

Table II. Testing to hydroperoxides of limonene and linalool

Characteristics	Tested to hydroperoxides of limonene, n (%) (n = 54)	Tested to hydroperoxides of linalool, n (%) (n = 28)
Atopy history	47 (87.0)	25 (89.3)
Atopic dermatitis	27 (50.0)	17 (60.7)
Dermatitis location		
Hand	5 (9.3)	4 (14.3)
Leg	2 (3.7)	1 (3.6)
Face	18 (33.3)	12 (42.9)
Patch testing reaction*		
No reaction	41 (75.9)	19 (67.9)
Doubtful reaction	6 (11.1)	4 (14.3)
+	5 (9.3)	5 (17.9)
++	1 (1.9)	0 (0)
+++	1 (1.9)	0 (0)
Positive reaction	7 (13.0)	5 (17.9)

*Doubtful reaction included cases of macular erythema only (+/-) or unclear reaction (?). The + symbol designates weak nonvesicular reaction with indurated erythema and possibly papules. The ++ symbol designates strong edematous or vesicular reaction. The +++ designates extreme spreading bullous or ulcerative reaction.

allergic contact dermatitis requires soluble protein antigens associated with allergenic haptens to engender a type IV hypersensitivity response, the hydroperoxides of limonene and linalool are oily terpenes, which may produce irritant reactions on patch testing, especially in patients with atopy. In adults, the optimal concentration of hydroperoxides of limonene and linalool has been determined through testing consecutive patients to various dilutions.⁴ The optimal concentration in children remains to be determined.

This study presents an important insight into the allergenicity of these hydroperoxides in children, although they are tested infrequently. Importantly, more than half of patients with a positive reaction to either hydroperoxide did not react to other commonly tested fragrance allergens, including FM1, FM2, and BoP. Had these patients not been tested to hydroperoxides of limonene and linalool, an important fragrance allergy would have been missed, leading to incomplete allergen avoidance and continued allergic contact dermatitis. These data underscore the importance of including these hydroperoxides in both adult and pediatric patch testing, given that fragrances are among the most common allergens.⁵

Danna Moustafa, BS,^{a,b} and JiaDe Yu, MD^{a,b}

From Harvard Medical School, Boston, Massachusetts^a; and the Department of Dermatology, Massachusetts General Hospital, Boston.^b

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Correspondence to: JiaDe Yu, MD, Massachusetts General Hospital, 50 Staniford St, Ste 200, Boston, MA 02114

E-mail: jdyu@partners.org

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Characteristics of physicians with dermatology board certification by the American Board of Physician Specialties



To the Editor: The American Board of Medical Specialties (ABMS) and American Osteopathic Association (AOA) are nationally recognized organizations that collaborate with member boards, including the American Board of Dermatology and the American Osteopathic Board of Dermatology, to offer specialty board certification. The American Board of Physician Specialties (ABPS) is another organization offering board certification to physicians in various specialties, including dermatology. Given little data exist, we evaluated the characteristics of physicians with ABPS dermatology board certifications (DBC).

From July to August 2019, the ABPS board-certified physician membership database was queried. Physician characteristics, such as sex, medical training, and ABMS/AOA board certification status, were obtained from internet searches. The University of Connecticut Health Center Institutional Review Board exempted this study.

Table I. Characteristics of the 65 physicians with American Board of Physician Specialties dermatology board certification

Physician characteristics	Count	
	(N = 65)	Percentage
Location of medical school*		
International medical school	24	36.9
United States medical school	41	63.1
Medical degree(s) earned*		
MD	44	67.7
MD/PhD	1	1.5
DO	20	30.8
Primary residency specialty*		
Dermatology	8	12.3
General surgery	5	7.7
Family medicine	17	26.2
Internal medicine	17	26.2
Emergency medicine	3	4.6
Pediatrics	5	7.7
Pathology	4	6.2
Physical medicine and rehabilitation	1	1.5
Internship year†	3	4.6
Unknown†	2	3.1
ABMS or AOA active board certification‡		
Dermatology	0	0.0
Pediatrics	2	3.1
Anatomic pathology and/or clinical pathology	4	6.2
Dermatopathology Subspecialty	2	3.1
Neuropathology Subspecialty	1	1.5
Internal Medicine	4	6.2
Emergency medicine	1	1.5
Family medicine	9	13.8
Physical Medicine and Rehabilitation	1	1.5

ABMS, American Board of Medical Specialties; AOA, American Osteopathic Association.

*Medical training information was obtained from DoCInfo, state medical board databases, Physician Compare National Downloadable File, Doximity, practice website, Zocdoc, and physician biographic sites, including Vitals, US News, and Healthgrades.

†For some physicians, primary residency training could not be determined. If intern year (postgraduate year 1) information was found, it was listed as "Internship year." Otherwise, the physician residency specialty was listed as "Unknown."

‡ABMS and AOA board certification information was obtained from Certification Matters and DoCInfo, both of which draw verified information from these board certification databases.

Of the 2783 ABPS physicians, 65 (2.34%) possessed DBCs. Characteristics of ABPS DBC physicians are summarized in [Table I](#).

