

Enhancing Sex Based Reactions to Bladder Cancer Treatment

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Introduction

In the USA, there will likely be 81,000 new cases of Bladder Cancer (BCa) in 2022, with men having nearly three times as many cases as women. Despite having a lower incidence, women usually have had more severe cancers and worse oncological outcomes, including higher rates of cancer specific mortality, disease progression and recurrence. As demonstrated by the standard of care condition of Bacillus Calmette-Guerin (BCG) immunotherapy in Non-Muscle Invasive BCa (NMIBC) and the recent approval of Immune Checkpoint Inhibitor (ICI) therapies targeting the PD-1/PD-L1 axis in

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References

1. Marks P, Soave A, Shariat SF, Fajkovic H, Fisch M, et al. (2016) Female with bladder cancer: What and why is there a difference?. *Transl Androl Urol* 5: 668.
2. Dobruch J, Daneshmand S, Fisch M, Lotan Y, Noon AP, et al. (2016) Gender and bladder cancer: A collaborative review of etiology, biology and outcomes. *Eur Urol* 69: 300-310.
3. Shariat SF, Sfakianos JP, Droller MJ, Karakiewicz PI, Meryn S, et al. (2010) The effect of age and gender on bladder cancer: A critical review of the literature. *BJU Int* 105: 300-308.
4. Villanueva CM, Cantor KP, Cordier S, Jaakkola JJ, King WD, et al. (2004) Disinfection byproducts and bladder cancer: A pooled analysis. *Epidemiology*. 15: 357-367.
5. Burger M, Catto JW, Dalbagni G, Grossman HB, Herr H, et al. (2013) Epidemiology and risk factors of urothelial bladder cancer. *Eur Urol* 63: 234-241.