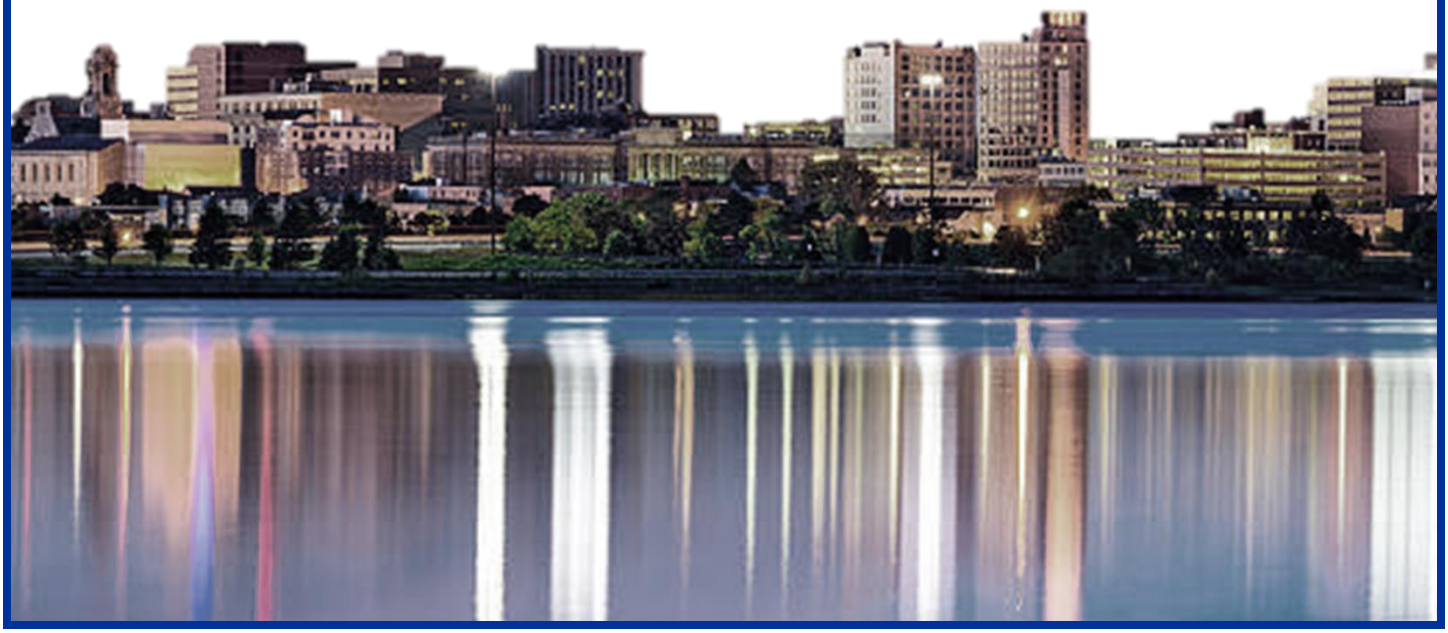
The 42nd Meeting of the New England Association of Gynecologic Oncologists

Portland, Maine

June 9-11, 2023



New England Association of Gynecologic Oncologists

Preamble

In Sturbridge, Massachusetts at the Public House on the Common, a group of physicians from the several states and commonwealths of Connecticut, Massachusetts, Maine, Rhode Island and Vermont were gathered in the afternoon of Saturday, the eighth day of March in the year A.D. nineteen hundred and eighty. These physicians proclaim their existence as gynecologic oncologists in order to advance the practice and science of gynecologic oncology in New England and agree that an organization for such a purpose should be formed and sustained.

It was decreed that this organization henceforth should be known as the New England Association of Gynecologic Oncologists.

It was agreed that invitations to membership should be extended to those who have distinguished themselves by their accomplishments and their extraordinary contributions to the practice and science of gynecologic oncology.

It was agreed that the purpose of the association was to improve patient care by: (1) Enhancing the exchange of medical knowledge among New England physicians treating patients with gynecologic malignancies. (2) Providing a forum for increased communication among gynecologic oncologists in New England which should foster collaborate studies. (3) Encouraging a feeling of camaraderie among gynecologic oncologists and others with common interests.

I hereby agree to the bylaws of this preamble and accordingly affix my signature on Saturday, October 18, 1980.

NEAGO 2023 would like to thank the following sponsors for their generous support!

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The 42nd Meeting of the New England Association of Gynecologic Oncologists

PAST NEAGO MEETINGS AND PRESIDENTS

YEAR	LOCATION	PRESIDENT
1980-1981	Treadway Inn, Newport, RI	Murray Joseph Casey, MD
1981-1982	Black Point Inn, Prouts Neck, ME	Charles R. Boyce, MD
1982-1983	Pleasant Bay, Chatham, MA	Henry C. McDuff, Jr., MD
1983-1984	Woodstock Inn, Woodstock, VT	Thomas Leavitt, MD
1984-1985	Trapp Family Lodge, Stowe, VT	Jerome Belinson, MD
1985-1986	New Seabury, Cape Cod, MA	C. Thomas Griffiths, MD
1986-1987	Inn by the Sea, Cape Elizabeth, ME	Charles L. Easterday, MD
1987-1988	The Hilton Inn, Mystic, CT	Stephen L. Curry, MD
1988-1989	Bar Harbor Inn, Bar Harbor, ME	Ernest I. Kohorn, MD
1989-1990	Sheraton Sturbridge Resort, Sturbridge, MA	Richard E. Hunter, MD
1990-1991	The Equinox, Manchester, VT	Robert C. Knapp, MD
1991-1992	Newport Islander, Newport, RI	John C. Lathrop, MD
1992-1993	Chatham Bars Inn, Chatham, MA	Peter E. Schwartz, MD
1993-1994	Harbor House, Nantucket, MA	Arlan F. Fuller, MD
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1997-1998	The White Mountain Hotel, N. Conway, NH	Joseph T. Chambers, MD
1998-1999	The Westin, Providence, RI	C.O. Granai, MD
1999-2000	Cranwell Resort, Lenox, MA	Jonathan M. Niloff, MD
2000-2001	Topnotch Resort and Spa, Stowe, VT	Setsuko K. Chambers, MD
2001-2002	Harbor View Hotel, Martha's Vineyard, MA	James S. Hoffman, MD
2002-2003	Black Point Inn, Prouts Neck, ME	Hector M. Tarraza, MD
2003-2004	Chatham Bars Inn, Chatham, MA	Walter H. Gajewski, MD
2004-2005	Mt. Washington Resort, Bretton Woods, NH	Robert McLellan, MD
2005-2006	The Equinox, Manchester Village, VT	Michel Prefontaine, MD
2006-2007	The Colony Hotel, Kennebunkport, ME	Annekathryn Goodman, MD
2007-2008	The Wequassett Resort, Chatham, MA	Michael Muto, MD
2008-2009	Wentworth-by-the-Sea, New Castle, NH	Leslie DeMars, MD
2009-2010	Spruce Point Inn, Booth Bay Harbor, ME	Beth Nelson, MD
2010-2011	Stowe Mountain Lodge, Stowe, VT	Valena Soto-Wright, MD
2011-2012	Bar Harbor Regency, Bar Harbor, ME	Marcela del Carmen, MD
2012-2013	Water's Edge Resort & Spa, Westbrook, CT	John Schorge, MD
2013-2014	Hyatt Regency, Goat Island, Newport, RI	Richard G. Moore, MD
2014-2015	The Colony Hotel, Kennebunkport, ME	Susan Zweizig, MD
2015-2016	Ocean Edge, Brewster, MA	Colleen Feltmate, MD
2016-2017	The Hilton Mystic, Mystic, CT	Amy Brown, MD, MPH
2017-2018	The Cliff House, Cape Neddick, ME	Emmanuel Soultanakis MD
2018-2019	Omni Mount Washington, Bretton Woods, NH	Dave Boruta, MD
2019-2020	The Equinox, Manchester Village, VT *(Canceled due to pandemic.)*	Cheung Wong, MD
2020-2021	Held virtually *(Due to pandemic.)*	Cheung Wong, MD
2021-2022	Hotel Viking, Newport, RI	Katina Robison, MD

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(For the best paper presented by a trainee)

1922 Bjorn Bjornsson, MD
1993 Ricardo Saniz de la Cuesta, MD
1994 Iris Wertheim, MD
1995 Thomas Rutherford, MD
1996 Mitchell Edelson, MD
1997 Annette Chen, MD
1998 Donald Wiper, MD
1999 John Schorge, MD

TRAINEE AWARD

1999 Karen Houck, MD
2000 Eugene P. Toy, MD
2001 Richard Moore, MD
2002 Robert DeBernardo, MD
2002 Tanja Pejovic, MD
2003 Laurent Brard, MD
2003 E. Colin Koon, MD, PhD
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2004 Ami Vaidya, MD
2005 Michael J. Callahan, MD
2005 Viven Lee, MD
2006 Katina Robison, MD
2006 Michael Kelley, MD
2007 Eloise Chapman (Clinical)
2007 Emily M. Ko, MD (Clinical)
2007 Katina Robison, MD (Basic Science)
2007 Alexander Olawaiye, MD (Basic Science)
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2010 Megan Wright, MD (Clinical)
2010 Katrin Kristjansdottir, MD (Basic Science)
2011 Elizabeth Lokich, MD (Clinical)
2011 Leslie Bradford, MD (Basic Science)
2012 Jessica Hsieh, MD (Clinical)
2012 Rachel Clark, MD (Basic Science)
2013 Kevin Elias, MD (Basic Science)
2013 Emily Hill, MD (Basic Science)
2014 Amy Bregar, MD (Clinical)
2014 Elizabeth Lokich, MD (Basic Science)
2014 Carlton Schwab, MD (Basic Science)
2015 Jonathan Black, MD (Basic Science)
2015 Kevin Elias, MD (Basic Science)
2015 Katelyn Dorney, MD (Clinical)
2016 Jenna Emerson, MD (Clinical)
2016 Kevin Elias, MD (Basic Science)
2017 Roni Nitecki, MD (Clinical)
2017 Matthew Oliver, MD (Basic Science)
2018 Searching for Award Winner (Clinical)
2018 Lindsey Beffa, MD (Basic Science)
2019 Deanna Glassman (Clinical)
2019 Jenna Emerson (Basic Science)
2020 No awards given (Meeting canceled)
2021 No awards given (Virtual; no abstracts)
2022 Kaitlin Nicholson, MD (Basic Science)
2022 Kate Kurchena, MD (Clinical)
2022 Julia Dexter, MD (NEAGO Collaborative)

PROGRAM

Friday, June 9, 2023

8:00 – 11:00 am	**NEAGO Surgical Symposium** Course Director: *Michael Worley, MD (BWH/DFCI)* Course Faculty: *Neil Horowitz, MD (BWH/DFCI), Alison Gockley, MD (MGH), David Boruta, MD (MD Anderson), Terri Febbraro, MD (MaineHealth), Leslie Bradford, MD (MaineHealth)*
11:00 am-12:00 pm (Armory and Regency Rooms)	**Member/Guest Registration** **Exhibition Hall Opens**
12:00 -1:00 pm (Armory Room)	**Industry Session:** *Speaker Lunch sponsored by Genmab* **Title:** "Understanding TIVDAK (tisotumab vedotin-tftv)" **Speaker: Heidi Godoy, DO** – US Oncology **(Boxed lunches provided by NEAGO)**
1:15-1:30 pm (Armory Room)	**Presidential Welcome:** *Leslie Bradford, MD*
1:30-2:30 pm (Armory Room)	**FIRST SCIENTIFIC SESSION – Basic Science** **Moderators:** Elizabeth Lokich, MD – WIHRI and Mitchell Clark, MD – Yale *(Abstract Schedule on Page 10)*
2:30-3:00 pm (Armory and Regency Rooms)	**Break with Coffee, Snacks and Exhibits** **(Refreshments provided by NEAGO)**
3:00-4:50 pm (Armory Room)	**SECOND SCIENTIFIC SESSION – Patient Care** **Moderators:** Katina Robison, MD – Tufts ('22 NEAGO President) and Ashley Stuckey, MD – WIHRI ('24 President-Elect) *(Abstract Schedule on Page11)*
5:00-6:30 pm (Armory Room)	**Tumor Board: NEAGO's Past, Present and Future** **Moderators:** Amy Bregar, MD (MGH) and Alex Melamed, MD (MGH) *Educational component sponsored by GlaxoSmithKline* **(Refreshments provided by NEAGO)**
6:30-7:30 pm (Armory and Regency Rooms)	**Cocktail Reception** **Exhibition Hall Open**

PROGRAM

Saturday, June 10, 2023

7:00 am (Armory Room)	**Registration Opens**
7:00-9:00 am (Regency Room)	**Breakfast Buffet and Exhibition Hall Open** **(Food and Beverages provided by NEAGO)**
7:30-8:30 am (Armory Room)	**Industry Session:** Speaker Breakfast sponsored by AstraZeneca **Title:** *Roundtable Program: LYNPARZA as First-line Maintenance Therapy in BRCAm or HRD+ Advanced Ovarian Cancer After Response to Platinum-Based Chemotherapy"* **Speaker: Bradley Monk, MD, FACOG, FACS** - HonorHealth
8:40-9:40 am (Armory Room)	**THIRD SCIENTIFIC SESSION – Lower Genital Tract** **Moderators:** Heidi Godoy, DO – US Oncology, Albany and Andrew Wiechert, MD – BIDMC *(Abstract Schedule on Page 12)*
9:45-10:15 am (Regency Room)	**Break with Coffee, Snacks and Exhibits** **(Refreshments provided by NEAGO)**
10:30 am-11:25 am (Armory Room)	**FOURTH SCIENTIFIC SESSION – Disparities in Care and Practice** **Moderators:** Cheung Wong, MD – UVM ('20 and '21 NEAGO President) and Leslie Bradford, MD – MaineHealth ('23 NEAGO President) *(Abstract Schedule on Page13)*
11:30-11:45 am (Armory Room)	**Presidential Address** Leslie Bradford, MD
12:00-1:00 pm (Armory Room)	**Keynote Address** **Sarah Temkin, MD** *Associate Director of Clinical Research, NIH Office of Research of Women's Health (ORWH)* "When surgery becomes 'Women's Work' – The Feminization of the Gynecologic Oncology Workforce" **(Boxed lunch provided by NEAGO)**
1:30 pm	**Exhibit Halls Close**
5:30-9:00 pm (PMA)	**Cocktails and Dinner at the Portland Museum of Art** 5:30-6:30 pm – Passed Prosecco and hors d'oeuvres (Sculpture Garden) 6:30-8:30 pm – Dinner in the Main Gallery **(NEAGO is providing 2 drink tickets per person for this event)**

PROGRAM

Sunday, June 11, 2023

7:00-9:00 am (Regency Room)	**Breakfast Buffet and Exhibition Hall Open** **(Food and Beverages provided by NEAGO)**
7:45-8:45 am (Armory Room)	**Industry Session:** Speaker Breakfast sponsored by Immunogen **Title:** *"A Targeted Treatment for Platinum Resistant Ovarian Cancer"* **Speaker: Ursula Matulonis, MD** - Chief of the Division of Gynecologic Oncology at the Dana-Farber Cancer Institute
9:00-10:10 am (Armory Room)	**FIFTH SCIENTIFIC SESSION – Focus on Endometrial Cancer** **Moderators:** Joyce Barlin, MD – Women's Cancer Care Associates, Albany) and Eric Eisenhauer, MD – MGH *(Abstract Schedule on Page 14)*
10:10-10:40 am (Armory Room)	**Distillation and Panel Discussion – "Will we ever agree on how to treat advanced-stage endometrial cancer""** Flashback to NEAGO 2019 with Joyce Barlin, MD, Eric Eisenhauer, MD, and David Baruta, MD ('19 NEAGO President)
10:40-11:00 am (Armory and Regency Rooms)	**Break with Coffee, Snacks and Exhibits** **(Refreshments provided by NEAGO)** ***Hotel Check Out**
11:10-11:40 am (Armory Room)	**SIXTH SCIENTIFIC SESSION – Case Reports and Video Abstracts** **Moderators:** Murray Joseph Casey, MD – Creighton ('80 NEAGO President) and Leslie Bradford, MD – MaineHealth ('23 NEAGO President) *(Abstract Schedule on Page 15)*
11:50 am (Armory Room)	**Announcement of NEAGO Prizes** **Announcement of Trainee Research Awards** **Summary of NEAGO Business Meeting:** *Drs, Bradford, Robison and Esselen* **Passing of the Gavel:** *Leslie Bradford, MD – '23 NEAGO President* **NEAGO 2024 Preview:** *Ashley Stuckey, MD, NEAGO President-Elect*

ABSTRACT SCHEDULES

(Presenters' names have been listed in bold.)

