

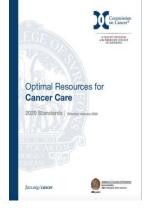
Baseline Compliance with Commission on Cancer Standard 5.5: Wide Local Excision for Primary Cutaneous Melanoma

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BACKGROUND

- The ACS Commission on Cancer (CoC)
 Cancer Surgery Standards Program (CSSP)
 was created in 2020 as a quality improvement endeavor.
- Operative Standards for Cancer Surgery have been published for melanoma¹.
- The CoC Standard 5.5 for melanoma focuses on curative intent wide local excision (WLE) of primary cutaneous melanoma and outlines²:



- 1. All WLEs with curative intent must:
 - Achieve standardized excision margins
 → based on Breslow depth
 - Include the proper depth of excision →
 - In situ disease: skin + superficial subcutaneous fat
 - Invasive melanoma: skin + subcutaneous tissue down to fascia
- 2. All operative reports include the **required minimum elements in synoptic format**:
 - Curative intent
 - Depth of original lesion
 - Clinical margin used to excise
 - Confirmation of depth of dissection

OBJECTIVE

Evaluate baseline compliance with the CoC Standard 5.5

METHODS

- National Cancer Database data from 2004 to 2020 was used to identify all Tis-T4, M0 melanoma patients undergoing operation on the primary melanoma
- Margin width was classified from the STORE codes as:
 - Gross excision (GE)
 - >1cm margin
 - >1cm to 2cm
 - >2cm
- Based on T category, margin compliance with **Standard 5.5** was defined as follows:
 - Tis: GE and Mohs surgery
 - T1: GE, Mohs surgery, and WLE with >1cm margin
 - T2-T4: GE, Mohs surgery, WLE both with >1cm margins and WLE with margins >1cm to 2cm
 - Residual disease at a margin was considered undertreatment and non-compliant

RESULTS

TABLE 1: Excision technique for primary melanoma lesion based on T category

Clinical T Category	Total N=398,583 (%)	Gross Excision N=165,138 (%)	Any Mohs Surgery N=25,756 (%)	>1cm margin N=136,745 (%)	>1cm to 2cm margin N=48,164 (%)	>2cm margin N=22,780 (%)
cTis	111,952 (28)	52,538 (47)	16,610 (15)	34,518 (31)	4,689 (4)	3,597 (3)
cT1	163,676 (41)	73,622 (45)	7,251 (4)	60,090 (37)	15,049 (9)	7,664 (5)
cT2	64,997 (16)	22,215 (34)	1,067 (2)	22,357 (34)	14,197 (22)	5,161 (8)
сТ3	35,751 (9)	10,687 (30)	509 (1)	11,968 (34)	8,953 (25)	3,634 (10)
cT4	22,207 (6)	6,076 (27)	319 (1)	7,812 (35)	5,276 (24)	2,724 (12)

TABLE 2: Excision technique, compliance, and anatomic site by T category

	cTis	cT1	cT2	cT3	cT4	Total
	N=111,952	N=163,676	N=64,997	N=35,751	N=22,207	N=398,583
Excision type (%)						
Gross excision	52,538 (47)	73,622 (45)	22,215 (34)	10,687 (30)	6,076 (27)	165,138 (41)
Any Mohs Surgery	16,610 (15)	7,251 (4)	1,067 (2)	509 (1)	319 (1)	25,756 (7)
>1cm margin	34,518 (31)	60,090 (37)	22,357 (34)	11,968 (34)	7,812 (35)	136,745 (34)
>1cm to 2cm margin	4,689 (4)	15,049 (9)	14,197 (22)	8,953 (25)	5,276 (24)	48,164 (12)
>2cm margin	3,597 (3)	7,664 (5)	5,161 (8)	3,634 (10)	2,724 (12)	22,780 (6)
Compliance (%)						
Compliant	67,822 (61)	138,762 (85)	58,555 (90)	31,273 (88)	18,563 (84)	314,975 (79)
Under treated	1,978 (2)	2,495 (2)	1,358 (2)	923 (3)	1,016 (5)	7,770 (2)
Over treated	42,152 (38)	22,419 (14)	5,084 (8)	3,555 (10)	2,628 (12)	75,838 (19)
Anatomic Site (%)						
Head and Neck	45,521 (41)	32,945 (20)	14,054 (22)	8,364 (23)	5,525 (25)	106,409 (27)
Trunk	25,839 (23)	55,672 (34)	19,967 (31)	10,948 (31)	7,367 (33)	119,793 (30)
Extremity	40,064 (36)	74,366 (45)	30,650 (47)	16,256 (46)	9,153 (41)	170,489 (43)
Overlapping lesion	122 (0.1)	134 (0.1)	60 (0.1)	32 (0.1)	23 (0.1)	371 (0.1)
Skin NOS	406 (0.4)	559 (0.3)	266 (0.4)	151 (0.4)	139 (0.6)	1,521 (0.4)

- 46% Tis-T1 underwent gross excision,
- >1cm margin was used in 34-35% T2-T4 melanomas.
- Overall compliance was 79%:
 - 2% undertreated
 - 19% overtreated
- 88% of T3 and 84% of T4 melanoma excisions were compliant.
- Tis and T1 melanomas, 38% and 14% of cases had margin widths greater than recommended.

CONCLUSIONS

- Estimated compliance for radial margin component of Standard 5.5 was 79% but cannot be accurately determined from current STORE codes
- An update of NCDB STORE codes to capture guideline-aligned, surgeonspecified in vivo WLE radial margins and WLE depth would permit auditing and QI measures to accurately assess and monitor CoC-accredited institutional compliance with Standard 5.5 to improve patient outcomes

REFERENCES

¹American College of Surgeons Clinical Research P, Matthew K. Operative Standards for Cancer Surgery: Volume II: Esophagus, Melanoma, Rectum, Stomach, Thyroid. Philadelphia: Wolters Kluwer Health; 2019.

²Lillemoe HA, Williams JK, Teshome MK, Zheng L, Francescatti AB, Hieken TJ, et al. Setting the Standard for Cutaneous Melanoma Wide Local Excision: An Overview of the American College of Surgeons Commission on Cancer Standard 5.5. J Am Coll Surg. 2023.