



INDIANA UNIVERSITY

**MELVIN AND BREN SIMON  
COMPREHENSIVE CANCER CENTER**

# **Cancer Health Disparities Symposium**

**2024 Abstract Book**

## **Enhancing Clinical Decision Making in Cancer Treatment through Application-based DRIVE scores**

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### **INTRODUCTION:**

Over the past two decades, there have been major efforts to draw attention to the inequities in medical oncology research. Available data indicates that 5-year relative survival rates for all cancer types diagnosed between 2010-2016 disproportionately favor Whites over Blacks, 68% and 63%, respectively (Howlander, Noone, and Krapcho et al., 2020). Disparities in cancer treatment, a major contributor to diminished outcomes in cancer mortality, may be related to the underrepresentation of ethnical minorities in clinical research. An informational tool created to easily evaluate the degree of ethnic diversity in cancer research is the DRIVE score (Birhiray and Birhiray, 2022). This metric functions using a 5-point for easily identifying major clinical studies meeting diversity goals. Indy Hematology Education required DRIVE scores at its 2023 annual review, and while the presentation of scores was a useful tool for attending clinicians, it involved a cumbersome manual calculation process. To facilitate greater simplicity in determining DRIVE scores and to do so more efficiently, we studied the use of a web-based application.

### **METHODS:**

Web applications and other AI tools are becoming more readily available to help analyze major datasets, aiming to remove cumbersome manual calculations in all fields. Therefore, we propose a study using the DRIVE platform and scoring criteria to evaluate data for all major or pivotal phase two and phase three studies in cancer clinical research published in the past decade. Clinicians can use the resulting DRIVE score while evaluating the applicability of clinical data to patients within their practice.

### **RESULTS:**

This is an ongoing study; the results will be published at a future meeting.

### **CONCLUSIONS:**

We hope to demonstrate the utility of our application in producing readily available and reliable information on the degree of ethnic diversity of current and future clinical data sets in cancer research, using the DRIVE score to inform the medical decision-making of practicing clinicians.

### **REFERENCES**

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## Indiana Native American Commercial Tobacco Survey

**Research Field:** Community Engagement

**Abstract:**

Authors: Katy Ellis Hilts, Deborah Buckles, Sally Tuttle, Mary Robertson, and Calvin Roberson

**Background:** Native American populations are more likely to use commercial tobacco products than other racial and ethnic groups in the U.S. They are also less likely to be covered by policies/rules that reduce exposure to secondhand smoke and are disproportionately impacted by tobacco-related diseases, including cancer.

**Purpose:** This study is being conducted in partnership with the American Indian Center of Indiana, Inc., the Indiana Native American Indian Affairs Commission, and IU Simon Comprehensive Cancer Center's Office of Community Outreach and Engagement. The purpose is to assess current commercial tobacco use trends among Native Americans in Indiana.

**Methods:** We adapted measures from the CDC American Indian Adult Tobacco Survey; questions cover general health status, previous/current commercial tobacco use, prior quit attempts, secondhand smoke exposure, and ceremonial tobacco use. Native Americans, 18+ years who reside in Indiana, are enrolled members or recognized descendants of any tribal nation, are eligible to participate. Ongoing recruitment includes direct contact via partner networks, social media advertisement, and participation in Pow Wows in Indiana; a \$20 e-gift card is being provided as an incentive for survey completion.

**Preliminary Results:** 60% (n=26/44) of respondents report current (31.8%; n=14) or former smoking; the average age of initiation is 14.8 years (range:7-26). Over half of current smokers intend to quit in 30 days to 6 months (n=8). The survey is still ongoing however updated results will be presented at the symposium.

**Discussion:** Results of this study will provide an initial assessment of commercial tobacco use among Native Americans and will support the next steps of this partnership to develop strategies to improve the health of Native Americans in Indiana.