FIRST SCIENTIFIC SESSION (Friday, June 9, 2023):

TOPIC – "Basic Science" (1:30 – 2:30 pm)

Moderators – Elizabeth Lokich, MD and Mitchell Clark, MD

Abstract #1 Elucidating the role of amphiregulin in the ovarian tumor immune microenvironment. ***Jasmine Ebott***, *Julia McAdams, Morgan Woodman, Payton De la Cruz, Jennifer R Ribeiro, Nicole E James, Ashley Stuckey* (Institution: WIHRI)

Abstract #2 Intratumoral expression analysis of mast cells in high grade serous ovarian cancer. ***Julia McAdams***, *Jasmine Ebott, Payton De la Cruz, Ashley Stuckey, Nicole E James* (Institution: WIHRI)

Abstract #3 Investigation of miRNA Expression Profiles in the Oviduct of a BRCA1 Mouse Model Prior to Premalignant Tubal Lesion Formation. ***Jessica St. Laurent***, *Urszula Smyczynska, Nicole Dunn, Wojciech Fendler, Kevin Elias* (Institution: BWH/DFCI)

Abstract #4 Evaluation of CAD inhibition for the treatment of ARID1A deficient cancers. ***Zainab Shonibare***, *Jaida Morgan, Zhigui Li, Gloria Huang* (Institution: Yale)

Abstract #5 Trastuzumab deruxtecan as treatment for recurrent uterine serous carcinoma: a case report supported by preclinical evidence. ***Blair McNamara***, *Levent Mutlu, Diego D. Manavella, Stefania Bellone Justin Harold, Dennis Mauricio, Eric R. Siegel, Natalia Buza, Pei Hui, Tobias Max Philipp Hartwich, Yang Yang-Hartwich, Cem Demirkiran, Miguel Skyler Z. Verzosa, Gary Altwerger, Elena Ratner, Gloria S. Huang, Mitchell Clark, Vaagn Andikyan, Masoud Azodi, Peter R. Dottino, Peter E. Schwartz, Alessandro D. Santin* (Institution: Yale)

SECOND SCIENTIFIC SESSION (Friday, June 9, 2023):

TOPIC – "Patient Care" (3:00 – 4:50 pm)

Moderators – Katina Robison, MD and Ashley Stuckey, MD

Abstract #6 Association of serous tubal intraepithelial carcinoma (STIC) with germline genetic mutations and gynecologic malignancy. ***Sha Sha***, *Ivy Wilkinson-Ryan, Jessica Bentz, Ilana Cass.* (Institution: Dartmouth)

Abstract #7 Hormone therapy is associated with improved overall survival in advanced-stage low-grade serous ovarian carcinoma: a risk-set matched retrospective study. ***Syem Barakzai***, *Amy L. Bregar, Marcela G. del Carmen, Eric L. Eisenhauer, Annekathryn Goodman, J. Alejandro Rauh-Hain, Allison A. Gockley, Alexander Melamed* (Institution: MGH)

Abstract #8 Understanding Geospatial Relationships in Ovarian Cancer Risk. ***Victoria Wang***, *Jaime E Hart, Kevin Elias* (Institution: BWH)

Abstract #9 Up front outpatient financial counseling in patients with newly diagnosed gynecologic malignancy undergoing chemotherapy decreases financial toxicity, as determined by the COST questionnaire. *Katrin Eurich,* ***Corinne Jansen****, Lauren Schlichting, Katina Robison, Katherine Miller* (Institution: WIHRI)

Abstract #10 Implementation of Financial Toxicity Screening and a Novel Financial Navigation Program. ***Nadiha Noor Chelsea***, *Maria Reyes, Tina Yi Jin Hsieh, Michele R. Hacker, Leslie A. Garrett, Katharine M. Esselen* (Institution: BIDMC)

Abstract #11 Utilizing electronic Patient Reported Outcomes (PRO) to Improve Postoperative Gynecologic Oncology care in a Rural Academic Center. ***Linh H. Nguyen***, *Casey O'Brien, Franziska Mbonglou, Gauri Dandi, Michael J. Hassett, Sandra Wong, Ilana Cass* (Institution: Dartmouth)

Abstract #12 Increasing Clinical Trial Enrollment amongst Gynecologic Oncology Patients via a Survey Intervention. ***Allan Huang***, *Elizabeth Lokich* (Institution: WIHRI)

Abstract #13 Early pathways to end-of-life planning: Evaluating the impact of an educational video on documented end-of-life planning discussions with patients with gynecologic cancers. ***Alicia M. Youssef***, *Madhuri Nori, Katina Robison, Katherine Miller (*Institution: WIHRI)

THIRD SCIENTIFIC SESSION (Saturday, June 10, 2023):

TOPIC – "Lower Genital Tract" (8:40 – 9:40 am)

Moderators – Heidi Godoy, DO and Andrew Wiechert, MD

Abstract #14 The effect of intrawound vancomycin powder on surgical site infection in inguinal lymph node dissection. *Jessica Buck DiSilvestro,* ***Alicia Youssef****, Leni Warlick, Lauren Schlichting, Katina Robison, Elizabeth Lokich* (Institution: WIHRI)

Abstract #15 Trends in sentinel lymph node evaluation for vulvar melanoma over time: a National Cancer Database analysis. ***Stephanie Alimena****, Alexandra Bercow, Neil Horowitz, Michelle Davis* (Institution: BWH/MGH)

Abstract #16 Association between utilization of sentinel lymph node biopsy in vulvar cancer and hospital volume of melanoma and breast cancer: a national cancer database study. ***Alexandra Bercow****, Jason Silberman, Varvara Mazina, Alexander Melamed, Allison Gockley, Amy Bregar, Eric Eisenhauer, Christina Minami, George Molina* (Institution: MGH/BWH/DFCI)

Abstract #17 LEEP vs. CKC: Final Pathology on Completion Hysterectomy in Patients with Adenocacinoma in Situ. ***William Manning****, Katina Robison, Elizabeth Lokich, Katrin Eurich* (Institution: WIHRI)

Abstract #18 Long-term follow-up of anal cytology and HPV genotyping among women with lower genital tract neoplasia. *Jessica DiSilvestro,* ***Sarah Fet-He****, Leni Warlick BS, Katherine Miller MD, Steven Schechter MD, Katina Robison MD* (Institution: WIHRI)

Abstract #19 Changes in LEEP Rates Following Introduction of the 2019 ASCCP Guidelines: A Retrospective Chart Review. ***Agudogo JS****, Sadlak N, Bookman L, Kellogg E, Noor Chelsea N, Hsieh T, Garrett L, McKinney S, Farid H.* (Institution: BIDMC)

FOURTH SCIENTIFIC SESSION (Saturday, June 10, 2023):

TOPIC – "Disparities in Care and Practice" (10:30 am – 11:25 pm)

Moderators – Cheung Wong, MD and Leslie Bradford, MD

Abstract #20 Concurrent laparoscopic hysterectomy and bariatric surgery for early-stage endometrial cancer and endometrial intraepithelial neoplasia: early results and lessons learned from an interdisciplinary prospective feasibility trial. ***Alexandra S Bercow***, *Victoria Wang, Stephen J Fiascone, Kevin M Elias, Michael J Worley, Colleen M Feltmate* (Institution: BWH)

Abstract #21 Assessing Disparities in Delays to Ovarian Cancer Care Across the Healthcare System. *Parisa N. Fallah, Gia Ciccolo, Tara Markert, Andrea Pelletier, Victoria Wang, Kevin M. Elias, Sarah Feldman,* ***Stephanie J. Alimena*** (Institution: BWH)

Abstract #22 Interval Wait Time for Endometrial Cancer Patients. *Victoria Wang,* ***Hadley Reid****, Trinity I. Russell, Lucy Chen, Andrea Pelletier, Regan H. Marsh, Colleen Feltmate, Kevin Elias* (Institution: BWH)

Abstract #23 Financial Toxicity is Associated with Longer Time from Symptom Onset to Diagnosis in Uterine Cancer. ***Reyes M****, Baig R, Pite A, Gompers A, Hacker M, Dalrymple J, Esselen K* (Institution: BIDMC)

Abstract #24 Improving Health Equity Among Ovarian Cancer Patients Enrolled in an Enhanced Recovery After Surgery (ERAS) Pathway. *Stephanie J. Alimena, Parisa N. Fallah,* ***Taylor Stewart****, Gavin G. Ovsak, Beryl Manning-Geist, Michael Worley, Jr, Kevin M. Elias* (Institution: BMH)

Abstract #25 Resident perceptions prior to the introduction of a gynecologic oncology fellowship. ***Kaitlin Nicholson****, Devon Harris, Lily Schneider, Elysia Larson, Michele Hacker, John L. Dalrymple, Ashlee Smith, Ashley Graul, Katharine Esselen, Andrew Wiechert* (Institution: BIDMC, University of Rochester Medical Center, St. Luke's University Health Network)

Abstract #26 Patient- and surgeon-related factors associated with operating room turnover time. ***Stephanie Alimena****, Michelle Davis* (Institution: BWH)

FIFTH SCIENTIFIC SESSION (Sunday, June 11, 2023):

TOPIC – "Focus on Endometrial Cancer" (9:00 – 10:10 am)

Moderators – Joyce Barlin, MD and Eric Eisenhauer, MD

Abstract #27 Lower risk of incident endometrial cancers in patients with type 2 diabetes mellitus treated with sodium-glucose cotransporter-2 inhibitors: A multi-center cohort study across the United States. ***Tina Y. J. Hsieh***, *Pin-Chia Huang, Michele R. Hacker, Joseph Dottino, Andrew Wiechert, Kevin Sheng-Kai Ma* (Institution: BWH)

Abstract #28 Characteristics and recurrence patterns in patients with stage I serous endometrial cancers. ***Kaitlin M Nicholson***, *Marcos Lepe, Lindsay Nelson, Devon Harris, Megan Yuen, Laura E. Dodge, Joanne Jang, Andrew Wiechert, Katharine M Esselen* (Institution: BIDMC)

Abstract #29 Molecular Subtypes of Endometrial Cancer Predict Rates of Lymph Node and Ovarian Metastasis at the Time of Surgical Staging. ***Isabela Covelli Velez***, *Mary Kathryn Abel, Hadley Reid, Alexandria N. Young, Colleen Feltmate, Jessica St. Laurent* (Institution: BWH)

Abstract #30 Trends in the treatment of lymph node positive endometrial cancer since the dissemination of PORTEC-3 and GOG 258. ***Varvara Mazina***, *Alex Bercow, Amy Bregar, Allison Gockley, Eric Eisenhauer, AK Goodman, Rachel Sisodia, Marcela del Carmen, Alexander Melamed* (Institution: MGH)

Abstract #31 Comparative Analysis of Adjuvant Treatment Outcomes in Stage III Endometrial Cancer: Overall Survival, Recurrence-Free Survival, and Toxicity. ***Alex E. Rosenthal***, *Annliz Macharia, Andrew Wiechert, Joanne Jang, Katharine Esselen* (Institution: BIDMC)

Abstract #32 Rate of postoperative VTE in endometrial cancer patients undergoing minimally invasive surgery. *Katrin Eurich,* ***Corinne Jansen***, *Julia Dexter, Elizabeth Lokich* (Institution: WIHRI)

Abstract #33 Pregnancy Outcome of Women undergoing Conservative Management for Endometrial Intraepithelial Neoplasia/Endometrial Adenocarcinoma: A Systematic Review and Meta-Analysis. ***Aashna Saini***, *Veronika Melnik, Ariba Memon, Becky Baltich Nelson, Katherine Leung, Gianna Wilkie, Susan Zweizig* (Institution: UMass)

SIXTH SCIENTIFIC SESSION (Sunday, June 12, 2022):

TOPIC – "Case Reports and Video Abstracts" (11:10 – 11:40 am)

Moderators – Murray Joseph Casey, MD ('80 President), and Leslie Bradford, MD ('23 President)

Abstract #34 Inhaled Tranexamic Acid (TXA) for Management of Pulmonary Hemorrhage in Stage III Mixed Trophoblastic Tumor. ***Rose Emlein***, *Heather Einstein, Amy Brown, Amanda Ramos, Jonathan Cosin, Clare Zhou, Marguerite Palisoul* (Institution: UConn/Hartford Healthcare)

Abstract #35 Diagnosis of congenital androgen insensitivity syndrome (CAIS) after discovery of a mixed germ cell tumor in patient with prior incorrect diagnosis of Mayer-Rokitansky-Kuster-Hauser (MRKH) syndrome. ***Areta Bojko***, *Jessica Kim, Caroline Nitschmann, Andrea Sorcini, Wright, Valena* (Institution: Lahey)

Abstract #36 Case Report: Paclitaxel Encephalopathy in Uterine Serous Carcinoma Patient. ***Allison Schachter***, *Jovana Martin, Timothy McElrath, Patrick Timmins, Joyce N. Barlin* (Institution: Albany Medical Center/Women's Cancer Care Assoc.)

Abstract #37 VIDEO ABSTRACT: Robotic Laterally Extended Endopelvic Resection for Recurrent Endometrial Cancer. ***Justin Harold***, *Blair McNamara, Levent Mutlu, Masoud Azodi, Elena Ratner* (Institution: Yale)

*1. Elucidating the role of amphiregulin in the ovarian tumor immune microenvironment.

