

# Research Journal of Pharmaceutical, Biological and Chemical Sciences

## From Conference to Clinic: Unveiling the Impact of Trends of Transformation in Oncology - A Review of the 7<sup>th</sup> Molecular Oncology Society Conference (MOSCON).

Manoj U Mahajan<sup>1</sup>, Nishigandha Mahajan<sup>2</sup>, Ashutosh Soni<sup>3</sup>, Harshal Chaudhary<sup>4\*</sup>, Jagdish Vishnoi<sup>5</sup>, Shokat Ali<sup>6</sup>, Nilesh Patira<sup>7</sup>, and KR Sharma<sup>8</sup>.

<sup>1</sup>Associate Professor, Departments of General Medicine, Pacific Medical College and Hospital, Udaipur, Rajasthan, India.

<sup>2</sup>Associate Professor, Department of Anaesthesiology, Pacific Medical College and Hospital, Udaipur, Rajasthan, India.

<sup>3</sup>Assistant Professor, Department of General Medicine, Pacific Medical College and Hospital, Udaipur, Rajasthan, India.

<sup>4</sup>Assistant Professor, Department of Pharmacology, Dr. N. Y. Tasgaonkar Institute of Medical Science (NYTIMS), Karjat, Maharashtra, India.

<sup>5</sup>Professor, Department of General Medicine, Pacific Medical College and Hospital, Udaipur, Rajasthan, India

<sup>6</sup>Associate Professor, Department of General Medicine, Pacific Medical College and Hospital Udaipur, Rajasthan, India.

<sup>7</sup>Professor, Department of General Medicine, Pacific Medical College and Hospital, Udaipur, Rajasthan, India.

<sup>8</sup>Professor, Department of General Medicine, Pacific Medical College and Hospital, Udaipur, Rajasthan, India.

### ABSTRACT

The 7<sup>th</sup> Medical Oncology Society Conference 2023 (MOSCON-2023) held in Udaipur from October 13-15, 2023, offered an in-depth overview of the advancements in oncology. Distinguished oncologists from across India and representatives from molecular diagnostic and pharmaceutical companies gathered to share their insights and research findings. Day 1 focused on lymphoma and myeloma, highlighting innovative diagnostic techniques and therapies. Day 2 addressed lung cancer, discussing epidemiology, diagnosis, and novel strategies. The conference then shifted to breast and prostate cancer, followed by a focus on head and neck cancer (HNC), exploring surgical techniques, standard therapies, and advanced interventions. Dr. Vijay Patil highlighted the role of immunotherapy and metronomic strategies in HNC. Day 3 covered ovarian and cervical cancer, discussing cutting-edge surgical approaches and treatment modalities, concluding with debates and panel discussions on cervical cancer vaccines. Industry-sponsored symposiums, interspersed throughout, covered various cancer types, offering valuable insights. Overall, MOSCON-2023 fostered collaboration and innovation, providing valuable insights for the future of oncology.

**Keywords:** Oncology advancements; Cancer treatment strategies; Immunotherapy; Head and Neck Cancer (HNC); Breast and prostate cancer; Lymphoma and myeloma

<https://doi.org/10.33887/rjpbcs/2024.15.4.18>

*\*Corresponding author*

## INTRODUCTION

The 7<sup>th</sup> Molecular Oncology Society Conference (MOSCON), held from October 13 to 15, 2023, Udaipur, Rajasthan, India, served as a pivotal gathering for researchers, clinicians, and industry professionals invested in unraveling the complexities of cancer. Under the theme "Trends of Transformation in Oncology: From Conference to Clinic," the conference provided a dynamic platform for the exchange of groundbreaking ideas and the exploration of the latest advancements in the field. Among the myriad of topics discussed in conference, the role of molecular oncology emerged as a cornerstone in reshaping the landscape of cancer research, drug discovery, management and patient care. Molecular oncology is a multidisciplinary field that focuses on understanding the molecular mechanisms underlying the development and progression of cancer. It integrates principles from molecular biology, genetics, genomics, and bioinformatics to decipher the intricate molecular alterations that drive oncogenesis. By exploring the genetic and molecular makeup of cancer cells, researchers in molecular oncology aim to identify key molecular targets for therapeutic interventions, unravel the complexities of tumor heterogeneity, and pave the way for personalized cancer treatments. With technological advancements rapidly expanding our understanding of the genomic intricacies of cancer, molecular oncology has become the linchpin in identifying novel therapeutic targets, unraveling intricate pathways, and ultimately revolutionizing drug discovery and development [1,2]. The speakers at MOSCON underscored how molecular insights are not merely confined to the laboratory; they have transcended into tangible clinical applications, driving a paradigm shift from bench to bedside.

The theme, "Trends of Transformation in Oncology: From Conference to Clinic", emphasized the dynamic changes occurring in the field of oncology and highlighted the urgency of integrating molecular insights into clinical practice. Molecular oncology contributes to the transformation of oncological trends by providing clinicians with precise tools for diagnosis, prognosis, and treatment selection. This integration facilitates the transition of promising discoveries from conference discussions to real-world applications in the clinic, expediting the development of innovative therapies and optimizing patient outcomes [3,4]. This theme also underscored the imperative need to bridge the gap between cutting-edge research discussed in conferences and its tangible application in clinical settings. Additionally, it emphasized the critical transition from theoretical breakthroughs discussed at conferences to practical implementation in clinical settings. This ensures that the wealth of knowledge generated in research labs translates into real-world benefits for patients. Further, the conference-to-clinic theme acknowledged the importance of interdisciplinary collaboration and knowledge exchange. The complexities of modern oncology demand a holistic approach that transcends traditional silos.

This conference served as a unique platform, bringing together a multitude of distinguished oncologists from across India, alongside leaders from various molecular diagnostic and pharmaceutical companies. This collective assembly provided a shared stage where key opinion leaders (KOLs) engaged in extensive discussions, collaborative brainstorming sessions, and debates. Their focal points included not only addressing current challenges in the field but also devising effective strategies for mitigating these obstacles. Moreover, the conference aimed to disseminate valuable insights by shedding light on the latest advancements in medical oncology.

### Featured Sessions, Keynote Addresses and Highlights

#### Day 1: Sessions and Highlights

##### *Session 1 (Lymphoma)*

The inaugural session, chaired by Dr. Ashish Jakhetiya, Dr. R K Sharma, and Dr. D C Kumawat, centered on lymphoma. Kicking off the event, Dr. Nilesh Patira initiated the conference with an insightful presentation on the "Fundamentals of Haematopoiesis." Dr. Jagdish Vishnoi further illuminated the intricacies of lymphomas in his talk on the epidemiology, classification, and pathophysiology (epidemiology and etio-pathogenesis) of lymphoma, he provided a thorough examination of the diverse facets of lymphomas. He began by defining lymphomas as a heterogeneous group of malignancies originating from clonal proliferation of B-cells, T-cells, or Natural Killer (NK) cells at different maturation stages [5]. He further delved into the overview of lymphomas, categorizing them clinically as high-grade (aggressive) and low-grade (indolent). He emphasized the global and Indian scenario of lymphoma burden, shedding light on its prevalence, incidence rates, and associated risk factors and elucidated the pathophysiology of diffuse

large B-cell lymphoma (DLBCL), gene mutations, ontogeny processes, and the role of proto-oncogenes and tumor suppressor genes in malignant transformation [6]. The session concluded with an overview of Hodgkin's lymphoma (HL), highlighting unique neoplastic cells, Reed-Sternberg cells, and the distinctive characteristics of classical HL. Dr. Jagdish Vishnoi's presentation offered a comprehensive understanding of lymphomas, covering their heterogeneity, risk factors, and underlying pathophysiological mechanisms. The audience gained a nuanced understanding of how hematopoietic processes intricately contribute to the development of lymphomas, providing a holistic perspective on both the physiological basis and the pathological manifestations within the realm of hematological malignancies.

In the subsequent session, Dr. Mallika Dixit illuminated the audience with a compelling lecture on "Recent Advances in the Diagnosis of Lymphoma." She navigated through cutting-edge diagnostic methodologies, shedding light on novel techniques and advancements that are reshaping our approach to identifying and characterizing lymphomas, ultimately enhancing precision and expediting therapeutic interventions. In the next thought-provoking session, Dr. Mukesh Kumar Rulaniya delved into "Recent Advances in the Treatment of Diffuse Large B-cell Lymphoma (DLBCL)," a prominent non-Hodgkin lymphoma (NHL). Dr. Rulaniya brought to light groundbreaking advancements, such as the POLARIX phase 3 trial results [7], revealing the efficacy of Pola-R-CHP compared to standard-of-care R-CHOP in improving progression-free survival (PFS: 76.7% vs 70.2%). He navigated through the evolving molecular classification of DLBCL and highlighted promising results from studies involving CAR-T cell therapy [8] and bispecific antibodies [9] like glofitamab, odronextamab, and mosunetuzumab, emphasizing their potential in reshaping DLBCL treatment landscapes as well as unveiling transformative pathways, underscoring the potential paradigm shifts in DLBCL treatment modalities. In the continuum of sessions on lymphoma, Dr. Prakash Singh Shekhawat delved into the realm of recent advances in treating Follicular Lymphoma (FL). He underscored the significance of prognostic tools, particularly FLIPI, and elucidated on common genetic alterations, offering refinements with m7-FLIPI and meticulously guided the audience through considerations in choosing therapy for FL based on various factors such as disease burden, comorbidities, toxicity concerns, and clinical trial availability. Dr. Shekhawat meticulously presented a comprehensive overview of the current treatment landscape for FL, encompassing strategies for both low and high tumor burden scenarios, he also highlighted the RESORT trial's long-term follow-up, emphasizing the balance between efficacy and toxicity in selecting treatment modalities [10]. For patients with advanced-stage, low tumor burden FL, he advocated the "watch and wait" approach, and for those with a higher tumor burden, he delved into the comparative efficacy of different regimens such as Bendamustine-Rituximab vs R-CHOP (a combination of five drugs used to treat cancer which includes Rituximab, Cyclophosphamide, Doxorubicin, Vincristine, Prednisolone) [11]. He meticulously covered the GALLIUM trial [12], RELEVANCE trial [13], and CHRONOS-3 trial [14], unraveling the evolving landscape of FL treatment. The integration of epigenetic modifiers, particularly Tazemetostat, and PI3K inhibitors like Copanlisib, brought a nuanced understanding of the expanding therapeutic arsenal. As the discourse extended to relapsed/refractory FL, Dr. Shekhawat navigated through key agents, including Rituximab retreatment, Obinutuzumab combination, radioimmunotherapy, and the promising realm of CAR-T cell therapy. The presentation encapsulated ongoing trials, emphasizing the need for personalized, risk-adapted treatments guided by prognostic indicators. Dr. Shekhawat's insights resonated with the complexity of FL management, offering a roadmap for clinicians to navigate the dynamic landscape with a focus on optimizing outcomes and preserving patients' quality of life.

