

### Oral 35 Sociodemographic Disparities in Prostate Cancer Presentation based on results from the Irish Prostate Cancer Outcomes Research (IPCOR) Study

Noa Gordon<sup>1</sup>, Cara Dooley<sup>1</sup>, Áine Murphy<sup>1</sup>, Frank Sullivan<sup>2</sup>, Ray McDermott<sup>3</sup>, Linda Sharp<sup>4</sup>, Bill Watson<sup>1</sup>, David Galvin<sup>1,3,5</sup>  
<sup>1</sup>University College Dublin, Dublin, Ireland; <sup>2</sup>National University of Ireland, Galway, Ireland; <sup>3</sup>St Vincent's University Hospital, Dublin, Ireland; <sup>4</sup>Newcastle University, Newcastle, UK; <sup>5</sup>Mater Misericordiae University Hospital, Dublin, Ireland

**Introduction:** The Irish Prostate Cancer Outcomes Research (IPCOR) Study collected comprehensive longitudinal data on men diagnosed with prostate cancer in Ireland. The analysis presented aimed to characterize disease presentation features and identify factors associated with sociodemographic disparities.

**Methods:** IPCOR collected demographic, diagnosis, and treatment data from 6816 men in 16 hospitals across Ireland between February 2016 and January 2020. A subset of 873 men participated in a study of Patient Reported Outcomes (PROMs) providing also information about healthcare financing. Comparisons between groups were conducted using chi-squared analysis.

**Results:** The median age at diagnosis was 67. The majority of men (75.7%) were diagnosed following opportunistic PSA screening, while a small proportion (8.4%) presented with symptoms. County, rural or urban settings, and distance to hospital were not related to the circumstances of disease presentation. However, we found an association between the socioeconomic status (SES) quintile and diagnosis post-screening. Men in the second and third SES quintiles were less often diagnosed post-screening (73.6% and 74.5%, respectively) than men in the first, fourth and fifth quintiles (77.1%, 76.6% and 76.8%, respectively  $p = .027$ ), indicating a U-shaped relationship.

**Conclusion:** There was a difference in how disease was presented based on socioeconomic status. Ireland's public-private healthcare mix may explain it. Those in the middle SES quintiles may not afford private insurance and may not be eligible for social healthcare. Men may avoid opportunistic screening due to cost. In order to improve outcomes, universal prostate cancer screening should be made available.

### Oral 36 Variations in the Reporting of Low Grade Prostate Cancer in Irish hospitals

Noa Gordon<sup>1</sup>, Cara Dooley<sup>1</sup>, Aine Murphy<sup>1</sup>, William Watson<sup>1</sup>, Linda Sharp<sup>2</sup>, Frank Sullivan<sup>3</sup>, Ray McDermott<sup>4</sup>, David Galvin<sup>1,4,5</sup>  
<sup>1</sup>University College Dublin, Dublin, Ireland; <sup>2</sup>Newcastle University, Newcastle, UK; <sup>3</sup>National University of Ireland, Galway, Ireland; <sup>4</sup>St Vincent's University Hospital, Dublin, Ireland; <sup>5</sup>Mater Misericordiae University Hospital, Dublin, Ireland

**Introduction:** Prostate Cancer (PC) remains the most common cancer in Irish men and the third-leading cause of cancer death. Detecting early prostate cancer may require radical therapy; however, in the absence of clinically significant cancer, men can often avail themselves of active surveillance or deferred therapy. Therefore, accurate detection of low-grade (Gleason 3+3) PC through biopsy and pathological analysis is essential.

**Methods:** Using data on all 6816 men from the Irish Prostate Cancer Outcomes Research (IPCOR) study, we examined the proportion of low-grade PC as a percentage of all cases detected throughout the study (2016–2020). The data were examined for each hospital and per year. We also examined the effect of PSA levels and MRI availability on Gleason 3+3 detection. Analysis included comparisons between groups using ANOVA and chi-squared analyses.