Jasmine Ebott, *Julia McAdams, Morgan Woodman, Payton De la Cruz, Jennifer R Ribeiro, Nicole E James, Ashley Stuckey* - ***Institution:*** *WIHRI*

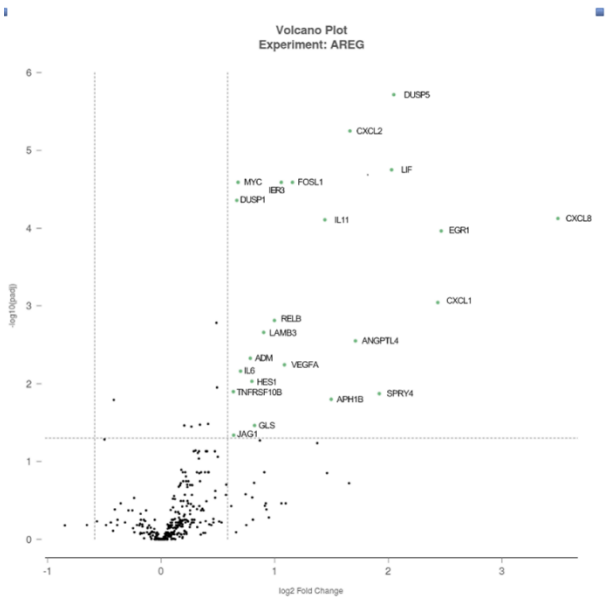
Objective: High grade serous ovarian cancer (HGSOC) is the most lethal gynecologic malignancy. In recent years, immunotherapies have garnered widespread success, however response rates have remained low for HGSOC. Therefore, an improved understanding as to how chemotherapy affects the ovarian tumor immune microenvironment (TIME) may uncover novel treatment. Our prior data established that the transmembrane glycoprotein amphiregulin (AREG) was one of the most significantly induced genes in HGSOC post neoadjuvant chemotherapy. Therefore, we sought to elucidate the role that increased AREG plays in the ovarian TIME following chemotherapy.

Methods: HGSOC cell line OV8 was stimulated with recombinant AREG (rAREG) and submitted for NanoString nCounter® PanCancer IO360 analysis to identify genomic changes in over 770 genes related to tumor immunology. A phospho-kinase proteome profiler and western blot analysis was employed to determine signaling pathways changes affected by rAREG in OV8, and the additional HGSOC cell line PEA1. Finally, The Cancer Genome Atlas (TCGA) Ovarian Serous Cystadenoma Nature 2011 study was accessed to evaluate AREG's association with platinum status, as well as its co-expression with genes of interest.

Results: Nanostring analysis revealed that OV8 cells treated with rAREG led to numerous significant ($p<0.006$) tumor-intrinsic immune increases, notably in DUSP5 (4.1- fold), DUSP1 (1.6-fold), IL6 (1.6-fold), CXCL8 (11.2-fold), CXCL2 (3.2 fold), and CXCL1 genes (5.4- fold) (Figure 1). TCGA data analysis revealed that AREG was significantly($p=0.018$) increased in patient chemoresistant tumors versus those sensitive to platinum-based therapy. Moreover, DUSP5, DUSP1, IL6, CXCL8, CXCL2, and CXCL1 were found to positively correlate ($r=0.2.15-0.354$, $p<0.00001$) in the TCGA cohort. Phospho-kinase proteome profiler results revealed an increase in STAT3 expression following rAREG exposure in OV8(2.9- fold) and PEA1(1.6- fold) cells. These results were validated via western blot analysis. Furthermore, western blot analysis also revealed that phospho-AKT, phospho-ERK, and programmed death ligand 1 (PD-L1) were increased following rAREG treatment in HGSOC cells.

Conclusions: These findings demonstrate that increased AREG leads to tumor-intrinsic activation of key immune pathways and associated genes. Further studies include investigating these changes in immunocompetent in-vitro and in vivo models as well as determining the effects of targeting AREG in HGSOC.

Continued - *Abstract 1, Figure 1: NanoString nCounter® PanCancer IO360 analysis. Volcano plot of significant ($p<0.05$) log2 fold changes in OV8 cells treated with recombinant AREG compared to control.



2. Intratumoral expression analysis of mast cells in high grade serous ovarian cancer

Julia McAdams, *Jasmine Ebott, Payton De la Cruz, Ashley Stuckey, Nicole E James - Institution: WIHRI*

Objective: As high grade serous ovarian cancer (HGSOC) patients have exhibited overall low response rates to clinically available immunotherapies, a more thorough understanding of the unique and complex ovarian tumor immune microenvironment (OTIME) is warranted in order to uncover novel immunologic targets. Our previous work reported that mast cells are significantly upregulated in HGSOC patient tumors following neoadjuvant chemotherapy (NACT). While mast cells are canonically known for mediating allergic responses, they also play a role in promoting tumor angiogenesis, although this process has not been well elucidated in HGSOC. Therefore, in this current study we sought to begin to better understand the location and function of mast cells within the OTIME.

Methods: 37 HGSOC matched pre-and post-NACT patient tumors were stained with a commercially available mast cell hemotoxic-based kit and both intratumoral and stromal mast cells were quantified. Immunohistochemistry was employed to stain for histamine in 19 matched HGSOC patient tumors and mean intensity and integrated optical density was quantified using Image J. Kaplan Meier curve analysis was employed to determine the relationship between mast cells levels and progression-free survival (PFS).

Results: Mast cells were more prominently expressed in intraepithelial regions compared to stromal cells, however both populations were significantly ($p<0.05$) increased following NACT. Total mast cells stratified by upper and lower quartile demonstrated that higher levels were significantly ($p<0.05$) associated with improved PFS. Furthermore, histamine, a marker of mast cell degranulation was significantly($p<0.05$) increased in HGSOC tumors post-NACT and significantly correlated ($r=0.553$, $p=0.013$) with the change in total mast cells.

Conclusions: Overall, our findings suggest a correlation in NACT exposure and intratumoral mast cell recruitment and degranulation. Further studies include investigating differences in specific tumorigenic genes and cell signaling pathways in mast cells pre- and post- NACT, as well as determining if mast cells can impact HGSOC chemotherapy response.

*3. Investigation of miRNA Expression Profiles in the Oviduct of a BRCA1 Mouse Model Prior to Premalignant Tubal Lesion Formation

Jessica St. Laurent*, Urszula Smyczynska, Nicole Dunn, Wojciech Fendler, Kevin Elias - Institution: BWH/DFCI*

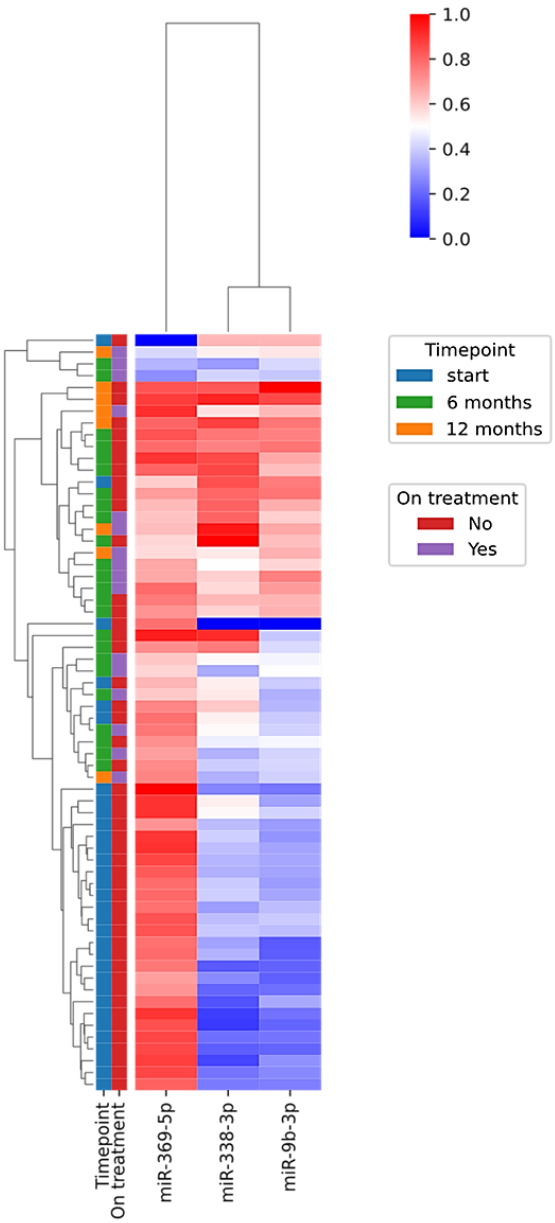
Objective: This study aimed to explore whether changes in miRNA profiles occur in the oviduct of a BRCA1 mouse model before the formation of premalignant tubal lesions.

Methods: Sixty-four Pax8-Cre Brca1flox/flox, tp53flox/flox mice were randomly assigned to either control or doxycycline-containing diet. Laparotomy was performed, and unilateral oviduct excision was carried out in all mice at the beginning of the study. Cohorts were treated for either 6 months or 12 months from the diet initiation. At the end of the study, oviduct tissue was obtained for analysis. Immunohistochemistry was performed on tissue to quantify Ki67 and Pax8 expression. Oviduct tissue was dissociated, and miRNA was isolated using a circulating RNA Qiagen kit. cDNA libraries were prepared from miRNA samples, and next-generation sequencing was performed. Data analysis included sample normalization, quality control, and differential expression using limma software modeling effects of both time, repeated measurements, and treatment.

Results: After at least 6 months of treatment, oviduct samples from dox-treated mice showed a significantly higher number of Ki67-positive cells compared to the control group (45 vs. 20, $p=0.011$). A total of 1920 unique miRNAs were identified from the oviduct tissue, and 327 miRNAs were present in all cohorts. The miRNA signature in all samples varied between the initial and delayed time points, indicating time-dependent changes in tissue miRNA expression. Additionally, 57 miRNAs were significantly differentially expressed between the control and BRCA1/tp53 loss oviducts ($p<0.05$). Three miRNAs, namely miR-9b-3p, miR-338-3p, and miR-369-5p, showed an increasing difference between the 6 and 12-month cohorts (Figure 1). Several miRNAs upregulated in the dox-treated group were previously associated with early-stage high-grade serous ovarian carcinoma.

Conclusion: The Pax8-Cre Brca1flox/flox, tp53flox/flox mouse is a suitable model for studying premalignant lesions of the mouse oviduct. The loss of BRCA1 and tp53 expression increased proliferative activity in the mouse oviduct and caused temporally dependent changes in tissue miRNA signature. The most altered miRNAs were biologically relevant miRNAs that warrant further investigation as a signature to define pre-STIC changes in the fallopian tube.

Continued - *Abstract 3, Figure 1: Heatmap of unsupervised cluster analysis of the most changed miRNA expression profiles in control and Pax8-Cre Brca1flox/flox, tp53flox/mice with and without doxycycline treatment.



4. Evaluation of CAD inhibition for the treatment of ARID1A deficient cancers

***Zainab Shonibare**, Jaida Morgan, Zhigui Li, Gloria Huang - Institution: Yale*

Objective: Loss-of-function ARID1A (AT-rich interacting domain-containing protein 1A gene) mutations occur frequently in gynecological malignancies, including ovarian clear cell carcinoma, ovarian endometrioid carcinoma, and uterine carcinoma and carcinosarcoma. We recently found that ARID1A mutation in cancer cells provokes metabolic reprogramming and increased reliance on the de novo pyrimidine DNA synthesis pathway. CAD (carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase) is a trifunctional enzyme that controls the first three steps of the pyrimidine biosynthetic pathway. The objective of this study was to evaluate CAD inhibition as a novel therapeutic strategy for ARID1A-mutated cancer.

Methods: Isogenic ARID1A proficient/deficient paired cancer cell lines (ES2 ARID1A wildtype and knockdown, HCT116 ARID1A wildtype and knockout) were grown in sub-confluent monolayer cultures. ARID1A status in the cell lines was confirmed by western blotting. CAD-specific siRNA and control siRNA were transfected using lipofectamine, and cells were quantified after 72 hours. Pharmacological inhibitors of CAD included the following: PALA (obtained from NIH), “Compound 1” and “Compound 2” (synthesized by Jubilant Biosys Ltd). Following drug treatments using a range of concentrations, cell viability after 72 hours of drug treatment was determined by SRB cytotoxicity assay, while colony formation after 8 days was determined by crystal violet staining.

Results: Using CAD-specific siRNA, we find that silencing of CAD strongly suppressed cell viability in ARID1A-deficient cells. The SRB cytotoxicity assays demonstrate novel Compounds 1 and 2 effectively inhibit cell proliferation, with a lower inhibitory concentration (IC50) compared to PALA. Both Compound 1 and 2 significantly decreased colony formation, compared to PALA.

Conclusion: Our results show that CAD inhibition decreases cell viability, proliferation, and colony formation in ARID1A-deficient ovarian carcinoma and colorectal cancer cell lines. The novel CAD inhibitors Compounds 1 and 2 are more potent than the conventional CAD inhibitor PALA, and are candidates for further preclinical evaluation in ARID1A-deficient cancers.

*5. Trastuzumab deruxtecan as treatment for recurrent uterine serous carcinoma: a case report supported by preclinical evidence

***Blair McNamara**, Levent Mutlu, Diego D. Manavella, Stefania Bellone Justin Harold, Dennis Mauricio, Eric R. Siegel, Natalia Buza, Pei Hui, Tobias Max Philipp Hartwich, Yang Yang-Hartwich, Cem Demirkiran, Miguel Skyler Z. Verzosa, Gary Altwerger, Elena Ratner, Gloria S. Huang, Mitchell Clark, Vaagn Andikyan, Masoud Azodi, Peter R. Dottino, Peter E. Schwartz, Alessandro D. Santin - Institution: Yale*

Objective: Effective treatments for advanced or recurrent uterine serous carcinoma (USC) are limited. Approximately 30% of USC overexpress HER2 (HER2 3+). Trastuzumab deruxtecan (T-DXd) is a HER2-directed antibody-drug conjugate (ADC) with a topoisomerase I inhibitor payload. We investigated the in vitro and in vivo efficacy of T-DXd in primary USC cell lines and xenografts. We report on a patient with recurrent HER2 3+ USC resistant to trastuzumab who experienced a durable clinical response to T-DXd.

Methods: We performed in vitro flow cytometry-based cell viability assays, bystander-effect assays, and antibody-dependent cellular cytotoxicity assays against five USC lines with variable HER2 expression. In vivo activity of T-DXd was studied in HER2 IHC 3+ USC xenografts.

Results: In vitro studies demonstrated T-DXd was more effective against HER2 3+ USC compared with control ADC (CTL ADC) (IC50 0.0213μM vs. not reached). While no significant effect was detected in HER2 non-expressing cell lines, T-DXd induced efficient bystander killing of HER2 non-expressing USC cells when admixed with HER2 3+ cells (100% vs. 47.9% viability, p=0.0001). In vivo studies confirmed T-DXd's efficacy (compared with CTL ADC) in HER2 3+ USC xenografts with a two-fold difference in tumor volume by day 8 (p=0.008), and a significant survival advantage (median OS 36 vs. 9.5 days, p=0.002).

A 68-year-old woman with recurrent stage IVB USC experienced durable response to T-DXd after failing standard treatments and other experimental HER2 and TROP-2-directed-ADCs. She began treatment with T-DXd (5.4 mg/kg) on 12/23/22 and her CA-125 normalized by 2/2023 (466 U/mL to 27.8 U/mL). By 5/1/23, imaging demonstrated resolution of a 2cm hepatic metastasis and decreased volume of pulmonary metastases (1.2 to 0.3cm). The patient has received 7 cycles of T-DXd without dose reductions or significant adverse effects.

Conclusions: T-DXd may represent a new treatment option for chemotherapy and trastuzumab-resistant USC.

*6. Association of serous tubal intraepithelial carcinoma (STIC) with germline genetic mutations and gynecologic malignancy

***Sha Sha**, Ivy Wilkinson-Ryan, Jessica Bentz, Ilana Cass Institution: Dartmouth*

Objective: STIC is a precursor to pelvic serous peritoneal carcinoma (PSPC) described in (1-17%) of risk-reducing bilateral salpingo-oophorectomy (rrBSO) specimens for pathogenic germline mutations. STIC has been discovered incidentally in benign pathology in <1% cases. We aim to describe clinical-pathological characteristics of STIC patients, including association with gynecologic malignancy and pathogenic germline mutations.