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## **The Important Role of Community Engagement in Cancer Prevention, Screening, Research, and Advocacy**

**Research Field:** Community Engagement

**Presenters:** MacKenzie Church; Debi Buckles, NCNTT; Mary Robertson, MPH

**Abstract:**

End Lung Cancer Now (ELCN), an initiative of the IU Simon Comprehensive Cancer Center (IUSCCC), was founded in 2020 with the vision to end the suffering and death from lung cancer in Indiana. The initiative's mission is to educate and empower community advocates to help us elevate messaging around prevention, screening, research, and advocacy. ELCN and the IU Simon Comprehensive Cancer Center's Office of Community Outreach and Engagement (COE) have partnered together to implement a multi-pronged, community engagement approach based on human-centered design and Theory of Systems Change to achieve this mission.

Cancer is a complex topic and discussing all of its facets with the community is a complicated and challenging task. ELCN and IUSCCC COE have established outreach strategies with various messaging and target audiences in mind. Three key strategies that ELCN and IUSCCC COE have implemented over the last 18 months include:

- Community-wide campaigns aimed to recruit college students to help us create the first tobacco-free generation. ELCN and IUSCCC COE have successfully engaged more than 500 students through the #WeCanBeTheFirst campaign to reach this goal.
- A call to action to local lung cancer screening centers to participate in National Lung Cancer Screening Day. This effort was spearheaded by ELCN, IUSCCC COE, American Cancer Society, and Indiana Cancer Consortium and resulted in 12 organizations screening 95 Hoosiers.
- Participation in community fairs and community conversations that offer education and resources about screening, research, and advocacy. ELCN and IUSCCC COE have an ongoing presence at large events like Indiana Black Expo and Indiana Latino Expo, and visit intimate settings like local churches, veteran coffee clubs, and low-income housing centers to promote the importance of screening and research.

These strategies could be replicated by other cancer discipline teams to improve the overall health of Hoosiers.

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## **Measuring Social Determinants of Health**

Karen Comer

Researchers engage with the Polis Center (Polis) at IU Indianapolis to identify cancer and other health disparities and to explore associated social determinants of health (SDOH). Collaborating with academic and community partners throughout Indiana and beyond, Polis contributes geospatial expertise, comprehensive data, content knowledge, and actionable analysis about places and the people who live there to create healthier, more resilient, equitable, and successful communities. This presentation will describe Polis expertise and processes for the co-design and development of SDOH measures using the SAVI database ([www.savi.org](http://www.savi.org)) and a wealth of other Polis information resources.

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## **Molecular differences by race and ancestry in high grade endometrial cancers**

Michele Cote

**Introduction:** The incidence of endometrial cancer continues to rise in the United States, driven by aggressive, high-grade subtypes. Most of what is known about endometrial cancer is derived from the more commonly diagnosed lower grade tumors, where surgical treatment is generally curative, and recurrence is rare. The Cancer Genome Atlas (TCGA), while providing detailed molecular profiling to define the tumors beyond histology, did not have large numbers of women with high-grade cancers. Additionally, the racial and ethnic diversity in the TCGA population was limited, as were the number of outcomes. Here, we present an extension of the findings from the TCGA into a population of non-Hispanic black and white women with high grade endometrial cancer.

**Methods:** We performed whole exome sequencing on tumor and normal tissue from n=285 women with high grade endometrial cancers (serous, endometrioid, mixed and clear cell tumors). Combined with detailed clinical and follow-up data, we identified demographic, clinical, and molecular features of the tumors which predicted endometrial cancer-specific survival using classification analysis regression tree (CART). Additionally, we utilized the WES data to estimate global ancestry, and determined whether frequency of clinically important genotypes varied between subgroups.

**Results:** Stage at diagnosis remained the most important variable associated with survival, followed by age at diagnosis. From there, COSMIC molecular signatures and copy number variation also predicted cancer-specific survival. Six distinct subtypes were identified. Further, there were differences in frequency of mutation by ancestry, notably in p53 mutations, ARID1A mutations, and microsatellite instability.