The first session was followed by an intense and insightful panel discussion on "Case-based Discussion of Lymphoma", moderated by Dr. Sameer Melinkeri. The panel, comprising five experts, collectively underscored the diversity within lymphomas, classifying them as indolent and aggressive. The treatment philosophies for these categories significantly differ, with a consensus that a 'wait and watch' strategy remains a viable option for indolent lymphomas. Emphasizing the importance of excision biopsy whenever feasible, the panel unanimously stressed the critical role of detailed immunohistochemistry in lymphoma diagnosis. A resounding conclusion emerged: many lymphomas are indeed curable, reflecting a beacon of hope in the dynamic realm of lymphoma management.

This was followed by an industry sponsored symposium, where Dr. Mukesh Kumar Rulaniya meticulously navigated through the critical facets/aspects of optimizing the dosage of Ruxolitinib for treating Myelofibrosis (MF). He comprehensively highlighted the recommended starting doses based on platelet counts, insights from phase 3 COMFORT studies [15,16], and the titration of doses over the treatment course. He also emphasized the importance of maintaining the highest tolerated dose for

maximal efficacy. The presentation further elucidated the benefits of higher doses, management of adverse events, and considerations for patients with low platelet counts.

### **Session-2 (Myeloma)**

The second brainstorming session on contemporary myeloma trends was chaired/presided by Dr. K R Sharma, Dr. B S Bomb & Dr. R L Meena. Dr. Saurabh Gupta, inaugurating the discourse, delved into the latest molecular insights into pathogenesis and epidemiology of myeloma. Dr. Gupta underscored the myriad manifestations intricately linked to myeloma, providing a comprehensive overview of this complex hematological condition. Next, Dr. Prakash Singh Shekhawat enlightened the audience on the "Recent advances in diagnosis and risk stratification of Multiple Myeloma," initiating a discourse that delved into the cutting-edge developments in techniques and tools to diagnose this hematological disorder. He underscored the critical role of various diagnostic approaches, ranging from clinical features to laboratory investigations and molecular testing, such as CBC, LFT, serum calcium, and BM evaluation. The discussion extended to the significance of rouleaux formation in peripheral smear and bone marrow aspiration. Dr. Shekhawat also discussed the realm of radiological investigations, emphasizing the current role of imaging, including CT, MRI, and PET scans, in the diagnosis and staging of multiple myeloma. Additionally, he elucidated the criteria and risk stratification methods, shedding light on mSMART 3.0 and IMWG Uniform Response Criteria 2016 for effective management.

Dr. Lalit Mohan Sharma next steered the discussion toward the "Classification of plasma cell disorders and treatment of smoldering myeloma." He unravelled the complexity from terminally differentiated B-cell neoplasms to the stages of monoclonal gammopathy of undetermined significance (MGUS). He also emphasized the novel SLiM CRAB criteria [17] – S (60% Plasmacytosis), Li (light chains I/U >100), M (MRI 1 or more focal lesions), C (calcium elevation), R (renal insufficiency), A (anemia), and B (bone disease). The evolution from MGUS to myeloma was elucidated, underlining conditions like solitary bone plasmacytoma and solitary extraosseous plasmacytoma. Dr. Sharma provided a detailed exploration of the 2014 IMWG Active Myeloma Criteria, distinguishing between myeloma-defining events and non-IgM MGUS. The genetic classification of multiple myeloma according to ICC 2022 was a focal point, guiding the audience through the varied plasma cell neoplasms. The talk extended to smoldering multiple myeloma (SMM), outlining its diagnostic criteria, biology, and prognostic factors. Dr. Sharma elaborated on the risk of progression to active myeloma, emphasizing the importance of risk stratification. He delved into the clinical course, diagnostic workup, and management of SMM, highlighting the evolving landscape and the ongoing quest to answer pivotal questions surrounding SMM treatment.

Embarking on a reflective journey through the annals of hematology, next, Dr. Sameer Melinkeri took center stage in the session, offering profound insights into "The past, present, and future of Hematology," providing a comprehensive overview that traversed the historical evolution, current advancements, and prospective horizons of this dynamic field. He showcased the evolution of treatments, emphasized the advent of immunotherapy and landmark achievements like the first bone marrow transplant. The landscape of leukemia, lymphomas, and myeloma was illuminated, heralding breakthroughs in targeted therapies and immunomodulatory drugs. The exciting realm of CAR T cell therapy, its approval in refractory B-cell ALL and lymphomas, and its potential to enhance the success of bone marrow transplants were elucidated. The talk concluded with a glimpse into hemostasis, exploring the treatment landscape of hemophilia and the revolutionary Emicizumab. Dr. Melinkeri also touched upon gene therapy in hematology and the evolution of anticoagulants, culminating in the search for safer options. This comprehensive journey encapsulated the rich tapestry of hematology's past, its dynamic present, and the promising horizons that beckon in the future.

Bringing the enlightening session on multiple myeloma to a close, the concluding session unfolded as a dynamic panel discussion. Under the adept moderation of Dr. Amish Vora, seven distinguished panellists gathered to delve into a case-based exploration of multiple myeloma. This engaging discourse aimed to synthesize collective insights, fostering a collaborative exchange of knowledge and expertise in the intricate realm of multiple myeloma management. Commencing the panel discussion, Dr. Amish Vora initiated with a poll, unraveling key considerations in multiple myeloma management. From determining transplant eligibility and induction preferences to contemplating early versus delayed autologous stem cell transplantation (ASCT), the discussion delved into the nuances of treatment strategies. In scrutinizing the evidence from studies like GRIFFIN [18] and MASTER [19], the panel weighed the pros and cons of quadruplet versus triplet treatment regimens. The discourse extended to maintenance therapy, pondering

the choice between single and doublet maintenance. Additionally, the crucial question of early versus delayed ASCT was dissected, considering the evolving landscape of multiple myeloma. With a comprehensive analysis, the panel concluded with insights on modifications of RVD (a combination of lenalidomide, bortezomib and dexamethasone) therapy, shaping a nuanced approach for the intricate decisions in multiple myeloma care. The esteemed panel, reached a consensus on crucial decisions in multiple myeloma management and concurred that the choice between quadruplet and triplet regimens, selection of single or double maintenance therapies, and the timing of ASCT should be meticulously tailored to individual patient profiles. Additionally, the panel explored modifications to the RVD approach, ensuring a patient-centric and nuanced treatment strategy.

The day culminated with a series of enlightening industry-sponsored symposiums, each delving into cutting-edge developments in various medical domains. Dr. Ankit Agrawal spearheaded the first symposium, unveiling novel dimensions in the management of chemotherapy-induced nausea and vomiting (CINV). Following this, Dr. Hemant Malhotra elucidated the pivotal role of thrombopoietin (TPO) receptor agonists in the effective management of severe aplastic anemia (SAA). Lastly, Dr. Manoj Mahajan, a programme director, led the audience through a paradigm shift in the management of metastatic non-small cell lung cancer (NSCLC), ushering in a new era of therapeutic strategies and possibilities.

## **Day 2: Sessions and Highlights**

### ***Session-3 (Lung cancer)***

Day 2 began with a scientific session on "Lung Cancer". Dr. Ankur Sharma, a distinguished oncologist, initiated the session with a comprehensive exploration of the epidemiological landscape of lung cancer. Subsequently, Dr. Aditi Aggarwal delved into the intricacies of diagnostic methodologies, shedding light on various advanced techniques employed in the precise diagnosis of lung cancer. This scientific conversation set the stage for an in-depth understanding of the multifaceted aspects of lung cancer, paving the way for informed discussions and insights. Dr. Kunal Sharma delved into the significance of cutting-edge technologies in molecular diagnostics for lung cancer. He highlighted recent advances and their implications for precise and effective diagnosis in the field.

In an enlightening session on the "Survival Impact of TKI in EGFR +ve advanced non-small cell lung cancer (NSCLC)," Dr. Shirish S Alurkar delivered a comprehensive analysis and insights into the evolving landscape of targeted therapies for NSCLC. He began by presenting a compelling case of NSCLC with brain metastases. Dr. Alurkar then embarked on a chronological journey through the development of targeted therapies for NSCLC, particularly focusing on EGFR mutations. The pivotal IPASS Trial comparing Gefitinib to conventional chemotherapy (ChemoRx: carboplatin and paclitaxel) provided a foundational understanding [20]. He meticulously examined the trials associated with 1st and 2nd generation EGFR-TKIs, such as Erlotinib (EURTAC and OPTIMAL Trials) and Afatinib (LUX-LUNG 3 and LUX-LUNG 6 trials), emphasizing their impact on progression-free survival (PFS) and overall survival (OS). He also highlighted that dacomitinib displayed benefits in both PFS and OS, distinguishing itself in the 2nd generation category through the ARCHER Trial [21], which suggests that Dacomitinib significantly improved PFS over gefitinib in first-line treatment of patients with EGFR-mutation-positive NSCLC and should be considered as a new treatment option for this population. While showcasing the FLAURA trial [22] for untreated EGFR-mutated advanced NSCLC, he highlighted that osimertinib demonstrated efficacy superior to that of standard EGFR-TKIs in the first-line treatment of EGFR mutation-positive advanced NSCLC, with a similar safety profile and lower rates of serious adverse events. Finally, Dr. Alurkar concluded that the improvement in survival with EGFR-TKIs hinges on their efficacy in delaying or preventing distant metastases. He underscored that the right drug, tailored for the right patient with EGFR-mutated tumors, is crucial. Furthermore, the lecture delved into the nuanced aspects of the quality of life improvement observed in patients undergoing TKI treatments. Overall, Dr. Shirish S Alurkar concluded that EGFR TKIs indeed offer substantial benefits, particularly when administered with a keen understanding of the individual patient's profile and disease characteristics.

