extracapsular extension
  - Palliative treatment of distant metastatic disease, particularly bony metastasis or brain involvement

Medication: High-dose IFN alfa-2b is the only Food and Drug Administration—approved adjuvant therapy for high-risk resected melanoma, defined as deep primaries >4 mm in Breslow depth (AJCC stage IIB) and regional lymph node metastasis (stage III). Various trials of low-dose IFN have shown no benefit in disease-free relapse or overall survival rates. Similarly, multiple melanoma vaccine trials are in progress, predominantly for stage III and IV disease.

# Follow-Up Outpatient Care:

- Observe patients closely after a diagnosis of intermediate-risk and high-risk cutaneous melanoma because most metastases are diagnosed in the first 1-3 years after treatment of the primary tumor.
- Diagnosis of recurrent/metastatic disease and new primary melanoma depends on a routine evaluation schedule that varies according to the presence of the following:
  - Tumor depth (low, intermediate, or high risk)
  - Histologic ulceration
  - Lymph node status
  - Results of examination of the melanoma scar
  - Examination of regional and distant lymph node basins
  - Hepatosplenomegaly on abdominal examination
  - Mole pattern and examination of the entire cutaneous surface for new primaries

#### Follow-up of a Melanoma

[From National Guideline Clearinghouse; Guideline "Skin Cancer"]

- Patients with a melanoma are followed-up every 3 months until 2 years have passed from the diagnosis. Thereafter, follow-up is continued every 6 months for 5 years. The unit responsible for follow-up (hospital or primary care) can be decided on locally. It is important that the same doctor always sees the patient.
- If the patient has numerous naevi or the syndrome of hereditary dysplastic naevi, follow-up of a melanoma should take place in a dermatological unit. High-quality photographs facilitate follow-up. These patients should be followed-up throughout their life.
- At follow-up visits the general condition and symptoms are investigated, and the site of excision and local lymph nodes are palpated.
   Satellites of melanoma are usually felt as subcutaneous nodules, and they are visible under the skin as dark spots.
- A melanoma first metastasizes into regional lymph nodes, which should be followed-up carefully by palpation. If the clinical
  examination suggests the spread of a melanoma, a chest radiograph, blood count, liver function tests, and liver ultrasonography
  should be performed.
- If a melanoma has infiltrated the regional lymph nodes, they are removed surgically. A metastasized melanoma is treated by an oncologist. Cytostatics and interferon have been moderately effective in the treatment of metastasized melanoma.

A rational approach to melanoma follow-up in patients with primary cutaneous melanoma. Scottish Melanoma Group.

Dicker TJ, Kavanagh GM, Herd RM, Ahmad T, McLaren KM, Chetty U, Hunter JA. University Department of Dermatology, The Royal Infirmary of Edinburgh NHS Trust, UK.

From the Scottish Melanoma Group database for south-east Scotland we evaluated 5-year follow-up in patients with cutaneous malignant melanoma excised between 1979 and 1994 and devised an 'evidence-based' review protocol. Of the 1568 with stage I melanoma, 293 (19%) developed a recurrence, 32 had a second primary melanoma and 97 had an in-situ melanoma. The disease-free interval shortened progressively with increasing tumour thickness. Overall, 80% of recurrences were within the first 3 years, but a few patients (< 8%) had recurrences 5 or 10 years after the initial surgery. In-situ melanomas did not recur. Almost half (47%) the recurrences were noted first by the patient, and only 26% were detected first at a follow-up clinic. One hundred and thirty-nine patients (89%) were still under review when their recurrences were detected, and 102 (65%) had been seen within the previous 3 months. Questionnaires were completed by 120 patients: sun protection and avoidance, and mole examination were more likely after melanoma excision. We recommend 3-monthly review of patients with invasive lesions for the first 3 years. Thereafter, those with lesions >/= 1.0 mm need two

further annual reviews. Patients with in-situ lesions should be reviewed once, to confirm adequate excision (0.5 cm margins) and to give appropriate education. Surveillance beyond 5 years is only justified if there are special risk factors.

**Prognosis:** Prognosis is multifactorial and primarily depends on (1) tumor thickness, (2) presence or absence of histologic ulceration, and (3) lymph node involvement (most important).

# Cutaneous melanoma (stages I and II)

- Thin primaries (< or equal to 1 mm) are associated with a 5-year survival rate of 91-95% depending on the presence or absence of histologic ulceration and Clark level >III.
- Intermediate thickness melanoma (1.01-4 mm) is associated with a 5-year survival ranging from 63-89%, depending on ulceration and thickness (1.01-2 mm, 2.01-4 mm) of the primary tumor.
- Patients with high-risk tumors (>4 mm) have a 5-year survival rate of 67% without ulceration, compared to 45% with an ulcerated primary.
- Ulceration significantly reduces survival at each tumor stage, even when regional lymph nodes are involved.