Methods: Between 1/1/2015 and 12/1/2022, we identified 47 STIC patients from our Gynecologic Pathology Database under an IRB approved retrospective study. The Sectioning and Extensively Examining the Fimbriated End (SEE-FIM) protocol was used for rrBSO and expanded to all fallopian tubes regardless of surgical indication in 2019. All patients with PSPC were offered genetic testing.

Results: STIC was present in 6 patients undergoing benign surgery, 3 at rrBSO, and 38 among those with high pre-operative suspicion for gynecologic malignancy. 29 (62%) with STIC had PSPC: 2 tubal cancers removed for pelvic organ prolapse, 1 ovarian cancer at rrBSO and 26 with suspected malignancy. All subsequently underwent complete staging. There were no significant differences in age or race by surgical indication. 6 STIC patients also had endometrial cancer, comprising 1.2% of all endometrial cancer cases during the study period. Of the STIC patients who underwent genetic testing, 19% had a pathogenic germline mutation. Excluding those who underwent rrBSO, 11% had a germline mutation. One had CHEK2-associated STIC and another had BRIP1-associated STIC.

Conclusion: The finding of STIC should prompt genetic testing given that 11% of untested patients were found to have germline pathogenic mutations. STIC is associated with PSPC in 2/3 of our cohort, which merits strong consideration of bilateral oophorectomy and staging if found unexpectedly for benign indications or at rrBSO. STIC may impact surveillance among patients with endometrial cancer or following rrBSO. We report two patients with moderate penetrance germline mutations (CHEK2, BRIP1) associated STIC.

Continued - *Abstract 6, Figure 1:

Distribution of STIC Lesions by Surgical Indication

	Benign procedure	rrBSO	High suspicion gynecologic malignancy
N = 47	N = 6	N = 3	N = 38
Age (median at surgery, years)	58	63	66
Race (%)	• White (83%) • Asian (17%)	• White (100%)	• White (100%)
Final pathology diagnosis (Stage)	• 2 fallopian tube cancer (2 Ia) • 1 endometrial cancer (Ib)	• 1 serous ovarian cancer (IIc)	• 11 fallopian tube cancer (1 IIIb, 5 IIIc, 4 IVa, 1 IVb) • 15 serous ovarian cancer (1 Ia, 1 IIb, 1 IIc, 1 IIIa, 2 IIIb, 6 IIIc, 2 IVa, 1 IVb) • 1 ovarian carcinosarcoma (Ic) • 5 endometrial cancer (2 Ia, 2 Ib, 1 3a) • 2 EIN • 3 Brenner tumor • 1 fibroid
Genetic testing performed (N, %)*	3 (50%)	3 (100%)	25 (66%)
Hereditary genetic mutation (N)*	• 1 BRCA1 VUS • 1 CHEK2	• 1 BRCA1 • 1 BRCA2 • 1 BRIP 1	• 1 BRCA1
Median length of follow up (range, months)**	1.5 (0, 27.7)	37.3 (4.5, 41.7)	14.4 (0.7, 59.8)
Status of disease	• 4 (67%) NED • 2 (33%) AWD	• 3 (100%) NED	• 18 (47%) NED • 10 (26%) AWD • 10 (26%) DOD

*Incomplete data set
**Time between first and last clinic visit
Abbreviations: endometrial intraepithelial neoplasia (EIN), no evidence of disease (NED), alive with disease (AWD), dead of disease (DOD)

*7. Hormone therapy is associated with improved overall survival in advanced-stage low-grade serous ovarian carcinoma: a risk-set matched retrospective study.

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Objective: Low-grade serous ovarian carcinoma (LGSOC) is often treated similarly to high-grade serous ovarian carcinoma (HGSOC) despite differences in clinical behavior. Observational studies suggest that maintenance hormonal therapy (HT) following primary treatment of LGSOC is associated with improved progression free survival. We conducted a multi-institutional observational study to investigate whether HT is associated with an overall survival advantage.

Methods: Patients with histologically confirmed, stage III or IV, LGSOC diagnosed between Jan 1, 2004, and Dec 31, 2019, treated in US Commission on Cancer accredited programs were included. Patients who received HT within 6 months of diagnosis were matched to controls who did not initiate HT during this timeframe. The primary outcome was risk of death from any cause, within five-years of initiation of HT or observation. Risk-set propensity score matching was employed to balance groups with respect to year of diagnosis, upfront treatment strategy, age, stage, race/ethnicity, comorbidity index, insurance status, zip-code median income, and cancer program type.

Results: There were 296 patients who initiated HT within 6 months of diagnosis, and 2,805 potential controls. Patient who received HT were more often treated in academic medical centers (55% vs 44%), diagnosed later in the study period (62% vs 23% diagnosed in 2018-2019), and received upfront chemotherapy less frequently (55% vs 83%). After risk set and propensity score matching, we identified 204 patients treated with HT and 204 untreated controls, who were otherwise similar with respect to measured covariates. In the matched cohort, maintenance HT was associated with a reduction in the risk of death (hazard ratio 0.61; 95% CI 0.37-0.99), corresponding to a 60-month survival of 71% compared with 61%, and an improvement in 5-year life expectancy of 3.6 months (95% CI 0.004-7.2).

Conclusions: Maintenance hormone therapy following primary management of LGSOC is associated with an overall survival benefit compared with observation.

*8. Understanding Geospatial Relationships in Ovarian Cancer Risk

Victoria Wang, *Jaime E Hart, Kevin Elias*
Institution: BWH

Objective: To examine the geographic distribution of ovarian cancer cases in the New England area and identify potential clusters for additional examination.

Methods: This was a case-control study utilizing 1580 ovarian cancer patients from a single healthcare system (MGB). Using electronic health record (EHR) review, patient primary addresses were geocoded. To account for spatial distribution confounded by access to the MGB health system, 1750 patients from the MGB biobank system were geocoded as controls. Generalized additive models were used to determine the spatial patterning of cases and controls, controlled for age and race. Geospatial analysis was performed using ArcGIS software and R.

Results: 3325 patients (1576 ovarian cancer patients, 1749 biobank controls) were successfully geocoded. Distribution of ovarian cancer cases and biobank patient controls were similar (average nearest neighbor distance 6337m vs 5623 m). Among the cohort of patients in New England (defined as MA, ME, NH, VT, RI, CT), there were 1476 ovarian cancer patients and 1663 biobank control patients. Use of a generalized additive model demonstrated higher incidence of ovarian cancer in Western CT, western MA, VT, and southern ME. These data are similar to SEER reported county-level incidence of late-stage ovarian cancer.

Conclusions: Understanding the geospatial distribution of ovarian cancer cases can highlight potential clusters of higher incidences of disease. Causal relationships have yet to be established and require future investigation, but these data suggest spatially patterned exposures are worth examination.

*9. Up front outpatient financial counseling in patients with newly diagnosed gynecologic malignancy undergoing chemotherapy decreases financial toxicity, as determined by the COST questionnaire

Katrin Eurich, ***Corinne Jansen****, Lauren Schlichting, Katina Robison, Katherine Miller - Institution: WIHRI*

Objectives: Studies have shown that many patients undergoing oncologic treatment have high financial burden and limited financial reserve. The effect of significant drug costs, potential loss of income, and caregiver burden associated with cancer treatment on outcomes has been defined as financial toxicity. High financial toxicity is associated with medication nonadherence, non persistence, and worse overall outcomes. This study aims to evaluate if up front financial counseling (FC) decreases subsequent financial toxicity, as determined by the COmprehensive Score for financial Toxicity (COST) questionnaire, in patients with gynecologic cancer undergoing their first line of chemotherapy.

Methods: This is a prospective randomized study comparing scores on the COST questionnaire in patients who undergo FC to scores in those who do not undergo FC at a single large academic institution beginning in January 2022. Patients were included if they had a confirmed diagnosis of gynecologic malignancy, planned or currently undergoing their first line of chemotherapy, are 18 years or older, and are able to consent in English. The study will conclude with enrollment of 80 patients with 40 in each arm, with current enrollment of 29. The primary outcome of interest is whether meeting with a financial counselor in the outpatient setting prior to the first cycle of chemotherapy results in decreased financial toxicity as measured by the COST questionnaire. Higher COST scores indicate better financial well-being.

Results: At the time of preliminary analysis total enrollment was 29; 14 in the arm with FC, 15 in the arm without FC, and 14 of the total group had both pre and post intervention COST scores. At the time of enrollment, the average COST score in the group who underwent FC was 21; without FC was 17, median in both groups was 18. Of the 14 patients who had both pre and post intervention COST scores available, those with FC had a mean decrease of -1.0, and those without FC had a mean increase of 7.8.

Conclusions: In the preliminary analysis of this study, exposure to FC is linked to an overall decrease in COST score. This could indicate that being aware of the cost of treatment may increase a patient's stress about finances. Covariates such as income, race/ethnicity, insurance status, and education will be included in final analysis. While providers cannot change the resources a patient has at the time of diagnosis, they can consider incorporating financial counseling as a routine part of intake of adjuvant treatment for gynecologic malignancy.

10. Implementation of Financial Toxicity Screening and a Novel Financial Navigation Program

***Nadiha Noor Chelsea**, Maria Reyes, Tina Yi Jin Hsieh, Michele R. Hacker, Leslie A. Garrett, Katharine M. Esselen - Institution: BIDMC*

Objective: To evaluate implementation of financial toxicity screening and a novel financial navigation program for gynecologic oncology patients

Methods: Patients presenting for initial consultation with a gynecologic oncology provider from July 2022 to February 2023 were included. A new financial navigator program began in July 2022. On October 17, 2022, a financial toxicity screening question was added to new patient intake forms. We quantified patient referrals to the navigator before and after screening implementation, along with needs identified, action taken by the navigator and institutional support services utilized.

Results: We included 535 new patients, 42% before and 58% after introduction of screening. The majority were white (61%) and had private insurance (59%) followed by Medicare (30%); median age was 58 (IQR 46-69). Following screening, a higher proportion of patients were referred to the financial navigator (11%) than before screening (4%, $p<0.001$). Additionally, referrals to other hospital social support services decreased from 9% before screening to 3% after ($p<0.001$). Uterine and cervical cancers were more prevalent in the 33 patients (11%) who screened positive (27% and 18% respectively) compared to those who screened negative (18% and 1%) or did not respond (19% and 4%). Referrals to the navigator included 46% of those who screened positive, 6% who screened negative and 8% who did not respond. Over six months, 62 patients (new and follow-up) were referred to the navigator. The most common need was transportation (21%) followed by financial assistance (16%) and emotional support (16%). The navigator assisted 11% of patients with transportation, and referred 13% to financial counseling/billing and 27% to other resources.

Conclusion: Implementing a financial toxicity screening question on intake forms was feasible, and increased identification of patients with financial toxicity and referrals to our financial navigator. Further investigation is needed to understand screening barriers and evaluate the program.

*11. Utilizing electronic Patient Reported Outcomes (PRO) to Improve Postoperative Gynecologic Oncology care in a Rural Academic Center

***Linh H. Nguyen**, Casey O'Brien, Franziska Mbonglou, Gauri Dandi, Michael J. Hassett, Sandra Wong, Ilana Cass - Institution: Dartmouth*

Objective: Patient symptoms following gynecologic cancer surgery maybe under-reported resulting in suboptimal management and unrecognized morbidity. PRO tools integrated into electronic health records allow health care teams to track and react to patient symptoms potentially improving patient outcome.

Methods: Through NCI's IMPACT consortium, Dartmouth-Hitchcock Medical Center and Epic designed eSyM, incorporating PRO-Common Terminology Criteria for Adverse Events questionnaires. Questionnaires were disseminated via active myDH patient portals twice/week for 60 days after surgery. Surveys included 8 symptom domains and overall wellbeing/functional status. Symptom severity was scored 0-4. Non-severe scores (0-2) linked to internet resources to manage symptoms. Severe symptom scores (≥3) triggered clinician responses. A retrospective chart review 4/2020 to 12/2020 characterized PRO of Gynecologic Oncology patients following surgery. The study compared demographic and surgical characteristics of women who used eSYM (utilizers) to those did not participate (non-utilizers) and resource utilization of the 2 groups. Student t-test analyzed categorical variables and Wilcoxon Rank Sum test, Poisson Statistical Regression analyzed continuous variables.

Results: 209 women were invited to complete eSYM questionnaires via myDH post-operatively. 172 (82%) utilizers completed at least 1 survey compared to 37 (18%) non-utilizers. There were no significant differences in the demographics or surgical characteristics of utilizers compared to non-utilizers, although the non-utilizers had higher Charlson Co-morbidity Index scores. 51% of utilizers reported a severe symptom, most commonly Neurologic (31%), GI-related (19%), and Cardiovascular (15%). Utilizers had higher RN telephone encounters [OR 1.79] and lower hospital re-admissions [OR 0.22] than non-utilizers with no differences in number of myDH messages, ED visits, or requested oxycodone refills.

Conclusion: eSyM had high uptake following gynecologic oncology surgery. Half of patients reported severe symptoms which were managed effectively with eSyM and nursing phone calls with lower hospital readmission compared to non-utilizers. These findings can optimize patient counseling to better prepare women for gynecologic surgery.

Continued - *Abstract 11, Table 1.

Variable	Non-Utilizers (n = 37)	Utilizers (n = 172)	P-value	Odds Ratio*[CI] *Compares utilizers to non-utilizers
Age				
Mean (SD)	54.4 (15.9)	57.0 (13.0)	n.s.	-
Median [Min, Max]	52 [28, 82]	57.5 [24, 91]		
Insurance Status				
None	0 (0%)	3 (2%)	n.s.	-
Private	19 (51%)	96 (56%)		
Medicare	12 (32%)	60 (35%)		
Medicaid	6 (16%)	13 (8%)		
Employment				-
Unemployed	21 (57%)	78 (45%)	n.s.	
Employed	16 (43%)	94 (55%)		
Charlson Comorbidity Index				-
Mean (SD)	2.51 (3.19)	1.35 (2.38)	0.04	
Median [Min, Max]	1 [0, 10]	0 [0, 14]		
Severe Symptom Reporting (%)				-
Any severe symptom		87 (51)		
Neurological (pain, dizziness, headache, concentration)		54 (31%)		
GI (nausea, vomiting, diarrhea, constipation)		33 (19%)		
Airway/Respiration (SOB, cough)				
Psych (discouraged, sad, anxiety)		5 (3%)		
Cardiovascular (fatigue, palpitation)		17 (10%)		
Wound (discharge, redness)		26 (15%)		
Urinary (painful urination)		0 (0)		
Dermatology (rash, itching)		4 (2%)		
Poor Overall Well-being		11 (6%)		
Poor Overall Functional Status		16 (9%)		
		43 (25%)		
Type of Surgery				
Laparotomy	9 (24%)	36 (21%)	0.13	-
Laparoscopy	23 (62%)	127 (74%)		
Other (eg. vulvectomy)	5 (14%)	9 (5%)		
Final Surgical Pathology				
Benign	15 (41%)	93 (54%)	n.s.	-
Malignant	22 (59%)	79 (46%)		
Resource Utilization				
RN Phone Calls	15 (41%)	98 (57%)		
#Patient with any phone encounter	24	200	0.007	1.79 [1.17, 2.73]
Total number of calls	0 [0, 4]	1 [0, 6]		
Median [Min, Max] # calls/patient				
***my*DH Patient Portal Messages**	8 (22%)	33 (19%)		
#Patient with any *my*DH messages	14	59	n.s.	0.91 [0.52, 1.69]
Total number of messages	0 [0, 6]	0 [0, 8]		
Median [Min, Max] # calls/patient				
Hospital Re-Admissions	5 (14%)	4 (2%)		
#Patient needing re-admissions	5	5	0.02	0.22 [0.06, 0.77]
Total #re-admission encounters				
ED Visits	5 (14%)	4 (2%)	n.s.	0.46 [0.20, 1.12]
#Patient needing ED visits	8	17		
Total ED visits				
Additional Oxycodone Refills	1 (3%)	12 (7%)	n.s.	3.01 [0.61, 54.57]
# Patient needing refills	1	14		
Total # refills				

*12. Increasing Clinical Trial Enrollment amongst Gynecologic Oncology Patients via a Survey Intervention

***Allan Huang**, Elizabeth Lokich - Institution: WIHRI*

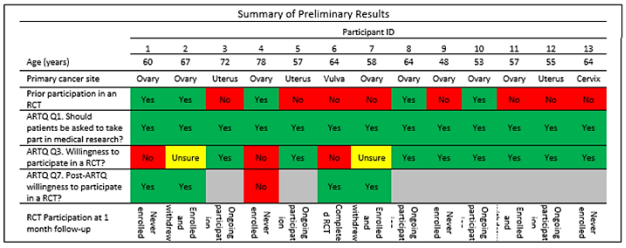
Objective: Racial and ethnic minorities are under-represented in gynecologic oncology randomized controlled trials (RCT). Few studies have explored interventions to increase recruitment in this patient population. We aim to pilot a validated survey as an educational intervention for increasing gynecologic oncology RCT enrollment.

