

3.04 Retrospective data analysis on levels of Radon exposure in Lung cancer patients in Level 2,3 and 4 Hospitals in the Republic of Ireland.

Jehangir Khan^{1,2}, Waheed Shah^{1,2}, Marissa O'Callaghan^{1,2}, David Healy¹, Marcus Butler^{1,2}, Aurelie Fabre, Cormac McCarthy^{1, 2}, Michael P Keane^{1, 2}.

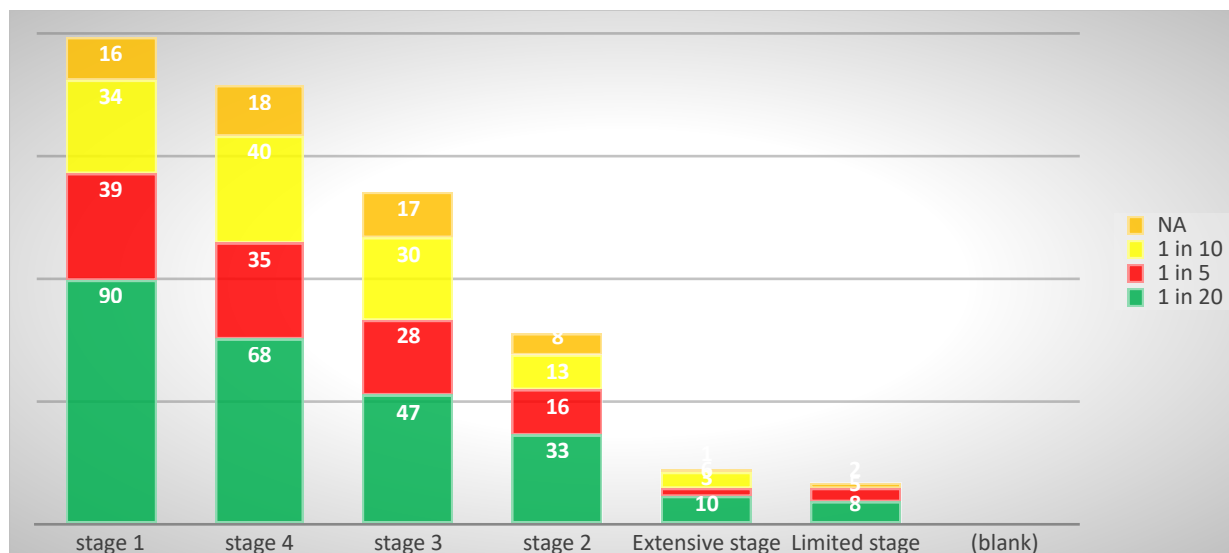
¹ Saint Vincent's University Hospital, Dublin, ² University College Dublin

Lung cancer is the leading cause of cancer worldwide. Radon is associated with increased risk of lung cancer after tobacco exposure. EPA has published updated data on Radon exposure in Ireland in 2022. Anecdotally we notice different stage of lung cancer presentation depending on geographical location. We hypothesise that certain radon exposure may be associated with increased staging of lung cancer at presentation.

Methods: Retrospective analysis of lung cancer patients was performed. We tracked Eircodes and evaluated exposure to Radon based on their geographical location.

Results: Analysis of total of 567 patients were performed, n:256 fell in the green zone category of radon exposure, n:126 in the red zone of radon exposure and n:123 in yellow zone of radon exposure. Sub analysis based on staging of lung cancer showed that n:35 was in the red of radon exposure in stage 4 lung cancer, while n:90 was in the green zone of radon exposure within stage 1 lung cancer cohort.

Conclusion: Our data suggests that that Radon may be linked to increase stage of lung cancer. It needs further exploration. Fig 1(3.14): Comparative analysis of Patients with Radon exposure in Level 2,3 and 4 Hospitals.



Conflict of Interest: None to declare