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Editorial

East Meets West: Convergence of the Art and Science of Oncology

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Non-communicable diseases (NCDs) are now responsible for most deaths globally, with cancer emerging as a leading cause of death across the world in the 21st century [1,2]. The incidence of and mortality from cancer continues to grow rapidly in an ever-increasing and aging global population. Although the incidence of cancer is significantly higher in the West (North America and Western Europe) compared with the developing low- and middle-income countries from the East, the overall burden of disease remains much higher in the East (including India and China), which is home to nearly 60% of the global population, compared with just over 20% of people residing in the West [2]. According to the estimates of the World Health Organization (WHO), nearly 70% of cancer deaths occur in low- and middle-income countries, which are expected to bear the brunt of the expected 24.1 million new cancer cases per year by 2030 [1,3]. With cancer ranking as the first or second cause of premature death in almost 100 countries worldwide, a high-level investment in cancer control alongside other major NCDs was recognised in 2017, with a new cancer resolution unanimously adopted by governments at the World Health Assembly. The resolution builds on the WHO Global Action Plan for the Prevention and Control of NCDs 2013 to 2020 and the United Nations Sustainable Development Goals (SDGs) 2030, which include a specific target of a reduction in premature mortality from NCDs by one-third by 2030 [4]. The SDGs were built on the successes of the Millennium Development Goals, but took a much broader scope, recognising the importance of integrated and indivisible action on economic growth, social equity and environmental protection to delivering sustainable development for all. Given the socioeconomic burden of cancer, reducing global cancer and NCD burden is a prerequisite for addressing social and economic inequity, stimulating economic growth and accelerating sustainable development. The WHO resolution on 'Cancer Prevention and Control' draws on targets set out in the Global Action Plan on NCDs and SDGs to help make the case for increasing national action on cancer [1,4]. Drawing on best practices from across the globe, it identifies 22 priority actions grouped into four key areas, for countries to systematically strengthen cancer services over time. These should be embedded in national cancer control plans that can drive the introduction or scale-up of services, in line with national priorities, and also serve as an important platform to co-ordinate national stakeholders around common goals.

Cancer's position relative to other diseases as a cause of premature death reflects national levels of socioeconomic development as measured by the human development index. With rapid population growth and aging worldwide, the rising prominence of cancer as a leading cause of death partly reflects the decline in cardiovascular and cerebrovascular mortality in the developed world and deaths from communicable and infectious diseases in developing countries [2]. Cancer transitions are most striking in developing countries like India and China, where increasing disease burden is paralleled by a changing profile of common cancer types [5]. A recurring observation is the ongoing displacement of infection-related and poverty-related cancers (cervix, stomach and liver cancers) by those cancers that are already much more frequent in developed countries (North America and Europe), such as breast, prostate and colorectal cancers [5]. These cancers are often ascribed to a Westernisation of lifestyle, yet the differing cancer profiles in individual countries and between regions signify marked geographic diversity, with a persistence of local risk factors in populations at quite different phases of social and economic transition. As per

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the most recent GLOBOCAN report [2], there were an estimated 18.1 million new cancer cases and 9.6 million cancer deaths in 2018. In both sexes combined, lung cancer was the most commonly diagnosed cancer (11.6% of all cases) and the leading cause of cancer death (18.4% of all cancer-related deaths), followed closely by female breast cancer (11.6%), colorectal cancer (10.0%) and prostate cancer (7.1%) for incidence and colorectal cancer (9.0%), stomach cancer (8.2%) and liver cancer (8.2%) for mortality. The most frequently diagnosed cancer and the leading cause of cancer death, however, varies substantially across countries and even within each country depending on the degree of socioeconomic development and associated lifestyle factors.

Given the increasing cancer burden with striking regional differences in incidence, mortality and spectrum between the East and the West, it was necessary that a meeting point be reached to raise relevant questions and discuss related issues in a convergent and congenial manner. This special issue of *Clinical Oncology* – East Meets West – highlights cancers of the lung, liver, prostate, breast, head and neck, stomach, cervix and brain tumours [6–17], considered to be important to both regions. The articles in this special issue are not meant to be comprehensive and indicative of practices across all of Asia, but focus mostly on India, China and Hong Kong. Countries like South Korea, Japan, Malaysia and Singapore are briefly mentioned; they have a very high quality of healthcare, more similar to many Western countries. Nevertheless, these articles largely provide a real-world illustration of the current practices and challenges of cancer care in the East.

Most of them focus on the key differences between the East and the West in terms of cancer epidemiology (incidence, demographics and mortality); biology (pathology and molecular genetics); technology (availability, accessibility and affordability), treatment paradigm (evidence-based medicine) and healthcare ecosystem (care pathways and delivery). Commonly proposed solutions to reduce regional disparity include augmenting healthcare infrastructure and spending; raising awareness for early diagnosis and treatment; establishing robust clinical care pathways; generating and adopting evidence-based guidelines; and engaging with the international community for collaborative research on contemporary oncological practice. Murthy *et al.* [7] describe the changing trends in prostate imaging, radiotherapy dose escalation, hypofractionation, stereotactic ablation and prostate brachytherapy in the context of practice patterns in the West, highlighting new directions in research on prostate cancer radiotherapy. Chakraborty *et al.* [8] compare published institutional data from India with the West and highlight recent collaborative efforts to initiate multicentre clinical trials in breast cancer within the country, similar to the co-operative group trials in the West. Chatterjee *et al.* [9] summarise the results of global efforts for a de-escalation of therapy in human papilloma virus (HPV)-associated oropharyngeal cancers in a bid to reduce toxicity and outline the intensification strategies in HPV-negative oropharyngeal cancers to improve survival outcomes. In another paper, Mummudi *et al.* [10] discuss the prevalence of oral cavity cancer, the habit of chewing tobacco and associated different tumour biology and the challenges of resources constraints, whereas Chopra *et al.* [11] describe the existing disparities in care for cervical cancer and highlight potential avenues of collaboration between the East and the West to improve therapeutic outcomes. Gupta *et al.* [12] review the descriptive epidemiology and clinical outcomes of tumours involving the brain and central nervous system, which pose unique challenges, but also provide new opportunities to develop and foster multidisciplinary care through mutual co-operation and collaboration between the developed world in the West and developing countries from the East.

Further east, Hong Kong, as Asia's world city, is an ideal place where medicine is practised in both the Eastern and the Western styles. We shall first describe, as an editorial and introduction, the current status of oncology healthcare provision in Hong Kong [6]. The importance of a multidisciplinary tumour board in managing complex advanced head and neck cancers, after learning from the West, is described [13]. In addition, we also provide a comprehensive summary of the different aetiologies and the novel therapeutics for advanced unresectable hepatocellular carcinoma, as well as the benefits and the caveats of biosimilars in this era of expensive health expenditure on anticancer treatment [14]. International experts, led by Chan *et al.* [15], update us on the recent advances in treatment strategies for gastric cancer.

Next, we explore how Chinese medicine and palliative care are practised in Hong Kong, in contrast to the rest of the world. From the East to the West and back to the East, So *et al.* [16] describe how Chinese medicine is perceived, investigated and practised differently in the East and the West. Finally, we show how the establishment of a public comprehensive palliative healthcare system within such a small city provides an example to other parts of the world [17].

Conflicts of interest

The authors declare no conflict of interest.

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