The next focus was on the frequency of targetable oncogenic driver molecular alterations other than EGFR in adenocarcinoma of the lung was demonstrated by Dr. Rohit Rebello. He delved into the NCCN guidelines for the management of NSCLC, emphasized the significance of ALK and ROS1 alterations in NSCLC. He provided insights into ALK inhibitors for NSCLC, discussed studies of ALK inhibitors in NSCLC such as J-ALEX, ALTA-1L, and the CROWN study. Studies have shown that lorlatinib, compared to crizotinib,

led to significantly longer PFS and increased intracranial response rates in previously untreated advanced ALK-positive NSCLC patients. However, lorlatinib was associated with a higher incidence of grade 3 or 4 adverse events, primarily driven by frequent alterations in lipid levels [23]. Furthermore, Dr. Rebello highlighted the role of lorlatinib in ALK-positive NSCLC and discussed the efficacy of crizotinib or entrectinib for ROS1 fusion-positive NSCLC. He also underscored the emergence of highly effective targeted therapies like selpercatinib and pralsetinib for RET fusion-positive NSCLC.

Concluding the enlightening and informative session on advanced NSCLC, Dr. Hemant Malhotra expertly moderated a case-based panel discussion. Joined by esteemed panellists, including Dr. Mallika Dixit, Dr. Sunil Kumar, Dr. Bharat Gupta, Dr. Amit Gupta, Dr. Kirti Sharma, Dr. Kripa Shanker Jhirwal and Dr. Sumit Agrawal, the interactive discussion revolved around optimizing outcomes in the realm of NSCLC. Dr. Malhotra provided a comprehensive overview, delving into the status of lung cancer in India, including incidence, prevalence, and mortality statistics. The case-based panel discussion focused on a 58-year-old woman, a non-smoker, presenting with chronic pain and a lung mass. The ensuing conversations addressed crucial decisions in staging, molecular marker testing, and first-line treatment options, emphasizing the significance of targetable genetic mutation testing and PDL-1 testing. Dr. Malhotra also emphasized the critical consideration of EGFR mutation status in NSCLC when contemplating immunotherapy. He underscored that trials exploring first-line immunotherapy or chemo/immunotherapy explicitly excluded patients with EGFR mutations or ALK rearrangements. This nuanced approach guides clinicians to avoid first-line immunotherapy in EGFR mutation-positive NSCLC, even in cases with high PD-L1 expression, ensuring precision in treatment decisions for optimal patient outcomes. Finally, panellists concurred on the necessity of a thorough diagnostic workup, distinguishing between squamous and non-squamous NSCLC, and the importance of tailored therapies based on genetic mutations. The session underscored the evolving landscape of NSCLC treatment, incorporating targeted therapies and immunotherapy for improved outcomes.

Two symposium sessions followed a panel discussion led by Dr. Rohit Rebello and Dr. Manoj Mahajan, respectively. Dr. Rebello presented data on "Real-world evidence: Osimertinib as standard of care (SoC) in the management of EGFRm NSCLC." His discourse centered on the FLAURA trial, comparing Osimertinib with standard EGFR-TKI in first-line therapy for EGFRm advanced NSCLC [22]. Real-world evidence from studies like FLOWER [24] and OSI-FACT [25] were also discussed, emphasizing Osimertinib's utilization in the U.S., interim efficacy support, and the anticipation of long-term outcome evaluations. Dr. Manoj Mahajan addressed the "Evolving role of liquid biopsy in advanced-stage cancers." His talk delved into the scientific exploration and intricacies of liquid biopsy, an increasingly pivotal diagnostic tool, in advanced-stage cancers. Liquid biopsy, a non-invasive diagnostic approach, involves the analysis of circulating tumor DNA (ctDNA) and other biomarkers in bodily fluids. Dr. Mahajan further detailed its applications in detecting genetic alterations, monitoring treatment response, and providing a comprehensive molecular profile of tumors. The evolving role of liquid biopsy could revolutionize cancer management by offering a minimally invasive yet highly informative tool for personalized treatment strategies and dynamic disease monitoring.

#### ***Session-4 (Breast cancer)***

The next interactive scientific session delved on recent trends in Breast Cancer, led by Dr. Garima Mehta, Dr. MM Mangal, and Dr. Narendra Rathore, highlighting crucial facets of breast cancer. The speakers explored topics encompassing the epidemiology and pathogenesis of breast cancer, molecular classifications, and recent advancements in HR+/HER2-ve, HER2+ve, and advanced TNBC. The scientific exploration continued with two sponsored symposiums, the first addressing unmet needs in HR+/HER2-EBC treatment prior to session 4, and the second one delving into the multi-marker assessments for recurrence risk prediction in HR+ EBC, showcasing data from the Can Assist Breast (CAB) test in between session 4. Dr. Ankur Punia led a comprehensive exploration on 'Reimagining Treatment of HR+/HER2-EBC,' shedding light on unmet needs and contemporary challenges in the landscape of Early-stage Breast Cancer (EBC) and highlighted the critical findings regarding hormone receptor-positive (HR+ve) EBC. Emphasizing the ongoing risk of relapse, particularly in the first two years, the presentation underscored the significant threat of distant relapse even in node-negative cases. Dr. Punia affirmed the statistical validity of Disease-Free Survival (DFS)/invasive DFS (iDFS) as a surrogate for Overall Survival (OS) in HR+/HER2-EBC. Moreover, he also emphasized the promising role of adjuvant abemaciclib, in conjunction with optimal endocrine therapy, in reducing the risk of distant relapse, especially in high-risk cohorts [26]. The ongoing evaluation of CDK4/6 inhibitors for patients at high and intermediate risk was also highlighted

as a key avenue of research. Next, Dr. Aditi Agrawal paved the way for session 4 with an exploration of the genetic aspects of breast cancer, focusing on the detection of BRCA1 and BRCA2 genes for breast cancer diagnosis. The discussion delved into Homologous Recombination Repair (HRR) and its crucial role in DNA damage repair. Notably, mutations in HRR genes were identified as contributors to deficient DNA repair, particularly in Triple Negative Breast Cancer, predicting a complete pathological response [27]. The presentation highlighted the clinical implications, emphasizing HRR gene mutations as prognostic and predictive biomarkers for platinum-based chemotherapy and PARP inhibitor therapy. Additionally, Dr. Agrawal elucidated Homologous Recombination Deficiency (HRD) as a tumor characteristic associated with impaired double-strand break repair via homologous recombination, highlighting its significance in breast and ovarian cancers. Dr. Ankit Agarwal set the stage for the subsequent discussion with an in-depth exploration of the "Molecular Classification of Breast Cancer", by delving into intrinsic subtypes, emphasizing Luminal A, Luminal B (HER2 -ve or HER2 +ve), Non-luminal HER2 +ve (erb-B2 or HER2/Neu overexpression), and basal-like (triple-negative breast cancer-TNBC or ductal type). He meticulously elucidated their clinicopathological status, exploring Ki-67 percentage and Her2/Neu grading on IHC [28]. Dr. Agarwal further navigated through tailored therapeutic approaches based on the specific subtypes of breast cancer, providing a comprehensive understanding of the molecular landscape and therapeutic considerations for each subtype. Concurrently, Dr. D. G. Vijay, focused on the 'CAB test,' elucidating multi-marker assessments for recurrence risk prediction in HR+ EBC, providing valuable insights from the CanAssist Breast (CAB) test or biomarkers data. Aligned with the symposium's themes, Dr. Sachin Jain led session 4, delving into an enlightening discussion on "Recent Advances in HR+/HER2-ve Advanced Breast Cancer (BC)." He initiated an in-depth exploration of treatment goals and recent advancements in managing HR+/HER2-ve advanced BC. Delving into the comprehensive management algorithm, he elucidated the strategic application of first, second, and third-line therapies. The conversation unfolded with a focus on the molecular intricacies, targeted therapies, and evolving treatment paradigms specific to this BC subtype. Dr. Jain also shared insights into the pivotal role of CDK 4/6 inhibitors, such as palbociclib, ribociclib, and abemaciclib, discussing their clinical trials and emerging biomarkers of CDK 4/6 inhibitors resistance. Addressing challenges post-resistance and extending the discussion beyond CDK 4/6 inhibitors, the session enriched understanding for tailored interventions, promising improved clinical outcomes in this intricate landscape.