**Conclusions:** Molecular profiling of tumors is critical to personalized treatment; however, clinical variables such as stage at diagnosis remain critically important need to be considered. Differences in key genes associated with response to treatment and tumor aggressiveness could drive disparities in survival outcomes.

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## **Assessing Household Material Hardship in Children with Central Nervous System (CNS) Tumors**

Scott Coven

**Background:** **Household material hardship** (HMH) is defined as unmet basic needs including food, heat, housing, or transportation. Researchers have documented higher rates of poor nutrition, injury, infectious disease, and hospitalization in healthy children living in families with household material hardship. Furthermore, targeted interventions exist to modify these health outcomes. However, little is known regarding the relationship between social determinants of health and their impact on overall and quality of survival for children with brain or spinal cord tumors. The current available information is based upon retrospective and secondary data sources, often limited to basic socioeconomic factors such as race and ethnicity.

The objective was *to describe the change in household material hardship through patient reported outcome measures from baseline to six-months and explore the association between social determinants of health, including prospective household material hardship data, and clinical outcomes among children with brain and spinal cord tumors.*

**Methods:** We aimed to enroll 150 patients with a brain or spinal cord tumors who were followed by the Pediatric Neuro-Oncology Program at Riley Hospital for Children at IU Health. These participants were approached during their routinely scheduled clinic visits by a member of the study team. Written or verbal consent/assent was obtained, and their data was transcribed into a REDCap™ database.

**Results:** To date, we have enrolled 118 children onto this study, with 35/76 participants completing their six-month follow-up survey. In line with Kira Bona's previous work, we have found that around 30% acknowledged one positive domain of household material hardship. Additionally, we have found that almost 40% of our cohort fall below the 200% Federal Poverty Level, which is often considered a cutpoint for lower socioeconomic status.

**Conclusions:** We have shown that collecting prospective patient reported sociodemographic information is feasible in a busy clinic setting.

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## **Patient and provider facing interventions to increase lung cancer screening utilization in the primary care setting**

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**Introduction:** Lung cancer is the leading cause of cancer mortality in the United States. Lung cancer screening (LCS) has a 20% reduction in mortality; however, screening remains low at 5.8% and even worse among Blacks (1.7%) and Hispanics (0.7%). LCS utilization is low in part because of primary care providers (PCP) lack of knowledge of eligibility criteria, time constraints, and uncertainty of next steps in management. Patient contributors include lack of awareness, fear, and distrust. *We proposed a study that would address gaps in implementing LCS. We hypothesized* this study would identify interventions effective in increasing LCS referrals in the primary care setting.

**Methods:** This study was conducted at Pecar Primary Care Clinic at Eskenazi Health. The electronic medical record (EMR) was used to identify potential screening eligible patients. LCS factsheets were mailed, and calls made inviting them participants to LCS. Interested patients were referred to the LCS program, and patients' reasons for refusal were documented. PCPs participated in LCS education and completed pre/post surveys.

**Results:** LCS education via mailed factsheets and personal calls inviting patients to LCS confirmed screening eligibility and led to referrals to the LCS program. We identified patients' reasons for refusal of LCS and limitations to contacting patients via mail and phone, including incorrect contact information and absence of pack-years in the EMR. Provider participation in the LCS education resulted in increased comfort with discussing LCS and confidence in next steps in management.

**Conclusions:** Personal LCS invitations to patients may be an effective way to increase LCS utilization. Updating the EMR with accurate patient contact information and smoking pack-years may help reach screening eligible patients. LCS provider education is an effective way to increase knowledge/confidence in LCS and managing next steps. Our proposed interventions are effective in increasing LCS referrals in the primary care setting.

