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### Racial and socioeconomic disparities in time to surgical treatment of melanoma



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**Background:** Although melanoma survival varies based on race and insurance status, the reasons underlying these disparities remain unclear. As shorter time from biopsy to definitive surgical treatment (time to surgery; TTS) is associated with improved survival in early-stage melanoma, we sought to investigate whether TTS differs between patients of different races and insurance types.

**Methods:** We identified patients with cutaneous melanoma stages I-IV using the National Cancer Database (2004-2015). Pearson chi-square, *t* tests, and analysis of variance were initially performed to evaluate differences in socioeconomic characteristics between racial groups and insurance types. A multivariate logistic regression model was created to evaluate the association of race, age, median household income, and insurance type with TTS.

**Results:** Of the 186,865 patients identified, 1024 (0.55%) were black. On multivariate analysis, black patients had significantly longer TTS than white patients for stage I-III melanoma (p 90 days (aOR 5.16, 95% CI 3.84-6.80), which persisted across each insurance type. Patients with Medicaid had the longest TTS (mean 60.41 days) and those with private insurance had the shortest TTS (mean 44.63 days, *P* < .001).

**Conclusions:** Controlling for socioeconomic characteristics, black patients with melanoma have significantly longer TTS than white patients. This suggests that factors other than insurance type are contributing to racial disparities in TTS. TTS also differed significantly by insurance type, which may reflect differential access to melanoma treatment.

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*Commercial disclosure: None identified.*

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### The growth of the tanning business in the United States, 2009-2019



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Despite its strong association with skin cancer indoor tanning remains popular. It consists of use of ultraviolet (UV) emitting devices, also known as tanning beds, and sunless tanning (spray tans and lotions). We sought to describe the trends in the business of indoor tanning in the United States from 2009 to 2019. Data were obtained from [IBISworld.com](http://IBISworld.com). In 2019, there were 13,748 tanning salons in the United States. The number of tanning salons showed a short decline for years 2009-2011. After 2011, there was a 3% increase per year in the number of tanning salons until 2019 ( $\beta = 289$  establishments, CI 175-402, *P* < .01). Through years 2009-2019, there was a total increase of 27% in consumer spending in tanning salons. ( $\beta = 326$  \$, CI 270-382, *P* < .01). In 2018, consumers aged 18-29 represented the largest group of indoor tanning patrons by revenue (30%). We obtained data from Google Trends to present the interest in tanning from 2004-2019. The interest for "tanning bed" was higher than for "spray tan" in 2004. Interest for "spray tan," but not for "tanning bed" showed a significant increase overtime ( $\beta = 0.11$ , CI 0.09-0.13, *P* < .01). After 2011, the total search volume was greater for "spray tan." Every year, searches for "tanning bed" and "spray tan" peaked in spring, while for "sunscreen" in June. Given the fact that people are still pursuing a tan, this is potentially a positive step and hopefully tanning beds can be reduced.

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### The benefits and harms of 308-nm excimer laser treatment for alopecia areata: A systematic review and meta-analysis of randomized controlled trials



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**Background:** Although it has been reported that the excimer laser (EL) treatment is effective for alopecia areata (AA), there has been no comprehensive systematic review of its efficacy and safety.

**Objective:** This study aimed to systematically review the benefits and harms of EL treatment in AA patients.

**Methods:** A comprehensive database search of Medline, Embase, Web of Science, and the Cochrane library databases from inception to December 31, 2018, was performed for all prospective studies. Of 22 studies initially identified, the full texts of 11 studies were assessed for eligibility, and 5 were finally included in the analysis. The primary outcome was the proportion of treatment success, defined as cosmetically acceptable hair regrowth or at least 75% regrowth of each designated patch or whole lesions in a patient.

**Results:** We analyzed 5 randomized controlled trials comprising a total of 87 AA patches/patients. The EL treatment showed a significantly higher treatment success rate than the untreated control group (risk difference [RD] 50.3%; 95% confidence interval [CI] 21.1%-79.5%; number needed to treat 2). No special harm was found related to the use of EL. In a subgroup analysis excluding cases with alopecia totalis or universalis, the EL treatment had a superior result (RD 59.1%, 95% CI 25.1%-93.1%) as well.

**Conclusions:** This systematic review revealed the significant benefit of EL in the treatment of AA. Given that EL treatment is noninvasive, as opposed to intralesional corticosteroid injection, the use of EL should be encouraged for AA patients.

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### Bidirectional associations between psoriasis and obstructive sleep apnea: A meta-analysis



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**Background:** Psoriasis and obstructive sleep apnea (OSA) share a common pathogenic mechanism of systemic inflammation. However, the link between psoriasis and OSA has not been confirmed.

**Objective:** To investigate the relationship between psoriasis and OSA.

**Methods:** We performed a systematic review and meta-analysis following the Meta-analysis of Observational Studies in Epidemiology (MOOSE) guidelines. We searched Medline and Embase for relevant studies from inception to May 11, 2019. Case-control, cross-sectional, and cohort studies that examined the association between psoriasis and OSA were included. No geographic or language limitations were imposed. The Newcastle-Ottawa Scale was used to assess the risk of bias of included studies. We performed random-effects model meta-analysis to calculate the pooled incidence rate ratio (IRR) with 95% CIs for cohort studies and odds ratio (ORs) with 95% CIs for case-control and cross-sectional studies.

**Results:** A total of 3 cohort studies and 4 case-control or cross-sectional studies with a total of 5,840,495 participants were included. A significantly increased risk for psoriasis was found in OSA patients (pooled IRR, 2.52, 95% CI, 1.89-3.36, studies = 3), as well as significantly increased odds for OSA in psoriasis patients (pooled OR, 2.60, 95% CI, 1.07-6.32, studies = 3)

**Conclusions:** We found bidirectional associations between psoriasis and OSA. Respiriologist or dermatologist consultations are indicated if patients with psoriasis present with sleep disorder or patients with OSA present with skin problems.

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