

The Elephant in the Room

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Cancer is the most brutal battle to fight, and its financial impact is even more challenging to face. As we move towards more targeted therapies, the cost of treatment is rising sharply, to the point that even patients with a good financial background cannot afford it. In this issue of *LNJCC*, a study examines the benefit of adding pembrolizumab to trastuzumab, which will increase treatment costs by 5 times.

The term financial toxicity was first coined in 2013 by researchers at Duke University [1]. Financial toxicity refers to the detrimental effects of the excess financial strain caused by the diagnosis of cancer on the well-being of patients, their families, and, on a larger scale, society. We should foster an environment in which we proactively enquire about patients' financial concerns. Newer advances in cancer care become meaningless if the patients' prognoses continue to be determined by where they live or how good their financial support is.

The financial burden is not just the cost of the drugs, though it takes a significant share of the pie. The other sources include hospital and physician fees, laboratory tests, imaging studies, and travel to the hospital for treatment [2]. Employment issues, caregiver expenses, and the inability to save money also play a role in this complex situation.

This era of molecular and immune therapies has revolutionized cancer treatment, improving patient outcomes and survival. No doubt these new agents are beneficial for patients, but their value depends on the price. The price is the dominant factor and has an inverse relationship with the value. The value of the drug will be low if its cost is high, regardless of its benefits.

The role of immunotherapy in early triple negative breast cancer (TNBC) is now well established in the phase 3 KEYNOTE-522 trial in early-stage TNBC, with an estimated overall survival at 60 months was 86.6% in the pembrolizumab–chemotherapy group, as compared with 81.7% in the placebo–chemotherapy group ($P=0.002$) [3]. In the CREATE-X trial, patients with residual invasive

breast cancer after neoadjuvant therapy were randomized to receive capecitabine or a placebo. In the subset of TNBC patients, the 5-year overall survival rate was 78.8% *versus* 70.3% [4]. The total cost of capecitabine is 100 times lower than that of pembrolizumab, and being an oral agent, it has the advantage of ease of administration.

In this context, pharmaco-economics is a relatively new field that aims to develop clinical trials to test the efficacy of lower-dose medications, diet-based dose adjustments, and other strategies to achieve similar disease outcomes at lower cost. The National Comprehensive Cancer Network (NCCN) has recently included low-dose abiraterone (250 mg/day) with food as an alternative to full-dose abiraterone (1,000 mg/day) fasting, reducing the cost of the drug by 75% [5].

In conclusion, financial toxicity is not inherent in a drug or intervention. It is a real consequence of care and treatment decisions, and it has real consequences. Both direct and indirect costs of care can have devastating effects on patients' quality of life and long-term financial health. In low- and middle-income countries (LMIC), key areas for further research include cost conversations, financial navigation, and policy initiatives to promote access to high-value care.

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