SUMMIT Rewind
A LOOK BACK AT KEY SESSIONS FROM THE 2023 NCODA FALL SUMMIT

THE INTERNATIONAL ONCOLOGY LANDSCAPE | PAGE 5

TO PARP OR NOT TO PARP — THAT IS THE QUESTION | PAGE 8
ORAL ANTICANCER TREATMENTS, TOXICITIES & SYMPTOMS | PAGE 9
TRACKING THE JOURNEY OF AN ORAL ONCOLYTIC | PAGE 11
Our focus is to offer an international community for healthcare students with a passion for oncology and the pharmaceutical industry. The NCODA Professional Student Organization (PSO) was established for students interested in oncology, association management, healthcare advocacy and policy, and industry leadership.

PSO BENEFITS

- First professional student organization for students interested in oncology/association management/industry/leadership
- Opportunities to attend NCODA international meetings
- Create educational materials to help impact cancer care
- International publishing opportunities (ForumRewind, SummitRewind, Inspire and Oncolytics Today publications)
- Increased networking opportunities with oncology clinical and industry professionals, and key opinion leaders
- Oncology clinical practice experience and mentorship
- Healthcare advocacy and policy experience

LOCATIONS OF ESTABLISHED PSO CHAPTERS

Being a part of the NCODA Professional Student Organization community is such a remarkable experience. Together, we keep each other updated and informed on current clinical oncology practices, while also providing opportunities that aid in developing leadership skills.

- Jonathan Rivera
PharmD Candidate | Class of 2023
University of North Texas Health Science Center

FOR MORE INFORMATION OR TO SUGGEST NEW CHAPTERS
Email Cooper Bailey at cooper.bailey@ncoda.org
Scan to visit, or check out www.ncoda.org/professional-student-organizations
SUMMIT Rewind provides summaries of key sessions from NCODA’s annual International Fall Summit written by members of Professional Student Organization chapters from around the world. To view slides from presentations, scan the QR code at the end of the summaries.

4 | Emerging Therapy of Bispecifics
A comprehensive overview for a new class of emerging therapies known as bispecific antibodies (BsAbs)

4 | Precision Medicine in Oncology: Leveraging Technology to Enhance Education
Technological advancements are transforming patient care in the U.S., though equity issues are still a challenge.

5 | Updates in Classical Hodgkin Lymphoma
A review of cHL pathophysiology and highlights of new supporting literature.

5 | A Glimpse into the International Oncology Landscape: Opportunities for Enhanced Oncology Care Around the Globe
A comparison of the profession across several markets, countries and cultures.

6 | Empowering the Nurse Through Confidence Building and Effective Communication Skills
How healthcare professionals can utilize communication to build self-confidence while improving patient care.

7 | Federal Legislative Updates in the Oncology Landscape: Understanding How Legislation and Policy Works for Patients and Practices
A summary of legislation regarding PBMs, the Stark Law, drug shortages and the Inflation Reduction Act.

7 | Oral Oncolytic Process Panel
A presentation focusing on workflow processes for initiating oral oncolytic treatment and follow-up procedures.

8 | To PARP or Not to PARP — That is the Question
Insight on utilization of PARP inhibitors for the frontline maintenance treatment of ovarian cancer.

8 | Social Determinants of Health
A discussion of the intersectionality between access to cancer care and social determinants of health and sexual orientation and gender identity.

9 | Classifying Oral Anticancer Treatments, Grading Toxicities and Managing Symptoms
An overview of primary OAM classes, criteria for evaluating adverse event severity and strategies for symptom management.

10 | International Health Disparities
A look at the rising burden of cancer care in Turkey, Greece and Uganda and what’s being done to address the situation.

10 | Novel Therapies for Relapsed/Refractory DLBCL
Highlights of novel therapy options to treat relapsed/refractory diffuse large B-cell lymphoma.

11 | An International Perspective into the Pharmacy Technician’s Role
A look at the diverse responsibilities of the pharmacy technician’s roles in different countries.

11 | Tracking the Journey of an Oral Oncolytic in the Medically Integrated Practice
A look at the patient care roles of the pharmacist, nurse and technician in treatments involving oral anticancer medication.
Emerging Therapy of Bispecifics

**PRESENTER:** Eden Biltibo, MD, MS | Vanderbilt University Medical Center

**SYNOPSIS:** Biltibo provided a comprehensive overview for a new class of emerging therapies known as bispecific antibodies (BsAbs).

