Racial and Ethnic Disparities in Access to Dermatologic Services Within the Pediatric Oncology Population

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Scholarly Report Title: Racial and Ethnic Disparities in Access to Dermatologic Services Within the Pediatric Oncology Population

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Abstract

TITLE: Racial and Ethnic Disparities in Access to Dermatologic Services Within the Pediatric Oncology Population

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Purpose: Access to dermatologic care is often inadequate for racial and ethnic minorities. Limited data is available on whether these disparities exist amongst oncology patients. To investigate the racial and ethnic distribution of pediatric oncology patients seen by outpatient dermatology and examine differences in referral patterns and dermatologic diagnoses by race and ethnicity.

Methods: A single-center retrospective chart review of pediatric oncology patients with at least one outpatient dermatology visit over an 8-year period. Descriptive and comparative statistical analysis between racial and ethnic groups was performed.

Results: In comparison to minorities, a significantly greater proportion of non-Hispanic White patients had an outpatient dermatology visit (7.8% [362/4635] vs. 6.0% [103/1730], p = 0.0109), documentation of oncology's intention to refer to dermatology (66% [187/281] vs. 50% [44/88],60 p = 0.0078) and visits for skin cancer surveillance (50.8% [184/362] vs. 36.9% [38/103], p = 61 0.0139). There was no difference in frequency of dermatologic diagnoses, including skin cancer.

Conclusions: There are racial and ethnic disparities in the use of outpatient dermatology services by pediatric oncology patients, suggesting a need for improvement in access to care.

Table of Contents

Glossary of Abbreviations

Dana Farber Cancer Institute (DFCI)

Office of Management and Budgets (OMB)

Scholarly Project Question: How does the proportion of pediatric oncology patients seen by outpatient dermatology differ by race and ethnicity? How do referral patterns differ by race and ethnicity?

Contribution: I was responsible for study design and data collection using an existing database of pediatric oncology patients. I extracted new information on race and ethnicity of all pediatric oncology patients' seen at Boston Children's Hospital between 2008 and 2015. This was a single center retrospective study in which the sex, race and ethnicity of patients seen at the DFCI between 2008 and 2015 were reviewed. Patients who had an outpatient dermatology visit at Boston Children's Hospital within this time period were identified and their medical records were further reviewed for clinical information from up to 4 visits for separate dermatologic issues during the study period. During the month, outside reading primarily consisted of peer-reviewed articles related to racial and ethnic health disparities in dermatology and current standards of race and ethnicity data collection. This preliminary reading was crucial to study design.

I was responsible for preparation of the initial manuscript figures, tables and verifying the validity of demographic data. Given the nature of the project, developing a strong methodology for racial and ethnic classification of patients was integral to ensure accurate results. This task was complicated by the need to collate the racial and ethnic data from two differing electronic medical record systems; both of which did not follow the current U.S census guidelines for collection and reporting of racial and ethnic data. During the month, outside reading consisted of peer-reviewed articles related to the cutaneous effects of oncologic therapies in the pediatric population.

I was responsible for conducting descriptive and comparative statistical analysis. During the month, outside reading primarily consisted of review articles and instructional literature relating to statistical analysis. I performed all statistical analysis with the guidance of a BCH statistician. In addition to completing statistical analysis, the first draft of the results and methods sections for the final manuscript were prepared. Our study found that racial and ethnic disparities existed in access to dermatologic care amongst pediatric oncology patients. In our cohort, minority patients were less likely to have had an outpatient dermatology visit and documentation of intention to refer to dermatology. Minority patients were also less likely to be seen by dermatology for skin cancer.

I was responsible for preparing a full draft of the study findings in an initial manuscript draft for journal submission. The draft went through multiple rounds of revisions and I prepared first draft of a research poster for presentation at 2019 American Academy of Dermatology Meeting. In response to our study's findings, a proposed solution to ensure adequate access to dermatologic care for all patients was to design a mobile cart to be used in oncology waiting rooms to distribute sun protection supplies, pamphlets and educational activities. During the month, outside reading consisted of peer-reviewed articles relating to the current recommendations for screening of pediatric oncology patients who have been exposed to oncologic therapy.