Methods: We conducted a single-institution, prospective study using the Attitudes to Randomized Trials Questionnaire (ARTQ), a survey instrument originally designed to improve communication regarding RCTs with oncology patients. Patients eligible for an RCT were approached at their office visit and asked to complete the ARTQ prior to discussing the specifics of their trial eligibility. Sociodemographic data and RCT enrollment information were abstracted from the medical record.

Results: Thirteen subjects are currently enrolled and recruitment is ongoing. The median age of participants is 60 years and patients live a median of 13.5 miles from the cancer center. While 38% of patients reported prior RCT participation and 100% of patients believed that patients should be asked to participate in medical research, only 62% were personally willing to participate in an RCT. This increased to 92% after completion of the ARTQ. Forty-six percent of the cohort had ongoing or completed RCT participation at short interval follow-up. At that time, of those who were unwilling to participate in a RCT prior to completion of the ARTQ, only 1 out of 5 had ongoing or completed RCT participation. In this group, two declined participation, one died, and one was a RCT screening failure.

Conclusions: Despite a significant history of RCT participation, hesitation to participate in RCTs persists in this cohort. Completion of the ARTQ seems to increase willingness to participate in RCTs. Further enrollment will power this study to fully examine the efficacy of the ARTQ in promoting RTC enrollment and exploring its impact on racial and ethnic minority populations.

Continued Abstract *12, Figure 1.



Summary of Preliminary Results

	Participant ID												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Age (years)	60	67	72	78	57	64	58	64	48	53	57	55	64
Primary cancer site	Ovary	Ovary	Uterus	Ovary	Uterus	Vulva	Ovary	Ovary	Ovary	Ovary	Ovary	Uterus	Cervix
Prior participation in an RCT	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	No	No	No
ARTQ Q1. Should patients be asked to take part in medical research?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ARTQ Q3. Willingness to participate in a RCT?	No	Unsure	Yes	No	Yes	No	Unsure	Yes	Yes	Yes	Yes	Yes	Yes
ARTQ Q7. Post-ARTQ willingness to participate in a RCT?	Yes	Yes		No		Yes	Yes						
RCT Participation at 1 month follow-up	Never enrolled	Enrolled and withdrew	Ongoing participation	Never enrolled	Ongoing participation	Completed RCT	Enrolled and withdrew	Ongoing participation	Never enrolled	Ongoing participation	Enrolled and withdrew	Ongoing participation	Never enrolled

*13. Early pathways to end-of-life planning: Evaluating the impact of an educational video on documented end-of-life planning discussions with patients with gynecologic cancers

Alicia M. Youssef, *Madhuri Nori, Katina Robison, Katherine Miller - Institution: WIHRI*

Objective: The primary objective was to evaluate the impact of an end-of-life (EOL) planning educational video on patient attitudes regarding EOL care. The secondary objective was to determine the composite mean of documented EOL planning, specifically the presence of an advanced directive, medical orders for life sustaining treatment (MOLST), palliative care referral, or code status discussion among gynecologic oncology patients with advanced or recurrent disease.

Methods: This is an observational prospective cohort study at a single academic institution. All patients with advanced (stage III or IV) or recurrent gynecologic malignancy were eligible for enrollment. Enrolled patients completed a pre-video survey assessing their attitudes regarding EOL planning. Patients were then shown a validated video titled "Talking to Your Doctor." After the video, patients completed a post-video survey. Chart review was performed to evaluate the presence of documented EOL planning.

Results: A total of 41 patients were enrolled. On the pre-video survey, 82% (34/41) of patients thought it was important to think about EOL. Eighty percent (33/41, 80%) of patients thought it was important for their doctor to know their wishes regarding EOL, but only 9% (4/41) of patients reported ever discussing it with their doctor. Most patients (28/41, 68%) reported that their doctors should initiate discussions regarding EOL planning. All patients (41/41, 100%) found the video to be helpful and would recommend the video to others. Nearly half of patients (20/41, 48%) were ready to talk about EOL with their doctor but only 3 (7%) were ready to talk on the day they were shown the video. The composite mean number of documented EOL planning components was 0.76 (SD 0.80).

Conclusion: EOL planning is a critical component of cancer care. Use of educational videos appears to be helpful to patients and could possibly increase discussions between patients with gynecologic malignancies and their providers.

*14. The effect of intrawound vancomycin powder on surgical site infection in inguinal lymph node dissection

*Jessica Buck DiSilvestro, **Alicia Youssef**, Leni Warlick, Lauren Schlichting, Katina Robison, Elizabeth Lokich Institution: WIHRI*

Objective: The primary objective was to determine the impact of intrawound vancomycin powder on the composite rate of postoperative complications within 30 days of surgery, including inguinal wound infection, incision separation, and hospital readmission, in patients with vulvar cancer undergoing inguinal lymph node dissection. Our secondary objective was to identify adverse effects of utilizing intrawound vancomycin powder, including allergic reaction and antibiotic-resistant infections.

Methods: This is an on-going pilot randomized control trial at a single academic institution. Patients with vulvar cancer who are planning to undergo an inguinal lymph node dissection are being randomized 1:1 to receive intrawound vancomycin powder at the time of surgery or not receive intrawound vancomycin powder.

Results: Ten patients have been enrolled and five patients were randomized to each arm. The mean age was 70 years and all patients were non-Hispanic white women. Seven women were obese (BMI ▪ 30). Nine women had squamous cell carcinoma histopathology and one had melanoma. Eight women had bilateral inguinal lymph node dissections while two had unilateral dissections. Of the 16 dissected groins, eight underwent sentinel dissection, four started with a sentinel dissection but transitioned to a full lymphadenectomy, and 6 underwent planned full lymphadenectomy. No patients in the vancomycin group had a composite postoperative complication, while one patient in the no vancomycin arm had a complication (an inguinal wound infection) [0% vs. 20%, p=0.99]. In the no vancomycin arm, one patient had a seroma form (20%) and one patient (20%) was prescribed antibiotics for alternative reasons. No adverse events occurred in either arm. The study is actively recruiting with a target enrollment of 30 patients.

Conclusion: This is preliminary data from an on-going pilot randomized trial. Of the ten patients who have completed enrollment, there has been only one postoperative infection within the no vancomycin arm. Additional data will provide further insight into the impact of vancomycin powder on postoperative complications.

15. Trends in sentinel lymph node evaluation for vulvar melanoma over time: a National Cancer Database analysis

***Stephanie Alimena**, Alexandra Bercow, Neil Horowitz, Michelle Davis - Institution: BWH/MGH*

Objective: The vulvar melanoma National Comprehensive Cancer Network (NCCN) 2023 guidelines recommend sentinel lymph node biopsy (SLNB) for clinical stage I and II disease. The purpose of this study was to understand current U.S. practice patterns for use of SLNB over time among patients with vulvar melanoma using the National Cancer Database.

Methods: Patients diagnosed with vulvar melanoma between 2012-2018 were identified using the National Cancer Database. Descriptive statistics were performed to understand practices patterns over time and by clinical stage. Patient, facility, and disease characteristics were compared between patients undergoing SLNB or inguinofemoral lymph node dissection (IFLD) using multivariable analysis.

Results: Of 1,883 patients, 934 (49.6%) underwent lymph node evaluation, with 362 of these (38.8%) undergoing SLNB, 97 (10.4%) undergoing SLNB + IFLD, and 475 (50.9%) undergoing IFLD only. The percentage of patients having SLNB (either with or without IFLD) increased over time (20.3% of all patients in 2012, 30.4% in 2018, $p<0.001$). Twenty-nine percent of patients with clinical stage I disease and 40.2% of those with clinical stage II disease underwent SLNB. Interestingly, 31.8% of those with clinical stage III disease and 24.0% of those with clinical stage IV disease underwent SLNB as well. On multivariable analysis, patients were less likely to undergo SLNB if they were Asian, were diagnosed in 2012-2013, were age 50-59 or ≥ age 80, or received care at a Community Cancer Program or Comprehensive Community Cancer Program.

Conclusions: SLNB is recommended by the NCCN to assess nodal disease in clinical stage I-II vulvar melanomas, but is currently underutilized in these patients. Consistent with the overall cutaneous melanoma guidelines, many patients with stage III and IV vulvar melanoma undergo SLNB. Updated gynecologic-specific melanoma guidelines are needed regarding the utility of SLNB in our patients.

*16. Association between utilization of sentinel lymph node biopsy in vulvar cancer and hospital volume of melanoma and breast cancer: a national cancer database study

***Alexandra Bercow**, Jason Silberman, Varvara Mazina, Alexander Melamed, Allison Gockley, Amy Bregar, Eric Eisenhauer, Christina Minami, George Molina*
Institution: MGH/BWH/DFCI

Objective: The technique for sentinel lymph node biopsy (SLNB) is similar for vulvar cancer, breast cancer, and melanoma. However, the implementation of SLNB for vulvar cancer has been limited, compared to widely adopted for breast cancer and melanoma. The objective of this study was to evaluate differences in utilization of SLNB for vulvar cancer according to hospital volume of SLNB for melanoma and breast cancer.

Methods: Women with clinical stage IB vulvar squamous cell carcinoma (vSCC) diagnosed between 2012-2018 were identified using the National Cancer Database. Facilities were stratified into terciles according to hospital-year volume of SLNB for eligible breast cancer and melanoma patients. The rate of vulvar SLNB as well as patient, facility, and disease characteristics were compared in the low, intermediate, and high-volume hospitals. A mixed-effects logistic regression was performed to assess the association between breast/melanoma SLNB volume by hospital-year and odds of SLNB for early-stage vSCC.

Results: Of the 3,532 women with clinical stage IB vSCC, 702 (19.8%) underwent SLNB (with/without complete lymphadenectomy). Low-volume facilities performed between 1 and 72 SLNB for breast cancer/melanoma and high-volume facilities performed more than 153 procedures each hospital-year. At low-volume hospitals, 19.9% of women with vSCC underwent SLNB compared to 40% at high-volume hospitals. On multivariable analysis adjusting for clinicopathologic characteristics, women with vSCC receiving care at high-volume breast cancer/melanoma SLNB centers remained significantly more likely to undergo SLNB compared to those receiving care at low-volume centers (odds ratio, OR 1.91, 95% CI 1.20-3.05). However, there was no significant difference in odds of undergoing SLNB between those who received care at high and low vulvectomy volume hospitals (OR 1.50, 95% CI 0.92-2.45).

Conclusions: There is significant variation in SLNB utilization in early-stage vSCC. Low utilization of SLNB in vulvar cancer may be attributable to the lower overall use of SLNB for other cancers at low-volume facilities rather than a lower vulvar cancer volume. Qualitative work is needed to elucidate the barriers and facilitators to SLNB in high vs. low-volume facilities.

*17. LEEP vs. CKC: Final Pathology on Completion Hysterectomy in Patients with Adenocarcinoma in Situ

***William Manning**, Katina Robison, Elizabeth Lokich, Katrin Eurich - Institution: WIHRI*

Objectives: The purpose of this study is to compare cone specimen size between patients who underwent LEEP versus CKC. This study also serves to assess the proportion of patients with positive margins by each modality. Finally, we will assess pathology at the time of completion hysterectomy and the interval pap and HPV history to evaluate whether or not hysterectomy is clinically indicated in all patients with AIS.

Methods: This study is a retrospective chart review. The electronic medical record was queried for patients that underwent LEEP or CKC for AIS between January 1, 1986 and December 31, 2020. Demographic, clinical and pathologic data were reviewed.

Results: Total cases included for analysis with final hysterectomy pathology: n=27. 12 cases of AIS without hysterectomy were also included in analysis. Average cone specimen size by method: LEEP 4.92cm3, CKC 8.83 cm3. Rate of margin positivity by method: LEEP 0.22, CKC 0.17. Final pathology positivity by method: LEEP 0.11, CKC 0.28. There were no cases of residual HPV in either group.

Conclusion: Consistent with prior studies, CKC specimens were non-significantly larger than LEEP specimens. This, however, did not contribute to a decreased rate of positive pathology on final hysterectomy. Interval HPV status was not different based on method of conization. Given no difference by method, it may be feasible to recommend either method of conization in patients with AIS. Additionally, there were low rates of residual disease on final pathology after hysterectomy. It may be acceptable to defer hysterectomy in select patients with adenocarcinoma in situ of the cervix.

*18. Long-term follow-up of anal cytology and HPV genotyping among women with lower genital tract neoplasia

*Jessica DiSilvestro, **Sarah Fet-He**, Leni Warlick BS, Katherine Miller MD, Steven Schechter MD, Katina Robison MD - Institution: WIHRI*

Objective: The primary objective is to determine the presence of anal dysplasia or cancer among patients with a history of lower genital tract dysplasia or cancer and a history of high-risk HPV and/or abnormal anal cytology in the past decade. We aim to determine the prevalence of abnormal anal cytology and the rate of clearance, persistence or new infection of high-risk HPV among this cohort.

Methods: This is an on-going, IRB-approved prospective cohort study evaluating women with a history of genital high-grade dysplasia or cancer who underwent high-risk HPV testing and anal cytology between 2012-2014 to determine the rate of progression, regression, or stability of anal dysplasia since prior screening. Women from the prior high-risk cohort were rescreened with anal pap smear and HPV testing. This study is funded by an investigator-led research grant.

Results: Thirty-nine patients were rescreened. Eleven (28.2%) patients had anal dysplasia requiring colorectal referral. Seven of these patients had sufficient HPV co-testing performed of which two (28.6%) were HPV positive (16, 18, and/or high risk other). Of the 23 patients with a history of anal dysplasia, eight (34.8%) had persistent anal dysplasia. Three patients (21.4%) who previously had negative anal pap smears had newly identified anal dysplasia. Three patients (27.3%) also had concurrent cervical dysplasia. Four patients had negative anal cytology but were HPV 16 positive and referred to colorectal. Three patients have undergone anoscopy (AIN1: 2, Negative: 1), with remaining data pending.