**PRESENTATION:** Biltibo explained the clinical work behind BsAbs, including available therapies, mechanism of action, notable adverse effects and current clinical trials. She noted that studies have shown an overall response rate up to 78%, depending on the therapy chosen, and at least a very good partial response in almost 60% of patients, consisting of VGPR, complete response and stringent complete response.

BsAbs are small molecules that are readily permeable to move to the site of action. These therapies execute their clinical effect by connecting endogenous T cells with antigens expressing the tumor malignancy, triggering the patient’s own T cells to extinguish the cancer. With this target, these therapies can spare cells without the tumor antigen present. Available BsAbs include blinatumomab, teclistamab-cqvy, mosunetuzumab-axgb, epcoritamab-bysp, glokifamab-gxbm, talquetamab-tgys and elranatamab-bcmm.

Important adverse events to highlight include cytokine release syndrome (CRS), neurotoxicity designation — with or without ICANS (immune effector cell-associated neurotoxicity syndrome) and cytopenia. Biltibo stressed the importance of identifying and grading these adverse events, as it will drive the management of these undesired side effects.

She emphasized utilization of any BsAbs requires hospitalization for at least one dose administration (except mosunetuzumab-axgb). All BsAbs have the potential to cause serious adverse events which may increase healthcare costs. Also, getting insurance approval may prolong a patient’s time to treatment, allowing disease progression.

**TAKEAWAY POINTS:**

- New tumor-associated antigens are being identified and tested to extend this therapy’s clinical applicability.
- All BsAbs showed efficacy in the relapsed refractory setting.
- BsAbs therapies could be initiated at academic centers and transferred to community settings to increase patient access.

Summary by Paige Pittlick, PharmD Candidate (2024), University of Minnesota College of Pharmacy.

**SESSION SLIDES:** Scan the QR code at right to view slides from this presentation.

---

Precision Medicine in Oncology: Leveraging Technology to Enhance Education

**PRESENTER:** John Marshall, MD | Georgetown University

**SYNOPSIS:** Marshall discussed how lack of equity within oncology care can affect patients in the United States, as well as what technologies have transformed diagnosis, treatment and communications.

**PRESENTATION:** Marshall emphasized that:

- We now recognize cancer as being polyclonal in nature.
- Smaller, targeted clinical studies instead of phase III trials can be effective.
- Genetic testing is now standardized.

However, there are some systemic limitations to oncology care within the U.S., including the inability of the U.S. Food & Drug Administration to value medications for pricing once they have received approval, compared to their regulatory counterparts in Great Britain.

Marshall noted that those living in lower socioeconomic conditions and certain minority groups can share a greater degree of healthcare disparities. He emphasized that it is imperative for providers to care for all patients with equity.

He said that the GI Cancers Equity Initiative Team at the Ruesch Center has largely assisted in patient oversight and management by providing legal support and treatment at sponsored medical facilities. The newest position, Clinical Coach, has shown evidence of increasing positive outcomes through consistent provider support.

Marshall provided a review of genomics and polymorphisms, and ultimately introduced the concept of Multi-omics (the study of the multifactorial presentation of mutated cells and cancer) including genomics, proteomics and other biochemical processes. Marshall described this as a foundation of Precision Medicine, the methodology behind transforming cancer patient care from homogenous to heterogenous treatments. An example is Circulating Tumor DNA, which identifies patientspecific markers on their tumor to target.

Marshall concluded precision medicine has incorporated machine learning and artificial intelligence to generate novel anti-carcinogenic therapies and to assess whether a patient will tolerate or benefit from certain treatments.

**TAKEAWAY POINTS:**

- The U.S. has limitations in its approach to bringing affordable, targeted care to oncology patients, but technology is moving to bridge the gaps.
- Using genomics and other patient-specific aspects to develop a unique care plan can pave the way to equity in health-related outcomes.

Summary by Trey Fulford, PharmD Candidate (2025), University of Georgia College of Pharmacy.

**SESSION SLIDES:** Scan the QR code at right to view slides from this presentation.
Updates in Classical Hodgkin Lymphoma

**PRESENTER:** Ashka Patel, PharmD, BCOP | Dana-Farber Cancer Institute

**SYNOPSIS:** Patel presented on the updated algorithm for classical Hodgkin Lymphoma (cHL) for standard treatments and patients ≥ 60 years of age. She provided a review of cHL pathophysiology and highlights of new supporting literature.