Link to Citation: N/A

Appendix

Introduction

Access to dermatologic care is often inadequate for minorities. According to the 2010 US National Healthcare Disparities Report, African-Americans comprised 4406 dermatology visits per 100,000 persons annually and Hispanics comprised 3472 visits per 100,000.[1] These reported values were significantly fewer when compared to 13,110 visits per 100,000 persons for Caucasian patients.[1] This report supports prior research demonstrating that Caucasian patients are more likely to access dermatologic care for total body skin examinations, which may explain why minority populations are more likely to present with advanced skin disease.[2]

While prior studies have reported ethnic and racial disparities in dermatologic care, minimal research is available on whether these disparities exist within the oncology population, which has a high burden of dermatologic disease associated with cancer treatment.[3] Our group recently performed a retrospective study of pediatric oncology patients with outpatient dermatology visits and demonstrated that dermatologists can improve diagnostic accuracy and allow for timely intervention of skin disease in this population.[4]

The primary objective of this study was to compare the racial and ethnic distribution of pediatric oncology patients seen by dermatology during an eight-year period. We also examined racial and ethnic group differences in referral patterns and dermatologic diagnoses.

Methods

This single center retrospective study was approved by the Boston Children's Hospital Institutional Review Board (P00016307). The sex, race and ethnicity of all patients seen in the Department of Pediatric Oncology at the Dana Farber Cancer Institute (DFCI) between January 1, 2008 and December 31, 2015 were reviewed. Patients who had an outpatient dermatology visit at Boston Children's Hospital within this time period were identified and their medical records were further reviewed for clinical information from up to 4 visits for separate

dermatologic issues during the study period. Data collected included whether they were referred by oncology, reason for outpatient visit, dermatologic diagnosis, and whether a skin biopsy was performed. Documented reasons for an outpatient dermatology visit were categorized as 1) baseline screenings prior to starting oncologic treatment 2) skin cancer surveillance 3) active skin complaints during treatment and 4) active skin complaints after treatment. If available, records were also reviewed for oncology's preliminary assessment and intention to refer to dermatology. Inclusion criteria included an oncologic diagnosis and/or diagnosis requiring hematopoietic stem cell transplantation and at least one dermatology visit between 2008 and 2015. Exclusion criteria included the absence of a dermatology visit after an oncologic diagnosis had been made and invalid or contradictory responses to race and ethnicity fields.

Study Definitions

Race and ethnicity were defined according to the current standards set by the United States Office of Management and Budgets (OMB's).[5] There are five major racial groups (White, Black, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander) and two ethnic groups (non-Hispanic and Hispanic). Race and ethnicity were combined to create the following categories: non-Hispanic White, non-Hispanic Black, non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, Non-Hispanic Native Hawaiian or Other Pacific Islander and Hispanic.[5] For this study, non-Hispanic White patients were compared to a minority group composed of patients who identified as Hispanic, non-Hispanic Black and non-Hispanic Asian. Non-Hispanic American Indian or Alaska Native and non-Hispanic Native Hawaiian or Other Pacific Islander were not included in the minority group due to an insufficient number of patients. Due to discrepancies between the current OMB standards and the electronic medical records, non-Hispanic patients who did not specify or provided other responses for their race were excluded. Patients who indicated Hispanic ethnicity but did not specify a race were included and categorized as "Hispanic". Patients were able to provide specific responses to the ethnicity field as opposed to declaring Hispanic or non-Hispanic. The following responses were included as that of Hispanic ethnicity: Argentinean, Bolivian, Canarian, Caribbean Islander, Catalonian, Central American, Colombian, Costa Rican, Cuban, Dominican, Dominican (Republic), Ecuadorian, Guatemalan, Hispanic or Latino, Honduran, Latin American, Mexican, Mexican American, Panamanian, Puerto Rican, Salvadoran, South American, Spaniard, Spanish Basque, Uruguayan and Venezuelan.[6]

Data Analysis

Descriptive statistical analysis was performed using categorical data provided as percentages. Statistical analysis was performed using GraphPad software (GraphPad, La Jolla, CA). Comparative statistical analysis was performed using a two-tailed Fisher's exact test to compare proportions between racial and ethnic groups. Mann-Whitney *U* test was used to compare median time from oncologic diagnosis to initial dermatology visit (months) and median wait time from oncology referral to first outpatient dermatology visit (days). Chi-square analysis was used to compare differences in proportions of oncologic treatment, reason for consultation and dermatologic diagnosis.

