**Abstract for V-10 Event Day 1 (3/29)**

**Topic 1. Clinical Practice Guidelines/consensus updated based on evidence based findings**

陳國興醫師

Survey Current Clinical Practice Guideline for metastatic colorectal cancer (mCRC) provides recommendations on diagnosis, treatment, and follow-up. Colorectal cancer is the third most common cancer worldwide, with a significant percentage of patients presenting with metastases. Improved outcomes have been achieved through early detection, biomarker-driven treatment, and multidisciplinary care. Diagnosis involves radiological imaging and biomarker testing for mutations such as RAS, BRAF, and MMR/MSI status. Treatment strategies depend on resectability, with options including systemic therapy, targeted therapy (anti-EGFR and anti-VEGF agents), and local treatments such as surgery and ablation. Conversion therapy aims to render initially unresectable disease operable. Patients with oligometastatic disease may benefit from a curative approach, while those with widespread metastases receive palliative care. The guideline emphasizes individualized treatment planning based on molecular profiles and tumor location, with multidisciplinary team discussions to optimize patient outcomes.

**Topic 2. Advancing mCRC Treatment: Insights from Phase 3 Paradigm Trials on 1L Therapy, Precision Medicine, and Acquired Resistance**

Dr. Yasutoshi Kuboki
In the phase 3 PARADIGM trial (NCT02394795), the addition of panitumumab (PAN) to FOLFOX6 significantly improved overall survival (OS) compared to bevacizumab (BEV) in patients with RAS wild-type metastatic colorectal cancer (mCRC). Subsequent exploratory analyses examined the role of acquired gene alterations in patients with ctDNA-confirmed 1L treatment and their impact on post-progression survival (PPS) following disease progression (PD). This presentation will synthesize the clinical implications of the PARADIGM study findings, with a focus on sequencing strategies and mechanisms underlying these observations to provide insights into optimized treatment approaches.

**Topic 3. Think beyond the tumor sidedness for conversion therapy treatment intention**

張伸吉醫師

The liver is the primary site for metastases in colorectal cancer (CRC), making colorectal liver metastases (CRLM) a key focus for treatment. In patients with liver-limited or liver-predominant disease, potential interventions include surgical resection, percutaneous ablation techniques (such as radiofrequency or microwave ablation), intra-arterial therapies (e.g., chemoembolization, radioembolization), and stereotactic radiotherapy. Systemic treatments, including chemotherapy, immunotherapy, and biologics, remain the primary options for those unsuitable for local therapies. Chemotherapy is often employed in neoadjuvant, adjuvant, or conversion settings, though trial outcomes are sometimes inconclusive. Optimal integration of these approaches relies on clinical evidence and multidisciplinary collaboration to tailor strategies to individual cases. This talk will review the comprehensive therapeutic landscape for CRLM, emphasizing evidence-based practices, ongoing studies, and areas of debate in the clinical management of this challenging condition.

**Topic 4. Optimized perioperative Strategy with systemic treatment and post operative complication improvement**

黃聖捷醫師

The choice of perioperative systemic treatment plays a critical role in converting initially unresectable metastatic colorectal cancer (mCRC) into a resectable state while minimizing postoperative complications. Anti-EGFR and Anti-VEGF therapies have demonstrated efficacy in tumor downsizing in RAS WT patients. Understanding the time required to achieve resectability with each treatment regimen is essential for surgical planning. However, systemic therapies also influence postoperative outcomes, including wound healing, liver regeneration, and overall complication rates, which may ultimately impact overall survival (OS). This presentation will explore the impact of targeted therapies on preoperative systemic treatment strategies, the assessment of resection timing, and their effects on postoperative complications. We will also discuss how these factors contribute to long-term survival, providing insights into optimizing treatment sequences for mCRC patients undergoing curative-intent surgery.

**Topic 5. Management of Metastatic Sites: Bone Metastases in Metastatic Colorectal Cancer (mCRC)**

謝燿宇醫師

According to epidemiological statistics, nearly a thousand newly diagnosed colorectal cancer patients develop bone metastases each year, accompanied by a series of skeletal complications/ skeletal-related events (SREs). These complications include pathological fractures, radiation to bone, spinal cord compression, and surgery to bone, as well as the risk of pain. Since October 2024, health insurance has expanded coverage for XGEVA to include patients with bone metastases from eight major cancers, including colorectal cancer. XGEVA effectively reduces the risk of skeletal complications, alleviates pain, and improves the quality of life for cancer patients, offering a new treatment option for those with bone metastases from colorectal cancer.

**Topic 6. CEA Dynamics as a Predictor of Response to Anti-EGFR Monoclonal Antibody Treatment in Metastatic Colorectal Cancer**

謝孟哲醫師

In metastatic colorectal cancer (mCRC), imaging for treatment response assessment is typically performed every three months due to reimbursement policies. However, both RECIST guidelines and early tumor shrinkage (ETS) assessments for Anti-EGFR therapy suggest an optimal evaluation interval of eight weeks. Carcinoembryonic antigen (CEA) is widely used as a prognostic and predictive biomarker in mCRC. This talk will explore whether CEA dynamics can serve as an early predictor for identifying responders to Anti-EGFR monoclonal antibody treatment before imaging confirmation. Integrating CEA trends into clinical decision-making could enhance early response assessment, optimizing treatment strategies for mCRC patients.