**PRESENTATION:** Hodgkin Lymphoma (HL) is an uncommon malignancy of B-cell origin that typically peaks in patients between 15 and 30 years old and 55 years old and older. The presence of Reed Sternberg Cells is a hallmark for cHL. The Ann Arbor Staging System identifies the four stages of cHL as subclasses of A, B, E or S. The disease is further classified based on stage (and the presence of unfavorable factors). Brentuximab vedotin (BV) in combination with doxorubicin, vinblastine and dacarbazine (AVD) is a common regimen for newly diagnosed, advanced-stage cases. Newer updates to the treatment algorithm include two regimens: doxorubicin, bleomycin, vinblastine, and dacarbazine (ABVD) x 2 cycles followed by a restaging PET, or BV-AVD x 6 cycles to Stages III-IV. Another regimen of ABVD x 2 cycles ± involved-site radiation therapy is designed for patients ≥ 60 years with Stage I-II favorable disease.

Patel cited new research highlighting the results of nivolumab (N-AVD) and improved progression-free survival vs BV-AVD in standard treatment populations. BV plus dacarbazine demonstrated efficacy and safety, and BV-AVD was well-tolerated in stages II-IV of the disease. The older population is heavily underrepresented in the supporting literature reviews. Although chill is highly curable, the cure rate within the elderly population does not meet the same expectations.

**DISCUSSION:**

**Q:** What type of fertility counseling do patients on doxorubicin, bleomycin, vinblastine, and dacarbazine receive?

**A:** Patients are referred to the fertility clinic for individualized options such as preservation. The impact of BV-AVD and ABVD on fertility is still being researched.

**TAKEAWAY POINTS:**

- The updated algorithm regimens minimize toxicity but have not been proven to overcome poorer disease outcomes in patients ≥ 60 years of age.
- Future clinical trials should include older patients as they make up 20% of HL patients and, typically, have a poorer prognosis than younger patients.

Summary by Omadevi Somai, PharmD Candidate (2024), Lake Erie College of Osteopathic Medicine School of Pharmacy.

**SESSION SLIDES:** Scan the QR code at right to view slides from this presentation.

The International Oncology Landscape: Opportunities for Enhanced Oncology Care Around the Globe

**MODERATOR:** Martin Whalen | Bristol-Myers Squibb – European Markets (Sweden)

**PRESENTERS:** Marko Skelin, MPHarm, PhD | General Hospital Sibenik, Zagreb (Croatia)

Christine Larivière, BPharm | Larivière et Massicotte Pharmaciennes, Inc., Montreal, Québec (Canada)

Victor Lisboa, MD | OncoClinícas (Brazil)

George P. Patrinos, PhD | University of Patras School of Health Sciences Department of Pharmacy (Greece)

Shinya Suzuki, PhD, BCOP-JSPHCS, National Cancer Center Hospital East, Chiba (Japan)

**SYNOPSIS:** This session provides a glimpse of the international oncology landscape with an emphasis on comparisons across markets, countries and cultures. The presenters, acknowledging the faults of the healthcare system, aim to collaborate towards better patient care and outcomes.

**PRESENTATION:** Patrinos highlighted the need to integrate personalized medicine in the healthcare system. He elaborated on his first prospective clinical study conducted in Vietnam and proposed conducting a pilot observational study, in collaboration with NCODA, to benefit the patients.

Suzuki and Larivière expressed their common opinion that there should be a strong collaboration with clinical pharmacists. Larivière talked about the “Unify Cancer Points” initiative, which aims to provide better care to the patients with the help of AI.

Skelin, considering the need for diversity in the context of clinical trials, described methods in which diversity is achieved in clinical trials described, methods in which diversity is achieved in a clinical trial, one of which involves a network to manage registration of patients and reduce dropout rates. He stressed the importance of collaboration with patients who qualify to conduct high quality research.

Lisboa discussed cancer treatments offered in public and private systems in Brazil and how doctors choose treatment protocols using guidelines from Europe or the United States.

Patrinos and Skelin suggested recruiting patients with different genetic backgrounds and collaborating with international organizations to ensure diversity in clinical trials.

**DISCUSSION:**

**Q:** What is the main message of this session?

**A:** We must actively listen to the patients in order to understand their needs.

**TAKEAWAY POINTS:**

- Patients should be the center of our work.
- Collaborate in order to benefit the patients.
- Consider patients with different genetic backgrounds.

Summary by Maria Vasileiou, MPharm Candidate (2024), National and Kapodistrian University of Athens.

**SESSION SLIDES:** Scan the QR code at right to view slides from this presentation.
**SUMMIT Rewind**

**Empowering the Nurse Through Confidence Building and Effective Communication Skills**

**PRESENTER:** Joni Watson, DNP, MBA, RN, OCN | Duke University School of Nursing

**SYNOPSIS:** Watson provided insight into how healthcare professionals can utilize their communication skills to build self-confidence while giving their patients the quality of care they deserve.