Continuing the enlightening forum, Dr. Priti Agarwal commenced the next presentation with an informative and brainstorming topic on "Recent Advances in HER2+ve Advanced BC." She meticulously navigated through the evolving treatment modalities, focusing on recent advances in HER2-targeted therapies, immunotherapy advancements, and emerging strategies in managing this specific subtype of breast cancer. She elucidated the pivotal role of HER2-targeted agents, such as trastuzumab deruxtecan, pertuzumab, neratinib, tucatinib, margetuximab and trastuzumab emtansine (T-DM1), shedding light on their efficacy, safety profiles, and their integration into contemporary therapeutic approaches in various clinical trials such as HER2CLIMB, NALA, SOPHIA and EMILIA trials. The comprehensive overview contributed to a deeper understanding of tailored interventions, offering new perspectives for improved outcomes in the challenging landscape of HER2+ve advanced breast cancer. Following Dr. Priti Agarwal's insightful talk, Dr. Bharat Bhosale enlightened the audience on "Recent Advances in Advanced Triple-Negative Breast Cancer (TNBC)," wherein, he provided a comprehensive overview of TNBC in India, exploring its molecular heterogeneity with a focus on BRCA gene mutations. He further elucidated therapy regimens aligned with NCCN guidelines, emphasizing tailored treatment strategies and delved into the significance of PARP inhibitors, specifically olaparib, in the context of BRCA-mutated advanced BC, citing insights from the OlympiAD trial. Herein, olaparib monotherapy demonstrated a significant advantage over standard therapy in patients with HER2-negative MBC and a germline BRCA mutation. Olaparib monotherapy also yielded a median 2.8 months longer progression-free survival (PFS) than standard therapy, translating to a 42% lower risk of disease progression or death compared to the standard treatment [29]. Furthermore, he unveiled the Phase III KEYNOTE-355 Trial, investigating the efficacy of pembrolizumab in combination with chemotherapy versus chemotherapy alone as a first-line treatment for locally recurrent, inoperable, or metastatic TNBC [30]. Special attention was given to the antibody-drug conjugate (ADC), sacituzumab govitecan (SG), and the first-in-class TROP2-directed ADC, as highlighted in the ASCENT Trial [31]. Sacituzumab govitecan, as demonstrated by Bardia and colleagues, led to significantly prolonged progression-free and overall survival in patients with metastatic TNBC compared to single-agent chemotherapy. However, its use was associated with a higher frequency of myelosuppression and diarrhea.

Concluding the session 4, a panel discussion on the case-based approach for the management of MBC took center stage. Dr. Bharat Bhosale expertly moderated the panel comprising of renowned oncologists, including Dr. Devendra Jain, Dr. Mayanka Seth, Dr. D G Vijay, Dr. Shashank Kothari, Dr. Navin Goyal, Dr. Renu Ranwaka, Dr. Rajesh Agarwal, and Dr. Mohit Badgurjar. The panel delved into five intricate cases, offering nuanced insights into the evolving landscape of MBC treatment. In the panel discussion, Dr. Bhosale presented five diverse cases of breast cancer. The first case involved a 38-year-old patient with a 2 cm lump in the right breast, emphasizing the importance of thorough investigations, including mammography, MRI, PET, and various biopsies. The second case, a 56-year-old with clinically node-positive TNBC, demonstrated the challenges of managing aggressive diseases even in early-stage TNBC, utilizing neoadjuvant chemotherapy. The third case, a 67-year-old female, highlighted the significance of neoadjuvant hormonal therapy, leading to significant resolution before surgery. The fourth case, a 58-year-old CEO with TNBC, underlined the complexities of decision-making when patients refuse standard treatments, emphasizing the need for close observation and individualized approaches. The fifth case, a 52-year-old postmenopausal lady, showcased the importance of targeted therapies, such as trastuzumab, in managing HR+ and Her2+ breast cancer, emphasizing the need for tailored treatment plans. Throughout the panel, Dr. Bhosale provided insights into the intricacies of diagnosis, treatment decisions, and individualized approaches for each case, shedding light on the evolving landscape of metastatic breast cancer management.

Following the enlightening Session 4 on breast cancer, three consecutive industry-sponsored symposiums were arranged to delve deeper into the intricacies of breast cancer. The inaugural symposium focused on the topic "Improving outcomes in HER2+ve Early BC". Dr. Amish Vora moderated the symposium, steering discussions on innovative approaches and dual blockade strategies in the neoadjuvant and adjuvant settings for two case studies on HER2 +ve early breast cancer. Focusing on the regimen comprising pertuzumab and trastuzumab, either in conjunction with anthracycline-based or anthracycline-free chemotherapy, he underscored the regimen's clinical data of efficacy in HER2+ early breast cancer [32]. Dr. Vora emphasized the notable benefits observed with the fixed-dose combination of pertuzumab and trastuzumab in two compelling case studies, shedding light on its potential impact on optimizing patient outcomes. In very next symposium, Dr. Shirish S Alurkar guided the audience through a comprehensive exploration of "Response guided approaches in HER2+ve EBC: How (Trastuzumab emtansine) T-DM1 can help?" With a compelling case study involving a 40-year-old premenopausal woman diagnosed with ER and HER2+ve breast cancer, Dr. Alurkar elucidated the available treatment paradigms – weighing the benefits of surgery followed by adjuvant therapy against neoadjuvant therapy followed by surgery. Emphasizing the role of T-DM1 as a potential neoadjuvant (KRISTINE trial) or adjuvant therapy (expert opinion) for HER2+ve breast cancer, he shed light on optimizing therapeutic decisions for improved patient outcomes [33,34]. The emphasis on T-DM1 as a potential therapy in both neoadjuvant (KRISTINE trial) and adjuvant settings underscores the complexity of therapeutic decisions. The report indicates that, despite the KRISTINE trial not altering the standard of care for neoadjuvant management, further research is warranted to explore the potential role of T-DM1 in de-escalating neoadjuvant chemotherapy for selected patients. Additionally, the expert opinion supports T-DM1 as an effective and safe adjuvant treatment for HER2-positive breast cancer patients who do not achieve a pathologic complete response after standard neoadjuvant chemotherapy plus anti-HER2 targeted therapy. The call for more research efforts in chemotherapy de-escalation in the early setting reflects the evolving landscape of treatment strategies for HER2-positive breast cancer. Dr. Ankur Punia meticulously addressed the disease burden and unmet needs in HR+ve HER2-ve EBC, providing a comprehensive overview of abemaciclib in both early and advanced/metastatic BC settings, along with insights into various CDK4/6 inhibitor trials in EBC. Dr. Shirish S Alurkar shifted the focus to the monarchE trial. He intricately explored the study design and rationale behind combining abemaciclib with endocrine therapy for adjuvant treatment of HR+ve HER2-ve EBC, shedding light on the long-term outcomes derived from the monarchE study [35]. The study concluded that abemaciclib (first CDK4/6 inhibitor) when combined with ET demonstrated a significant improvement in invasive disease-free survival (IDFS) in patients with HR+, HER2- node-positive EBC at high risk of early recurrence. Following the symposiums, Session 5 commenced, dedicated to prostate cancer, with esteemed chairpersons Dr. F S Mehta, Dr. H L Khamesara, and Dr. H P Gupta at the helm.

### ***Session-5 (Prostate cancer)***

Opening the session, Dr. Kshitiz Ranka delved into the epidemiology, pathogenesis, and diagnosis of this prevalent condition. He expounded on the various risk factors contributing to prostate cancer, emphasizing the role of inflammatory microenvironment, oxidative stress, and the microbiome in its



development. Dr. Hanuwant Singh Rathore delivered an in-depth discourse on "Surgical Management of Early Prostate Cancer" during this session. Dr. Rathore emphasized Radical Prostatectomy (RP) as the gold standard surgery for organ-confined tumors, particularly in candidates showing no evidence of metastasis. He comprehensively covered various approaches, including Open Radical Retropubic Prostatectomy (RRP), Open Radical Perineal Prostatectomy (RPP), Laparoscopic RP (LRP), and Robot Assisted RP (RARP). Dr. Rathore also highlighted the technical advancements, reduced morbidity, and enhanced surgical and oncological outcomes associated with these approaches, underscoring RP as the preferred modality for localized and locally advanced prostate cancer.

Commencing the exploration into "Recent advances in metastatic Hormone-Sensitive Prostate Cancer (HSPC)", also known as castration sensitive prostate cancer (CSPC) Dr. Divesh Goyal led the next lecture wherein delved into landmark pivotal studies, focusing on Androgen Deprivation Therapy (ADT) intensification (CHAARTED trial), ADT-based doublet therapy (TITAN trial and ARCHES trial), and ADT-based triplet therapy (PEACE-1 trial and ARASENS trial). The CHAARTED trial demonstrated that chemohormonal therapy extends OS for patients with high-volume metastatic prostate cancer but does not provide OS benefits for those with low-volume disease [36]. In the TITAN trial, adding apalutamide to ADT significantly increased overall survival and radiographic progression-free survival compared to placebo plus ADT in metastatic CSPC [37]. The ARCHES trial demonstrated that enzalutamide with ADT reduces the risk of metastatic progression or death in men with metastatic HSPC, including those with low-volume disease and/or prior docetaxel [38]. The PEACE trial showed that combining ADT, docetaxel, and abiraterone improved OS and PFS in de novo metastatic CSPC [39]. In the ARASENS trial, the combination of darolutamide, androgen-deprivation therapy, and docetaxel extended OS significantly compared to placebo plus androgen-deprivation therapy and docetaxel in metastatic HSPC [40]. Dr. Goyal also provided insights into biomarker-based treatment options, shedding light on the evolving landscape of personalized and precision therapeutic strategies for metastatic HSPC.

Dr. Pulkit Nag further delved into the "Recent Advances of Metastatic Castrate Resistant Prostate Cancer (mCRPC)". He initiated an insightful exploration into the intricate landscape of mCRPC" and meticulously navigated through the various stages of mCRPC, unraveling the progress through different pathways. Dr. Nag elucidated the available treatment options, sequences of various agents, and emerging roles of targeted therapy in metastatic CRPC. The discourse was enriched with insights from landmark trials such as TAX 327, PREVAIL, TROPIC, CARD, COU-AA-301, and AFFIRM trial as well as FLAC European database, providing a comprehensive overview of the evolving treatment paradigms in metastatic CRPC. In the TAX327 trial, docetaxel administered every three weeks with prednisone demonstrated superior survival and improved response rates in terms of pain, serum PSA level, and quality of life compared to mitoxantrone plus prednisone [41]. The AFFIRM trial revealed that enzalutamide significantly improves outcomes in both younger (<75 years) and elderly (≥75 years) patients with comparable safety and tolerability [42]. In the PREVAIL trial, enzalutamide significantly reduced the risk of radiographic progression and death, delaying the initiation of chemotherapy in men with metastatic prostate cancer [43]. According to the FLAC European Database, OS increased with the number of life-extending therapies, with a sequence including docetaxel (DOC), cabazitaxel (CABA), and an androgen receptor-targeted therapy (ART) providing the greatest OS benefit [44].