Topic 7. Real-World Evidence Research from NHIA data base in Metastatic Colorectal Cancer: Raising Awareness of the Need for Patient Contributions

吳志謙醫師

The selection of first-line targeted therapy for RAS-wildtype (RAS-wt) metastatic colorectal cancer (mCRC) remains a clinical challenge. Trials such as FIRE-3, CALGB/SWOG 80405, and PARADIGM suggest that anti-EGFR agents provide an overall survival (OS) benefit in left-sided tumors, while anti-VEGF therapies may be preferable for right-sided tumors. Taiwan's National Health Insurance Administration (NHIA) database offers real-world insights into treatment effectiveness and reimbursement-based clinical decision-making. This talk integrates real-world data with clinical trial findings to evaluate optimal treatment strategies, focusing on survival outcomes, tumor location, and response rates. Understanding real-world treatment patterns can guide more personalized and cost-effective therapy decisions for mCRC patients.

**Topic 8. Clinical Experience: Exploring the Correlation Between Depth of Response, conversion Rate, and OS Benefit**

江世偉醫師

Depth of response (DoR) has emerged as a key predictor of conversion surgery success and overall survival (OS) benefit in metastatic colorectal cancer (mCRC). While clinical trials highlight the importance of early tumor shrinkage and DoR, real-world data provide valuable insights into treatment effectiveness outside controlled study settings. This single-center analysis examines the relationship between DoR, conversion rates from unresectable to resectable disease, and OS outcomes in mCRC patients receiving systemic therapy. By integrating real-world evidence, we aim to assess whether DoR serves as a reliable surrogate marker for improved long-term survival and guide more effective treatment strategies for conversion therapy in mCRC.

**Abstract for V-10 Event Day 2 (3/30)**

**Biomarker-Directed Therapy in Metastatic Colorectal Cancer: Precision Treatment Strategy**

**by Dr. 陳敬左**

Dr. Ching-Tso Chen will present a comprehensive analysis of biomarker-directed therapy in metastatic colorectal cancer (mCRC), emphasizing the critical role of molecular profiling in guiding treatment decisions. This lecture will explore key biomarkers, including MSI-H/dMMR, KRAS G12C, BRAF, and HER2, discussing their predictive and prognostic implications. Dr. Chen will review recent advancements in targeted therapies, pivotal clinical trials, and their impact on current treatment paradigms. Additionally, the session will highlight guideline recommendations, the evolving role of combination therapies, and challenges in biomarker testing. Future directions in precision oncology, including novel therapeutic approaches and resistance mechanisms, will also be addressed. This talk aims to provide a comprehensive understanding of how biomarker-driven strategies are transforming mCRC management and improving patient outcomes.

**Unveiling a 40-Year-Old Enigma: Drugging the Elusive KRAS**

**By professor Kevan Shokat**

Professor Kevan Shokat will present a groundbreaking discussion on the challenges and breakthroughs in targeting KRAS, one of the most elusive oncogenic drivers in cancer biology. For four decades, KRAS mutations have been considered undruggable due to their structural properties and high-affinity GTP binding. This lecture will delve into the innovative drug discovery strategies that led to the development of KRAS inhibitors, detailing the molecular screening process, structure-based drug design, and mechanism of action of selective inhibitors. Professor Shokat will also highlight the impact of KRAS-targeted therapies on clinical practice, resistance mechanisms, and future directions in overcoming therapeutic limitations. This session will provide invaluable insights into the journey of transforming KRAS from an untargetable oncogene into a viable therapeutic target.

**KRAS Mutant mCRC in Taiwan: Where Do We Stand?**

**By Dr. 張沛泓**

Dr. Pei-Hung Chang will present an in-depth analysis of KRAS-mutant metastatic colorectal cancer (mCRC) in Taiwan, based on data from The Chang Gung Research Database. This lecture will provide a comprehensive overview of the genetic mutation landscape in Taiwanese mCRC patients, with a particular focus on the prevalence and clinical significance of KRAS G12C mutations. Dr. Chang will discuss epidemiological trends, prognostic implications, and survival outcomes associated with KRAS mutations, comparing them with global data. Additionally, the session will explore the therapeutic challenges posed by KRAS-mutant mCRC and the evolving role of targeted therapies. By integrating large-scale genomic data with clinical outcomes, this talk aims to offer valuable insights into precision oncology and personalized treatment strategies for KRAS-driven mCRC in Taiwan.

**Sotorasib: A Novel KRAS G12C Inhibitor for mCRC**

**By Dr. Yasutoshi Kuboki**

Dr. Yasutoshi Kuboki, principal investigator of the Phase III CodeBreaK 300 trial, will provide a comprehensive review of sotorasib, a groundbreaking KRAS G12C inhibitor, in the treatment of metastatic colorectal cancer (mCRC). This lecture will summarize the latest clinical advancements, including efficacy, safety, and biomarker-driven responses observed in clinical trials. Dr. Kuboki will share key insights from his experience in trial design and patient outcomes, highlighting challenges and strategies in optimizing KRAS G12C-targeted therapy. Additionally, the session will explore combination approaches, resistance mechanisms, and future perspectives in KRAS-mutant mCRC treatment. This talk will offer critical updates on the evolving role of sotorasib, shaping the precision oncology landscape for KRAS-driven mCRC.

**Precision Medicine for RAS-Mutant Cancer: Raising a Spur for RAS**

**By Dr. 梁逸歆**

Dr. Yi-Hsin Liang will provide an insightful discussion on the evolving role of precision medicine in RAS-mutant cancers, with a particular focus on trial experiences with KRAS G12C inhibitors in metastatic colorectal cancer (mCRC). This lecture will explore clinical challenges and therapeutic outcomes observed in practice, highlighting key considerations in patient selection, treatment response, and resistance mechanisms. Dr. Liang will also discuss the future of mCRC precision medicine, including advancements in KRAS-targeted therapies, combination strategies, and the emerging role of circulating tumor DNA (ctDNA) in guiding treatment decisions. By integrating clinical experience with cutting-edge research, this session aims to provide a forward-looking perspective on optimizing personalized treatment strategies for RAS-mutant mCRC.