(06)

乳癌精準治療:從臨床試驗到真實世界數據

Tailored Treatment of Breast Cancer from Trial-Based and RWD Perspective

時 間:113年6月22日(星期六)08:30~12:10

地 點:臺北榮民總醫院 致德樓第六、七會議室

08:30-08:40	Opening Remarks	曾令民副院長 Ling-Ming Tseng
	座長:曾令民 副院長 (Ling-Ming Tseng)	
08:40-09:10	回顧 HER2 生物學在乳腺癌中的全貌:新見解與觀點 Revisiting the Landscape of HER2 Biology in Breast Cancer: Insights and Perspectives	劉峻宇醫師 Chun-Yu Liu
	座長:戴明燊 醫師 (Ming-Shen Dai)	
09:10-09:40	早期乳癌使用標靶治療的實境數據回顧分析 The real-World Data of HER2-Directed Therapy in Early Breast Cancer	蔡宜芳醫師 Yi-Fang Tsai
	座長: 趙大中 醫師 (Ta-Chung Chao)	
09:40-10:10	HER2 陽性早期乳癌女性使用 HER2 標靶藥物治療之健康 相關生活品質探討 Health-Related Quality of Life in Her2-Positive Early Breast Cancer Woman Using Her2 Target Therapy	廖國秀醫師 Kuo-Hsiu Liao
10:10-10:30	Coffee Break	
	座長:俞志誠 教授 (Jyh-Cherng Yu)	
10:30-11:00	術前輔助治療對早期 HER2 陽性乳癌的臨床運用與效益 Early HER2-Positive Breast Cancer: Who May Benefit from Neoadjuvant Therapy?	黃其晟醫師 Chi-Cheng Huang
	座長: 趙祖怡 教授 (Tsu-Yi Chao)	
11:00-11:30	臨床積極運用 CDK4/6 抑制劑為 HR+HER2- 轉移乳癌患 者群體帶來顯著的生存效益 Striving for Significant Survival Benefit for the Broadest Set of Patients in HR+HER2- mBC with CDK4/6i	賴峻毅醫師 Jiun-I Lai
	座長:黃其晟 教授 (Chi-Cheng Huang)	
11:30-12:00	用強化輔助治療最佳化 HER2 陽性乳癌患者的治療 Optimizing Treatment in Patients with HER2-positive Early Breast Cancer by Extended Adjuvant Treatment	陳彥蓁醫師 Yen-Jen Chen
12:00-12:10	Closing Remarks	俞志誠教授 Jyh-Cherng Yu

Revisiting the landscape of HER2 biology in breast cancer: Insights and perspectives

回顧 HER2 生物學在乳腺癌中的全貌:新見解與觀點

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In this topic, we will provide a comprehensive overview of the current understanding and recent advancements in HER2 biology within the context of breast cancer. HER2, a pivotal biomarker and therapeutic target in breast cancer management, has undergone significant scrutiny and exploration over the years. This review revisits the intricate landscape of HER2 biology, shedding light on its role in breast cancer development, progression, and therapeutic resistance. We highlight recent insights into HER2 signaling pathways, molecular mechanisms driving HER2-driven tumorigenesis, and emerging treatment strategies. Furthermore, we discuss the evolving perspectives on HER2-targeted therapies, including novel therapeutic modalities and combination approaches aimed at overcoming resistance and improving patient outcomes. Through a synthesis of current research findings and clinical implications, this review offers valuable insights and perspectives for further exploration and advancement in the field of HER2-targeted breast cancer therapy.

The real-world data of HER2-directed therapy in early breast cancer 早期乳癌使用標靶治療的實境數據回顧分析

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Early-stage HER2-positive breast cancers are largely treated with chemotherapy combined with anti-HER2 therapy. Adjuvant trastuzumab, as the standard treatment since 2006, had markedly reduce recurrence and subsequent mortality in HER2-positve breast cancer. Following the invention of pertuzumab, double blockade of target therapy creates significant progress first in trials of neoadjuvant setting, then in adjuvant setting for node-positive disease. As the raising populations who received neoadjuvant systemic therapy (NST), trastuzumab emtansine demonstrated its efficacy in reducing recurrence for those with residual tumors after NST. The strategy of treatment in HER2-positive early breast cancer is drafted based on mounting evidence from clinical trials and now well accepted by experts. However, regimens of first choice may not be applied to every single patient due to limitation from policy of insurance or individual finance. The side effects of HER2-directed therapy are another concern after the epochal drug had been introduced to clinical practice for nearly two decades. Here we will review the real-world data of anti-HER2 therapy in early breast cancer.

Health-related quality of life in HER2-positive early breast cancer woman using HER2 target therapy

HER2 陽性早期乳癌女性使用 HER2 標靶藥物治療之健康相關生活 品質探討

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Breast cancer remains one of the most common malignancies affecting women worldwide, with a subset characterized by overexpression of the human epidermal growth factor receptor 2 (HER2). HER2-positive breast cancers are known for their aggressive nature but have seen significant improvements in prognosis and survival outcomes with the advent of HER2-targeted therapies. While the efficacy of these treatments in prolonging life is well-documented, understanding their impact on patients' health-related quality of life (HRQoL) is crucial for holistic patient care.