**PRESENTATION:** Watson used the analogy of a mirror and a window for leadership. A mirror represents authenticity; leaders should be reflective as they learn and grow. A window represents transparency; a reminder to be transparent, and create mirror moments for others to reflect on themselves.

Miscommunication between peers, patients and healthcare professionals could cost the U.S. healthcare system. According to the literature, multiple communication barriers impact the Quintuple Aim.

The Quintuple Aim, a standard of value-based care, spans health equity, quality healthcare, improved outcomes, lower costs and clinician well-being.

Watson emphasized the importance of not losing the "magic in the mundane." The way that nurses and healthcare professionals show up to work matters. Patients had been heavily impacted by how their providers have acted.

With the Quintuple Aim in mind, patients should be unafraid to speak and to realize their voices matter in their health.

In a complex environment, diverse teams with diverse communities and perspectives are necessary, along with solid relational affinity.

Open, honest and transparent communications helps healthcare professionals develop great solutions to help their communities.

**DISCUSSION:**

**Q:** As a nursing leader and administrator, how do you win support for unpopular opinions?

**A:** Provide data as early as possible to start conversations around decision-making; ensure everyone on the team is on the same page.

**TAKEAWAY POINTS:**

- Effective communication is key to giving patients the best care.
- Become a leader who can inspire change to help achieve the Quintuple Aim.
- Learn and grow by being a mirror and a window for everyone.

Summary by Kelvin Houston, PharmD Candidate (2025), The Ohio State University College of Pharmacy.

**SESSION SLIDES:** Scan the QR code at right to view slides from this presentation.

---

**NEW SEASON**

The PQI Podcast, presented by NCODA, hosts clinical and administrative experts in oncology providing insight on important industry topics and how they value the Positive Quality Intervention (PQI) resource for their practices. In addition, the podcast highlights patient stories of hope, determination and how patient-centered care has impacted their cancer journey.

**STREAMING NOW**

@thepqipodcast
Federal Legislative Updates in the Oncology Landscape: Understanding How Legislation and Policy Works for Patients and Practices

MODERATOR: Barry Brooks, MD | Texas Oncology

PRESENTER: U.S. Rep. Earl L. “Buddy” Carter (R-GA); Yen Nguyen, PharmD | Oncology Consultants

SYNOPSIS: Carter discussed various healthcare legislation introduced in the U.S. Congress pertaining to Pharmacy Benefit Managers (PBMs), the Stark Law, drug shortages, the Inflation Reduction Act (IRA) and more.

Nguyen briefly spoke about the negative effect that the Centers for Medicare and Medicaid Services (CMS) has had on the Stark Law, urging attendees to raise awareness with their legislators.

PRESENTATION: Carter shared his career transition from licensed pharmacist to politician. He said his experiences with independent pharmacies and as a consultant pharmacist have helped shape his healthcare bills and priorities.

Carter addressed the negative impact on patient care as a result of the CMS’s guidance on Stark Law, and how he cosponsored the Seniors’ Access to Critical Medications Act to enable critical medications to be mailed directly to patients or be collected by caregivers from pharmacies.

Carter voiced his opposition to the IRA.

Carter noted that he is a member of bipartisan committees where key healthcare legislation is introduced and passed. To address drug shortages, he introduced the State Strategic Stockpile Act, the MADE in America Act and Essential Medicines Strategic Stockpile Act.

Carter said he introduced the PBM Accountability Act and the Drug Price Transparency in Medicare Act to help foster PBM transparency.

He also discussed the benefits and challenges of the HELP Copays Act.

Nguyen said the Stark Law needs to be updated, and shared a powerful patient story. She urged healthcare professionals to ask their legislators to reverse the CMS’ stance on this issue.

TAKEAWAY POINTS:
• Numerous bills in Congress address important issues that affect oncology patients and practices.
• Educating legislators about healthcare issues will raise awareness and garner support for bills.
• Medical professionals should do their best to stay up-to-date with healthcare legislation.

SUMMARY by Brian Sato, PharmD Candidate (2024), University of Kentucky.

SESSION SLIDES: Scan the QR code at right to view slides from this presentation.

Oral Oncolytic Process Panel

MODERATOR: Alyson Leonard, PharmD, BCPS, BCOP, CPP | Oral Cone Health Cancer Center

PRESENTERS: Charity Sharron Golden, PharmD | Tennessee Oncology; Chelsea Gustafson, PharmD, BCOP | MD Anderson Cancer Center; Diana Van Ostran, PharmD, BCOP | Miami Cancer Institute

SYNOPSIS: The panelists described workflow processes for initiating oral oncolytic treatment and follow-up procedures specific to their institutions. They also discussed barriers to authorization of oral oncolytics and how they resolve these issues.

