

genitourinary tumours, non-prostate

794P **Impact of race on survival following radical cystectomy for muscle-invasive bladder cancer (MIBC): Analysis of the US National Cancer Database (NCDB)**

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Background: The impact of race as an independent factor on overall survival (OS) following radical cystectomy (RC) for muscle invasive bladder cancer (MIBC) is unclear. Small retrospective studies suggest an unfavorable impact of black race on outcomes. We conducted a retrospective analysis of the large NCDB database to evaluate the impact of race, specifically African American race, in patients undergoing RC for MIBC.

Methods: The NCDB was employed including patients (pts) with new diagnoses of urothelial carcinoma of bladder who underwent RC in the US from 2004-2013. Those

with prior malignancy and prior radiotherapy were excluded. Race status was collected as white (W), black (B), white Hispanic (H) and Asian or Pacific islander (API). Multivariate analyses were conducted to determine whether race conferred an independent impact on OS in 3 separate cohorts: those who underwent RC alone, those who underwent neoadjuvant chemotherapy (NC) and those who underwent adjuvant chemotherapy (AC) after controlling for baseline stage (clinical stage for NC group, and pathologic stage for RC and AC groups), age, year of diagnosis, Charlson Comorbidity Index (CCI), number of lymph nodes examined at RC and gender.

Results: A total of 31,619 pts were available for analysis: 18,939 in the RC group (W = 17,117, B = 1075, H = 481, API = 266), 4059 in the AC group (W = 3672, B = 236, H = 107, API = 44) and 8621 in the NC group (W = 7848, B = 445, H = 204, API = 124). On multivariate analysis, black race was statistically significantly and independently associated with poor OS compared to white race in the RC alone (HR = 1.17, p = 0.0004), AC (HR = 1.32, p = 0.0007) and NC (HR = 1.21, p = 0.0034) groups. Limitations of a retrospective analysis apply.

Conclusions: Black race was validated to be an independently significant poor prognostic factor for OS in this large cohort of pts with bladder cancer undergoing RC with or without perioperative chemotherapy. The incorporation of race in post-operative nomograms and prognostic models is warranted to improve risk stratification.

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