Session 5 culminated with a dynamic Panel Discussion on "Metastatic Prostate Cancer: A Case-Based Approach." Expertly moderated by Dr. Lalit Mohan Sharma, the panel featured distinguished specialists, including Dr. Kiran Chigurupalli, Dr. Mamta Lodha, Dr. Sapan Ashok Jain, Dr. Mukesh Sevag, Dr. Bhupesh Patel, and Dr. Ajay Chauhan. Dr. Sharma shed light on the significance of genetic profile studies, providing a holistic perspective on comprehensive personalized patient care in the context of metastatic prostate cancer.

Dr. Lalit Mohan Sharma led the industry-sponsored symposium addressing the "Role of immunology (IO) and its sequencing strategy in the management of head and neck squamous cell carcinomas (HNSCC)." Herein, Dr. Sharma delved into the efficacy of immunotherapy (cetuximab), both as monotherapy and in conjunction with platinum-based chemotherapy (cisplatin), for the management of HNSCC. Through a comprehensive presentation, he provided a comparative analysis of overall survival (OS) data from the EXTREME regimen and various platinum-based first-line therapies. The extensive use of the EXTREME regimen for HNSCC in the largest patient cohort demonstrated excellent tolerability and yielded a high overall response rate (ORR). Notably, there was a noteworthy correlation between the occurrence of skin toxicity and the efficacy of the treatment [45]. Dr. Sharma also elucidated the progression-free

survival (PFS) data, drawing comparisons between KEYTRUDA (pembrolizumab) and EXTREME regimens (cetuximab with platinum-based chemotherapy-cisplatin), and also provided valuable insights from the KEYNOTE-048 trial, which explored the efficacy of pembrolizumab alone or in combination with chemotherapy against the EXTREME regimen involving cetuximab with chemotherapy for HNSCC. Considering the demonstrated effectiveness and safety profile, pembrolizumab, in combination with platinum and 5-fluorouracil, is a suitable initial therapeutic approach for recurrent or metastatic head and neck squamous cell carcinoma (HNSCC). Additionally, for PD-L1-positive cases of recurrent or metastatic HNSCC, pembrolizumab monotherapy stands out as a fitting first-line treatment option [46].

### ***Session 6 (Head and neck cancer)***

Inaugurating the session, Dr. Mamta Lodha set the stage with an enlightening discussion on the epidemiology, pathogenesis, and diagnosis of head and neck cancer. Dr. Sourabh Sharma delved into the intricacies of "Surgical Management of Early Head and Neck Cancer." His talk unfolded a comprehensive exploration of surgical approaches, emphasizing the nuances involved in effectively managing early-stage cases. Furthermore, Dr. Sharma shed light on the innovative aspects of transoral laser surgery and the cutting-edge techniques associated with transoral robotic surgery, offering valuable insights into evolving methodologies for enhanced patient care.

Dr. Hemant Dadhich propelled the session forward with an illuminating discussion on the "Recent Advances of Metastatic Head and Neck Cancer." His insightful talk delved into emerging treatment modalities, therapeutic breakthroughs, and evolving strategies for managing metastatic cases. Drawing from key trials such as CheckMate-141, KEYNOTE 040, and KEYNOTE 048, along with EXTREME regimen data, Dr. Dadhich provided a forward-looking perspective on the dynamic landscape of Head and Neck Cancer care. The CheckMate-141 trial concluded that, for patients with platinum-refractory, recurrent squamous-cell carcinoma of the head and neck, nivolumab treatment led to extended overall survival compared to standard single-agent therapy [47]. The KEYNOTE-040 trial concluded that pembrolizumab demonstrated a clinically meaningful extension of OS and exhibited a favorable safety profile for patients with recurrent or metastatic HNSCC. These findings support the exploration of pembrolizumab as both a monotherapy and as part of combination therapy in earlier stages of the disease [48]. Notably, he discussed the triple metronomic chemotherapy strategy to comprehensively address the challenges posed by the disease. Dr. Vijay Patil illuminated the audience with a comprehensive discussion on the "Role of metronomic therapeutic strategies in Locally Advanced/Metastatic Head and Neck Cancer," shedding light on novel strategies and breakthroughs in the field [49]. He underscored the transformative potential of metronomic strategies in Head and Neck Cancer (HNC) treatment. Emphasizing their impact on the tumor microenvironment, he elucidated how these strategies contribute to enhanced overall survival and improved quality of life for HNC patients. Dr. Patil further explored the potential benefits of metronomic approaches in addressing multidrug resistance and refractory cases of oral cancer, providing valuable insights into their promising role in challenging clinical scenarios.

As Day 2 drew to a close, the session reached its zenith with a riveting Panel Discussion focused on locally advanced/metastatic Head and Neck Cancer. Helmed by the seasoned expertise of Dr. Vijay Patil, the discussion adopted a case-based approach and featured a distinguished panel, including Dr. Hemant Dadhich, Dr. Arvind Patidar, Dr. Kanishk Mehta, Dr. Shiv Kaushik, and Dr. Sushant Joshi. The engaging conversation explored intricate clinical scenarios, offering profound insights into the evolving landscape of advanced Head and Neck Cancer management. In the insightful panel discussion led by Prof V M Patil, the deliberation revolved around viable options, including salvage surgery, considerations for re-radiation, and factors influencing overall survival (OS) in such cases, the role of palliative systemic therapy, its efficacy in symptom control, improvements in survival and quality of life. The presentation extended to the outcomes of palliative chemotherapy in oral cancer and the potential impact of immunotherapy on long-term survival, particularly in cases with CPS 1-19.

### **Day 3: Featured Sessions and Key Highlights**

#### ***Astra Zeneca Sponsored Symposium***

The final day of the conference unfolded on Day 3 with an enlightening industry-sponsored symposium, featuring distinguished speakers who delved into critical topics encompassing HER2+ve Metastatic Breast Cancer (MBC), Non-Small Cell Lung Cancer (NSCLC), and Biliary Tract Cancer (BTC). Dr.

Pulkit Nag set the tone with an illuminating discussion on "Evolving Trends in the Management of HER2+ve MBC." He began by characterizing HER2+ve MBC as an aggressive disease, emphasizing the FDA approval of HER2-targeted therapies for MBC and delved into the intricate landscape of HER2 signaling in breast cancer, highlighting the significance of blocking these signaling pathways. The crux of his presentation revolved around recent advances in HER2+ve MBC, particularly focusing on the groundbreaking antibody-drug conjugate, trastuzumab deruxtecan (T-DXd), he highlighted the results of landmark trials, including DESTINY-Breast01, DESTINY-Breast02, and DESTINY-Breast03 [50]. DESTINY-Breast02 demonstrated the favorable benefit-risk profile of trastuzumab deruxtecan in HER2-positive metastatic breast cancer, showcasing its ability to overcome resistance observed in a previous antibody-drug conjugate, as evidenced in DESTINY-Breast01 [51]. In the DESTINY-Breast03 trial, among patients previously treated with trastuzumab and a taxane, trastuzumab deruxtecan showed a lower risk of disease progression or death compared to trastuzumab emtansine. However, it was associated with interstitial lung disease (ILD) and pneumonitis, emphasizing the need for vigilant monitoring [52]. He emphasized the need for more effective treatment options in the second line, given the numerical drop in median PFS between first-line THP and second-line T-DM1.

In subsequent symposium, Dr. Rahul Rai spoke on "Managing Stage III NSCLC in Real Life," using a poignant case study of a 52-year-old male presenting with weight loss and a dry cough. The patient was diagnosed with adenocarcinoma of the left lung, confirmed by PET-CT and positive immunohistochemistry markers (TTF-1, p63, CK7). Dr. Rai delved into the intricacies of lung cancer stage-based grouping, emphasizing the heterogeneous nature of Stage III Locally Advanced NSCLC, with the majority of patients having unresectable tumors. Providing an overview of the current NSCLC treatment paradigm, he highlighted the challenges associated with Stage III NSCLC. A key focal point of his discussion revolved around the optimal timing to initiate Durvalumab after conventional chemoradiotherapy (CRT) [53,54].

Embarking on the next symposium, Dr. Pramod Kumar, led an enlightening discussion on "Newer Updates on First line therapy for Management of Biliary Tract Cancer (BTC). He emphasized the standard-of-care first-line therapy featuring gemcitabine and cisplatin/oxaliplatin combination for advanced cases using meta-analysis. Gemcitabine/cisplatin regimen with cisplatin (25–35 mg/m<sup>2</sup>) administered on days 1 and 8 is associated with better survival advantage than Gemox regimen (gemcitabine/oxaliplatin) but with addition of toxicity [55]. He explored the promising realm of immunotherapy in combination with the first-line approach for BTC and meticulously navigated through landmark clinical trials such as TOPAZ-1, highlighting the transformative potential of Durvalumab plus Gem-Cis in shaping the future of BTC management [56]. The TOPAZ-1 trial concluded that the addition of durvalumab to chemotherapy significantly enhanced overall survival compared to the placebo plus chemotherapy group. Additionally, improvements were observed in pre-specified secondary endpoints such as progression-free survival and objective response rate. The safety profiles between the two treatment groups were found to be similar.