Results

Of the 9862 unique pediatric oncology patients seen at DFCI between January 1, 2008 and December 31, 2015, 6365 responses to race and ethnicity fields met the criteria for inclusion in the study. 3497 patients were excluded for the following reasons: 2813 patients did not indicate ethnicity, 7 patients provided inconsistent responses between DFCI and BCH medical records and 663 patients who indicated non-Hispanic ethnicity indicated their race as "Other" , "Unknown", "Unable to Respond" or they declined to answer. 13 non-Hispanic American Indian and 1 non-Hispanic Native Hawaiian were seen at the DFCI; however, none of these patients were seen by dermatology and therefore were not included in the minority group.

Outpatient visits by race and ethnicity

7.3% (465/6365) of these patients had an outpatient dermatology visit. The proportions of non-Hispanic White, non-Hispanic Asian and non-Hispanic Black pediatric oncology patients seen by dermatology were 7.8% (362/4635), 6.2% (16/259) and 4.0% (22/547) respectively. The proportions of Hispanic and non-Hispanic patients seen were 7.0% (65/924) and 7.4% (400/5441) respectively. Overall, 6.1% (281/4635) of non-Hispanic White and 5.1% (88/1730) of minority patients had their first outpatient dermatology visit during the study period. The proportion of patients with an outpatient dermatology visit during the study period is presented by race and ethnicity in Table 1. There was a significantly greater proportion of non-Hispanic White patients with an outpatient dermatology visit in comparison to all minority patients (7.8% [362/4635] vs. 6.0% [103/1730], $p = 0.0109$). There was also a significantly greater proportion of non-Hispanic White than non-Hispanic Black patients seen (7.8% [362/4635] vs. 4.0% [22/547], $p = 0.0010$). There was no significant difference in proportion of non-Hispanic White (7.8%

[362/4635]) vs. non-Hispanic Asian (6.2% [16/259], $p = 0.4023$) or Hispanic (7.0%, [65/924], $p = 0.4569$) patients seen, nor was there a significant difference between proportion of Hispanic and non-Hispanic patients seen (7.0% [65/924] vs. 7.4% [400/5441], $p = 0.7846$).

Baseline Characteristics

Baseline characteristics of 465 patients with outpatient dermatology visits are presented in Table 2. There was no significant difference in the distance from documented residence to the hospital between non-Hispanic White patients and minorities, White patients to minority subgroups, or Hispanic and non-Hispanics. A significantly smaller proportion of minority patients compared to non-Hispanic White patients and Hispanic patients compared to non-Hispanic patients were seen by oncology for malignant conditions (78.6 % [81/103] vs. 90.6% [328/362], $p = 0.0018$ and 72.3 % [47/65] vs. 90.5% [362/400], $p = 0.0001$, respectively). However, there was no significant difference between these groups in terms of exposure to various oncologic treatments ($\chi^2 = 5.56$, df = 5, $p = 0.3514$ and $\chi^2 = 10.06$, df = 5, $p = 0.0735$, respectively).