PRESENTATION: When an oral oncolytic is prescribed, it is sent to the pharmacist to create a treatment plan. The prescription undergoes systemic checking, with documenting for appropriateness, processing protocol and pharmacist review. The prescription is then sent to the specialty pharmacy, where technician navigator teams initiate the prior authorization process. The script is assessed if it needs to be outsourced to a retail pharmacy per insurance or if it can be filled at the institution. Patient education is provided by the pharmacist and nurses prior to start date for adherence, whereupon personalized educational materials can be created. Once the medication is dispensed, the pharmacist will follow up with patients for adverse effects. An important consideration to follow-up schedules is allowing the patient time to digest the information. Medication Assistance Coordinators who assist patients and prescribers are vital in making prescription affordable and influencing adherence.

DISCUSSION:
Q: How are oncology nurses incorporated into the workflow of your oral oncolytic programs? At what point do they reach out to the patient to assess their learning ability?
A: During the patient education visit, the patient can be assessed for educational resources such as medication calendars. If more education is needed, follow up closer to start time. Nurse navigators help with adherence barriers and connect patients to appropriate resources. Oncology nurses are resources throughout the process and important to identifying access issues.

TAKEAWAY POINTS:
• Tailor follow-up timelines specific to the patient to manage side effects early on.
• Create educational materials to meet the patient’s needs.
• A designated group of nurses/technicians to help with high-cost medication greatly improves accessibility for the patient.

SUMMARY by Madelyn Hall, PharmD Candidate (2026), University of Texas at Austin College of Pharmacy.

SESSION SLIDES: Scan the QR code at right to view slides from this presentation.
**To PARP or Not to PARP — That is the Question**

**PRESENTER:** Laura Quintal, PharmD, BCOP | University of California San Francisco Medical Center

**SYNOPSIS:** Quintal provided insight on the utilization of PARP inhibitors (PARPi) for the frontline maintenance treatment of ovarian cancer and highlighted genomic profiling to identify which patients will benefit from PARPi treatments.

**PRESENTATION:** Quintal noted current frontline chemotherapy for ovarian cancer treatment has shown a high response rate of ~80%. However, relapse/progression occurred in 70% to 80% of women within three years. Thus, identifying the patient on platinum-sensitive/resistant status is important to determine therapy afterward.

Quintal focused on PARPi and their adequacy in treating ovarian cancer. She explained that PARPi cause multiple double-stranded breaks which lead to cell death, and this is beneficial in tumors with the breast cancer gene BRCA1, BRCA2, or a partner and localizer of BRCA2 (PALB2) mutations.

She emphasized the need to focus on more targeted personalized therapies using PARP inhibitors by referencing genomic profiling to obtain biomarker status. According to current guidelines for genetic and tumor molecular testing in ovarian cancer, germline or inherited testing should be done regardless of family history. Somatic tumor testing should be performed if the germline testing result is negative in BRCA1/2 patients. Additional HRD testing should be conducted if the patient is BRCA wild type.

For second-line maintenance therapy, olaparib could be offered regardless of the patient's BRCAm status and HRD status. Niraparib should only be used for germ-line-specific BRCAm; rucaparib should only be offered for BRCAm positive.

PARPi are not suitable for single-agent treatment as there is no overall survival benefit. Quintal emphasized that timing plays an important factor when utilizing PARPi.

**DISCUSSION:**

**Q:** What are some monitoring parameters when a patient is receiving a PARPi?

**A:** Refer to some suggestions/guidelines from prescribing information. If the patients have adverse events, they will experience them within 1-3 cycles.

**TAKEAWAY POINTS:**

- PARPi for frontline maintenance in the market include olaparib and niraparib.
- The U.S. Food and Drug Administration has withdrawn approval for PARP inhibitors for the single-agent treatment for women with advanced ovarian cancer who experienced recurrence or progression after three or more lines of chemotherapy.

**Social Determinants of Health**

**PRESENTER:** Maya Leiva, PharmD, BCOP, APP, APh | Inova Schar Cancer Institute

**SYNOPSIS:** Leiva discussed the intersectionality between access to cancer care and social determinants of health (SDoH) and sexual orientation and gender identity (SOGI). Providers can positively impact the care these patients receive through several measures.

**PRESENTATION:** Leiva provided an in-depth discussion of how social and community context plays into accessing healthcare.

When patients come from many different geographic areas, potentially avoidable factors can negatively affect access to cancer care, such as educational status, income level and racial segregation.

