



SPEAKER PRESENTATIONS

Sp01

PREDICTORS OF OUTCOME AND SURVIVAL IN PROSTATE CANCER – DATA FROM TERTIARY CARE UROLOGY INSTITUTE IN PAKISTAN

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Worldwide prostate cancer is the second most common cancer and fifth in causing cancer mortality in men. It accounts for about 14.1% (more than 1.4 million) of all cancers in men and responsible for 6.8% (about 0.4 million) cancer deaths in the year 2020¹. In Pakistan, as per Globocan 2020, prostate cancer ranked 13th in new cases (around 4500 cases) and 16th in causing cancer mortality (about 2000 deaths)². This discrepancy might be due to genetic heterogeneity of 220 million population or because of lack of central cancer registry. Over the past decade or so, there is a rapid change in the landscape of treatment of both localized and metastatic prostate cancer. Sophisticated surgical and radiation therapy techniques have reduced the rate of complications with improved quality of life³. Use of neoadjuvant, concurrent and adjuvant androgen deprivation therapy with radiation therapy in non-metastatic prostate cancer have shown to improve survival⁴. Novel anti-androgen agents (Abiraterone acetate^{5,6} Apalutamide⁷ and Enzalutamide⁸) and chemotherapy⁹ have also proved clear benefit in castrate sensitive prostate cancer. The arena of radiotheranostics¹⁰ has opened a new frontier in the treatment of prostate cancer. Clinical features like serum age, ethnicity, PSA levels, Gleason's score¹¹ and stage at presentation have been shown to effect the prognosis in prostate cancer. Molecular, and genetic factors have been investigated in predicting the outcome in prostate cancer though relatively few are routinely used.

This study will give insight into prostate cancer in our population and help us in making guidelines for better treatment with aim to design the Decision Support Platform (DSP) for artificial intelligence (AI)¹².

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Sp02

GENERIC IMATINIB VS GLEEVEC

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The tyrosine kinase inhibitors (TKI) used in chronic myeloid leukemia (CML) treatment have dramatically changed the disease outcome. Glivec/Gleevec (branded imatinib) was the first TKI developed and has proven to be effective and safe in the long term (Hochhaus et al., 2017).

After the Glivec patent expired, many countries approved generic imatinib for CML treatment. Generic formulations are less expensive and, therefore, more affordable and available for limited resources countries.

Generic formulations of imatinib are used in India since the early 2000s (Parikh et al. 2002) and in most countries since 2016. In Brazil, generics replaced Glivec in 2013 in the first-line treatment patients with CML treated at the Public Health System.

There are still conflicting results about safety and efficacy in the published studies. Regarding pharmacological properties and bioequivalence, several studies compared branded with generic imatinib showing similarity (Malhotra et al., 2014; Arora et al., 2016, Natarajan et al., 2019).

Switching from branded to generic imatinib appears to maintain efficacy and safety (Skazan et al., 2019; Scalzulli

et al., 2019; Dalle et al., 2019; Gemelli et al., 2020). However, some studies showed that patients reported new or worsening side effects after switching, primarily mild and moderate, such as nausea, edema, diarrhea, and fatigue (Abudalli et al., 2019, Scalzulli et al., 2020).

In the first-line setting, retrospective and prospective studies compared branded with generic imatinib. A recent study from China compared 236 pts treated with generic with 206 pts treated in first line with branded imatinib and did not find differences in toxicity, responses and overall survival (OS) and progression-free survival in 4 years (Dou, 2020). An updated analysis of a Brazilian study compared the outcomes of a retrospective cohort treated with Glivec with a prospective cohort treated with generics. There was a similar rate of major molecular responses and toxicity at 12 months, OS and PFS survival. (personal communication).

In terms of health care costs, real-life studies demonstrated that generics use reduced the cost of CML treatment and are more cost-effective than branded imatinib. In the last ELN 2020 recommendations, generic imatinib is indicated as one of the options for first-line treatment in CML, if the drug has quality control of production, similar bioavailability, and efficacy (Hochhaus 2020). Monitoring of the short and long-term efficacy and safety is essential.

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