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## **ANPEP regulates one-carbon metabolism in prostate cancer.**

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In the year 2023, prostate cancer (PCa) contributed to 34,700 cancer-related fatalities within the United States. Notably, African American men (AAM) experience disproportionately higher rates of both PCa incidence and mortality compared to their European American counterparts (EAM). To investigate some of the biological factors which contribute to these disparities, we carried out an unbiased genomic expression analysis of PCa stratified by ancestry using retrospective and prospective clinical cohorts. In these analyses, we identified aminopeptidase N (ANPEP, APN, CD13), as the most differentially expressed gene in both self-identified and ancestry derived AAM compared with EAM. Previous studies demonstrated that the aminopeptidase ANPEP cleaves N termini of numerous hormones, cytokines, and chemokines involved in oncogenic signaling, cancer relapse and Inflammation. Specifically, ANPEP trims peptides with an N-terminal L-alanine and (L-cysteinylglycine)-S-conjugates while releasing alanine and glycine, respectively. While the role of ANPEP in cytokine activation is well studied, the contribution of ANPEP to amino acids homeostasis remains unknown. Herein, we aim to characterize the metabolic function of ANPEP and whether ANPEP regulates therapeutic efficacy. Using computational analyses, we demonstrate that expression of ANPEP predominantly correlates with various amino acid transporters. By employing untargeted metabolomics, we subsequently revealed a significant enrichment of one-carbon metabolism in cells that overexpress ANPEP. The one-carbon metabolism connects a series of metabolic pathways including the methionine cycle which in turn regulates methylation of various cellular substrates. We then performed genome-wide methylation profiling demonstrates that ANPEP overexpression is associated with elevated methylation of DNA. Because elevated methylation of DNA which is a determinant of therapeutic efficacy in prostate cancer, future studies will assess whether ANPEP regulation of methylation capacity impacts therapeutic efficacy and disease progression. To clinically validate our findings, we then carried out a fluxomic approach in ex vivo human tumor slice culture from 20 patients of prostate cancer. These studies demonstrate that PCa from AAM exhibit higher demand for methionine and cystine highlighting dominance of one-carbon metabolism. In conclusion, we discovered a new function of ANPEP in regulating one-carbon metabolism in prostate cancer.

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# **E-consenting Trial at Indiana University Simon Comprehensive Cancer Center**

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## **BACKGROUND**

Utilizing electronic systems to e-consent would transform the consenting process at the Clinical Trials Office bringing consenting into the digital age. Some of the major factors expected to be affected included compliance with regulatory requirements, consent tracking, data quality/accuracy, audit trails, and efficiency.

## **GOALS**

CTO wanted a uniform, accessible, secure and efficient consenting process. Utilizing a platform provided the opportunity to transition from paper consents to an electronic consent library. The shift would save physical space and be environmentally friendly (i.e. reduces paper usage). CTO focused on securely completing, submitting, and storing consents in a centralized location and enhanced process efficiency.

## **OUTCOMES**

### *Benefits*

- Increased enrollment due to remote e-consent feature
- Afforded thorough review of consent and allowed patients to ask questions without physical constraint or multitasking with clinic appointments
- Adherence to regulatory requirements and protocols
- Storing e-consents securely in centralized location
- Proper completion and submission of consent forms (Auto-populated date field and consent version minimizing errors)
- Data accuracy and legibility
- Accessible library of e-documents
- Environmentally friendly (reduce paper usage)

### *Challenges*

- Less user friendly for patients who lack technological proficiency
- Training requirements to adhere to system protocols was time consuming for staff

## **LESSONS LEARNED AND FUTURE DIRECTION**

In summary, e-consenting demonstrated significant advantages. However, we identified areas for improvement to enhance user-friendliness. As an example, there is a need to streamline the patient identity verification process by eliminating the multistep verification while upholding security standards. Additionally, improving navigation for patients who lack technological proficiency and may require remote assistance emerged as a key improvement area. The CTO has opted to revert back to paper until a platform becomes available that meets consenting needs. The aims are to enable consenting efficiently and securely, prioritizing patient satisfaction and privacy.