Conclusions: We demonstrated that women from this high-risk cohort continue to display high rates of anal dysplasia. Although studies have demonstrated that women with a history of HPV-related genital neoplasia are at risk for anal dysplasia and cancers, the appropriate method, frequency of screening, and the role of HPV co-testing remains unclear. As we continue to screen this high-risk cohort, we will gain valuable information on the natural progression of anal dysplasia and high-risk anal HPV infections which can guide future recommendations.

*19. Changes in LEEP Rates Following Introduction of the 2019 ASCCP Guidelines: A Retrospective Chart Review

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Objective: This retrospective chart review compared Loop Electrosurgical Excision Procedure (LEEP) rates before and after the 2019 American Society for Colposcopy and Cervical Pathology (ASCCP) guidelines. For management of cervical intraepithelial neoplasia (CIN) 2, the guidelines transitioned from focusing on "young women" to women interested in fertility preservation, increasing potential eligibility for conservative management. We hypothesized that the rates of LEEP procedures performed in reproductive-aged women decreased since the 2019 ASCCP guidelines.

Methods: Records were reviewed from 457 patients who underwent LEEPs from 2009-2022 at a tertiary care academic medical center. LEEPs that were not performed for dysplasia or abnormal cervical cytology were excluded. Number of LEEPs performed in reproductive age women, defined as age < 43, prior to the 2019 changes in ASCCP guidelines were compared to the number of LEEPs performed under current guidelines. Data were analyzed using a chi-squared test, with number of LEEPs performed characterized by presence or absence of prior LEEPs.

Results: Records from 419 patients were included in the analysis, with 333 having LEEPs prior to 2019 and 86 having LEEPs following 2019. The median age of patients undergoing LEEP after 2019 increased to 40 compared to median age of 34 prior to 2019 ($p = 0.0042$). The proportion of participants who had not undergone a prior LEEP was higher after the updated guidelines were introduced (17.1% compared to 47.7% respectively). This was consistent with a significant reduction in likelihood that a woman had a prior LEEP following the change in guidelines ($p<0.0001$).

Conclusion: There was a significantly lower likelihood of prior LEEP after 2019 ASCCP guidelines, and median age increased for patients undergoing LEEP after the 2019 guidelines. This finding suggests a reduction in LEEP rates following the change in the ASCCP guidelines, possibly as a result of increased shared-decision making among patients interested in fertility preservation.

*20. Concurrent laparoscopic hysterectomy and bariatric surgery for early-stage endometrial cancer and endometrial intraepithelial neoplasia: early results and lessons learned from an interdisciplinary prospective feasibility trial

Alexandra S Bercow, *Victoria Wang, Stephen J Fiascone, Kevin M Elias, Michael J Worley, Colleen M Feltmate - Institution: BWH*

Objective: Data suggests that women with early-stage, grade 1 endometrioid endometrial carcinoma are more likely to die from comorbidities related to obesity than cancer. The objective of this prospective study is to examine the feasibility of expedited referral to a bariatric surgeon as well as feasibility and safety of concurrent laparoscopic hysterectomy and bariatric surgery in obese women with presumed early-stage grade 1 endometrial carcinoma (G1EC) or endometrial intraepithelial neoplasia (EIN).

Methods: Patients are recruited from the Brigham and Women's Hospital gynecologic oncology clinic. Women with 1) EIN or G1EC and 2) a BMI≥40 or BMI≥35 with one or more obesity-related comorbidity are eligible. Patients are then referred to a bariatric surgeon with a goal of undergoing concurrent laparoscopic hysterectomy (and other indicated oncologic procedures) and bariatric surgery within 8 weeks for women with G1EC, 12 weeks for EIN, and 6 months for EIN with IUD in situ. Our target sample size is 30 patients.

Results: To date, thirteen patients have been consented and enrolled for the trial. The median age of enrolled patients was 54 years-old [35-66], and average BMI was 48.2 [38.9-61.2]. Obesity-related comorbidities included hypertension, insulin-dependent diabetes, nonalcoholic fatty liver disease, and obstructive sleep apnea. Average time between initial visit with a gynecologic oncologist and bariatric surgeon was 9.75 days [0-19]. Eight women had EIN and five had G1EC on initial biopsy. Of the 13 women enrolled, five have undergone concurrent surgery and two were taken off study for medical reasons. Of the remaining seven participants, two patients were denied coverage by insurance, two desired a trial of nonsurgical weight loss management, and two declined bariatric surgery for personal reasons. Of the patients who underwent combined surgery, three had EIN and three had G1EC on initial biopsy. One EIN patient was upstaged to G1EC but required no adjuvant therapy. One patient was readmitted for an abdominal wall hematoma and pelvic abscess but only required drain placement and antibiotics. The median weight loss for patients who have undergone combined surgery was 48lbs [43-81] compared to 9lbs [-23—39].

Conclusion: Early results demonstrate feasibility of an expedited referral process to a bariatric surgeon for obese women with EIN or G1EC. Combined surgery at a large academic institution appears to be feasible and safe, but further patient accrual is necessary. While interdisciplinary collaboration brings its own set of challenges, developing a study protocol with key personnel promotes investment in a successful trial by all parties, thereby fostering surgical innovation.

*21. Assessing Disparities in Delays to Ovarian Cancer Care Across the Healthcare System

Parisa N. Fallah, Gia Ciccolo, Tara Markert, Andrea Pelletier, Victoria Wang, Kevin M. Elias, Sarah Feldman, ***Stephanie J. Alimena*** *- Institution: BWH*

Objective: Ovarian cancer often presents with vague symptoms, leading to patient related delays in presentation for care. However, little is understood regarding non-patient related delays, including delays in diagnosis, gynecologic oncology referrals, and treatment. This study assesses disparities in delays to care by race, language, insurance, and zip code.

Methods: A retrospective cohort study was performed among ovarian cancer patients at one academic institution from 2017 to 2021. Data regarding timing of symptoms, date of initial presentation to care, diagnostic workup, pathologic diagnosis, gynecologic oncology appointment, and initial treatment were abstracted from the medical record. Differences in each healthcare interval were compared by race (white vs non-white), language (English vs other), insurance (public vs private), and geography (Massachusetts region).

Results: Of 298 patients (85.6% white, 14.4% non-white), non-white women were younger (56.1 vs 61.5 years, $p=0.014$) and fewer non-white women spoke English as a primary language (69.8% vs 98.4%, $p<0.001$), but were otherwise similar in demographics. Regarding geographic location, 239 patients were from MA and 59 from outside MA. When looking at each healthcare interval, there were no statistically significant differences by race, language, or insurance. When analyzing by geographic location (Table 1), there were notable (though not statistically significant) differences in time from first presentation until seeing a gynecologic oncologist (25.8 vs 34.5 days, $p=0.26$), cancer diagnosis until treatment (11.5 vs 17.0 days, $p=0.152$), and overall healthcare system interval (41.5 vs 55.9 days, $p=0.087$).

Conclusion: In our cohort, patients did not experience differences in delays to care by race, insurance, or language; however, there are trends towards increased delays for patients outside of Eastern MA. Interestingly, only 6 patients were from low-resource neighborhoods in Boston, suggesting underutilization of subspecialty services by these patients. More data is needed to understand geographic variation in access to care.

Continued – *Abstract 21, Table 1.
Delays in ovarian cancer care over different healthcare intervals by geographic location (This table does not include patients from outside MA)

	Suffolk, Essex, Middlesex, Norfolk (Eastern MA) [mean/SD] N=140	Rest of MA* [mean/SD] N=99	P-value
First Presentation to Care until Seeing a Gyn Oncologist *(continuous - t test)*	25.83 (32.81)	34.53 (82.29)	**0.261**
Seeing a Gyn Oncologist until Cancer Diagnosis *(continuous - t test)*	4.11(18.82)	4.74 (54.45)	0.899
Cancer Diagnosis until Treatment *(continuous - t test)*	11.52 (14.78)	16.99 (41.35)	**0.152**
Overall Healthcare System Interval (First Presentation until Treatment) *(continuous - t test)*	41.46 (39.93)	55.88 (87.10)	**0.087**

*22. Interval Wait Time for Endometrial Cancer Patients

*Victoria Wang, **Hadley Reid**, Trinity I. Russell, Lucy Chen, Andrea Pelletier, Regan H. Marsh, Colleen Feltmate, Kevin Elias - Institution: BWH*

Objective: To examine differences in interval wait time for surgery in Endometrial Intraepithelial Neoplasia (EIN) and Endometrial Cancer patients residing in priority neighborhoods.

Methods: A retrospective chart review of patients with EIN or endometrial cancer at a single institution between 2016-2019 was performed. Five priority neighborhoods where medically underserved populations reside were identified from a Community Health Needs Assessment. Outcomes were compared between patients from priority neighborhoods and patients from other non-priority zip codes within the same state.

Results: Preliminary results are reported on 49 patients from priority neighborhoods and 126 patients from other neighborhoods within the same state. Mean age (60.1 vs 58.3 yrs, p 0.36) and rates of private insurance status were similar (57.0% vs 57.1%, p 1.0). Priority neighborhood patients were more likely to identify as Black (41% vs 4%; p <0.01) or Hispanic (12% vs 0%, p <0.01) and to speak a non-English primary language (24.5% vs 1.6%, p <0.01). Priority neighborhood patients had a higher Charlson co-morbidity score (0.78 vs 0.43, p <0.01). Patients had similar rates of advanced stage disease (Stage III or IV 30% vs 30%, p 0.8) and histologic subtype (Endometrioid 61.8% vs 62.5%; Serous or Clear Cell 29% vs 37.5%, p 0.6). The mean interval wait time between diagnostic biopsy and surgery was longer in priority neighborhood patients (243 vs 122 days, p 0.04), despite a similar interval from referring provider visit and first Gynecology Oncology provider visit (41 vs 34 days, p 0.5). Race/ethnicity, age, insurance, and co-morbidities were not significant factors impacting interval wait time.

Conclusion: Interval wait time from diagnostic biopsy to surgical staging procedure was longer in patients from priority neighborhoods compared to other neighborhoods, despite similar rates of histology and stage of disease. These findings highlight potential barriers to healthcare access for underserved patients that are unaddressed by current systems.

*23. Financial Toxicity is Associated with Longer Time from Symptom Onset to Diagnosis in Uterine Cancer

***Reyes M**, Baig R, Pite A, Gompers A, Hacker M, Dalrymple J, Esselen K - Institution: BIDMC*

Objective: Gynecologic cancer patients with high financial toxicity (FT) are significantly more likely to report delaying care and have higher exposure to healthcare services including visits and imaging studies. We aimed to compare time to diagnosis and treatment along with healthcare resource utilization in patients with uterine cancer stratified by the degree of patient-reported FT.

Methods: Patients with gynecologic cancer were asked to complete a cross-sectional survey at follow-up visits with gynecology, medical and radiation oncology from 2017-2021. The survey included the Comprehensive Score for Financial Toxicity (COST) tool. Demographic, disease and healthcare utilization data were abstracted from medical records. Disease variables included date of symptom onset, initial biopsy, surgery and start of relevant adjuvant therapy. Healthcare utilization was measured in the year before survey completion and included number of inpatient and outpatient visits including emergency room (ER) visits, procedures, surgeries, and imaging studies. FT was categorized as high (COST score ≤23) and low (COST score >23). Data presented as n (%) and median (interquartile range). Chi-square, Fisher's exact, and Wilcoxon rank-sum tests were used to compare risk factors, time to diagnosis, and healthcare utilization between groups.

Results: Among 139 respondents with uterine cancer, 30.2% had high FT and 69.8% had low FT. The median age at diagnosis was 63.1 (57.0-68.4) years, 82.0% of respondents were Non Latinx White, and 5.8% had a non-English primary language. Most cancers were stage I (71.9%), 7.2% were stage II, and 20.9% were stages III-IV. Approximately 1/3 of the cohort had surgical treatment alone and the rest had some combination of surgery, chemotherapy and/or radiation and 10.8% of the cohort had recurrence of their cancer. Median time since diagnosis in the cohort was 10.8 months (5.6-29.3). Risk factors for high financial toxicity included age, education, employment, insurance status, income, and receipt of chemotherapy (all $p<0.05$). The median time from symptom onset to diagnosis (initial biopsy) was 2.1 months (1.0-4.7), with longer median time to diagnosis in the high FT [3.9 (1.1-7.0) months] than low FT [1.8 (0.9-3.8) months] group ($p=0.01$). The median time from symptom onset to definitive staging surgery was 3.3 months (1.9-6.7), and also was longer in the high FT [6.0 (2.6-12.5) than the low FT [2.8 (1.8-5.9)] group ($p=0.03$). There was no difference in the time from biopsy to gynecologic oncology consult or time from consult to surgery between the levels of financial toxicity (all $p\geq0.44$). Patients with high and low financial toxicity had similar utilization of ER visits, outpatient visits, surgeries, tests, images, and inpatient days in the year prior to completion of the COST survey.

Conclusion: Patients with uterine cancer identified to have high financial toxicity were more likely to have longer time to diagnosis compared to patients with low financial toxicity. Delays in initial evaluation and treatment may contribute to worse cancer outcomes and survival for patients with financial toxicity as reported in other studies. Thus, more work is needed to understand what financial and social factors may be leading to the slower time to diagnosis in patients with uterine cancer.

*24. Improving Health Equity Among Ovarian Cancer Patients Enrolled in an Enhanced Recovery After Surgery (ERAS) Pathway

*Stephanie J. Alimena, Parisa N. Fallah, **Taylor Stewart**, Gavin G. Ovsak, Beryl Manning-Geist, Michael Worley, Jr, Kevin M. Elias - Institution: BMH*

Objective: It is unknown whether Enhanced Recovery After Surgery (ERAS) protocols may improve health equity among ovarian cancer patients through standardization of perioperative and postoperative care.

Methods: A cohort study was performed among advanced stage ovarian cancer patients undergoing surgery at one academic institution from January 2010 to December 2021. The pre-ERAS time period was defined as January 2010 to July 2015, and the post-ERAS time period was defined as March 2017 to December 2021, excluding 2015 to 2017 when ERAS was being implemented. Chart review was performed to assess complications within 30 days of surgery, including reoperations, readmissions, ICU admissions, blood transfusions, and more (Table 1). Chi-square and Fisher's exact analyses were performed to compare outcomes by race during the pre-ERAS and post-ERAS time periods.

Results: Of 794 ovarian cancer patients (42.9% pre-ERAS, 57.1% post-ERAS), 86 patients (10.8%) were non-white, and the percentage of non-white patients increased over time (7.9% pre-ERAS, 13.0% post-ERAS). Before ERAS was implemented, 22.2% of non-white women versus 9.6% of white women were readmitted within 30 days of surgery ($p=0.040$). Non-white women also received blood transfusions at a higher rate compared to non-white women (48.1% vs 29.6%, $p=0.046$), with no other significant differences in complications during the pre-ERAS time period noted. Post-ERAS implementation, readmissions were reduced by half among non-white women, which were no longer noted to be significantly different by race (11.9% vs 9.9%, $p=0.641$). Similarly, there was no longer a significant difference in blood transfusions by race.

Conclusions: ERAS programs may improve health equity by reducing the need for blood transfusions and reducing readmissions among non-white women with ovarian cancer. Further investigation is needed to understand which aspects of ERAS programs contribute to these differences given the potential far-reaching implications in reducing inequities in care and overall healthcare expenditures.