### **Session 7 (Ovarian Cancer)**

Dr. Shilpa Goyal led the talk with a comprehensive overview of "Epidemiology, Pathogenesis, and Diagnosis of Ovarian Cancer." Dr. Subhabrata Das took the stage to illuminate the audience on the "Role of Cytoreduction Surgery in Early Ovarian Cancer." Dr. Das elucidated the various types of cytoreduction, emphasizing its pivotal role in ovarian cancer management. He underscored the significance of cytoreductive surgery followed by chemotherapy, highlighting that neoadjuvant chemotherapy (NACT) is a viable option when ovarian cytoreduction faces challenges. Dr. Das concluded with a focus on the principles of surgery and surgical staging, providing key insights into optimal management strategies. (Or Next, Dr. In the subsequent presentation, Dr. Gaurang Modi, esteemed oncologist and Director of Oncowin Cancer Center in Ahmedabad, illuminated the audience with insights into the Recent Advances in the Management of Advanced Ovarian Cancer. In his comprehensive discussion, Dr. Gaurang Modi delved into the intricacies of managing newly diagnosed advanced ovarian cancer. He navigated through the considerations of primary and interval debulking surgery, highlighting the pivotal role of Hyperthermic Intraperitoneal Chemotherapy (HIPEC) in conjunction with Cytoreduction Surgery (CRS). HIPEC increases concentrations of chemotherapy directly within the peritoneal cavity compared with the intravenous route and reduces the systemic side effects associated with prolonged adjuvant intraperitoneal exposure. Furthermore, hyperthermia increases tissue penetration and is synergistic with the therapeutic chemotherapy agents used [57]. Dr. Modi particularly underscored the significance of enhancing first-line therapy with the addition of either Bevacizumab or PARP inhibitors in maintenance therapy. Throughout his talk, he expounded on the findings and implications of key clinical trials, such as GOG-0218 and ICON7

for Bevacizumab, and SOLO-1, PRIMA, and ATHENA-MONO for PARP inhibitors like olaparib, niraparib, and rucaparib. The GOG-0218 trial demonstrated that incorporating bevacizumab into carboplatin and paclitaxel chemotherapy, continued for up to 10 months, resulted in a notable extension of the median progression-free survival by approximately 4 months in patients with advanced epithelial ovarian cancer [58]. Similarly, the ICON7 trial concluded that bevacizumab contributed to enhanced progression-free survival in women with ovarian cancer, particularly showing greater benefits in both progression-free and overall survival among those deemed at high risk for disease progression [59].

Finally, the engaging session delved into a dynamic Case-based Panel Discussion, offering pragmatic insights and expert opinions. Under the skilled moderation of Dr. Aseem Kumar Samar, the panellists (Dr. Subhabrata Das, Dr. Shilpa Goyal, Dr. Monika Khandelwal, Dr. Akanksha Tripathi, Dr. Jini Gupta, and Dr. Akanksha Agrawal) brought forth their diverse experiences and knowledge, fostering a collaborative atmosphere for discussing optimal approaches to ovarian cancer management. This culmination of varied perspectives and clinical expertise provided a comprehensive closure to the ovarian cancer session, leaving the audience enriched and informed.

Enlightening a specialized realm of discussions, the post-Session 7 segment featured two Industry-Sponsored Symposia, each addressing targeted topics of paramount importance. The first symposium, generously sponsored by Bard, delved into the crucial topic of "Peripherally Inserted Central Cathetering (PICCing) as a Vascular Access Device (VAD) for Cancer Patients." Simultaneously, Intas took the spotlight with the second symposium, focusing on "Improving outcomes with novel formulations of Taxanes." These symposia aimed to deepen the understanding of innovative approaches and advancements, offering a unique perspective on vascular access devices and novel taxane formulations for enhanced patient outcomes in the realm of cancer care. Dr. Bharat Gupta, a distinguished speaker in the Bard-sponsored symposium, navigated the audience through the intricacies of PICCing, shedding light on the necessity and intricacies of this procedure. In his comprehensive talk, he meticulously outlined the algorithm for selecting the appropriate Venous Access Device (VAD), emphasizing the crucial role of Intravenous Catheters. Dr. Gupta delved into the advantages inherent in PICCing, providing a nuanced understanding of the significance of proper VAD selection in the context of cancer care. His insightful discussion contributed valuable insights into optimizing patient experiences and outcomes through strategic vascular access device choices.

In the subsequent illuminating symposium sponsored by Intas, Dr. Aseem Samar captivated the audience by presenting a compelling case study. He initiated the discourse with the intricate scenario of a 57-year-old diabetic male diagnosed with nasopharyngeal carcinoma. The initial conventional docetaxel-based TPF (docetaxel, cisplatin and 5-FU) regimen faced challenges, leading to hypersensitivity reactions and severe mucositis. Dr. Samar then navigated through the pivotal shift to a novel formulation, Nanosomal docetaxel lipid suspension (NDLS) based TPF (NDLS, cisplatin and 5-FU) regimen. Through this transition, the patient exhibited improved tolerance with mild hyperemia and no evident neoplasm after chemotherapy and radiotherapy. Dr. Samar further elucidated the findings of multicenter retrospective study, emphasizing the safety and efficacy of NDLS-based TPF induction chemotherapy for inoperable/unresectable LA-HNSCC, showcasing promising response rates and overall well-tolerated outcomes [60]. His discussion provided a comprehensive understanding of how these innovative formulations could potentially contribute to improved outcomes in cancer treatment, marking a significant stride in the ongoing evolution of therapeutic strategies.

### ***Session 8 (Cervical Cancer)***

After successful completion of concept sharing symposium, the spotlight shifted to the critical domain of Cervical Cancer session, curated and overseen by the esteemed panel of chairpersons comprising Dr. Anil Sharma, Dr. Sunita Maheshwari, and Dr. Shiv Narayan Sharma. Diving into the multifaceted realm of cervical cancer, Session 8 unfolded with a diverse array of lectures, each unraveling crucial aspects of the disease. The session's itinerary traversed through the intricate topics of Epidemiology, pathogenesis, and diagnosis; Debating the role of vaccines in cervical cancer prevention: For and Against; Strategies for managing early-stage cervical cancer, and the evolving landscape of immunotherapy in advanced cases. Each lecture in this comprehensive session promised to contribute valuable insights, collectively illuminating the complex narrative of cervical cancer from various perspectives. As the curtains rose on Session 8, Dr. Ramesh Purohit took the podium to inaugurate the enlightening talks on cervical cancer. His discourse on "Epidemiology, Pathogenesis, and Diagnosis of Cervical Cancer" delved into the evolving

landscape of our understanding of this disease. Dr. Purohit insights not only laid the foundation for the subsequent discussions within the session but also provided a comprehensive overview of the current state of knowledge on cervical cancer, initiating a collective exploration into the multifaceted aspects of its epidemiology, pathogenesis, and diagnostic approaches.

Setting off the discourse surrounding the prevention of cervical cancer, next, Dr. Ajay Yadav delivered a compelling talk that delved into the burdensome presence of this disease in India. Addressing the mortality rates, causative factors, and the intricacies of the HPV-mediated pathway, Dr. Yadav underscored the pivotal role of HPV vaccines in preventing cervical cancer. His discussion extended to the latest developments in vaccines, ultimately advocating for their significant contribution to the prevention of this specific cancer type. Dr. Yadav's comprehensive presentation illuminated the importance of vaccines as a powerful tool in the fight against cervical cancer. In a counterpoint debate, Dr. Jagdish Vishnoi brought a critical perspective to the discussion on the role of vaccines in preventing cervical cancer. Commencing with an exploration of risk factors for cervical cancer, he raised a thought-provoking question about the limited coverage of vaccines against only three variants of HPV, leaving other variants unaddressed. Dr. Vishnoi questioned the absence of direct data demonstrating the efficacy of vaccines in halting the progression from precancerous conditions to cancer. Expressing concerns about safety, he brought attention to instances where medical interventions were required for girl children post-HPV vaccination, adding a layer of complexity to the ongoing debate.

Following the spirited debate that ignited the auditorium, the focus shifted to a critical topic as Dr. Kinjal Jani took the stage to address the intricacies of "Management of Early Cervical Cancer," offering valuable insights into the nuanced strategies for dealing with this stage of the disease. In her insightful session, Dr. Kinjal Jani meticulously navigated through the complexities of this crucial stage in cervical cancer. She elucidated the various treatment modalities, emphasizing the importance of tailored approaches for individual cases. Dr. Jani provided a comprehensive overview of surgical interventions, radiation therapy, and the evolving landscape of adjuvant therapies. Her talk seamlessly integrated evidence-based practices, current guidelines, and emerging trends, offering the audience valuable insights into the nuanced management of early-stage cervical cancer. Continuing the exploration into advanced stages of cervical cancer, Dr. Pramod Kumar took the stage to shed light on the "Role of Immunotherapy in Advanced Cervical Cancer." He discussed the pivotal studies (KEYNOTE-826, 158 and 028 on pembrolizumab) and breakthroughs, paving the way for a nuanced understanding of immunotherapeutic interventions. The KEYNOTE-826 trial concluded that among patients with persistent, recurrent, or metastatic cervical cancer receiving chemotherapy with or without bevacizumab, pembrolizumab significantly extended both PFS and OS compared to placebo [61]. The KEYNOTE-158 study revealed that pembrolizumab monotherapy exhibited durable antitumor activity and manageable safety in patients with advanced cervical cancer, leading to accelerated approval by the US Food and Drug Administration (USFDA) for those with programmed death ligand 1 (PD-L1)-positive advanced cervical cancer who experienced progression during or after chemotherapy [62]. Additionally, in patients with PD-L1-positive advanced cervical cancer, KEYNOTE-028 demonstrated antitumor activity and a safety profile of pembrolizumab consistent with that observed in other tumor types [63]. By exploring novel strategies and their implications, Dr. Kumar navigated the audience through the evolving role of immunotherapy in reshaping the outlook for patients with advanced cervical cancer.

Bringing the curtains down on an intellectually stimulating conference, the final act of session unfolded with a dynamic Case-Based Panel Discussion on Cervical Cancer. Under the expert moderation of an eminent medical oncologist Dr. Chirag Desai and in the esteemed presence of distinguished panellists - Dr. Jagdish Vishnoi, Dr. Kinjal Jani, Dr. Pooja Gandhi, Dr. Bhamini Jakhethiya, Dr. Rahul Rai, Dr. Sudha Sharma, Dr. Anuj Sharma and Dr. Sheetal Kaushik, Dr. Chirag Desai offered a comprehensive overview of HPV vaccines and the various HPV variants linked to cervical cancer. He intricately explored bivalent, quadrivalent, and nonvalent vaccine types. Shedding light on pivotal clinical trials like KEYNOTE-826 and GOG-204, he provided a detailed understanding of their implications. As the panel discussion concluded, the conference culminated with a valedictory function, marking the end of a knowledge-packed event.