Dermatologic Characteristics

Detailed information about our cohort's outpatient dermatology visits are presented in Table 3. The median time from oncologic diagnosis to first dermatology visit was 28.5 months for non-Hispanic White patients and 27.8 months for minorities; this difference was non-significant (Mann-Whitney $U = 11839$, $p = 0.5485$). In comparison to minorities, there was a significantly higher proportion of non-Hispanic White patients with documentation of the oncology team's intention to refer the patient for their first outpatient dermatology visit (66% [187/281] vs. 50% [44/88], $p = 0.0078$). There was a significantly higher proportion of non-Hispanic White patients compared to minorities whose reason for outpatient dermatology visit was skin cancer surveillance (50.8% [184/362] vs. 36.9% [38/103], $p = 0.0139$). There was no significant difference in the proportions of patients diagnosed between the nine disease categories presented in Table 3 ($\chi^2 = 11.84$, df = 8, $p = 0.1585$). Two and a half percent (9/362) of White patients received a diagnosis of skin cancer whereas there were no diagnoses (0/103) amongst minority patients; however, this difference was not significant ($p = 0.2173$). Skin cancer diagnoses in White patients included basal cell carcinoma (n = 4), squamous cell carcinoma (n = 4), and melanoma (n = 1). There were no significant differences across racial and ethnic groups in the frequency of change in dermatologic diagnosis after seeing a dermatologist or in the number of biopsies performed.

Discussion

Our study found that racial and ethnic disparities exist in access to dermatologic care amongst pediatric oncology patients. In our cohort, minority patients were less likely to have had an outpatient dermatology visit and documentation by oncology of intention to refer to dermatology. Minority patients were also less likely to be seen by dermatology for skin cancer surveillance.

Disparities in dermatologic care for racial and ethnic minorities may be attributed to real or perceived differences in health insurance coverage, geographic barriers, or risk for skin disease. A lack of private insurance has been shown to be associated with reduced access to dermatologic care.[7-10] Compared to patients with private insurance, uninsured and Medicaid patients are less likely to have an annual dermatology visit and to have a skin-related diagnosis made by a dermatologist.[7] According to the 2016 U.S Census, the Black and Hispanic population are more likely to be uninsured. 16% of Hispanics and 11% of Blacks were uninsured in comparison to 6% of non-Hispanic Whites.[11] However, insurance coverage may not account for all findings given that racial disparities in dermatology have been found in equally insured patient populations.[12] Geographic restrictions might also limit access to dermatologic care; however, it is an unlikely explanation for this study's findings given that there was not a significant difference in distance from documented residence to Boston Children's Hospital between non-Hispanic White and minority patients. The majority of patients in both groups lived within 100 miles of the hospital.

Differences in the number of outpatient visits and skin cancer surveillance appointments could be explained by the assumption that minority patients have a lower risk for skin cancer than non-Hispanic White patients. There is a difference in baseline risk for skin cancer between racial and ethnic groups; non-Hispanic White patients have a higher risk of developing skin cancers like melanoma.[11] The incidence of melanoma in non-Hispanic Whites is 26 in 100,000 compared to 4 in 100,000 in Hispanics and 1 in 100,000 in African Americans.[11] However, in this patient population with similar rates of exposure to hematopoietic stem cell transplant, chemotherapy and radiation, all patients regardless of race and ethnicity would benefit from outpatient dermatology visits and long-term skin cancer surveillance because of their increased risk for cutaneous reactions, complications and secondary neoplasms (Figure 1A & 1B).[13] In addition, the incidence of skin cancer is increasing amongst racial and ethnic minorities, for instance the growing rate of melanoma amongst the Hispanic population.[14] Despite rising cancer

rates, sun-protective behaviors in youth are inadequate, especially amongst racial and ethnic minorities.[15] Non-Hispanic Black and Hispanic children are less likely to adhere to sun protective behaviors than their non-Hispanic White peers.[15] Although sun safety counseling and pamphlets can be beneficial in encouraging sun protective behaviors, a quarter of pediatricians do not offer counseling.[16] Even amongst high risk populations such as pediatric cancer survivors, prior studies have shown that as few as 18% of patients receive appropriate counseling on risk reduction and future screening.[17]