Additionally, disproportionate screening can lead to health disparities within marginalized communities. She noted that a staggering two-thirds of hospital systems do not screen patients for social risk factors or SOGi. It is therefore critical to train any patient-facing staff on data collection methods related to SDoH to screen for potential of gaps in care.

Utilization of the health equity framework includes routine data collection, continual surveillance, evaluation of evidence, collaboration, community engagement, infrastructure, capacity, policy and law.

**DISCUSSION:**

**Q:** If you were to design the perfect Electronic Health Record (EHR), how would you address the cons of the data collection methods that exist today which create a limited availability of social risk information?

**A:** An integrated EHR system between healthcare systems to access data related to SDoH and SOGi would be a good start to addressing this issue. Having a national standard in terms of which questions are most impactful to patients — and having a dynamic collection process with the help of AI in clinical decision-making related to SDoH — would also be beneficial.

**Q:** Is asking socioeconomic questions aloud to patients important?

**A:** Sometimes it takes multiple times to ask a question before a patient is willing to answer them. Thus, providing multiple opportunities — such as face-to-face and through questionnaires — is going to be most impactful for patients when their primary language may not be English.

**TAKEAWAY POINTS:**

- SDoH creates a framework for why patients with same diseases have different outcomes.
- Healthcare needs to normalize the routine collection of SDoH, including SOGi.
- It is important to meet patients where they are and never make assumptions.

**Summary by Young Seo (Alice) Lee, PharmD Candidate (2026), Northeastern University.**

**SESSION SLIDES:** Scan the QR code at right to view slides from this presentation.

**Summary by Kelli Corona, PharmD Candidate (2025), University of Florida College of Pharmacy.**

**SESSION SLIDES:** Scan the QR code at right to view slides from this presentation.
Classifying Oral Anticancer Treatments, Grading Toxicities and Managing Symptoms

**PRESENTERS:** Tracey Hoffman, MA, MSN, FNP-BC, OCN | American Health Network/OPTUM; Alex Schickli, PharmD, BCOP | Norton Cancer Institute

**SYNOPSIS:** Hoffman and Schickli presented on Oral Anticancer Medications (OAMs), including their classification, toxicity grading and the management of side effects through pharmacologic and non-pharmacologic strategies.

**PRESENTATION:**

**Classification:** OAMs are divided into chemotherapy, hormone/endocrine therapy, immunotherapy and targeted therapy. Chemotherapy targets cell replication, while hormone therapy is employed in hormone-responsive cancers like ER+/PR+ breast cancer. Immunotherapy, mainly parenteral, has oral options like lenalidomide, enhancing T cell and NK cell activity. Targeted therapy engages specific receptors or mutated enzymes in cancer cells, including oral drugs like kinase inhibitors.

**Grading Toxicities:** The Common Terminology Criteria for Adverse Events (CTCAE) is an essential tool for evaluating the severity of adverse events in cancer patients. Developed by the National Cancer Institute, the grading system spans from 1 to 5, with higher grades indicating more severe effects. Clinical intervention is required for Grade 2 reactions and above.

**Managing Symptoms:** Management strategies were discussed for specific, OAM-associated adverse events such as hot flashes, hand-foot syndrome, rash acneiform, diarrhea, oral mucositis and nausea. These approaches involved pharmacologic and non-pharmacologic treatments tailored to the severity and type of each event. These included: oxybutynin for hot flashes; topical diclofenac for hand-foot syndrome; antihistamines or topical steroids for rash acneiform; loperamide and diet for CDK4/6 inhibitor-induced diarrhea; lidocaine mouthwash for oral mucositis; and 5-HT3 antagonists (ondansetron) and dopamine antagonists (olanzapine) for PARP inhibitor-related nausea.

**DISCUSSION:**

**Q:** Can intervention for toxicities start before Grade 2?

**A:** Intervention is standard at Grade 2. Patient feedback is required for earlier intervention (Grade 1), especially for nausea/vomiting.

**Q:** When should patients hold oral anticancer medications?

**A:** Holding OAMs is guided by up-to-date recommendations or patient’s choice due to adverse effects. Grade 2 might require dose adjustment. Grade 3 typically necessitates a complete hold.

Summary by Thomas Cho, PharmD Candidate (2025), University of Toronto.