### CONCLUDING REMARKS

In the closing of MOSCON-2023, Dr. Manoj Mahajan, the esteemed program director, graced the valedictory function with insightful concluding remarks. Expressing gratitude to the attendees, he emphasized the conference's success in fostering collaborative learning and cutting-edge insights in the

field of medical oncology. Dr. Mahajan acknowledged and lauded the distinguished speakers, dedicated organizers, and engaged participants for their invaluable contributions, making MOSCON-2023 a resounding success. Reflecting on the multifaceted sessions that spanned lung cancer, breast cancer, prostate cancer, head and neck cancer, ovarian cancer, and cervical cancer, Dr. Mahajan highlighted the conference commitment to providing a comprehensive update on the latest advancements, treatment modalities, and research breakthroughs in oncology. He acknowledged the role of industry-sponsored symposiums in deepening the understanding of specific cancer types and treatments.

Dr. Mahajan underscored the significance of MOSCON-2023 as a platform for interdisciplinary collaboration, where oncologists, surgeons, researchers, and industry experts converged to share knowledge, experiences, and innovations. He expressed optimism about the positive impact of the insights gained during the conference on advancing cancer care and research. In closing, he extended heartfelt appreciation to all contributors and participants, encouraging a continued exchange of ideas and collaborations beyond the conference walls. The valedictory function marked not just the end of an event but the beginning of renewed endeavors and shared commitments in the dynamic landscape of medical oncology.

#### ACKNOWLEDGMENT

Authors are thankful to Dr. Lav Patel (Intas Pharmaceutical Ltd, Gujarat, India) for critically reviewed the manuscript and fruitful suggestions. Authors also acknowledge Dr. Mehul R. Chorawala and Ms. Sakshi Srivastava, Intas Pharmaceutical Ltd, Gujarat, India for medical writing assistance and additional editorial communication. The authors also grateful to the all health-care professionals (HCP) for their participation in this study.

#### REFERENCES

- [1] Lane D: The promise of molecular oncology. *Lancet* 1998;351 Suppl 2:SII17-20.
- [2] Piña-Sánchez P, Chávez-González A, Ruiz-Tachiquín M, Vadillo E, Monroy-García A, Montesinos JJ, et al: Cancer Biology, Epidemiology, and Treatment in the 21st Century: Current Status and Future Challenges From a Biomedical Perspective. *Cancer Control* 2021; 28:10732748211038735.
- [3] Januszewicz W, Fitzgerald RC: Early detection and therapeutics. *Mol Oncol* 2019;13(3):599-613.
- [4] Fernandes H, Zhang P: Overview of Molecular Diagnostics in Clinical Pathology. In: McManus LM, Mitchell RN, Editors. *Pathobiology of Human Disease*. Academic Press; 2014. pp. 3287-3303.
- [5] Jaffe ES, Harris NL, Stein H, Isaacson PG: Classification of lymphoid neoplasms: the microscope as a tool for disease discovery. *Blood* 2008;112(12):4384-99.
- [6] Almasmoum HA: Molecular complexity of diffuse large B-cell lymphoma: a molecular perspective and therapeutic implications. *J Appl Genet* 2023. Epub ahead of print.
- [7] Tilly H, Morschhauser F, Sehn LH, Friedberg JW, Trněný M, Sharman JP, et al: Polatuzumab Vedotin in Previously Untreated Diffuse Large B-Cell Lymphoma. *N Engl J Med* 2022;386(4):351-363.
- [8] Almasbak H, Aarvak T, Vemuri MC: CAR T Cell Therapy: A Game Changer in Cancer Treatment. *J Immunol Res* 2016;2016:5474602.
- [9] Hutchings M: The evolving therapy of DLBCL: Bispecific antibodies. *Hematol Oncol* 2023;41(S1):107-111.
- [10] Kahl BS, Hong F, Williams ME, Gascoyne RD, Wagner LI, Krauss JC, et al: Rituximab extended schedule or re-treatment trial for low-tumor burden follicular lymphoma: eastern cooperative oncology group protocol e4402. *J Clin Oncol* 2014;32(28):3096-3102.
- [11] Mondello P, Steiner N, Willenbacher W, Cerchione C, Nappi D, Mauro E, et al: Bendamustine plus Rituximab Versus R-CHOP as First-Line Treatment for Patients with Follicular Lymphoma Grade 3A: Evidence from a Multicenter, Retrospective Study. *Oncologist* 2018;23(4):454-460.
- [12] Marcus R, Davies A, Ando K, Klapper W, Opat S, Owen C, et al: Obinutuzumab for the First-Line Treatment of Follicular Lymphoma. *N Engl J Med* 2017;377(14):1331-1344.
- [13] Morschhauser F, Fowler NH, Feugier P, Bouabdallah R, Tilly H, Palomba ML, et al: Rituximab plus Lenalidomide in Advanced Untreated Follicular Lymphoma. *N Engl J Med* 2018;379(10):934-947.
- [14] Matasar MJ, Capra M, Özcan M, Lv F, Li W, Yañez E, et al: Copanlisib plus rituximab versus placebo plus rituximab in patients with relapsed indolent non-Hodgkin lymphoma (CHRONOS-3): a double-blind, randomised, placebo-controlled, phase 3 trial. *Lancet Oncol* 2021;22(5):678-689.

- [15] Verstovsek S, Mesa RA, Gotlib J, Gupta V, DiPersio JF, Catalano JV, et al: Long-term treatment with ruxolitinib for patients with myelofibrosis: 5-year update from the randomized, double-blind, placebo-controlled, phase 3 COMFORT-I trial. *J Hematol Oncol* 2017;10(1):55.
- [16] Harrison CN, Vannucchi AM, Kiladjian JJ, Al-Ali HK, Gisslinger H, Knoop L, et al: Long-term findings from COMFORT-II, a phase 3 study of ruxolitinib vs best available therapy for myelofibrosis. *Leukemia* 2016;30(8):1701-1707.
- [17] Ludwig H, Kainz S, Schreder M, Zojer N, Hinke A: SLiM CRAB criteria revisited: temporal trends in prognosis of patients with smoldering multiple myeloma who meet the definition of 'biomarker-defined early multiple myeloma'-a systematic review with meta-analysis. *EClinicalMedicine* 2023; 58:101910.
- [18] Voorhees PM, Kaufman JL, Laubach J, Sborov DW, Reeves B, Rodriguez C, et al: Daratumumab, lenalidomide, bortezomib, and dexamethasone for transplant-eligible newly diagnosed multiple myeloma: the GRIFFIN trial. *Blood* 2020;136(8):936-945.
- [19] Costa LJ, Chhabra S, Medvedova E, Dholaria BR, Schmidt TM, Godby KN, et al: Minimal residual disease response-adapted therapy in newly diagnosed multiple myeloma (MASTER): final report of the multicentre, single-arm, phase 2 trial. *Lancet Haematol* 2023;10(11):e890-e901.
- [20] Mok TS, Wu YL, Thongprasert S, Yang CH, Chu DT, Saijo N, et al: Gefitinib or carboplatin-paclitaxel in pulmonary adenocarcinoma. *N Engl J Med* 2009;361(10):947-957.
- [21] Wu YL, Cheng Y, Zhou X, Lee KH, Nakagawa K, Niho S, et al: Dacomitinib versus gefitinib as first-line treatment for patients with EGFR-mutation-positive non-small-cell lung cancer (ARCHER 1050): a randomised, open-label, phase 3 trial. *Lancet Oncol* 2017;18(11):1454-1466.
- [22] Soria JC, Ohe Y, Vansteenkiste J, Reungwetwattana T, Chewaskulyong B, Lee KH, et al: Osimertinib in Untreated EGFR-Mutated Advanced Non-Small-Cell Lung Cancer. *N Engl J Med* 2018;378(2):113-125.
- [23] Shaw AT, Bauer TM, de Marinis F, Felip E, Goto Y, Liu G, et al: First-Line Lorlatinib or Crizotinib in Advanced ALK-Positive Lung Cancer. *N Engl J Med* 2020;383(21):2018-2029.
- [24] Lorenzi M, Ferro A, Cecere F, Scattolin D, Del Conte A, Follador A, et al: First-Line Osimertinib in Patients with EGFR-Mutant Advanced Non-Small Cell Lung Cancer: Outcome and Safety in the Real World: FLOWER Study. *Oncologist* 2022;27(2):87-e115.
- [25] Sakata Y, Sakata S, Oya Y, Tamiya M, Suzuki H, Shibaki R, et al: Osimertinib as first-line treatment for advanced epidermal growth factor receptor mutation-positive non-small-cell lung cancer in a real-world setting (OSI-FACT). *Eur J Cancer* 2021;159:144-153.
- [26] Freedman RA, Graff SL, Somerfield MR, Telli ML, Wolff AC, Giordano SH: Adjuvant Abemaciclib Plus Endocrine Therapy in the Treatment of High-Risk Early Breast Cancer: ASCO Guideline Rapid Recommendation Update Q and A. *JCO Oncol Pract* 2022;18(7):516-519.
- [27] Voutsadakis IA, Stravodimou A: Homologous Recombination Defects and Mutations in DNA Damage Response (DDR) Genes Besides BRCA1 and BRCA2 as Breast Cancer Biomarkers for PARP Inhibitors and Other DDR Targeting Therapies. *Anticancer Res* 2023;43(3):967-981.
- [28] Yersal O, Barutca S: Biological subtypes of breast cancer: Prognostic and therapeutic implications. *World J Clin Oncol* 2014;5(3):412-424.
- [29] Robson M, Im SA, Senkus E, Xu B, Domchek SM, Masuda N, et al: Olaparib for Metastatic Breast Cancer in Patients with a Germline BRCA Mutation. *N Engl J Med* 2017;377(6):523-533.
- [30] Cortes J, Rugo HS, Cescon DW, Im SA, Yusof MM, Gallardo C, et al: Pembrolizumab plus Chemotherapy in Advanced Triple-Negative Breast Cancer. *N Engl J Med* 2022;387(3):217-226.
- [31] Bardia A, Hurvitz SA, Tolaney SM, Loirat D, Punie K, Oliveira M, et al: Sacituzumab Govitecan in Metastatic Triple-Negative Breast Cancer. *N Engl J Med* 2021;384(16):1529-1541.
- [32] Jagosky M, Tan AR: Combination of Pertuzumab and Trastuzumab in the Treatment of HER2-Positive Early Breast Cancer: A Review of the Emerging Clinical Data. *Breast Cancer (Dove Med Press)* 2021;13:393-407.
- [33] Okines AF: T-DM1 in the Neo-Adjuvant Treatment of HER2-Positive Breast Cancer: Impact of the KRISTINE (TRIO-021) Trial. *Rev Recent Clin Trials* 2017;12(3):216-222.
- [34] Molinelli C, Parisi F, Razeti MG, Arecco L, Cosso M, Fregatti P, et al: Trastuzumab emtansine (T-DM1) as adjuvant treatment of HER2-positive early breast cancer: safety and efficacy. *Expert Rev Anticancer Ther* 2021;21(3):241-250.
- [35] Johnston SRD, Harbeck N, Hegg R, Toi M, Martin M, Shao ZM, et al: Abemaciclib Combined With Endocrine Therapy for the Adjuvant Treatment of HR+, HER2-, Node-Positive, High-Risk, Early Breast Cancer (monarchE). *J Clin Oncol* 2020;38(34):3987-3998.

