

Appendix

Table A1: Melanoma TNM Classification

Table 1. TNM Staging Categories for Cutaneous Melanoma

Classification	Thickness (mm)	Ulceration Status/Mitoses
T		
Tis	NA	NA
T1	≤ 1.00	a: Without ulceration and mitosis < 1/mm ² b: With ulceration or mitoses ≥ 1/mm ²
T2	1.01-2.00	a: Without ulceration b: With ulceration
T3	2.01-4.00	a: Without ulceration b: With ulceration
T4	> 4.00	a: Without ulceration b: With ulceration
N		
	No. of Metastatic Nodes	Nodal Metastatic Burden
N0	0	NA
N1	1	a: Micrometastasis* b: Macrometastasis†
N2	2-3	a: Micrometastasis* b: Macrometastasis† c: In transit metastases/satellites without metastatic nodes
N3	4+ metastatic nodes, or matted nodes, or in transit metastases/satellites with metastatic nodes	
M		
	Site	Serum LDH
M0	No distant metastases	NA
M1a	Distant skin, subcutaneous, or nodal metastases	Normal
M1b	Lung metastases	Normal
M1c	All other visceral metastases	Normal
	Any distant metastasis	Elevated

Abbreviations: NA, not applicable; LDH, lactate dehydrogenase.

*Micrometastases are diagnosed after sentinel lymph node biopsy.

†Macrometastases are defined as clinically detectable nodal metastases confirmed pathologically.

Table A2: Clinical and pathologic staging system

Table 2. Anatomic Stage Groupings for Cutaneous Melanoma							
	Clinical Staging*				Pathologic Staging†		
	T	N	M		T	N	M
0	Tis	N0	M0	0	Tis	N0	M0
IA	T1a	N0	M0	IA	T1a	N0	M0
IB	T1b	N0	M0	IB	T1b	N0	M0
	T2a	N0	M0		T2a	N0	M0
IIA	T2b	N0	M0	IIA	T2b	N0	M0
	T3a	N0	M0		T3a	N0	M0
IIB	T3b	N0	M0	IIB	T3b	N0	M0
	T4a	N0	M0		T4a	N0	M0
IIC	T4b	N0	M0	IIC	T4b	N0	M0
III	Any T	N > N0	M0	IIIA	T1-4a	N1a	M0
					T1-4a	N2a	M0
				IIIB	T1-4b	N1a	M0
					T1-4b	N2a	M0
					T1-4a	N1b	M0
					T1-4a	N2b	M0
				IIIC	T1-4a	N2c	M0
					T1-4b	N1b	M0
					T1-4b	N2b	M0
					T1-4b	N2c	M0
				Any T	N3	M0	
IV	Any T	Any N	M1	IV	Any T	Any N	M1

*Clinical staging includes microstaging of the primary melanoma and clinical/radiologic evaluation for metastases. By convention, it should be used after complete excision of the primary melanoma with clinical assessment for regional and distant metastases.

†Pathologic staging includes microstaging of the primary melanoma and pathologic information about the regional lymph nodes after partial (ie, sentinel node biopsy) or complete lymphadenectomy. Pathologic stage 0 or stage IA patients are the exception; they do not require pathologic evaluation of their lymph nodes.

Table A3: Clarks level of invasion

Level I:	Melanomas confined to the outermost layer of the skin, the epidermis. Also called "melanoma in-situ."
Level II:	Penetration by the melanocytes into the second layer of the skin, the outermost part of the dermis, the papillary dermis
Level III:	The melanocytes has invaded the interface between papillary and reticular dermis and compresses the reticular dermis
Level IV:	Melanocytes invade deeper through the dermis, into the reticular dermis, but completely within the skin.
Level V:	Penetration of melanocytes into the fat of the skin beneath the dermis, penetration into the third layer of the skin, the subcutaneous tissue.