**SESSION SLIDES:** Scan the QR code at right to view slides from this presentation.
**International Health Disparities**

**PRESENTERS:** Sarah Gillaspie, PharmD, MPH Candidate (2024) | Virginia Commonwealth University School of Pharmacy; Sotiros-Charalampos Diamantoudis, MPHarm Candidate | Aristotle University of Thessaloniki, Thessaloniki (Greece); Mustafa Abacioglu, MPHarm, Marmara University, Istanbul (Turkey); Ivan Santiago Awuzu, BPhtarm | Makerere University, Kampala (Uganda)

**SYNOPSIS:** Gillaspie detailed numerous examples and definitions of disparities present in society and the world. The presentation accentuated the need to recognize and understand the vast societal and cultural makeups to address the rising global cancer burden. A discussion followed in which panelists gave insights into healthcare in their respective countries — Greece, Turkey and Uganda.

**PRESENTATION:** Gillaspie highlighted the growing rate of cancer worldwide, a Top 10 leading cause of premature mortality, defined as death before 70. As healthcare continues to improve, cancer will become a heightened issue due to lower-income patients lack of resources. Precipitating factors range from access to care, screening and treatment modalities to the risk factors of patients' social determinants of health. The topics of religion and fatalism were discussed as essential components of patient care. A series of charts visually demonstrated individual disparities between countries and attributable risk factors.

**DISCUSSION:**

Q: How has cancer care evolved over time?

A: Turkey follows U.S. Food and Drug Administration and European Medicines Agency (EMA) regulations. First-line treatments are usually fully covered by the state, although treatments may be delayed for several years between drug approval and therapy availability.

Greece follows the EMA, providing medical care and home assistance to its citizens. It is currently building interest in society and the world. The presentation accentuated the need to recognize and understand the vast societal and cultural makeups to address the rising global cancer burden. A discussion followed in which panelists gave insights into healthcare in their respective countries — Greece, Turkey and Uganda.

**TAKEAWAY POINTS:**

- The ability to identify and act on health disparities will prevent unnecessary deaths.
- Professional development opportunities and social media platforms should be utilized both to learn and educate others on this topic.

**Summary by Daten Beasley, PharmD Candidate (2025), Albany College of Pharmacy and Health Sciences.**

---

**Novel Therapies for Relapsed/Refractory DLBCL**

**PRESENTER:** Simona Armanca, PharmD, BCOP | Invoca Schar Cancer Institute

**SYNOPSIS:** Armanca discussed novel therapy options to treat relapsed/refractory diffuse large B-cell lymphoma (DLBCL), highlighting patient-specific considerations.

**PRESENTATION:** Diffuse large B-cell lymphoma is mainly seen in 60- to 70-year-old patients. Prognosis is based on the stage and International Prognostic Index score. About 60% of patients are cured with first-line therapy. CAR-T-cell products are used when the patient experiences refractory or early relapsed (R/R) DLBCL, which occurs <12 months after first-line therapy. These include axicabtagene ciloleucel (axi-cell), tisagenlecleucel (tisa-cell) and lisocabtagene maraleucel (liso-cell). Within the past five years, novel agents have been FDA-approved for R/R DLBCL after >2 lines of therapy.

The U.S. Food and Drug Administration approved polatuzumab vedotin + bendamustine and rituximab (BR) in June 2019. This medication benefits patients who are non-transplant/non-CAR-T eligible, bridging therapy prior to CAR-T cell, or post-CAR-T relapse.

Tafasitamab + lenalidomide, approved in July 2020, showed >Grade 3 toxicity with neutropenia in 48% of patients in the L-MIND trial. Serious adverse drug events included pneumonia and febrile neutropenia. The medication would be used in patients unfit or ineligible to receive autologous hematopoietic stem cell transplantation.

Loncastuximab tesirine was approved in April 2021 for use as a single agent. The results from the LOTIS-2 trial were discussed as side effects including effusion, edema, phototoxicity and dermatologic toxicity.

The last two agents discussed were epcoritamab-bysb and glofitamab-gxbm, approved respectively in May and June 2023. Pretreatment with dexamethasone, acetaminophen, and diphenhydramine (an antihistamine) with dose escalation is recommended with glofitamab. For cycle 4 (C4) and onward, dexamethasone is mainly utilized for prophylaxis therapy for antiviral and PJP prophylaxis.

**TAKEAWAY POINTS:**

- About 60% of patients are cured with first-line treatment; 30% fail first-line therapy.
- Early relapses and primary refractory DLBCL can be treated with CAR T-cell therapies.
- Patients not eligible for transplant may receive tafasitamab + lenalidomide.
- Prophylaxis therapy for antiviral and PJP are necessary with epcoritamab, glofitamab, and polatuzumab vedotin + BR.