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## **RACE is a key determinant of the human intratumor microbiome**

Mei Luo

Intratumor microbes, which are present in both tumor and immune cells, have been shown to have multiple effects on human cancer. Recent studies have demonstrated that it is possible to characterize the landscape of tumor-specific intratumor microbes in a large number of cancer patients. However, the effects of patients' demographic and clinical factors (e.g., age, gender, body mass index [BMI], and self-reported race) on the intratumor microbiome remain to be elucidated. Addressing this important open question, we performed a systematic characterization of the tumor microbiome across different cancer types to better understand the effects of these factors on the intratumor microbiome composition. We obtained the microbial abundances in different cancer types from TCGA, including 1,553 genera belonging to 395 families, 175 orders, 76 classes, and 37 phyla. We investigated the associations between the abundance of intratumor microbes, measured in normalized read counts associated with a genus, and gender, age at initial diagnosis, BMI, and race across 27 cancer types having a sample size  $\geq 20$ . This analysis was performed through a propensity score algorithm, adjusting for potential confounding factors such as histological type and tumor stage. Our key result is the finding of strong associations between races and different genera abundances in most cancer types. For example, in breast cancer (BRCA), we identified 551, 701, and 305 significantly differentially abundant genera in European versus Asian, European versus African, and Asian versus African with  $FDR < 0.05$ , respectively. Some microbial genera showed consistent significant differences in race comparisons in numerous cancer types. Reassuringly, the number of significantly differential genera is still high in European versus Asian, European versus African, and Asian versus African, respectively. Our findings thus highlight the important role that race may play in tumor microbiome composition and the need to consider its effects in future microbiome-based therapeutic strategies.

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## **Exploring Social Determinants of Health with SAVI**

Kevin Mickey

SAVI is a platform that provides access to thousands of socio-demographic variables about Central Indiana communities accessible through a web-based mapping platform. Researchers can use SAVI to visualize and analyze community health data and other socio-economic data.

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## **Psychological Burdens, System Distrust, and Financial Constraints Among the Barriers Facing Marginalized Groups Referred for Liver Transplantation for Hepatocellular Carcinoma: A Qualitative Study**

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**Background:** Black patients and those experiencing adverse social determinants of health (SDOH) face significant disparities in accessing curative therapies for hepatocellular carcinoma (HCC), which impacts their survival. Provider perceived barriers to liver transplantation (LT) have been explored. This study engages Black patients and those experiencing adverse SDOH to understand the informational, health systems, and social barriers they encounter in completing the HCC-LT care cascade.

**Methods:** Two focus groups were conducted: one with Black participants and one with participants experiencing adverse SDOH at one LT center. Black participants could have adverse SDOH, but non-Black participants were excluded from the Black focus group. Two individual interviews (one Black patient and one with adverse SDOH) supplemented the focus groups. Adverse SDOH were defined as being insured by Medicaid or Medicare and being unmarried as these adverse SDOH were associated with worse survival in our published state-wide cohort study. Participants not referred for LT were excluded. Human-centered design methods, including journey mapping, group ideation, affinity diagramming, concept mapping, and visual modeling, were used to uncover unmet needs and identify themes and differences between groups.

**Results:** There were 17 participants (7 Black and 10 with adverse SDOH); 5 had undergone LT and 12 were or had been in evaluation for LT. **Figure 1** illustrates major challenges identified by each group which included struggles with comprehending medical information and difficulty with decision making. Psychological and emotional burdens were more prevalent among Black patients, while both groups faced difficulties in securing adequate support systems. Only Black patients expressed distrust in the healthcare system including distrust in the information provided and the belief that treatments were motivated solely by profit rather than patient well-being. The adverse SDOH group voiced more concerns related to fragmented care coordination, difficulties in navigating complex healthcare systems, and financial constraints.