- [36] Kyriakopoulos CE, Chen YH, Carducci MA, Liu G, Jarrard DF, Hahn NM, et al: Chemohormonal Therapy in Metastatic Hormone-Sensitive Prostate Cancer: Long-Term Survival Analysis of the Randomized Phase III E3805 CHAARTED Trial. *J Clin Oncol* 2018;36(11):1080-1087.
- [37] Chi KN, Agarwal N, Bjartell A, Chung BH, Pereira de Santana Gomes AJ, Given R, et al: Apalutamide for Metastatic, Castration-Sensitive Prostate Cancer. *N Engl J Med* 2019;381(1):13-24.
- [38] Armstrong AJ, Szmulewitz RZ, Petrylak DP, Holzbeierlein J, Villers A, Azad A, et al: A Randomized, Phase III Study of Androgen Deprivation Therapy With Enzalutamide or Placebo in Men With Metastatic Hormone-Sensitive Prostate Cancer. *J Clin Oncol* 2019;37(32):2974-2986.
- [39] Fizazi K, Foulon S, Carles J, Roubaud G, McDermott R, Fléchon A, et al: Abiraterone plus prednisone added to androgen deprivation therapy and docetaxel in de novo metastatic castration-sensitive prostate cancer (PEACE-1): a multicentre, open-label, randomised, phase 3 study with a 2 × 2 factorial design. *Lancet* 2022;399(10336):1695-1707.
- [40] Smith MR, Hussain M, Saad F, Fizazi K, Sternberg CN, Crawford ED, et al: Darolutamide and Survival in Metastatic, Hormone-Sensitive Prostate Cancer. *N Engl J Med* 2022;386(12):1132-1142.
- [41] Tannock IF, de Wit R, Berry WR, Horti J, Pluzanska A, Chi KN, et al: Docetaxel plus prednisone or mitoxantrone plus prednisone for advanced prostate cancer. *N Engl J Med* 2004;351(15):1502-1512.
- [42] Sternberg CN, de Bono JS, Chi KN, Fizazi K, Mulders P, Cerbone L, et al: Improved outcomes in elderly patients with metastatic castration-resistant prostate cancer treated with the androgen receptor inhibitor enzalutamide: results from the phase III AFFIRM trial. *Ann Oncol* 2014;25(2):429-434.
- [43] Beer TM, Armstrong AJ, Rathkopf DE, Loriot Y, Sternberg CN, Higano CS, et al: Enzalutamide in metastatic prostate cancer before chemotherapy. *N Engl J Med* 2014;371(5):424-433.
- [44] Angelergues A, Efstathiou E, Gyftaki R, Wysocki PJ, Lainez N, Gonzalez I, et al: Results of the FLAC European Database of Metastatic Castration-Resistant Prostate Cancer Patients Treated with Docetaxel, Cabazitaxel, and Androgen Receptor-Targeted Agents. *Clin Genitourin Cancer* 2018;16(4):e777-e784.
- [45] Le Roy C, Vernerey D, Evin C, Richard S, Crespel C, Samaille T, et al: Efficacy and Tolerance of Carboplatin plus Cetuximab (Simplified EXTREME Regimen) in Patients with Recurrent and/or Metastatic Head and Neck Squamous Cell Carcinoma. *Clin Oncol (R Coll Radiol)* 2022;34(12):e473-e481.
- [46] Burtneß B, Harrington KJ, Greil R, Soulières D, Tahara M, de Castro G Jr, et al: Pembrolizumab alone or with chemotherapy versus cetuximab with chemotherapy for recurrent or metastatic squamous cell carcinoma of the head and neck (KEYNOTE-048): a randomised, open-label, phase 3 study. *Lancet* 2019;394(10212):1915-1928.
- [47] Ferris RL, Blumenschein G Jr, Fayette J, Guigay J, Colevas AD, Licitra L, et al: Nivolumab for Recurrent Squamous-Cell Carcinoma of the Head and Neck. *N Engl J Med* 2016;375(19):1856-1867.
- [48] Cohen EEW, Soulières D, Le Tourneau C, Dinis J, Licitra L, Ahn MJ, et al: Pembrolizumab versus methotrexate, docetaxel, or cetuximab for recurrent or metastatic head-and-neck squamous cell carcinoma (KEYNOTE-040): a randomised, open-label, phase 3 study. *Lancet* 2019;393(10167):156-167.
- [49] Patil V, Noronha V, Krishna V, Joshi A, Prabhash K: Oral metronomic chemotherapy in recurrent, metastatic and locally advanced head and neck cancers. *Clin Oncol (R Coll Radiol)* 2013;25(6):388.
- [50] Modi S, Saura C, Yamashita T, Park YH, Kim SB, Tamura K, et al: Trastuzumab Deruxtecan in Previously Treated HER2-Positive Breast Cancer. *N Engl J Med* 2020;382(7):610-621.
- [51] André F, Hee Park Y, Kim SB, Takano T, Im SA, Borges G, et al: Trastuzumab deruxtecan versus treatment of physician's choice in patients with HER2-positive metastatic breast cancer (DESTINY-Breast02): a randomised, open-label, multicentre, phase 3 trial. *Lancet* 2023;401(10390):1773-1785.
- [52] Cortés J, Kim SB, Chung WP, Im SA, Park YH, Hegg R, et al: Trastuzumab Deruxtecan versus Trastuzumab Emtansine for Breast Cancer. *N Engl J Med* 2022;386(12):1143-1154.
- [53] Taugner J, Käsmann L, Eze C, Tufman A, Reinmuth N, Duell T, et al: Durvalumab after Chemoradiotherapy for PD-L1 Expressing Inoperable Stage III NSCLC Leads to Significant Improvement of Local-Regional Control and Overall Survival in the Real-World Setting. *Cancers (Basel)* 2021;13(7):1613.
- [54] Antonia SJ, Villegas A, Daniel D, Vicente D, Murakami S, Hui R, et al: Durvalumab after Chemoradiotherapy in Stage III Non-Small-Cell Lung Cancer. *N Engl J Med* 2017;377(20):1919-1929.



- [55] Fiteni F, Nguyen T, Vernerey D, Paillard MJ, Kim S, Demarchi M, et al: Cisplatin/gemcitabine or oxaliplatin/gemcitabine in the treatment of advanced biliary tract cancer: a systematic review. *Cancer Med* 2014;3(6):1502-1511.
- [56] Oh DY, He AR, Qin S, Chen LT, Okusaka T, Vogel A, et al: Durvalumab plus Gemcitabine and Cisplatin in Advanced Biliary Tract Cancer. *NEJM Evid* 2022;1(8).
- [57] Riggs MJ, Pandalai PK, Kim J, Dietrich CS: Hyperthermic Intraperitoneal Chemotherapy in Ovarian Cancer. *Diagnostics (Basel)* 2020;10(1):43.
- [58] Burger RA, Brady MF, Bookman MA, Fleming GF, Monk BJ, Huang H, et al: Incorporation of bevacizumab in the primary treatment of ovarian cancer. *N Engl J Med* 2011;365(26):2473-2483.
- [59] Perren TJ, Swart AM, Pfisterer J, Ledermann JA, Pujade-Lauraine E, Kristensen G, et al: A phase 3 trial of bevacizumab in ovarian cancer. *N Engl J Med* 2011;365(26):2484-2496.
- [60] Majumdar SKD, Subramanian S, Biswas G, Joshi N, Khan MA, Ahmad I: Efficacy and safety of nanosomal docetaxel lipid suspension-based chemotherapy in squamous cell carcinoma of the head and neck: A multicenter retrospective study. *Oncol Lett* 2020;20(6):344.
- [61] Colombo N, Dubot C, Lorusso D, Caceres MV, Hasegawa K, Shapira-Frommer R, et al: Pembrolizumab for Persistent, Recurrent, or Metastatic Cervical Cancer. *N Engl J Med* 2021;385(20):1856-1867.
- [62] Chung HC, Ros W, Delord JP, Perets R, Italiano A, Shapira-Frommer R, et al: Efficacy and Safety of Pembrolizumab in Previously Treated Advanced Cervical Cancer: Results From the Phase II KEYNOTE-158 Study. *J Clin Oncol* 2019;37(17):1470-1478.
- [63] Frenel JS, Le Tourneau C, O'Neil B, Ott PA, Piha-Paul SA, Gomez-Roca C, et al: Safety and Efficacy of Pembrolizumab in Advanced, Programmed Death Ligand 1-Positive Cervical Cancer: Results From the Phase Ib KEYNOTE-028 Trial. *J Clin Oncol* 2017;35(36):4035-4041.