Continued – *Abstract 24, Table 1.

	Pre-ERAS (N=341)			Post-ERAS (N=453)		
Complications	Nonwhite (N=27, 7.9%)	White (N=314, 92.1%)	p-value	Nonwhite (N=59, 13.0%)	White (N=394, 87.0%)	p-value
Reoperation within 30 days	0 (0.0%)	3 (1.0%)	1.0	1 (1.7%)	8 (2.0%)	1.0
Readmission within 30 days	6 (22.2%)	30 (9.6%)	**0.040***	7 (11.9%)	39 (9.9%)	**0.641**
ICU admission within 30 days	2 (7.4%)	10 (3.2%)	0.244	5 (8.5%)	8 (2.0%)	0.018*
Blood transfusion during primary stay	13 (48.1%)	93 (29.6%)	**0.046***	25 (42.4%)	150 (38.1%)	**0.527**
Pneumonia	0 (0%)	6 (1.9%)	1.0	1 (1.7%)	4 (1.0%)	1.0
Wound Infection	1 (3.7%)	46 (14.6%)	0.148	1 (1.7%)	19 (4.8%)	0.343
Urinary Tract Infection	1 (3.7%)	16 (5.1%)	1.0	5 (8.5%)	22 (5.6%)	0.382
Intraabdominal abscess	1 (3.7%)	12 (3.8%)	1.0	2 (3.4%)	5 (1.3%)	0.228
Acute myocardial infarction	0 (0%)	0 (0%)	n/a	0 (0%)	0 (0%)	n/a
DVT or PE	1 (3.7%)	9 (2.9%)	1.0	1 (1.7%)	4 (1.0%)	1.0
Anastomotic leak	0 (0%)	1 (0.3%)	1.0	0 (0%)	0 (0%)	n/a
SBO	2 (7.4%)	4 (1.3%)	0.074	2 (3.4%)	3 (0.8%)	0.129
Ileus	2 (7.4%)	16 (5.1%)	0.644	9 (15.3%)	34 (8.6%)	0.105

*25. Resident perceptions prior to the introduction of a gynecologic oncology fellowship

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Objectives: A general belief exists in surgical training that a fellow may impede the resident training experience due to decreased surgical volume. Conversely, a fellowship may enhance the resident experience through heighted education, near-peer mentorship, and research opportunities. We assessed resident perceptions prior to the advent of a gynecologic oncology (GO) fellowship.

Methods: An IRB-approved survey was distributed to participating obstetrics and gynecology (OB/GYN) residents at three academic institutions, prior to the introduction of a clinical GO fellow. Surveys were conducted through REDCap. The survey included questions about perceptions related to resident surgical volume, clinical decision making, research opportunities, education, and mentorship. Each response was scored on a 5-point Likert scale of agreement. We assessed the association between resident year (dichotomized as junior (PGY 1/2) versus senior (PGY 3/4)) and each statement using Chi-square tests in Stata v. 16.

Results: Fifty-eight percent (46/80) of residents completed the survey. Of the respondents, 61% were juniors; 39% were seniors. With respect to the operative experience, 44% of residents expected decreased volume and operative autonomy. Outside of the operating room, 48% anticipated a decrease in faculty interactions, but only 22% expected a fellow to decrease clinical decision making. Ninety-three percent agreed that the fellow would increase access to research opportunities and mentorship. Sixty-seven percent predicted an improvement in the overall rotation experience. Twenty-two percent anticipated a fellow to increase resident interest in GO fellowship. There was no difference in responses between junior and senior residents.

Conclusions: This study demonstrated that while 44% of OB/GYN residents anticipated a new GO fellowship to adversely impact their surgical experience, the majority expected an improvement in research opportunities, education, and mentorship. Post-fellowship surveys and comparison of ACGME case logs pre- and post-fellowship are planned to evaluate actual resident experience. This information may benefit institutions considering new fellowship programs to enhance the resident-fellow experience.

26. Patient- and surgeon-related factors associated with operating room turnover time

***Stephanie Alimena**, Michelle Davis - Institution: BWH*

Objective: Longer operating room (OR) turnover times result in higher healthcare expenditures, lower patient satisfaction, and lower surgeon job satisfaction, though there is little research investigating factors that affect turnover times.

Methods: OR turnover times for adult patients were collected from 4/1/2022 to 3/31/2023 from two academic hospitals in Boston, MA. Add-on cases, cases not scheduled consecutively, and cases performed by a surgeon with <10 cases per year were excluded. T-test and ANOVA analyses were performed to determine mean OR turnover times by patient- and surgeon/hospital-related factors. A subset analysis was performed for gynecology cases only.
Results: Among 24,480 cases, 79.8% of patients were white, 56.9% of patients were female, and 57.3% had an ASA score of 3 or above. Female surgeons performed 22.8% of cases. Mean OR turnover time was 58:59 (mm:ss) ± 0:19. Longer turnover times were noted for cases with multiple surgeons, cases at hospital #1, cases performed on Black patients, and cases where the patient spoke a language other than English or Spanish (Table 1). There was a stepwise increase in turnover time with increasing ASA scores, and no difference in turnover time by surgeon gender. Services with the longest turnover times included transplant surgery, vascular surgery, and neurosurgery. When confined to gynecology cases only, cases performed by female surgeons had longer turnover times, and patient race and language were no longer significant.

Conclusions: Patient-related factors were primary drivers of longer OR turnover times, with longer times for those with language barriers, more comorbid conditions, and those having surgery with a high-risk specialty. However, among gynecology cases specifically, female surgeon gender was associated with longer turnover, which bears further scrutiny. Many of these factors may be amenable to quality improvement cycles to improve perioperative communication and optimization of medical comorbidities prior to proceeding to the OR.

Continued Abstract 26, Table 1.
Mean operating room turnover time by surgeon/hospital-related factors and patient-related factors.

	Mean OR Turnover (mm:ss) ± SD	p-value
Surgeon/Hospital Factors		
Surgeon Gender		0.463
Male	59:02 ± 0:20	
Female	58:49 ± 0:19	
Multiple Surgeons in Case		<0.001*
Yes	60:40 ± 0:21	
No	58:36 ± 0:19	
Surgeon Specialty		<0.001*
General Surgery/Trauma	55:18 ± 0:20	
Gynecology	58:57 ± 0:16	
Neurosurgery	65:46 ± 0:22	
Orthopedic Surgery	57:02 ± 0:20	
Other	58:14 ± 0:18	
Plastic Surgery	58:43 ± 0:18	
Surgical Oncology	60:29 ± 0:20	
Cardiothoracic Surgery	62:35 ± 0:19	
Transplant Surgery	71:18 ± 0:22	
Urology	56:16 ± 0:18	
Vascular Surgery	69:18 ± 0:21	
Hospital		<0.001*
Hospital #1	63:25 ± 0:19	
Hospital #2	55:02 ± 0:19	
Patient Factors		
Patient Race		<0.001*
White	58:46 ± 0:19	
Asian or Pacific Islander	58:12 ± 0:19	
Black	61:38 ± 0:20	
Other/Multiple Races	59:33 ± 0:20	
Unknown	59:00 ± 0:19	
Patient Ethnicity		0.007*
Hispanic	59:09 ± 0:19	
Not Hispanic	59:05 ± 0:20	
Unknown	57:22 ± 0:19	
Patient Primary Language		0.005*
English	58:54 ± 0:19	
Spanish	59:23 ± 0:19	
Other	61:30 ± 0:20	
Unknown	58:27 ± 0:20	
Patient Gender		0.113
Female	58:46 ± 0:19	
Male	59:17 ± 0:20	
Other	65:14 ± 0:04	
Patient Insurance Payor		0.096
Medicaid	59:34 ± 0:19	
Medicare	59:22 ± 0:20	
Other govt insurance	58:23 ± 0:18	
Private	58:42 ± 0:19	
Unknown/Other	59:28 ± 0:19	
Patient ASA score		0.001*
1	53:29 ± 0:18	
2	55:17 ± 0:18	
3	61:14 ± 0:20	
4	66:55 ± 0:20	
5	78:09 ± 0:15	
Unknown	55:30 ± 0:20	

27. Lower risk of incident endometrial cancers in patients with type 2 diabetes mellitus treated with sodium-glucose cotransporter-2 inhibitors: A multi-center cohort study across the United States

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Institution: BWH

Objective: Endometrial cancer is the most common gynecological cancer, with a majority of patients experiencing metabolic disorders such as obesity and type 2 diabetes mellitus (T2DM). In adults with T2DM, sodium-glucose cotransporter-2 inhibitors (SGLT-2i) offer comparable anti-hyperglycemic effects, enhanced cardiovascular benefits, and weight loss compared to metformin. This study aimed to assess incident endometrial pre-cancer and cancer among adults with T2DM who initiated first-line treatment with SGLT-2i versus metformin, an active comparator known to reduce endometrial cancer risk.

Methods: Patients with T2DM ≥18 years initiating SGLT-2i or metformin from June, 2014-March, 2023 with no prior use of antidiabetic medications were included from 92 healthcare organizations across the U.S and propensity score matched on demographic characteristics, comorbidities, medical history and biomarkers. Kaplan-Meier analysis and log-rank tests were used to compare outcomes between the cohorts. Hazard ratios (HRs) and 95% confidence intervals (CIs) were obtained using the Cox proportional hazard regression model. Outcomes were based on ICD-9 and ICD-10 codes and included endometrial hyperplasia, endometrial carcinoma in situ and a composite outcome of endometrial cancer and pre-cancer.

Results: Among 718,276 first-line SGLT-2i initiators matched to 3,248,403 metformin initiators, the mean follow-up time was 5.03 ± 10.04 years and 5.70 ± 10.65 years , respectively. SGLT-2i initiators exhibited a significantly lower risk for the composite endometrial cancer and pre-cancer outcome (HR, 0.84; 95% CI, 0.81 to 0.88) and endometrial hyperplasia (HR, 0.92; CI, 0.86 to 0.97), as well as a lower, though not statistically significant, risk of endometrial carcinoma in situ (HR, 0.68; CI, 0.43 to 1.10).

Conclusion: As first-line T2DM treatments, SGLT-2i initiators demonstrated a lower risk for endometrial cancer and pre-cancer outcomes along with endometrial hyperplasia compared to metformin. Additional studies are necessary to determine the possible therapeutic application of SGLT-2i in the prevention of endometrial cancer.

*28. Characteristics and recurrence patterns in patients with stage I serous endometrial cancers

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Institution: BIDMC

Objectives: Adjuvant treatment for uterine-confined high-grade serous carcinoma remains highly individualized. Our objective was to assess differences in recurrence patterns and risk based on presence of myoinvasion and HER2 expression in stage I serous endometrial cancers.

Methods: A retrospective chart review of patients with stage I serous endometrial carcinoma between 2014 and 2021 was conducted at a single academic medical center. Gynecologic pathologists re-reviewed all available slides and performed HER2 immunohistochemistry (IHC) testing. HER2 expression was defined as an IHC of 2+ or 3+. We stratified patients into noninvasive (including no residual cancer or polyp-confined) and myoinvasive disease, and compared patient, disease and treatment characteristics along with cancer outcomes, using chi square, Fisher's exact or Mann Whitney U tests.

Results: We identified 74 patients with stage I serous endometrial cancer; 32 (43%) of tumors were noninvasive and 42 (57%) were myoinvasive. Patients without myoinvasion were more likely to receive adjuvant therapy than patients with myoinvasion (74% vs. 47%, p=0.02). No patients received upfront Trastuzumab. Cancer recurred in 12 (16%) patients with myoinvasion, compared to 0 patients without myoinvasion (p=0.002). More than half of patients who recurred had multifocal recurrence; the most common sites were lung (55%) and peritoneum (55%). On univariate analysis, myoinvasion (p=0.002) and LVSI (p=0.003) were associated with recurrence. HER2 staining was performed in 57 patients, and expression was positive in 18 (32%). HER2 expression was not associated with recurrence (25% vs 33%, p= 1.0).

Discussion: This study adds to existing literature of uterine-confined serous cancers through a comparison of noninvasive and invasive cancers while accounting for HER2 status. Although HER2 expression in this small cohort was not associated with recurrence risk, further research is needed to explore this relationship and delineate the role of HER2 staining in early cancers and its potential treatment implications.

*29. Molecular Subtypes of Endometrial Cancer Predict Rates of Lymph Node and Ovarian Metastasis at the Time of Surgical Staging

***Isabela Covelli Velez**, Mary Kathryn Abel, Hadley Reid, Alexandria N. Young, Colleen Feltmate, Jessica St. Laurent Institution: BWH*

Objective: To investigate differences in rates of ovarian and lymph node metastasis (LNM) in endometrial cancer (EC) across different molecular subtypes, as molecular classification presents an opportunity to better risk-stratify patients and guide surgical management.

Methods: A retrospective chart review was conducted, including all women diagnosed with epithelial EC between January 2011 and December 2020 at a single institution with IRB approval. Clinical and pathologic variables were collected for all patients who underwent primary staging surgery, including sentinel lymph node biopsy, and consented to the institutional targeted next-generation sequencing panel (Oncopanel). Sequencing results were reviewed in conjunction with immunohistochemistry (IHC) studies to classify samples into established molecular subtypes based on the review of tumor mutation burden, copy number, and mismatch repair IHC.

Results: The study enrolled 425 patients with presumed early-stage EC who underwent surgical staging and had molecular classification performed. Among them, 56 (13.2%) were classified as copy-number high (CNV-High), 230 (54.1%) as copy-number low (CNV-Low), 108 (25.4%) as microsatellite instability (MSI-High), and 31 (7.3%) as POLE ultramutated. LNM was observed in 38 (8.9%) cases, and ovarian metastases were found in 44 (10.4%) cases. CNV-High cases had 9 (2.1%) cases of LNM and 13 (3.1%) cases of adnexal involvement. CNV-Low cases had 14 (3.2%) cases of LNM and 22 (5.2%) cases of adnexal involvement. MSI-High cases had 15 (3.5%) cases of LNM and 8 (1.9%) cases of adnexal involvement. No LNM was observed in POLE ultramutated cases, and only 1 (0.2%) case had adnexal involvement.

Conclusion: These results suggest that the molecular subtypes of EC may predict the rates of ovarian and LNM in patients undergoing surgical staging, with CNV-Low and MSI-High subtypes associated with higher rates of LNM. Conversely, POLE ultramutated cases had low rates of LNM, suggesting a potential for less aggressive surgical management in these patients.

*30. Trends in the treatment of lymph node positive endometrial cancer since the dissemination of PORTEC-3 and GOG 258.

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Objective: The goal of this study is to describe how trends in the treatment of lymph node positive endometrial cancer have evolved since the publication of PORTEC-3, a trial comparing whole pelvic radiation (RT) with dual modality treatment (chemotherapy and radiotherapy, DMT), and GOG-258, a trial which comparing DMT with chemotherapy alone (CT).

Methods: We identified patients with carcinoma of the endometrium with metastatic regional lymph nodes who were diagnosed between 2010 and 2020 and treated in Commission on Cancer accredited cancer programs in the United States and received adjuvant therapy. We fit Poisson regression models with robust standard errors to evaluate whether temporal trends in the use of RT, CT, and DMT changed in 2017, the year that results from PORTEC-3 and GOG-258 were first presented.

