



# National Variation in Lymph Node Dissection and Pathological Yield at the Time of Radical Cystectomy

Alejandro Abello, MD. MPH., Cayce Nawaf, MD., Joseph Brito, MD., Preston Sprenkle, MD., Patrick A. Kenney, MD., Joseph Renzulli, MD., Michael Leapman, MD.  
Yale School of Medicine, Department of Urology.

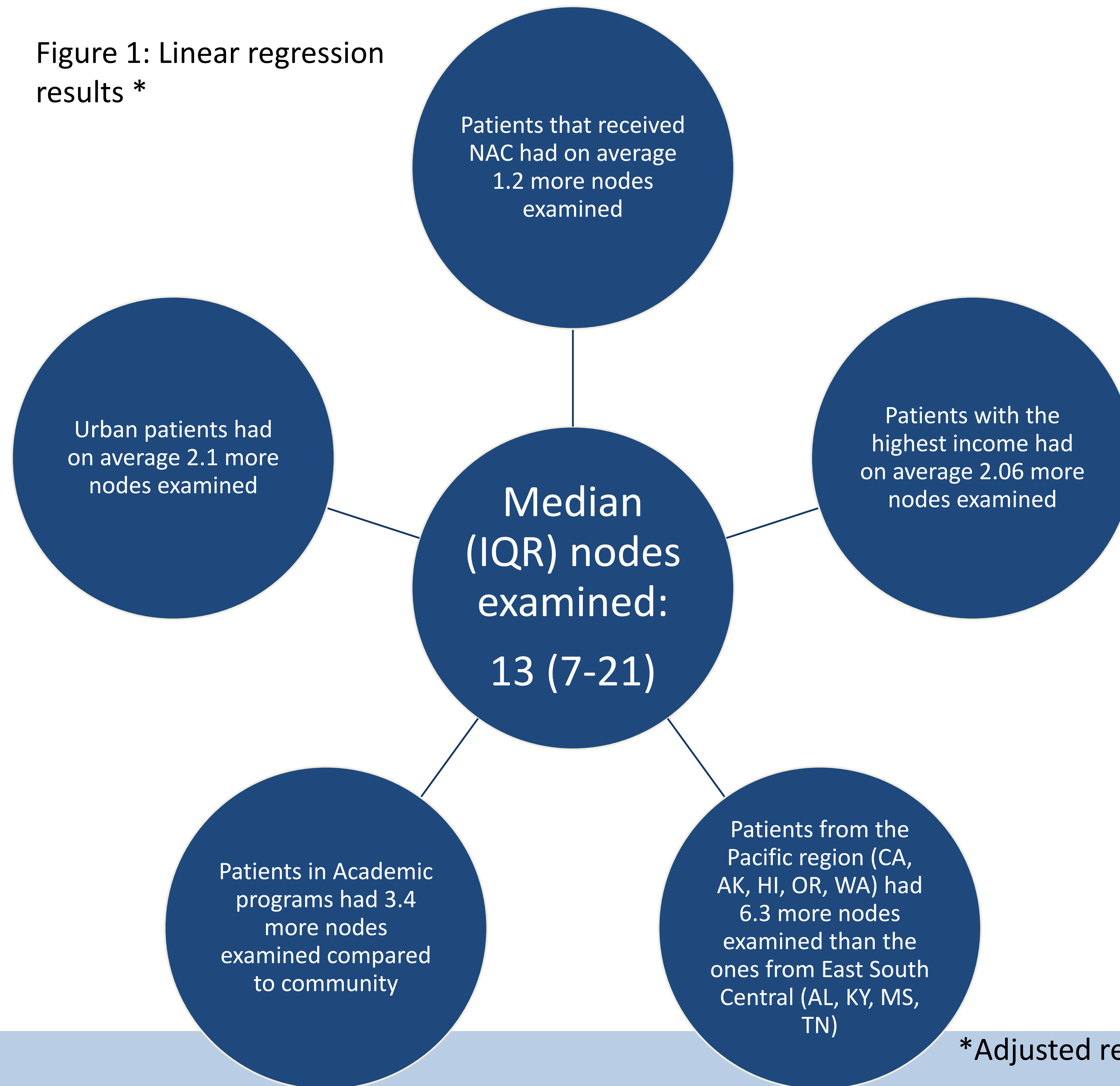
## Introduction

- Pelvic lymph node dissection (LND) is an integral component of the surgical treatment of invasive urothelial carcinoma of the bladder.
- Substantial variation in the performance of LND.
- **AIM:** We aimed to evaluate the factors associated with the performance and yield of LND during radical cystectomy and pelvic lymph node dissection in non-metastatic bladder cancer.

## Methods and Materials

- National Cancer Database.
- Clinical stage II-III, non-metastatic urothelial carcinoma of the bladder
- Radical cystectomy + LND ± Neoadjuvant chemotherapy (NAC)
- Primary study outcome: Lymph node yield.
- Analysis: Unadjusted and adjusted linear regression models predicting lymph node yield and multiple clinical and sociodemographic independent variables.

Figure 1: Linear regression results \*



## Results

- 17,169 patients with urothelial carcinoma who underwent cystectomy for clinical stage II and III disease; 2,009 (11.7%) did not receive LND.
- In patients with cystectomy and LND, 75% of patients were male, 87.3% had stage II disease, and 42.3% received NAC.
- Adjusted linear regression results predicting lymph node yield is shown in **Figure 1**,
- This study is limited by absent information relating to surgical template or pathological analysis.

## Conclusions

- ✓ Pelvic lymph node dissection is not universal at the time of RC for urothelial carcinoma of the bladder.
- ✓ Several factors were associated with greater lymph node yield including receipt of neoadjuvant chemotherapy, specific regions of the country, as well as sociodemographic factors.

\*Adjusted results. All P-values < 0.001

## Contact

Alejandro Abello  
Yale School of Medicine, Department of Urology.  
Alejandro.Abello@yale.edu  
@Yale\_Urology