

Rowan University

## Rowan Digital Works

---

Rowan-Virtua Research Day

28th Annual Research Day

---

May 2nd, 12:00 AM

# Waiting for a Cure: Factors Influencing Melanoma Treatment Delays

Lisa Huang  
*Rowan University*


David Rubin  
*Rowan University*

Lothar Vidal  
*Rowan University*

Jordan Riser  
*Rowan University*

Christopher Jones  
*Rowan University*

Follow this and additional works at: [https://rdw.rowan.edu/stratford\\_research\\_day](https://rdw.rowan.edu/stratford_research_day)

 *See next page for additional authors*

Part of the [Community Health and Preventive Medicine Commons](#), [Dermatology Commons](#), [Health and Medical Administration Commons](#), [Neoplasms Commons](#), [Oncology Commons](#), [Pathological Conditions, Signs and Symptoms Commons](#), [Preventive Medicine Commons](#), [Public Health Education and Promotion Commons](#), and the [Skin and Connective Tissue Diseases Commons](#)

Let us know how access to this document benefits you - share your thoughts on our [feedback form](#).

---

Huang, Lisa; Rubin, David; Vidal, Lothar; Riser, Jordan; Jones, Christopher; and Hiester, Samantha, "Waiting for a Cure: Factors Influencing Melanoma Treatment Delays" (2024). *Rowan-Virtua Research Day*. 195. [https://rdw.rowan.edu/stratford\\_research\\_day/2024/may2/195](https://rdw.rowan.edu/stratford_research_day/2024/may2/195)

This Poster is brought to you for free and open access by the Conferences, Events, and Symposia at Rowan Digital Works. It has been accepted for inclusion in Rowan-Virtua Research Day by an authorized administrator of Rowan Digital Works.

---

**Submitting Author(s)**

Lisa Huang, David Rubin, Lothar Vidal, Jordan Riser, Christopher Jones, and Samantha Hiester

# Waiting for a Cure: Factors Influencing Melanoma Treatment Delays

Lisa Huang, OMS-I; David Rubin, OMS-I; Lothar Vidal, OMS-I; Jordan Riser, OMS-I; Christopher Jones, OMS-I; Samantha Hiester, OMS-I  
Rowan-Virtua School of Osteopathic Medicine

## Introduction:

Melanoma has a five-year survival rate of 94%, one of the highest of all cancers, if caught early in stage I when the cancer is still localized. Yet, despite the relative good prognosis, if melanoma is not caught until it has spread regionally or distantly, the five-year survival rate drops to 74% and 35% respectively. Given the impact of early treatment on survival rates, it is essential to identify the barriers patients face in accessing timely melanoma treatment following diagnosis.

## Research Question:

Longer wait times between melanoma diagnosis and treatment are influenced by demographic and socioeconomic factors, and are associated with poorer long-term prognosis and or quality of life.

## Methods:

A literature review through PubMed, Web of Science, and Scopus databases was conducted to look for articles on factors influencing variations in wait time for melanoma treatment and effects on overall patient outcomes. Eligibility criteria included publication within the last 5 years in a peer-reviewed journal accessible through the Rowan-Virtua SOM Health Sciences Library, focus on melanoma, and conducted within the United States. Selected sources primarily addressed disparities across racial and ethnic backgrounds, socioeconomic status, and related factors.