Results: We included 26,429 patients, mean age of 64 years, of whom 52.9% had endometrioid, 18.0% had serous, 10.5% had mixed, 10.4% had carcinosarcoma histology. Most patients (62.3%) received DMT, 31.7% received CT, and 6.0% received RT. Between 2010 and 2017 the proportion of patients who received CT decreased from 34.5% to 30.9% corresponding an annual decrease of 3.8% (95% CI 2.7-5.0%). The proportion who received DMT increased from 55.5% to 63.7% corresponding to an increase of 2.8% (95% CI 2.1-3.5%) per year. In 2017, there was a statistically significant reversal in both trends ($p<0.001$). Thereafter, the proportion of patients who received DMT decreased by 3.0% (95% CI 1.5-4.4%) per year while the proportion who received CT increased by 5.1% (95% CI 2.0-8.1%) per year, reaching 60.9% and 33.8% respectively.

Conclusion: The dissemination of recent randomized data was associated with a significant change in treatment trends for node positive endometrial cancer, with an increase in the proportion of patients who receive CT alone and a concomitant decrease in receipt of DMT. RT alone is uncommon in the population.

*31. Comparative Analysis of Adjuvant Treatment Outcomes in Stage III Endometrial Cancer: Overall Survival, Recurrence-Free Survival, and Toxicity

***Alex E. Rosenthal**, Annliz Macharia, Andrew Wiechert, Joanne Jang, Katharine Esselen - Institution: BIDMC*

Objective: Optimal adjuvant treatment for stage III endometrial cancer is controversial due to varying outcomes of the PORTEC-31 and GOG 2582 trials, which evaluated chemoradiotherapy versus chemotherapy or radiation therapy alone. Our study evaluated outcomes of patients treated with upfront chemotherapy with possible radiation (upfront) compared to radiation with sensitizing cisplatin with or without subsequent chemotherapy (concurrent). Our objective was to assess differences in 1) overall survival (OS) and recurrence free survival (RFS); and 2) acute and long-term toxicities.

Methods: All stage III endometrial cancer patients treated at our institution from 2010-2021 were included. Demographic, disease, toxicity, recurrence, and survival data were captured through retrospective chart review. Differences between groups were analyzed using Chi-square, Fisher's exact, or Kruskal-Wallis tests.

Results: A total of 187 patients were included; 110 underwent upfront, 54 underwent concurrent, 9 underwent radiation only, and 11 received no adjuvant treatment. There were no differences between groups in age, race, or BMI. Most patients were above age 70 (55.4%), white (71.2%) and obese (47.8%). Nearly half (47.5%) had stage IIIC1 disease, and the most common histology was grade 1 endometrioid (28.6%) followed by serous (25.3%). Notable differences between groups included 28.7% vs 14.8% with stage IIIC2 disease ($p=0.045$) and 53.2% vs 5.6% with serous, clear cell and carcinosarcoma histology ($p<0.001$). Median OS in concurrent group was 58.5 vs 42.3 months in upfront group ($p=0.08$). Median RFS in concurrent group was 57.4 vs 27.1 months in upfront group ($p=0.01$).

Conclusion: Patients undergoing concurrent had longer median OS and RFS when compared to upfront with significant difference in RFS and near significant trend in OS. There were more patients with higher stage and aggressive histologies in the upfront group. These findings may help inform recommendations for adjuvant therapy for stage III endometrial cancer and future clinical trial design.

*32. Rate of postoperative VTE in endometrial cancer patients undergoing minimally invasive surgery

*Katrin Eurich, **Corinne Jansen**, Julia Dexter, Elizabeth Lokich - Institution: WIHRI*

Objectives: The American Society of Clinical Oncology (ASCO) recommends extended pharmacologic prophylaxis for all gynecologic oncology patients undergoing major surgery, regardless of surgical modality. Data supporting this recommendation is based largely on patients undergoing open procedures, but more recently minimally invasive surgery (MIS) has become the widely accepted standard of care in endometrial cancer surgery. Several large studies suggest a significantly lower rate of postoperative venous thromboembolism (VTE) in patients undergoing MIS as compared to open surgery. This study aims to determine the rate of postoperative VTE in patients undergoing MIS for endometrial cancer who do not receive extended outpatient pharmacologic VTE prophylaxis at discharge.

Methods: This is a retrospective chart review of women undergoing MIS surgery for endometrial cancer at a single large academic institution between 2014 and 2020. Patients were excluded for age less than 18, final diagnosis other than endometrial cancer, history of VTE or known thrombophilia already on anticoagulation, surgery done at an outside institution, or conversion to open procedure. The primary outcome was the rate of VTE within 30 days of surgery.

Results: During the study period we identified no patients who experienced a VTE within 30 days of surgery. In our study population 56.3% of cases were robotic and 43.7% were laparoscopic. Per hospital policy all women received mechanical prophylaxis during surgery and postoperatively, and 59.2% of women received pharmacologic prophylaxis while inpatient. No patients in this study received outpatient pharmacologic prophylaxis. The rate of VTE in this patient population was 0%.

Conclusion: The rate of VTE in endometrial cancer patients undergoing MIS surgery who do not receive extended outpatient pharmacologic VTE prophylaxis was extremely low irrespective of surgical modality. We recommend that this patient population does not require extended outpatient pharmacologic VTE prophylaxis and suggest current guidelines differentiate recommendations based on surgical modality.

*33. Pregnancy Outcome of Women undergoing Conservative Management for Endometrial Intraepithelial Neoplasia/Endometrial Adenocarcinoma: A Systematic Review and Meta-Analysis

***Aashna Saini**, Veronika Melnik, Ariba Memon, Becky Baltich Nelson, Katherine Leung, Gianna Wilkie, Susan Zweizig - Institution: UMass*

Objective: To determine pregnancy, live birth, and recurrence rates in women with Endometrial Intraepithelial (EIN) and Grade 1 endometrial adenocarcinoma (EAC) who were treated with fertility sparing management.

Data Sources: Studies were extracted from Ovid MEDLINE, Scopus, ClinicalTrials.gov, and Cochrane library from 2009 to March 1, 2022.

Study Eligibility Criteria: We included all studies that reported pregnancy outcomes, live birth rates, and recurrence rates in women with EIN and EAC. Studies that did not report EIN and EAC outcomes separately or studies missing any of the three listed criteria were excluded.

Methods: The initial search yielded 5,807 unique citations that were screened in Covidence by two independent reviewers. Study types included randomized controlled trials (RCTs), cohort studies, cross-sectional studies, and case-reports. Our outcomes of interest were pregnancy rates, live birth rates, and recurrence rates.

Results: A meta-analysis of 11 studies that met inclusion criteria were performed. Results showed that patients with EIN had 21% increased odds of achieving pregnancy compared to patients with Grade 1 EAC (OR 1.2, 95% CI 0.74-1.99). Patients with EIN had 21% decreased odds of achieving live birth compared to patients with Grade 1 EAC (OR 0.79, 95% CI 0.43-1.43). Patients with EIN had 53% decreased odds of recurrence compared to patients with Grade 1 EAC (OR 0.47, 95% CI 0.32-0.7).

Conclusion: Patients with EIN had a lower rate of recurrence compared with patients with Grade 1 EAC. However, there was no statistically significant difference in achieving pregnancy or live birth rates when comparing EIN and EAC groups. Interestingly, there was a non-significant trend towards increased odds of pregnancy in the EIN group while a decreased odds of achieving live birth. Further research is needed to characterize the perinatal outcomes of this population.

*34. Inhaled Tranexamic Acid (TXA) for Management of Pulmonary Hemorrhage in Stage III Mixed Trophoblastic Tumor

***Rose Emlein**, Heather Einstein, Amy Brown, Amanda Ramos, Jonathan Cosin, Clare Zhou, Marguerite Palisoul - Institution: UConn/Hartford Healthcare*

Objective: We report a case of the use of nebulized TXA for management of pulmonary hemorrhage in Stage III gestational trophoblastic neoplasia (GTN).

Methods: The patient is a 44 year old G3P2 with newly diagnosed Stage III mixed malignant trophoblastic tumor (Epithelial Trophoblastic Tumor and Placental Site Trophoblastic Tumor) with known pulmonary metastases. She presented with low volume hemoptysis and anemia with a hemoglobin 5.7, was admitted for blood transfusion and expedition of chemotherapy. Induction etoposide & cisplatin (EP) was administered on hospital day (HD) 2, when β-hcg was 1,778. On HD#3 she was initiated on nebulized TXA every 8 hours.

Results: Hemoptysis initially improved with 72 hours of scheduled TXA. When changed to PRN and she went 22 hours without TXA, hemoptysis worsened and she developed acute hypoxic respiratory failure requiring intubation, transfer to ICU. Bronchoscopy showed diffuse alveolar hemorrhage and scheduled nebulized TXA was restarted. Bleeding stabilized 5 days later. Paralytics were subsequently utilized to limit movement induced hemorrhage. TXA was discontinued 15 days after intubation. She received 15 units of PRBC over 22 days. She remained intubated for 24 days until a tracheostomy was placed. Ventilator was weaned after 12 weeks and she was decannulated 3 weeks later. Hospital course was complicated by bilateral DVT, acute cholecystitis, and urosepsis. As of abstract submission, she has received 2 cycles of induction EP and 5 cycles of etoposide, methotrexate, actinomycin-D(EMA)/EP with pembrolizumab, requiring various dose reductions and delays. β-hcg reached a maximum of 72,316 on cycle 1 day 1 of EMA/EP and normalized after cycle 3. Discharge to long term acute care hospital is anticipated soon. Clinical course will be updated at presentation.

Conclusion: GTN can be highly vascular and pulmonary metastases can cause life-threatening hemorrhage. Nebulized TXA provides a promising method to stabilize pulmonary hemorrhage in GTN.

*35. Diagnosis of congenital androgen insensitivity syndrome (CAIS) after discovery of a mixed germ cell tumor in patient with prior incorrect diagnosis of Mayer-Rokitansky-Kuster-Hauser (MRKH) syndrome

***Areta Bojko**, Jessica Kim, Caroline Nitschmann, Andrea Sorcini, Wright, Valena - Institution: Lahey*

Objective: To review the literature and demonstrate the unique findings of metastatic germ cell tumor (GCT) in an intersex, cisgender phenotypic female with misdiagnosis of Mayer-Rokitansky-Kuster-Hauser syndrome (MRKH) at birth with delayed adult diagnosis of congenital androgen insensitivity syndrome (CAIS) presenting with a pelvic mass. This highlights the critical role of a karyotype in preventing XY females from developing GCT later in life by timely risk reducing bilateral gonadectomy.

Methods: Literature review was performed of CAIS in the setting of GCTs to highlight the controversies in nomenclature, diagnostic approach to GCTs presenting in women, men and intersex patients. Medical photography and video of the operative procedure demonstrates the distinguishing clinical features and anatomy seen in CAIS as opposed to MRKH.

Results: A 28 year old woman presented with left lower quadrant pelvic pain and urinary frequency. She was found to have a positive beta-HCG over 9,000 mIU/mL and CT imaging confirmed a 9.7 x 7.6 x 12.5 cm mass in the mid pelvis, with absence of cervix and uterus. On physical exam, scant axillary and pubic hair and presence of a long vaginal canal raised suspicion of CAIS rather than MRKH. Karyotype with FISH for Y chromosome marker (SRY) analysis confirmed XY in all cells. Tumor markers and ultrasound guided biopsy of supraclavicular nodes confirmed metastatic GCT.

Conclusion: The role of genetics in intersex cisgender phenotypic females is critical to correctly identify the risk of dysgerminoma and gonadoblastoma in XY patients and prevent GCTs with risk reducing surgery. Management of advanced GCTs differs between genotypically male and female patients. In XY patients, chemotherapy prior to potential surgical intervention is the standard approach while in ovarian GCTs, primary cytoreduction is recommended. The variable management approaches to these tumors highlight the importance of a multidisciplinary approach in caring for these patients.

*36. Case Report: Paclitaxel Encephalopathy in Uterine Serous Carcinoma Patient

***Allison Schachter**, Jovana Martin, Timothy McElrath, Patrick Timmins, Joyce N. Barlin*
Institution: Albany Medical Center / Women's Cancer Care Associates

Paclitaxel is a cornerstone of therapy in gynecologic oncology. The most common dose limiting adverse effects include peripheral neuropathy and neutropenia. Central nervous system (CNS) toxicity is less commonly encountered due to limited penetration of Paclitaxel across the blood-brain barrier. Although a rare side effect, CNS toxicity should be considered on the differential diagnosis of patients presenting with behavioral changes following treatment with Paclitaxel.

This is the case of a 68-year-old female with stage IV uterine serous cancer who developed acute resolving encephalopathy following infusion of Paclitaxel. She developed behavioral changes and word finding difficulties 12 days after cycle 4 of Paclitaxel/Carboplatin. Extensive evaluation including imaging and neurology consultation was without clear etiology. She was started on antibiotics for a possible vaginal cuff abscess and discharged with clinical improvement. Sixteen days following cycle 5 she was re-admitted with similar symptoms and treated for a possible urinary tract infection. The cause was thought to be psychiatric in origin. Three weeks later, she was admitted to the psychiatry service with acute mania. The patient declined cycle 6 of adjuvant chemotherapy and did not follow up as advised. She returned to care 10 months later with carcinomatosis and was treated with Lenvatinib/Pembrolizumab. She progressed on this regimen, and she was re-challenged with Paclitaxel/Carboplatin. Seven days later, she developed similar self-resolving behavioral changes. The patient was continued on single agent Carboplatin.

CNS toxicity is a rare side effect of Paclitaxel. Our patient developed mental status changes 1-2 weeks after Paclitaxel infusion. In contrast to this case, prior case reports demonstrate acute onset of symptoms hours following Paclitaxel infusion. The pathophysiology for this self-resolving encephalopathy is unclear. Paclitaxel can cause acute transient encephalopathy in patients without prior risk factors and should be kept on the differential for patients with acute mental status changes after treatment.

*37. VIDEO ABSTRACT: Robotic Laterally Extended Endopelvic Resection for Recurrent Endometrial Cancer

Justin Harold, *Blair McNamara, Levent Mutlu, Masoud Azodi, Elena Ratner - Institution: Yale*

Objective: To demonstrate a narrated video of a robotic laterally extended endopelvic resection (LEER) for recurrent endometrial cancer

Methods: LEER was originally reported by Hockel et al in 1999 for the treatment of infrailiac laterally recurrent gynecologic cancers involving the pelvic sidewall (1). Complete resection is reported in up to 75% of patients (2). Most prior descriptions are of laparotomic approaches, while there is 1 reported robotic demonstration in the literature (3). Our patient originally presented in February 2017 with a FIGO Grade I endometrioid endometrial adenocarcinoma. She underwent uncomplicated TLH, BSO, sentinel lymph node mapping and biopsy, and bilateral PLND. Pathology demonstrated a stage IA FIGO grade 2 endometrioid endometrial adenocarcinoma with 30% myoinvasion and no lymphovascular invasion. She received 18 Gray of adjuvant vaginal cuff brachytherapy in 3 fractions. She was followed for 5 years in surveillance with no evidence of disease. In April of 2023, she presented with acute right lower quadrant pain radiating to the back, hip, and anterolateral right leg. CT abdomen/pelvis and MRI demonstrated a lobular 5.7 cm right pelvic sidewall mass, inseparable from the right obturator internus muscle. She was counseled and underwent robotic LEER.

Results: Operative time was 4 hours and estimated blood loss 350 mL. She was discharged home on postoperative day 2, ambulatory, with 4/5 adduction of the right lower extremity. Pathology demonstrated recurrent endometrial adenocarcinoma.

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