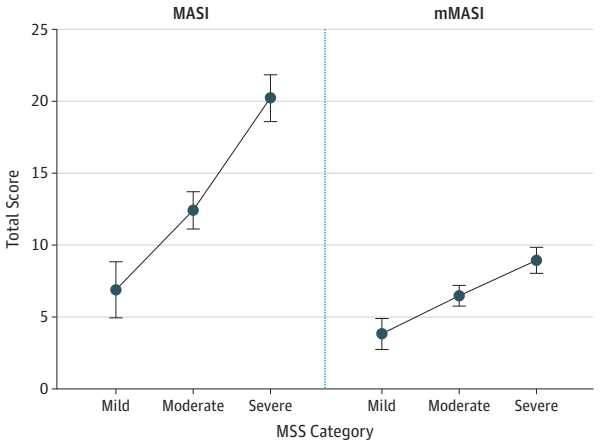
Figure. MASI and Modified MASI (mMASI) Scores



Correlated with the melasma severity score (MSS) showing ranges for mild, moderate, and severe melasma. Error bars indicate 95% CIs. MASI indicates Melasma Area and Severity Index.

means for MASI were highest for those with severe MSS and the lowest for those with mild MSS (means: mild, 6.9 [95% CI, 4.9-8.8]; moderate, 12.4 [95 CI, 11.1-13.7]; severe, 20.2 [95% CI, 18.6-21.9]).

Discussion | This study provides a framework that facilitates meaningful clinical interpretation of the numerical mMASI score. The ranges for mMASI provided herein correspond to global levels of severity using the MSS. Such categorization in MSS levels can assist clinicians in interpreting clinical trial data, severity of disease, and response to treatment. The mMASI is a simple, reliable validated tool that is a modification of the most commonly used outcome measure for melasma. This user-friendly tool can now be correlated with the newly proposed clinical ranges of severity presented in the Figure, which can be used to assist researchers in determining entry criteria for clinical trains for melasma and improvement of melasma with treatment.

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Patient Preferences During Skin Cancer Screening Examination

Although skin cancer screening through total-body skin examination (TBSE) may reduce morbidity or mortality from skin cancer, one potential harm of screening is that the nature of this examination may cause patient embarrassment. Among female patients undergoing colonoscopy and pelvic examinations there is a strong preference for a female physician.[1,2] To our knowledge, the influence of physician sex on patient attitudes toward skin cancer screening has not been studied in a nonveteran population.[3,4]

Methods | Using an anonymous, cross-sectional survey (determined to be exempt from full board review by the institutional review boards of the University of Pittsburgh, University of Utah, and East Carolina University), adults (≥18 years) undergoing a TBSE at these 3 institutions were surveyed to determine their preferences of screening clinician's sex and degree of disrobement during TBSE. Univariate significance was tested using the *t* test or the χ^2 test.

Results | Of 483 invited participants, 443 completed some or all of the survey and 82 refused (response rate, 85.5%). Population demographics and preferences for examining clinician's sex are shown (**Table 1**). Eighty-five women (33.7%) and 32 men (16.8%) had a preference for physician sex ($P < .001$), among whom 84 women (98.8%) and 12 men (37.5%) preferred a female physician ($P < .001$). Clinician sex preference correlated inversely with patient age (50% of women were <30 years; 24.2% of women were ≥70 years) but not with educational attainment or body mass index.

For the TBSE, women were more likely than men to prefer to leave undergarments in place (46.2% vs 39.7%; $P = .05$) and to not have their genitals examined (31.3% vs 12.5%; $P < .001$) (**Table 2**). However, women were more likely

Table 1. Demographic Characteristics of 443 Survey Respondents

Respondent Type	Patients, No. (%)
Age, mean (SD), y	55.7 (15.6)
Female	252 (56.9)
White	437 (98.6)
College graduate	293 (66.3)
BMI, mean (SD)	26.5 (5.9)
Normal	196 (44.2)
Overweight	165 (37.2)
Obese	82 (18.5)
Medical history	
Personal history of skin cancer	207 (47.9)
Personal history of melanoma	76 (17.2)
Personal history of mole removal and/or biopsy	371 (84.9)
Family history of melanoma	83 (20.9)
History of TBSE	339 (77.4)
Expressed preference for physician sex	117 (26.4)
Reason for visit	
Concerned about a particular spot	135 (31.4)
No concern about a particular spot, just TBSE	295 (68.6)

Abbreviations: BMI, body mass index (calculated as weight in kilograms divided by height in meters squared); TBSE, total-body skin examination.

Table 2. Patient Preferences for Disrobement by Sex for 438 Patients Undergoing Total-Body Skin Examination (TBSE)

	Sex, No. (%)	
Preference	Male	Female
All respondents	189 (43.2)	249 (56.8)
Preference for undressing for TBSE[a]		
Remove undergarments	36 (19.0)	59 (23.7)
Leave undergarments in place	75 (39.7)	115 (46.2)
No preference	78 (41.3)	75 (30.1)
Preference for examination of genitals[b]		
Examine genitals; remove undergarments	83 (45.1)	61 (25.1)
Examine genitals; undergarments on	78 (42.4)	106 (43.6)
Prefer to not have genitals examined	23 (12.5)	76 (31.3)
Preference for examination of breasts[c]		
Remove bra	NA	148 (60.2)
Examine breasts but leave bra on	NA	85 (34.6)
Prefer to not have breasts examined	NA	13 (5.3)

Abbreviation: NA, not applicable.