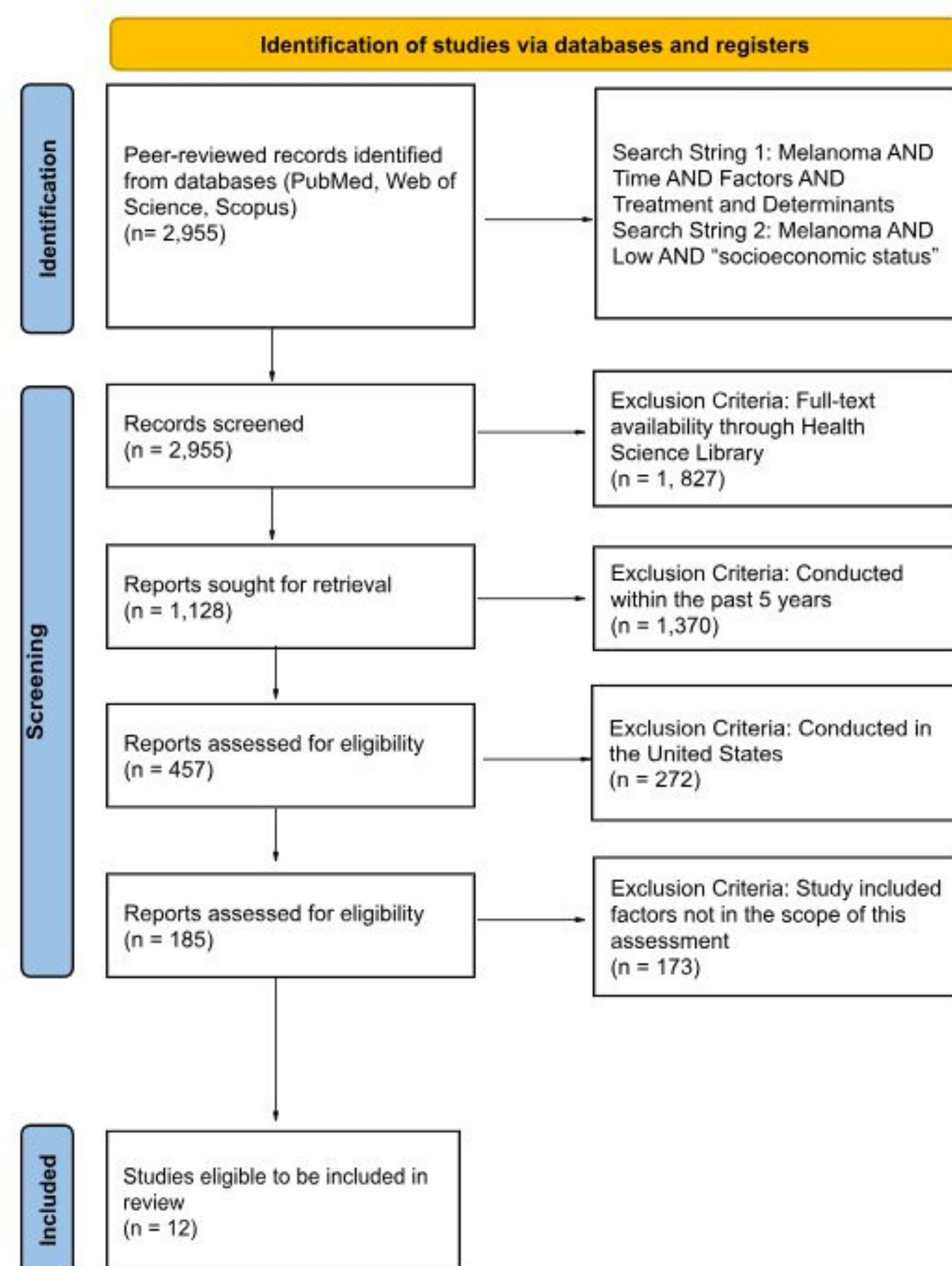


Figure 1. PRISMA flowchart search on PubMed, Web of Science, and Scopus

## Results:

Elderly, male, and Medicare patients experienced longer wait times, as did those with higher Breslow thickness and more severe melanoma stages. Patients who received intervention within 30 days of biopsy had significantly better survival rates, with delays of 30-59 days associated with a 14% worse survival, 60-89 days with a 40% worse survival, 90-119 days with a 63% worse survival, and over 119 days with a 70% worse survival. Lack of knowledge about melanoma, particularly in communities with lower melanoma incidence, was noted, along with a perception that skin cancer might be less severe, contributing to delayed care. Black patients experienced longer times from diagnosis to surgery for stages I-III melanoma compared to non-Hispanic white patients, with average times of 23.4 days for black patients versus 11.7 days for white patients, and over 5 times higher odds of surgery over 90 days for black patients. Socioeconomic factors also played a role, with patients in lower-income neighborhoods experiencing longer wait times to surgery following diagnosis. These findings underscore the need for targeted interventions to reduce disparities in access to timely melanoma treatment and improve outcomes for all patients.

