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INVITED COMMENTARY

Prostate Cancer

Separate Chinese lines for prostate cancer?

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The recent report of Chinese patients treated with abiraterone is important. It debates whether previous reports of mainly Western patients with docetaxel-naïve and docetaxel-resistant castration-resistant metastatic prostate cancer are valid for Chinese patients.¹ The study showed findings with abiraterone for Chinese patients like those previously published. However, it remains an open question whether Chinese patients with prostate cancer differ from Western patients.

The Chinese investigators started abiraterone as monotherapy after failure to androgen deprivation therapy (ADT) with or without failure to docetaxel. They questioned whether Chinese patients with metastatic prostate cancer should be given abiraterone before or after docetaxel. In recent years, several randomized trials showed that patients with castration naïve metastatic prostate cancer benefit from adding docetaxel or abiraterone to ADT.²⁻⁴ Hence, should Chinese patients be treated with a combination of abiraterone and ADT or only be treated with abiraterone after the failure to ADT?

Complementary analyses elucidated whether patients planned for ADT would gain most from adding docetaxel or abiraterone to ADT.⁵ In the Systemic Therapy in Advancing or Metastatic Prostate Cancer: Evaluation of Drug Efficacy (STAMPEDE) study, patients had a better progression-free survival when ADT was combined with abiraterone instead of docetaxel. However, the STAMPEDE trial also showed that overall survival was better when ADT was combined with abiraterone than with docetaxel. Hence, a question is whether Chinese patients heading for ADT should have ADT combined with abiraterone or docetaxel.

In addition to studies analyzing the choice between the addition of docetaxel or abiraterone, an ongoing PEACE trial (NCT 01957436, ClinicalTrials.gov) examines whether the three-drug combination of ADT, docetaxel, and abiraterone is better than a two drug combination of ADT and docetaxel. The question is also relevant for Chinese patients. Would they respond better if they were treated with the three-drug combination?

Recent years raised the question whether patients with oligometastatic prostate cancer is a separate group of metastatic prostate cancer. It is defined as detection of only up to three to five metastases with advanced imaging modalities, such as PSMA-based PET/CT scans. So far, oligometastatic prostate cancer was treated with targeted radiotherapy to delay systemic treatment.⁶ Chinese centers might initiate phase II studies with a curative intention of patients with oligometastatic prostate cancer treated with a combination of high-technology radiotherapy and optimized systemic treatment.

The study of abiraterone is a small cohort study from a single Chinese hospital. In contrast, the STAMPEDE trial is a multicenter trial in the United Kingdom where more than 20 hospitals worked together in the framework of a single protocol. The centers contributed with

a varying number of participants in the trial. Some centers recruited less than 10 participants, but many centers recruited more than 100 participants. Overall the STAMPEDE trial analyzed nearly 9000 participants. A similar Chinese multicenter trial organization may recruit more participants.

In the 1990s, it was shown that East-Asian female nonsmoking patients with nonsmall cell lung cancer often had mutations of the epidermal growth factor receptor (*EGFR*). Treatment with *EGFR* inhibitors gave a high response for patients with mutations of *EGFR*.⁷ Randomized trials showed that *EGFR* inhibitors gave patients with *EGFR* mutations as effective results as established chemotherapy. Correspondingly, studies of Chinese patients with prostate cancer might disclose that Asian and Western prostate cancers have important genetic differences.

Recent years have given many changes in the treatment of prostate cancer. China might organize a National database of all patients with prostate cancer as has been done in Denmark. The database should be structured so it could provide feedback to health authorities and other interested parties. A Chinese database of prostate cancer might further elucidate whether guidelines based on Western populations are relevant for Asian populations.

It will be of interest for a Western oncologist to follow future Chinese clinical research of prostate cancer.

COMPETING INTERESTS

The author declares no competing interests.

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