Explore the HRQoL outcomes associated with various HER2-targeted therapies in women with HER2positive early breast cancer, specifically comparing Trastuzumab&Pertuzumab (PH) vs. Trastuzumab (H); Trastuzumab emtansine (T-DM1) vs. Trastuzumab deruxtecan (T-DXd), and subcutaneous (SC) vs. intravenous (IV) administration routes.

As the treatment landscape for HER2-positive early breast cancer evolves, so too does our understanding of how these therapies impact patients' lives beyond survival. The current data and research contributes to a growing body of evidence that supports a holistic view of cancer care, where HRQoL is a pivotal consideration in treatment planning. Future research should continue to explore these dimensions, ensuring that advances in cancer therapy translate into meaningful improvements in patients' lives.

Early HER2-positive breast cancer: Who may benefit from neoadjuvant therapy?

術前輔助治療對早期 HER2 陽性乳癌的臨床運用與效益

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Neoadjuvant therapy has emerged as a crucial approach in managing early HER2-positive breast cancer, aiming to optimize outcomes by downsizing tumors and increasing breast-conserving rates. This therapeutic strategy typically involves a combination of sequential chemotherapy and HER2-targeted therapy, such as trastuzumab. The benefits of neoadjuvant breast cancer treatment, including chemotherapy, endocrine therapy, and targeted therapy, are well-established, contributing to disease downstaging and improved treatment efficacy.

Identification of candidates who may particularly benefit from neoadjuvant therapy in early HER2positive breast cancer is pivotal. This tailored approach is especially pertinent for cases where downsizing the tumor is crucial for optimal surgical outcomes or breast conservation.

In summary, neoadjuvant therapy plays a vital role in the management of early HER2-positive breast cancer, offering benefits in tumor downsizing and increasing breast-conserving rates. Tailoring this approach to specific patient subgroups, including those with hormone receptor-positive, HER2-negative tumors, enhances its effectiveness in achieving optimal outcome

Striving for significant survival benefit for the broadest set of patients in HR+HER2- mBC with CDK4/6i

臨床積極運用 CDK4/6 抑制劑為 HR+HER2- 轉移乳癌患者群體帶來 顯著的生存效益

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Randomized phase III trials have consistently demonstrated therapeutic benefits with ribociclib to endocrine therapy in HR+ HER2- advanced breast cancer. Across studies in pre- and postmenopausal populations, the ribociclib-endocrine combination improved progression-free survival (PFS) and overall survival (OS) versus endocrine monotherapy, without compromising quality of life (QoL).

Notably, in the RIGHT Choice study of premenopausal patients with aggressive disease features like high visceral burden or rapid progression - typically requiring chemotherapy - the ribociclib regimen with ovarian suppression and an aromatase inhibitor achieved comparable objective response rates and superior PFS compared to standard chemotherapy combinations. These data signal a potential paradigm shift in managing advanced HR+/HER2- disease. While cytotoxic chemotherapy has historically been standard for high tumor burden or visceral crisis, integrating targeted CDK4/6 inhibition into endocrine-based therapy may offer an equally efficacious but better-tolerated strategy, circumventing chemotherapy's deleterious effects on QoL.

As clinical utility of CDK4/6 inhibitors is further elucidated, these agents hold considerable promise in extending survival while preserving QoL, particularly for patients with aggressive, life-threatening manifestations.

Optimizing treatment in patients with HER2-positive early breast cancer by extended adjuvant treatment

用強化輔助治療最佳化 HER2 陽性乳癌患者的治療

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Breast cancer is by far the most frequent disease among women in Taiwan, and the diagnosis and treatment have also been improved a lot these years. HER2, the abbreviation of human epidermal growth factor receptor 2, could be one of the key biological factors in breast cancer category. The overexpression or amplification of HER2 gene could lead to cell abnormal progression, and it accounted for around 20% of breast cancer.

The application of trastuzumab significantly improved the clinical outcome of early stage HER2positive breast cancer, nevertheless, nearly 30% of patients who had trastuzumab still faced recurrence risk within 10 years. Moreover, there are some other factors, such as nodal status, hormone receptor status, and achieving pCR or not, may influence the risk of recurrence.

Neratinib, an irreversible tyrosine kinase inhibitor, showed its efficacy with a different mechanism from mono-clonal antibodies, making it an option to extend patients' adjuvant treatment with a better outcome, especially for those who had a higher risk of recurrence than others. ExteNET trial demonstrated neratinib lowered 27% of recurrence risk in a 5-year follow-up period. The study also showed that the benefit of extended adjuvant therapy is higher in subgroups with a higher risk, such as non-pCR population.

This benefit has also been recognized by international guidelines, including NCCN, ESMO, and ASCO, suggests that 1-year extended adjuvant treatment should be considered for patients who have a higher risk.