**Results:** About one-third (33.7%) of patients were diagnosed with Gleason 3 + 3. This proportion did not vary significantly by year of diagnosis. However, there was a significant variation in Gleason 3 + 3 diagnosis proportion between hospitals ranging from 13.7% to 49.3% ( $p < 0.001$ ). A variation was noticed between Dublin hospitals (ranging from 13.7% to 37.9%) and Galway and Cork hospitals (ranging from 35.8% to 39.5% and 42.5% to 49.3%, respectively,  $p < 0.001$ ). Pre-biopsy MRI availability was not found to be related to this variation but PSA levels vary significantly with Gleason score.

**Conclusion:** Significant differences in Gleason 3+3 PC reporting were identified across cancer centres in Ireland. Local biopsy and pathology practices may affect these variations.

### Oral 37 Local anaesthetic transperineal prostate biopsy: A systematic review and meta-analysis

Donnacha Hogan<sup>1,2</sup>, Abbie Kanagarajah<sup>1</sup>, Henry H. Yao<sup>1</sup>, Philip Dundee<sup>1</sup>, Helen E. O'Connell<sup>1</sup>

<sup>1</sup>Department of Urology, Western Health, Melbourne, Australia;

<sup>2</sup>College of Medicine, University College Cork, Cork, Ireland

**Introduction:** To conduct a systematic review of the literature to assess the diagnostic ability, complication rate, patient tolerability, and cost of local anaesthetic (LA) transperineal prostate biopsy.

**Methods:** Two reviewers searched Medline, the Cochrane Library, and Embase for publications on LA transperineal prostate biopsy up to March 2021. Outcomes of interest included cancer detection rates, complication rates, pain assessments and cost.

**Results:** A total of 35 publications with 113 944 men were included in this review. The cancer detection rate for LA transperineal prostate biopsy in patients undergoing primary biopsy was 52% (95% confidence interval [CI] 0.45–0.60; I<sup>2</sup> = 97) and the clinically significant cancer detection rate (Gleason  $\geq 3 + 4$ ) was 37% (95% CI 0.24–0.52; I<sup>2</sup> = 99%). The rate of infection-related complications in the included studies was 0.15% (95% CI 0.0000–0.0043; I<sup>2</sup> = 86). The LA transperineal procedures had a low rate of procedural abandonment (26/6954, 0.37%), with the greatest pain scores measured during LA administration. No formal cost analyses on LA transperineal prostate biopsies were identified in the literature. The overall risk of bias in the included studies was high, with considerable study heterogeneity and publication bias.

**Conclusion:** Transperineal prostate biopsy performed under LA is a viable option for centres interested in avoiding the risk of infection associated with transrectal biopsy, and the logistical burden of general anaesthesia. Further investigation into LA transperineal prostate biopsy with comparative studies is warranted for its consideration as the standard in prostate biopsy technique.

### Oral 38 Evaluating the diagnostic utility of bone scan in newly diagnosed prostate cancer

O'Beirn Ellen<sup>1</sup>, Kaur Ishapreet<sup>1</sup>, De Sousa Emma<sup>1</sup>, Gavin Enda<sup>1</sup>, MacCraith Eoin<sup>1</sup>, D'Arcy Frank<sup>1</sup>, Durkan Garrett<sup>1</sup>, O'Malley Paddy<sup>1</sup>, Dowling Catherine<sup>1</sup>

<sup>1</sup>Department of Urology, Galway University Hospital, Galway, Ireland

**Introduction:** Bone scan (BS) is recommended as part of staging imaging in newly diagnosed prostate cancer in intermediate risk ISUP grade group (GG) 3 disease(1). However, several guidelines recommend BS only for high-risk disease. The aim of this study is to investigate the diagnostic yield of BS in newly diagnosed prostate cancer.

**Method:** A retrospective review was carried out on all new prostate cancer diagnoses who underwent staging bone scan over a one-year