A unified collaborative approach is necessary for improving dermatology access for minority pediatric oncology patients. The current Children's Oncology Group guidelines for secondary neoplasm surveillance recommends monthly self-skin examinations for all pediatric cancer survivors and annual exam skins by a health care provider for those with chronic GVHD or radiation therapy exposure.[18] These guidelines may not be sufficient because up to 40% of patients will not seek medical attention for skin complaints.[19] Furthermore, when skin complaints do arise, Black and Hispanic patients are more likely to see a primary care or emergency department physician for diagnosis than a dermatologist.[19, 20] Approaches to ensure adequate access to dermatologic care for all patients include encouraging familiarity with the current screening recommendations amongst patients and providers, as well as an assessment of local resources that address sun safety education and access to dermatology for skin cancer surveillance and skin complaints.[21-24] Our study findings prompted us to develop a new approach of improving skin disease awareness through the use of a mobile cart by dermatology and oncology providers to distribute sun protection supplies, pamphlets and educational activities to patients and their families at the DFCI Jimmy Fund Clinic.

The study also highlighted the importance of standardized collection of race and ethnicity data in electronic medical records at our institutions. Neither the DFCI or BCH collected patient's race or ethnicity according to the revised OMB standards. Ensuring consistency in the racial and ethnic categories that are presented to patients when requesting demographic information allows for uniform collection and comparability. Furthermore, providing patients appropriate definitions of each racial and ethnic category reduces ambiguity in self-identification and may minimize the proportion of patients providing responses that are unable to be categorized.

Limitations of the study include its single center retrospective nature. Variation in documentation within medical records may have limited the capture of each referral from oncology. In addition,

our study did not assess insurance status. However, virtually every patient seen at our institution has health insurance and access to dermatology is readily available even for patients insured through the Massachusetts Medicaid program (MassHealth). Lastly, simplified racial and ethnicity demographic information made capturing biracial individuals not possible.

Conclusion

Our study demonstrates that there are racial and ethnic disparities in access to dermatologic care in the pediatric oncology population despite recognition of the high risk of cutaneous disease from oncologic therapies. A unified and collaborative approach including patient and provider education on the importance of skin cancer screening and the benefits of seeing a dermatologist for prevention and management of skin disease might afford patients of all ethnic and racial backgrounds equal access to dermatologic care.

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Figure legend

Figure 1. Examples of minority patients seen in outpatient dermatology clinic for skin cancer and cutaneous reactions.

Figure 1A. Squamous cell carcinoma in-situ. 20-year old non-Hispanic Black female with a history of sickle cell anemia treated with HSCT diagnosed after the study period.

Figure 1B. Graft-versus-Host-Disease. 5-year old Hispanic female with a history of hematologic malignancy treated with chemotherapy, radiation and HSCT diagnosed during the study period.