**Conclusions:** Black patients and those with adverse SDOH face unique challenges in accessing LT for HCC. Tailored interventions addressing information challenges, distrust, emotional burdens, and financial constraints are essential to improve access for these populations.

**Figure 1.** Affinity Diagram Exploring Marginalized Patients Barriers to Liver Transplantation for Hepatocellular Carcinoma

**Legend:** The population icons indicate which group discussed each challenge. A solid icon indicates that the challenge was a main theme of discussion. A translucent icon indicates that the challenge was mentioned but was not a main point of discussion. A missing icon indicates that the challenge wasn't mentioned.

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## **Testing the Effect of Culturally Targeted, Normative Messaging on Black Women's Intentions to Participate in a Breast Cancer Clinical Trial**

Kathi Ridley-Merriweather

Evidence demonstrates that the breast cancer (BC) research community could exert more effort to ensure the recruitment of Black women, who are underrepresented, into clinical trials (CTs). Successfully swelling the percentages of Black women who participate in BC research is likely reliant on increasing group members' motivations to surmount existing historical, cultural, and social barriers.

This study examined the effects of culturally informed messaging on Black women's intention to participate in a unique BC CT. Black women aged 18 and over (N=635) were recruited through Qualtrics to participate in an online, posttest only, control-group design message testing study using random assignment to condition. Survey questions were designed to measure the messages' effects on the women's intention to participate in the CT.

The study employed univariate and multivariate logistic regression and yielded statistically nonsignificant results; however, the findings trended overall toward having higher probability of intending to perform the behavior (overall intention  $M = 3.35$ ). Important knowledge was gained from this study showing that dissemination of culturally targeted, norms-based messaging to Black women could elicit positive intentions in their willingness to donate healthy breast tissue.

The piloted letter could pave the way for other strategies. Combining culturally targeted, norms-based messaging with face-to-face interaction could elicit positive intentions in Black women's willingness to participate in a BC CT. Results also imply that helping Black women better understand that CT participation is something in which they and others like them have interest and want to do, particularly after having been comprehensively informed. Given that previous successful recruitment methods were based on research practices involving face-to-face, interpersonal interactions, future research should consider employing a multi-level approach in further testing of these messages.

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## Colorectal Cancer Risk Assessment: Community Engagement Across the Research Continuum

Mary Robertson

**Background:** Colorectal cancer (CRC) is the second-leading cause of cancer death in the US when men and women are combined, yet it can often be detected early or prevented through screening. In 2024, there will be an estimated 152,810 new cases of colorectal cancer diagnosed in the US. African Americans have higher incidence and mortality rate and more likely to be diagnosed younger ages. Screening can prevent colorectal cancer through the detection and removal of precancerous growths (polyps), and it can often detect cancer at an early stage, when treatment is usually more successful.

**Purpose:** The IU Simon Comprehensive Cancer Center's Office of Community Outreach and Engagement (COE) created a colorectal cancer screening risk assessment to increase the use of proven colorectal cancer screening tests among the entire population for whom screening is appropriate. The purpose is to show 1) how research strategies on increasing CRC screening can be implemented in a community setting 2) how community members can participate in research at all stages from creation to implementation.

**Methods:** We adapted measures from validated cancer risk surveys; questions cover general health status, family history, age, and more. The screening tool originated with the COE's Health Equity Advisory Committee and went through evolutionary iterations based on feedback from a community listening session, community partnership (IU Health), faculty input (Dr. Imperiale), and tool pilot testing in Indiana

**Discussion:** Risk tools may increase intentions to have cancer screenings. Community engagement in evidenced based interventions from conception to implementation is essential. Results of implementing this study in Indiana show that very few Hoosiers are aware of their screening eligibility or screening guidelines. The CRC risk assessment will provide as a model for community engaged evidenced based interventions.