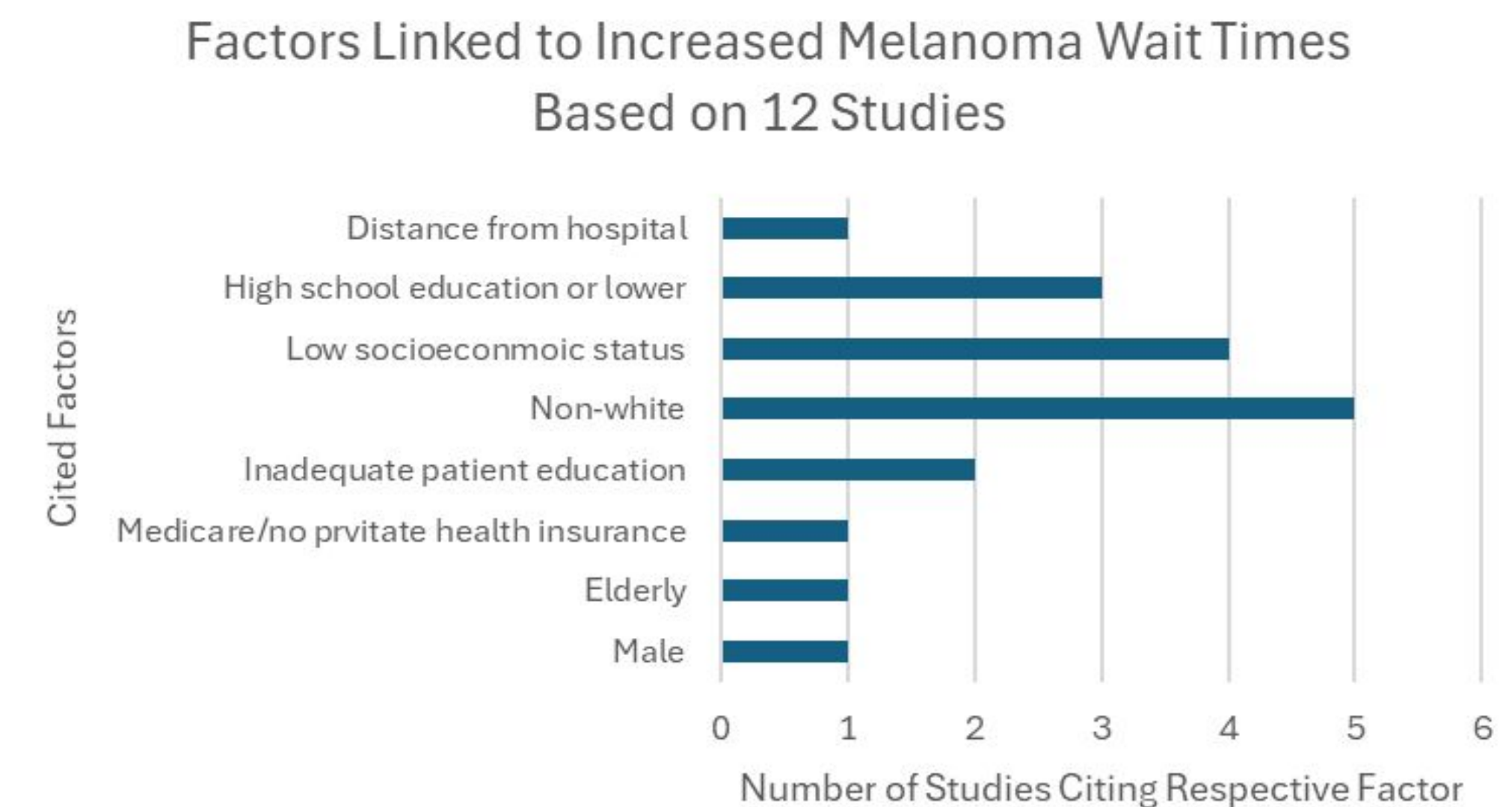


Figure 2. Factors Linked to Increased Melanoma Wait Times Based on 12 Studies

## Discussion:

To improve wait times, we must enhance public health education, considering patient-based factors like education and social beliefs. This involves addressing where people receive basic medical information, potentially through social media campaigns and high school health curriculums. Our findings align with existing disparities in race, socioeconomic status, geography, highlighting the need for ongoing discussions to address these inequalities effectively. However, limitations such as understudied time-to-treatment factors and language barriers underscore the complexity of the issue.