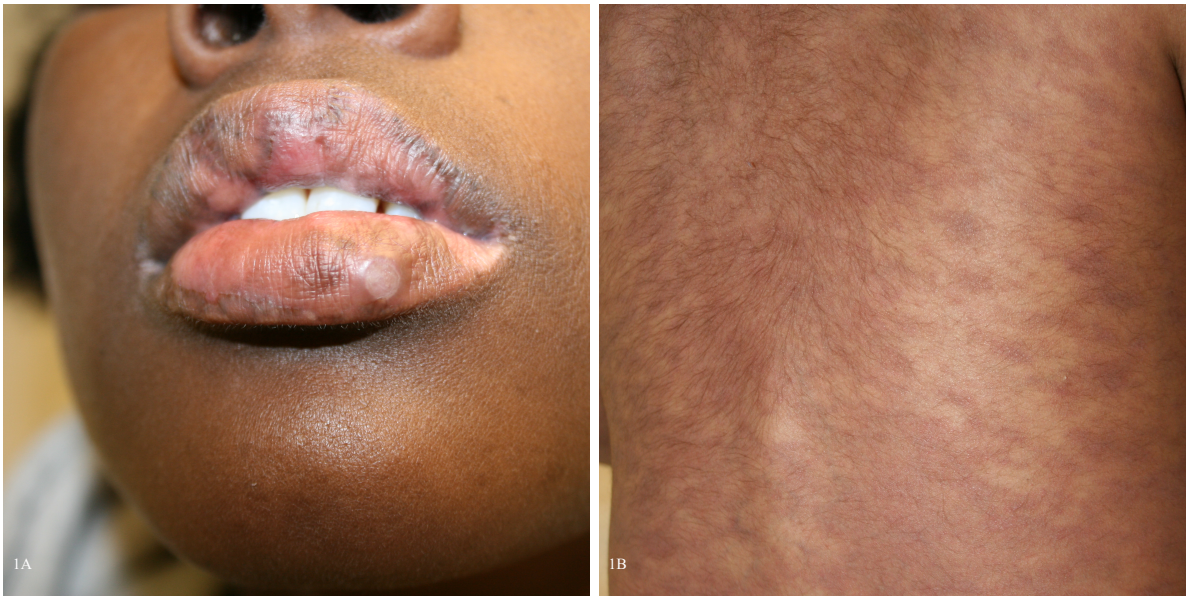

Table legend

Table I. “Outpatient Dermatology Visits by Race and Ethnicity.”

Table II. “Demographic Features of Pediatric Oncology Outpatients Seen by Dermatology by Race and Ethnicity.”

Table III. “Clinical Characteristics of Outpatient Dermatology Visits.”

Table I. Outpatient Dermatology Visits by Race and Ethnicity.

					Minority Subgroups		
	Total (%)	Non-Hispanic White (%)	Minority (%)	Non-Hispanic White vs. Minority *p*-value	Hispanic (%)	Non-Hispanic Asian (%)	Non-Hispanic Black (%)
Dermatology Visits				0.0109*			

≥ 1 outpatient visits	465/6365 (7.3)	362/4635 (7.8)	103/1730 (6.0)		65/924 (7.0)	16/259 (6.2)	22/547 (4.0)
0 outpatient visits	5900/6365 (92.7)	4273/4635 (92.2)	1627/1730 (94.0)		859/924 (93.0)	243/259 (93.8)	525/547 (96.0)

* indicates *p*-value ≤ 0.05

Table II. Demographic Features of Pediatric Oncology Outpatients Seen by Dermatology by Race and Ethnicity.

					Minority Subgroups		
	Total (%)	Non-Hispanic White (%)	Minority (%)	Non-Hispanic White vs. Minority *p*-value	Hispanic (%)	Non-Hispanic Asian (%)	Non-Hispanic Black (%)
Sex				0.4330			
Female	209/465 (44.9)	159/362 (43.9)	50/103 (48.5)		30/65 (46.2)	9/16 (56.2)	11/22 (50.0)
Male	256/465 (55.1)	203/362 (56.1)	53/103 (51.5)		35/65 (53.8)	7/16 (43.8)	11/22 (50.0)
Oncologic Diagnosis				0.0018*			
Malignant	409/465 (88.0)	328/362 (90.6)	81/103 (78.6)		47/65 (72.3)	16/16 (100)	18/22 (81.8)
Non-malignant	56/465 (12.0)	34/362 (9.4)	22/103 (21.4)		18/65 (27.7)	0/16 (0)	4/22 (18.2)

Oncologic				0.351			
Treatment				4			
Surgery Only	38/465	29/362	9/103		5/65	2/16	2/22 (9.1)
	(8.2)	(8.0)	(8.7)		(7.7)	(12.5)	
Chemotherapy	129/465	102/362	27/103		21/65	5/16	1/22 (4.5)
	(27.7)	(28.2)	(26.2)		(32.3)	(31.3)	
Radiation	8/465	8/362	0/103 (0)		0/65 (0)	0/16 (0)	0/22 (0)
	(1.7)	(2.2)					
Chemotherapy	105/465	86/362	19/103		7/65	5/16	7/22
and Radiation	(22.6)	(23.7)	(18.5)		(10.8)	(31.3)	(31.8)
HSCT†	178/465	131/362	47/103		32/65	4/16	11/22
	(38.3)	(36.2)	(45.6)		(49.2)	(25.0)	(50.0)
No Treatment	7/465	6/362	1/103		0/65 (0)	0/16 (0)	1/22 (4.5)
	(1.5)	(1.7)	(1.0)				
Distance to				0.750			
Hospital				7			
<100 miles	398/465	311/362	87/103		52/65	14/16	21/22
	(85.6)	(86.0)	(84.5)		(80.0)	(87.5)	(95.5)
>100 miles	67/465	51/362	16/103		13/65	2/16	1/22(4.5)
	(14.4)	(14.0)	(15.5)		(20.0)	(12.5)	

* indicates *p*-value ≤ 0.05

†Hematopoietic Stem Cell Transplant

Table III. Clinical Characteristics of Outpatient Dermatology Visits.