# Stage III disease

- Regional lymph node metastasis is associated with a 5-year survival rate of 13-69%, depending on the number of nodes involved, microscopic or macroscopic (matted nodes/gross extracapsular extension) disease, and ulceration of the primary melanoma. Intransit metastasis/satellite lesions are associated with 30-50% 5-year survival, with a significantly worse prognosis in the setting of concomitant regional nodal metastasis (10-30%).
- Adjuvant IFN-alfa has shown improved disease-free and overall survival for Stage III disease, and melanoma vaccines/biologic response modifiers show promise in prolonging survival.

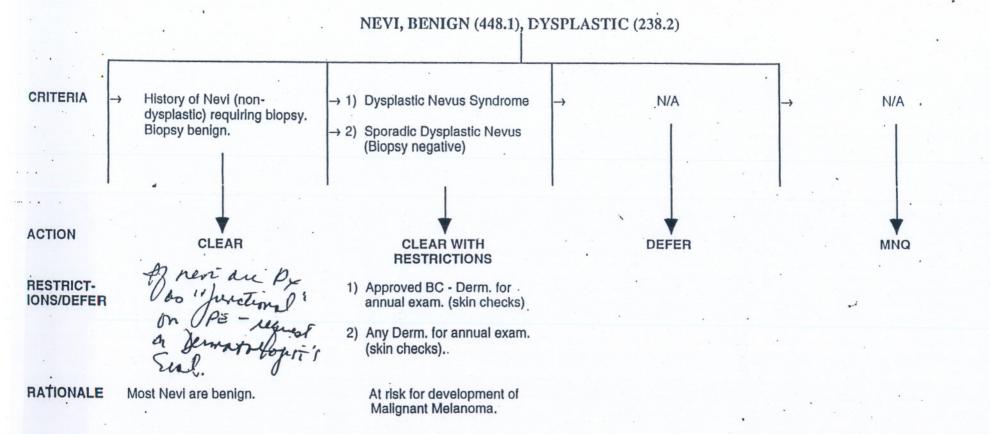
# Stage IV disease

- Prognosis for distant metastatic disease is extremely poor, with a median survival rate of only 6-9 months and 5-year survival rates
  ranging from 7-19%, depending on the site(s) of metastasis. In general, patients with soft tissue, nodal, and isolated lung metastasis
  have slightly better prognosis than those with other visceral metastasis and/or elevated lactate dehydrogenase levels. However,
  survival beyond one year occurs in only a minority of Stage IV patients.
- Systemic chemotherapy is the mainstay of treatment, despite low response rates (<20%), which tend to be of short duration.
- Biochemotherapy, employing standard chemotherapeutic agents with biologic response modifiers such as IL-2, interferon alfa, or GM-CSF has shown limited success in the management of unresectable stage IV melanoma, and is under further investigation.
   High dose IL-2 alone, or combined with histamine dihydrochloride, has also shown promise in patients with advanced disease.
- As with regional nodal disease, there are numerous trials investigating the use of melanoma vaccines (with or without biologic response modifiers) in the treatment of disseminated disease. It is hopeful that data from the many phase III trials in progress worldwide will show improvement in survival for patients with advanced melanoma.

Literature review available.

#### Reviewers:

Dr. Robert Carnathan, OMS Dermatology Consultant. 5530 Wisconsin Avenue, NW #830, Chevy Chase, MD 20851. Phone: 301-718-8616. Fax: 301-718-8758.



MEDICAL INFORMATION NEEDED: Generic Information

- Dermatologist evaluation

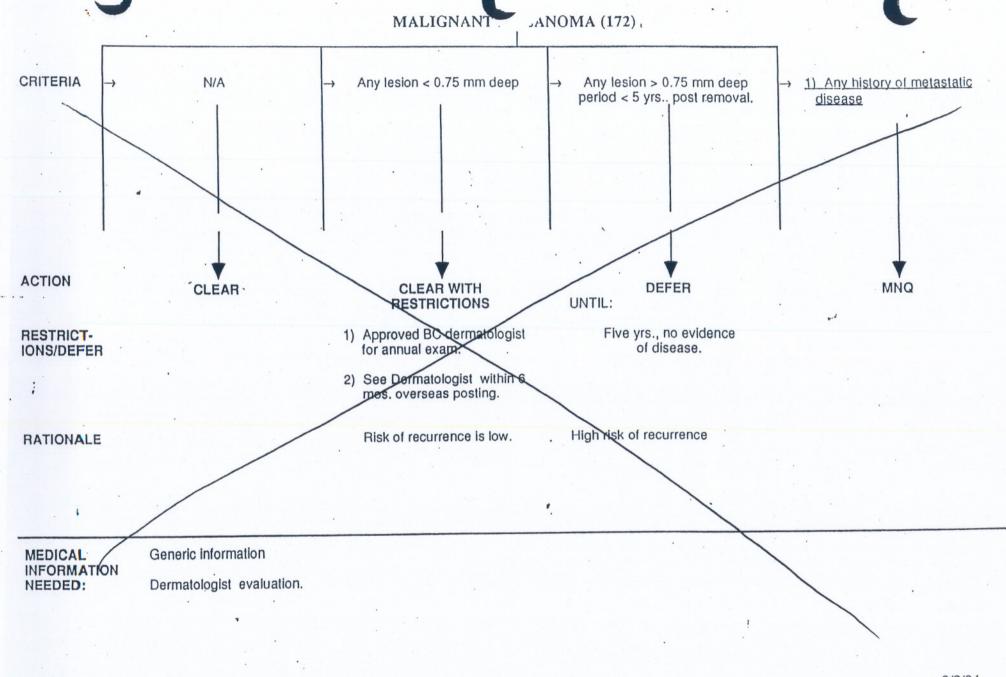
Biopsy report.