## Conclusion:

Further research is necessary to explore the impact of melanoma across different racial groups, as current literature predominantly focuses on Whites. Additionally, investigating factors such as insurance coverage for dermatologist visits and access to care may reveal factors that lead to a reduction in wait times for melanoma treatment. Moreover, community education initiatives aimed at teaching the early signs of melanoma could lead to earlier physician visits and quicker interventions.

## References:

- Swetter SM, Tsao H, Bichakjian CK, et al. Guidelines of care for the management of primary cutaneous melanoma. *J Am Acad Dermatol.* Jan 2019;80(1):208-250. doi:10.1016/j.jaad.2018.08.055
- Rouhani P, Hu S, Kirsner RS. Melanoma in Hispanic and black Americans. *Cancer Control.* Jul 2008;15(3):248-53. doi:10.1177/107327480801500308
- Eggermont AMM, Spatz A, Robert C. Cutaneous melanoma. *The Lancet.* 2014/03/01/ 2014;383(9919):816-827. doi:https://doi.org/10.1016/S0140-6736(13)60802-8
- McKenna DB, Lee RJ, Prescott RJ, Doherty VR. The time from diagnostic excision biopsy to wide local excision for primary cutaneous malignant melanoma may not affect patient survival. *Br J Dermatol.* Jul 2002;147(1):48-54. doi:10.1046/j.1365-2133.2002.04815.x
- Conic RZ, Cabrera CI, Khorana AA, Gastman BR. Determination of the impact of melanoma surgical timing on survival using the National Cancer Database. *J Am Acad Dermatol.* Jan 2018;78(1):40-46.e7. doi:10.1016/j.jaad.2017.08.039
- Huff LS, Chang CA, Thomas JF, et al. Defining an acceptable period of time from melanoma biopsy to excision. *Dermatology Reports.* 2012;4(1). doi:10.4081/dr.2012.e2
- Dawes SM, Tsai S, Gittleman H, Barnholtz-Sloan JS, Bordeaux JS. Racial disparities in melanoma survival. *J Am Acad Dermatol.* Nov 2016;75(5):983-991. doi:10.1016/j.jaad.2016.06.006
- Baranowski MLH, Yeung H, Chen SC, Gillespie TW, Goodman M. Factors associated with time to surgery in melanoma: An analysis of the National Cancer Database. *J Am Acad Dermatol.* Oct 2019;81(4):908-916. doi:10.1016/j.jaad.2019.05.079
- Gingrich AA, Sauder CAM, Goldfarb M, Li Q, Wun T, Keegan THM. Disparities in the Occurrence of Late Effects following Treatment among Adolescent and Young Adult Melanoma Survivors. *Cancer Epidemiol Biomarkers Prev.* Nov 2020;29(11):2195-2202. doi:10.1158/1055-9965.Epi-20-0427
- Pollitt RA, Clarke CA, Shema SJ, Swetter SM. California Medicaid enrollment and melanoma stage at diagnosis: a population-based study. *Am J Prev Med.* Jul 2008;35(1):7-13. doi:10.1016/j.amepre.2008.03.0264
- Mahendraraj K, Sidhu K, Lau CSM, McRoy GJ, Chamberlain RS, Smith FO. Malignant Melanoma in African-Americans: A Population-Based Clinical Outcomes Study Involving 1106 African-American Patients from the Surveillance, Epidemiology, and End Result (SEER) Database (1988-2011). *Medicine (Baltimore).* Apr 2017;96(15):e6258. doi:10.1097/md.00000000000006258
- Qian Y, Johannet P, Sawyers A, Yu J, Osman I, Zhong J. The ongoing racial disparities in melanoma: An analysis of the Surveillance, Epidemiology, and End Results database (1975-2016). *J Am Acad Dermatol.* Jun 2021;84(6):1585-1593. doi:10.1016/j.jaad.2020.08.097