					Minority Subgroups		
	Total (%)	Non-Hispanic White (%)	Minority (%)	Non-Hispanic White vs. Minority *p*-value	Hispanic (%)	Non-Hispanic Asian (%)	Non-Hispanic Black (%)
Oncology Intent to Refer for First Dermatology Visit*				0.0078†			
Yes	231/369 (62.6)	187/281 (66.5)	44/88 (50.0)		27/55 (49.1)	8/13 (61.5)	9/20 (45.0)
No	138/369 (37.4)	94/281 (33.5)	44/88 (50.0)		28/55 (50.9)	5/13 (38.5)	11/20 (55.0)
Reason for Dermatology Consultation							
Baseline screening	27/465 (5.8)	21/362 (5.8)	6/103 (5.8)	0.9999	4/65 (6.1)	1/16 (6.3)	1/22 (4.5)
Skin cancer surveillance	222/465 (47.7)	184/362 (50.8)	38/103 (36.9)	0.0139†	24/65 (36.9)	5/16 (31.2)	9/22 (40.9)

Skin issue during treatment	87/465 (18.7)	73/362 (20.2)	14/103 (13.6)	0.1527	6/65 (9.2)	6/16 (37.5)	2/22 (9.1)
Skin issue after treatment	322/465 (69.2)	251/362 (69.3)	71/103 (68.9)	0.9999	47/65 (72.3)	7/16 (43.8)	17/22(77.3)
Dermatologic Diagnosis				0.1585			
Bacterial Infection	22/465 (4.7)	16/362 (4.4)	6/103 (5.8)		2/65 (3.1)	1/16 (6.3)	3/22 (13.6)
Viral Infection	90/465 (19.4)	72/362 (19.9)	18/103 (17.5)		12/65 (18.6)	3/16 (18.8)	3/22 (13.6)
Fungal Infection	21/465 (4.5)	17/362 (4.7)	4/103 (3.9)		2/65 (3.1)	0/16 (0)	2/22 (9.1)
Cutaneous Drug Side Effect	40/465 (8.6)	34/362 (9.4)	6/103 (5.8)		4/65 (6.2)	0/16 (0)	2/22 (9.1)
Cutaneous GVHD	27/465 (5.8)	18/362 (4.9)	9/103 (8.7)		7/65 (10.8)	1/16 (6.3)	1/22 (4.5)
Malignancy	18/465 (3.9)	15/362 (4.1)	3/103 (2.9)		1/65 (1.5)	1/16 (6.3)	1/22 (4.5)
Other Skin Eruption[‡]	197/465 (42.4)	147/362 (40.6)	50/103 (48.5)		27/65 (41.5)	9/16 (56.3)	14/22 (63.6)
Other Skin Lesion[§]	122/465 (26.2)	105/362 (29.0)	17/103 (16.5)		10/65 (15.4)	4/16 (25.0)	3/22 (13.6)
Other[‖]	78/465 (16.8)	56/362 (15.5)	22/103 (21.4)		13/65 (20.0)	3/16 (18.8)	6/22 (27.3)

[*]excludes patients whose first dermatology appointment occurred prior to the study period

[†]indicates *p*-value ≤ 0.05

[‡]including atopic dermatitis, irritant dermatitis, contact dermatitis, seborrheic dermatitis, psoriasis, acne and keratosis pilaris

[§]including acrochordon, congenital nevus, dermatofibroma, seborrheic keratosis, cysts and atypical nevi

[‖]including alopecia, nail dystrophy and/or other nail change and scars