In 2024, cancer remained the top cause of death in Taiwan for the 43rd consecutive year. How we plan to eradicate cancer as a major cause of premature death is a model for how to approach other important Non-Communicable Diseases. Critical to that plan is the role of drugs targeted with precision at the fundamental cellular mechanisms driving cancer.

In 2025, Taiwan significantly increased spending on cancer drugs with the establishment and expansion of the New Cancer Drug Fund (CDF). The government allocated NT$5 billion (about US$153.5 million) for new cancer drugs in 2025, as part of a plan to ultimately raise the fund to NT$10 billion to support access to innovative and expensive cancer therapies. How wisely that money is spent will determine the clinical value it gains for Taiwan's patients.

HER2 over-expressing (HER2-positive) breast cancer is a classic example of the problem. It has a significant impact in Taiwan, for the population has a higher proportion of HER2 cases with onset at a younger age than global averages.

Genetic testing and targeted anti-HER2 therapies, such as trastuzumab, have transformed prognosis. Despite improvements, about 20% of patients still relapse or develop metastasis after adjuvant therapy.

Taiwan's National Health Insurance (NHI) system promotes value-based medicine mainly through Pay-for-Performance (P4P) programs, Diagnosis-Related Group (DRG) payments, and efforts to incorporate patient involvement in coverage decisions. These initiatives reward quality and outcomes rather than sheer volume of care, encouraging providers to deliver effective and efficient care. Efficiency matters, as patients consistently show that most will trade off small

differences in survival to reduce the physical and financial burdens of treatment.

In Taiwan, the costs of cancer care doubled in one decade. That problem is global. The UK has a similar model of healthcare to Taiwan's NHI and a Cancer Drugs Fund (CDF) too. Spending the CDF wisely will be critical, for without reform to current management policies, the cost to the UK National Health Service (NHS) for breast cancer care is expected to rise by nearly 40% from around £2.8 billion ($3.8Bn USD/ NT$116Bn) in 2024 to £3.6 billion ($4.9Bn USD/ NT$149Bn) by 2034.

Using the metrics of value-based medicine, this presentation will look at data behind current management decisions for HER2 disease, including

- Single vs combined HER2 therapies at different stages of disease
- The optimal dose/schedules of treatment
- The optimal treatment delivery: intravenous or subcutaneous
- The value of originator or biosimilar brands