Recent concerns regarding the monopoly that ABMS/AOA has on physicians' ability to practice medicine, uncertain quality outcomes from maintenance of certification (MOC), and dissatisfaction with time utilization, administrative burden, and cost have led to calls for recalling MOC, alternative assessment

models, and alternate board certification organizations, such as ABPS.^{1,2} However, according to a systematic review of 11 studies completed before MOC implementation, 16 of 29 findings showed that initial ABMS certification positively correlated with better clinical outcomes.³ While the exact reasons for physicians seeking ABPS DBC are unclear, effective high-quality care and patient safety is imperative when delivering dermatologic care. Results from this study raise several potential issues regarding transparency, advertising, and competency.

Only a small minority of physicians with ABPS DBC have completed formal dermatology residency training, and only approximately one-third possess active ABMS/AOA board certification in any specialty. These results raise concerns regarding the use of the title "board certification" without completing residency in that field. The American Academy of Dermatology holds the position that "advertising is considered to be inappropriate, unprofessional and unacceptable" when stating or implying that one "is a board-certified specialist unless... certified by a board recognized by ABMS, ABD, AOB, Royal College of Physicians and Surgeons of Canada, or an international equivalent."⁴ The equivalency of ABPS to ABMS/AOA board certification is unclear, and variations exist on the state level regarding whether ABPS-certified physicians are allowed to advertise as "board certified." Furthermore, alternative certification may encourage physicians to practice unsupervised without adequate and proper training in the specialty. Although the value of MOC on quality of care is contentious,^{1,2} ABMS and AOA both require accredited dermatology residencies that reflect 12,000 to 16,000 hours of supervised dermatologic patient care under qualified faculty for initial DBC.

Limitations of this study include data being derived from a composite of publicly available online information and our inability to derive conclusions regarding quality or outcomes of care. Given the changes in the board certification and MOC landscape, further investigation will be required to better understand whether and how ABMS/AOA and ABPS DBC and physicians with and without accredited dermatology residency training affect quality, outcomes, and safety of patient care.

Isabel Nip, MS,^a Paula W. Feng, MD,^b and Hao Feng, MD, MHS^c

From the University of Connecticut School of Medicine, Farmington^a; the Department of Ophthalmology and Visual Science, Yale University School of Medicine, New Haven, Connecticut^b;

and the Department of Dermatology, University of Connecticut Health Center, Farmington.^c

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Reprint requests: Hao Feng, MD, MHS, Department of Dermatology, University of Connecticut Health Center, 21 S Rd, 2nd Floor, Farmington, CT 06032

E-mail: haofeng625@gmail.com

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Access to Mohs micrographic surgery through the Veterans Choice Program of the United States Department of Veterans Affairs



To the Editor: The Veterans Health Administration (VHA) is one of the largest health care systems in the United States, responsible for providing health care to veterans who meet eligibility requirements. This system includes 1600 facilities with more than 20,000 physicians and serves 9.1 million enrollees with an annual budget of more than \$60 billion.¹

Because of concerns about waiting times and quality of care at some Veterans Administration (VA) facilities, the Veterans Access, Choice, and Accountability Act of 2014 was enacted (Public Law 113-146)² to expand non-VA treatment options for eligible veterans to allow timely access to high-quality health care through the Veterans Choice Program (VCP).³ This program, recently expanded by the VA Mission act with a budget of \$55 billion, allows eligible veterans to receive care in the private sector

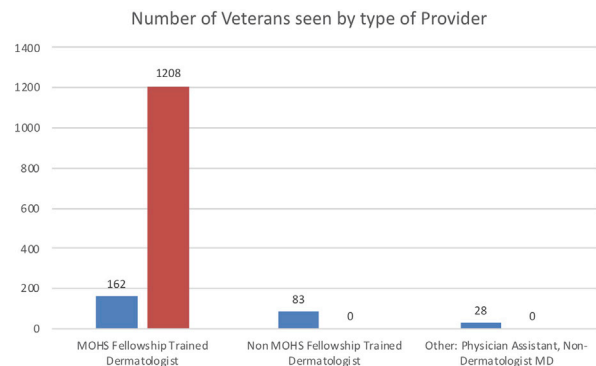


Fig 1. Distribution of patients referred for Mohs micrographic surgery from 2014 through 2017. The blue bars are patients who were referred for Mohs micrographic surgery to the private sector by the Veterans Choice Program. The red bars are the patients who received Mohs micrographic surgery within the Veterans Administration facility during the same time period.

if they have limited access due to geographic distance or if the VA is unable to provide the requested care within 30 days.

In this cross-sectional observational study, we examined access to Mohs micrographic surgery at the VA Northern California Health Care System, (7 sites) to see whether the goals of the VCP to provide timely and high-quality care to veterans were met.

After review by the VA Mohs micrographic surgeon, patients with biopsy-proven skin cancers from October 1, 2014 through September 30, 2017, who met Mohs AUC⁴ and for whom, after discussion of treatment alternatives, Mohs was deemed the appropriate therapy were referred to the private sector for Mohs micrographic surgery through the VCP if access to the VA was limited by geography or time. The outcomes recorded were provider training, time from referral to appointment, and type of procedure performed. Training and credentialing of the VCP provider was determined by cross-checking the American College of Mohs Surgery website and the Medical Board of California website.

Although the VA does not require its Mohs micrographic surgeons to be fellowship trained, 80% of VA Mohs micrographic surgeons are.⁵ The law establishing the VCP states that providers must “maintain at least the same or similar credentials and licenses as those credentials and licenses that are required of health care providers of the Department”³; in practice, however, expertise is only self-reported (personal communication from Deputy Chief Medical Officer, TriWest Healthcare Alliance [third party administrator], 2019, to RRD).