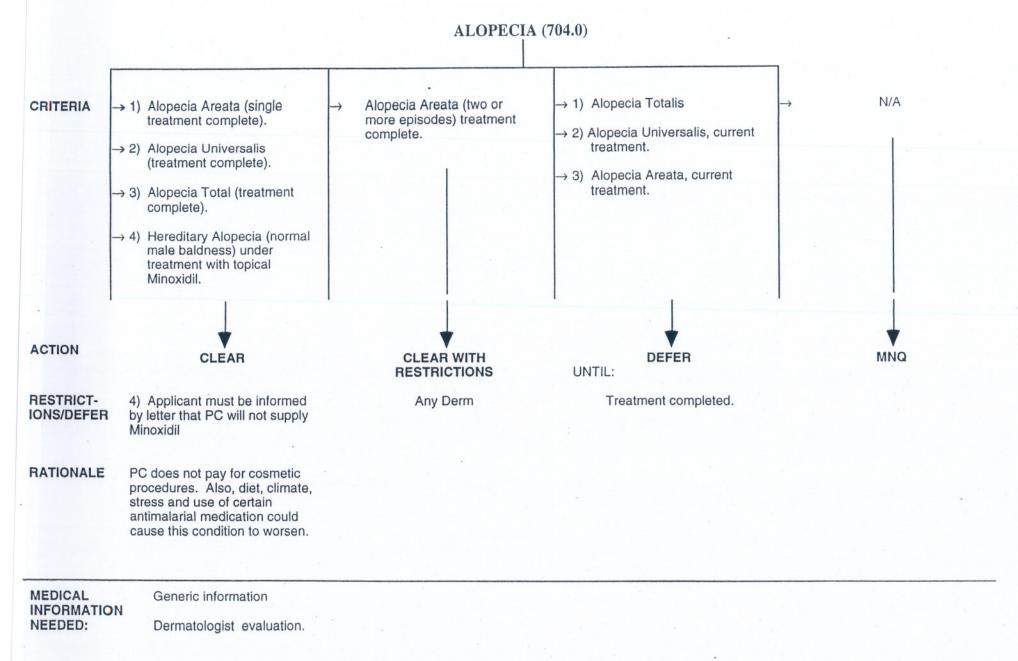
F/U needed 2-3 yrs.

Aggravating factors.

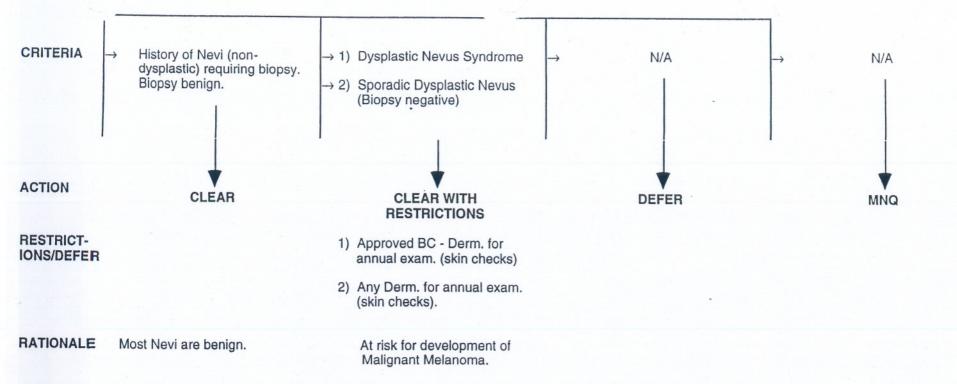
8/15/93







10/31/94



MEDICAL INFORMATION NEEDED:

Generic information

Dermatologist evaluation

Biopsy report.

F/U needed 2-3 yrs.

Aggravating factors.