**Summary by Shannyn Gilchrist-Oates, PharmD Candidate (2024), University of North Texas System College of Pharmacy.**
**An International Perspective into the Pharmacy Technician’s Role**

**MODERATOR:** Vonda McClendon, CPhT | Texas Oncology

**PRESENTERS:** Elisa Ceron, PA, Lariviére et Massicotte, Pharmaciennes, Inc., Montreal, Quebec (Canada); Andrea Harris, RPhT | BC Cancer Agency, Kelowna, British Columbia (Canada); Nicola Stockmann, MAPharmT | Association of Pharmacy Technicians UK, Birmingham (England)

**SYNOPSIS:** The panel discussed the diverse responsibilities of the pharmacy technician’s roles in different countries. Topics addressed included education and training, scope of practice, the future of the profession and global variations in oncology care.

**PRESENTATION:** Ceron shared that a high school diploma is required for pharmacy technicians in Quebec. The length of training can vary depending on the technician’s specific practice site while the scope of practice is similar to that in the United States. With additional on-site training, technicians can take on more responsibilities, allowing pharmacist to allocate more time to clinical tasks.

Harris discussed the multiple options for training and education in British Columbia. Typically, the training process is approximately two years, with one year dedicated to school, practicums and labs, followed by one year to prepare for the exam and registration. Once registered, pharmacy technicians undergo yearly check-ins to make sure skills are up to date. Day-to-day tasks are similar to tasks for U.S. technicians and include preparing sterile medications and handling outpatient dispensing processes.

Stockmann said that training for pharmacy technicians in the UK takes two years. The General Pharmaceutical Council regulates this process and oversees yearly revalidation. She emphasized that efforts are being made to broaden the scope of practice for pharmacy technicians, and there is ongoing discussion with the government to establish increased responsibilities.

All three panelists compared the differences in healthcare systems in their respective countries to those in U.S. systems.

**TAKEAWAY POINTS:**

- The presentation represented a smaller portion of pharmacy technicians in the world. However, it highlighted that pharmacy technicians have common foundational duties with key differences in their daily responsibilities in each country.
- Pharmacy technicians are a vital part of healthcare teams, and their roles are evolving. Through cross-cultural exposure, technicians can collaborate to discover new perspectives and create unity within the profession.

Summary by Parker Lenheiser, PharmD Candidate (2024), Texas Tech Health Sciences Center.

---

**Tracking the Journey of an Oral Oncolytic in the Medically Integrated Practice**

**PRESENTERS:** Elizabeth Bettencourt, MSN, RN, OCN | Palo Alto Medical Foundation/Sutter Health; Ashleigh Cheikelard, PharmD, RPh | Cancer Specialists of North Florida; Jayme Colucci, CPhT | Banner Health

**SYNOPSIS:** The presenters discussed their individual roles in the journey of an oral anticancer medication (OAM) as it goes from being prescribed by the provider, to the hands of the patient and through completion of treatment, as well as the plethora of NCODA resources available to assist the interdisciplinary team along the way.

**PRESENTATION:** The presentation began by introducing touchpoints, which are areas in the medically integrated dispensing workflow that could delay the dispensing of an OAM. Some areas included: prescription verification, prior authorization and patient readiness. The presenters took turns explaining their personal role in each touchpoint and how the roles may overlap.

Much of the presentation was spent on the touchpoint of financial assistance. The pharmacy technician will call the patient to assess financial burden, initiate applications, involve the financial team and document every interaction in the EMR. The nurse will then come in to answer any lingering patient questions, assist with application completion, close any communication gaps and add on to the EMR documentation. Finally, the pharmacist will collaborate with the clinical team/provider and recommend alternative treatments if necessary. Every member had a unique yet equally important role in assisting the patient with their OAM.

The presenters highlighted various NCODA resources to be utilized by the care team. These tools are located on the NCODA website with instructions on how to navigate them.

The presenters heavily stressed the importance of documentation and communication between the interdisciplinary team as it ensures that patients will receive optimized individualized care.

**DISCUSSION:**

**Q:** How often do you contact the patient?  
**A:** Within five to seven days of starting treatment, then weekly for three months, and finally once a month until treatment completion.

**TAKEAWAY POINTS:**

- Effective communication is the key to dispensing OAMs in a timely manner.
- Each member of the medically integrated care team plays a vital role in caring for patients.

Summary by Brianna Earskine, PharmD Candidate (2025), University of Texas at Austin College of Pharmacy.

---
JOIN US IN DALLAS, TEXAS
April 3-5, 2024  NCODA SPRING FORUM
SHERATON DALLAS HOTEL  REGISTRATION OPENING SOON!

FOR MORE INFORMATION, SCAN QR CODE OR VISIT:
www.ncoda.org/spring-forum