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## **CA19-9 Non-Production in Pancreatic Cancer: A Poor Prognosis Feature Associated with African Genetic Ancestry**

Alex Roch

**Background:** The prognosis of pancreatic ductal adenocarcinoma (PDAC) remains poor with a 5-year survival rate of only 13%, despite advancements in surgical and chemotherapeutic interventions. CA19-9 serves as a primary tumor marker for monitoring response to neoadjuvant therapies. Elevated preoperative CA19-9 levels correlate with advanced disease stages, higher risk of unresectability, and worse survival rates. Approximately 15% of patients are unable to produce this glycoprotein, but the prognostic implications of CA19-9 non-production remain uncertain. We hypothesized that CA19-9 non-production was more prevalent among individuals of African genetic ancestry and linked to a poorer prognosis.

**Methods:** We conducted a retrospective analysis of our institution's prospective surgical database, including all consecutive patients who underwent curative pancreatic resections for PDAC from January 2015 to May 2023 and had documented CA19-9 values. CA19-9 non-production was defined as sustained serum CA19-9 levels below 3U/mL.

**Results:** Among the 642 identified patients with an average age of 67 years and a gender ratio of 0.5, 46 were classified as CA19-9 non-producers, representing 7.2% of the total cohort. Notably, CA19-9 non-production was more prevalent in individuals of African descent compared to Caucasian patients (20% vs. 6.4%,  $p=0.009$ ). Demographic, clinical, and pathological characteristics were similar between CA19-9 producers and non-producers. While the use of neoadjuvant therapy was not different between the two groups, CA19-9 non-production was associated with poorer response to neoadjuvant chemotherapy. None of the CA19-9 non-producers demonstrated a major pathological response (grade 0 or 1) to neoadjuvant chemotherapy, in contrast to 12.7% of producers ( $p=0.09$ ). In a multivariable analysis, African genetic ancestry independently correlated with CA19-9 non-production ( $p=0.04$ , OR 2.7[1.1-6.7]) and decreased probabilities of major pathological response ( $p=0.01$ , OR 7.5[1.5-37.3]).

**Conclusion:** Our findings suggest that CA19-9 non-production is more prevalent among individuals of African genetic ancestry and is associated with worse outcomes, especially inferior response to neoadjuvant chemotherapy.

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## Use of Co-Design to Identify Barriers to Health-Promoting Behaviors among African American Breast Cancer Survivors with Comorbid Obesity

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### Abstract

**Introduction:** Approximately 90% of African American patients with newly diagnosed breast cancer have multimorbidity most commonly cardiometabolic diseases like obesity. Obesity is related to negative impacts across all aspects of cancer care as well as more adverse side effects of cancer treatment. African American breast cancer survivors (BCS) show higher incidences of chronic conditions, like obesity, and have difficulty losing weight. Lifestyle interventions can improve survivorship outcomes, but most have been adapted to African American BCS needs.

**Objective:** The purpose of this research is to explore and honor the lived experiences of breast cancer survivorship among African American women with obesity to better understand their experiences and perceptions of how their cancer journey intersects with other health behaviors.

**Methods:** A co-design approach with five participants was used to understand specific barriers to a healthy weight and lifestyle as well as potential solutions that would benefit African American or Black BCS entering an evidence-based lifestyle intervention that targeted weight and body wellness. Participants completed one co-design session for problem identification. This initial session identified the participants' most impactful cancer- and non-cancer-related barriers to building health behaviors.

**Results:** Barriers to a healthy lifestyle were found to be either cancer- or non-cancer-related. Cancer-related barriers included pain and fatigue related to cancer treatment and the lasting side effects. Non-cancer related barriers included time and responsibilities, nutrition, exercise, and the definition of health used by medical professionals.

**Discussion:** Both cancer-related and non-cancer related barriers were identified in contributing to difficulty in maintaining health behaviors. Further research should examine how these barriers can be addressed in lifestyle interventions targeted to African American BCS.

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