[a] $P = .05$.

[b] $P < .001$.

[c] Among 246 female respondents.

to be asked to remove their undergarments prior to examination (46.3% vs 25.3%; $P = .004$). In visits with physician-patient sex concordance (n = 218), patients were more likely to be asked to remove their underwear (36.9% vs 25.5%; $P = .01$), and women were more likely to have their breasts examined (81.2% vs 71.7%; $P = .03$) than in visits with physician-patient sex nonconcordance. While women were more likely than men to report feeling embarrassed prior to TBSE (using a Likert scale of 1-5, with 5 indicating the most embarrassment), with mean (SD) scores of 1.8 (1.1) for women and 1.4 (0.7) for men ($P < .001$), the clinical significance of this difference is unclear.

Discussion | A study of military veterans showed that physician-patient sex nonconcordance resulted in the refusal of the TBSE among 16% of women but only 2% of men.[3] We found a similar preference for female clinicians as well as specific preferences during examination of sensitive areas during the TBSE in a nonveteran population. This offers an opportunity to provide patient-centered care and reduce patient discomfort during TBSE. Considering that genital melanomas comprise only 0.2% to 0.8% of all melanomas,[5,6] it is important to balance the low risk of missing such a melanoma with the relatively higher risk of potentially causing patient discomfort by performing this examination. Limitations of this study include use of a population who already had a scheduled TBSE, most of whom were highly educated and had undergone TBSE in the past. This design did not allow us to survey those who avoided skin cancer screenings altogether. The choice of sex of all individuals, including residents and medical students, present during the TBSE may have been limited at the academic sites where the study was conducted.

Allowing patients to choose their degree of disrobing, body areas examined and the sex of clinician for TBSE may reduce patient discomfort or embarrassment as a potential barrier to regular skin cancer screening.

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OBSERVATION

Increased Airport Scrutiny by the Transportation Security Administration of a Patient-Passenger Carrying Ammonium Lactate–Containing Moisturizer

After the deadliest terrorist attack on American soil on September 11, 2001, the 107th Congress passed the Aviation and Transportation Security Act on November 19, 2001, and established the Transportation Security Administration (TSA) to oversee all modes of transportation, including air travel. Subsequently, after a liquid explosives threat in 2006, the restrictions further tightened so that travelers could carry liquids onto airplanes only in conformance with the "3-1-1 liquids rule," ie, in containers no larger than 3.4 ounces (100 mL) in a 1-quart plastic bag. Then in 2010, after the attempted bombing of a flight from Amsterdam to Detroit, the Explosives Trace Detection Test (ETDT) was implemented, a screening process that involves "swabbing" for explosive materials. The TSA prohibits items on airplanes such as explosives and/or flammables, firearms, food items, self-defense items, sharp objects, sporting goods, and tools; however, items of all types are subject to scrutiny. The final decision whether to allow an item onto an airplane rests with the individual TSA agent.[1]

Security issues are not unknown to oncodermatology patients. The literature reports that at least 3 patients with grade 2 or 3 hand-foot syndrome, who had lost their fingerprints secondary to capecitabine treatment, were either detained at airport security or unable to process government papers or perform banking procedures.[2-4] We report a patient-airline passenger who encountered heightened TSA scrutiny of an ammonium lactate–containing moisturizer at 3 different airports in both checked and carry-on luggage.

Box. Neutral Ingredients Contained in Ammonium Lactate, 12%, Cream[6]

- Light mineral oil
- Glyceryl monostearate
- Polyethylene glycol (PEG)-100 stearate
- Propylene glycol
- Polyoxyl 40 stearate
- Glycerin
- Magnesium aluminum silicate
- Laureth-4
- Cetyl alcohol
- Methyl and propyl parabens
- Water

Report of a Case | A woman with cancer was receiving antiestrogen therapy, which caused dry skin and associated erythema and pruritus. When traveling, she carried her prescribed 385-mL bottle of ammonium lactate, 12%, cream in the standard 1-quart plastic bag, clearly labeled with the appropriate prescription information. Nonetheless, at an airport, the bottle was removed from her carry-on bag following x-ray screening for examination by a TSA agent, and the patient underwent ETDT on her hands.

She was flagged again on another flight when the bottle was spotted in the x-ray machine, and that second screening involved a full body pat-down in addition to the ETDT performed on the bottle and her hands. In addition, a sample was taken from the ammonium lactate moisturizer for analysis.

Before a third domestic flight, the patient placed the ammonium lactate container in her checked luggage with a TSA-approved lock, hoping to avoid delays. However, after arriving at her destination and opening her checked luggage, the patient discovered a printed card saying that the TSA had opened her bag and performed an ETDT.

Discussion | Ammonium is the salt form of the base ammonia, and for it to exist in stable form, it must be chemically combined with an acid. In the case of ammonium lactate, the acid is lactic acid, the compound forming one of thousands of harmless ammonium salts that are used extensively in cosmetics and everyday household items. However, the most common explosive form of ammonia is the nitrate salt ammonium nitrate. It is the combination with nitrate that is responsible for its explosive property and is the target of TSA scrutiny.

The active ingredient in ammonium lactate, 12%, cream consists of lactic acid neutralized with ammonium hydroxide forming the stable salt ammonium lactate. Lactic acid is an α-hydroxy propionic acid, a hygroscopic humectant that reduces excessive epidermal keratinization to serve as an efficient moisturizer.[5] Ammonium lactate is mixed with many other neutral ingredients[6] to form the cream (ingredients listed in the Box).