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Bladder cancer: Detection and characterization of host-genetic markers associated with bladder cancer among individuals in Schistosoma endemic communities of Northern Tanzania

I am aiming to detect and characterize host-genetic markers associated with bladder cancer among individuals in schistosoma endemic communities of Northern Tanzania.

We will study the aetiology of bladder cancer in Tanzania by looking at the incidence and risk factors. In a case-control study design, we will recruit bladder cancer patients as cases and healthy individuals as controls. For all these participants, we will assess schistosomiasis in urine and via self-reported history, as well as occupation and environmental risk factors. Among cases, we will examine bladder cancer germline genetic mutations associations and their interaction with the immune system and evaluate their potential as urine biomarkers for early detection of bladder cancer. The outcomes of this study will enhance our understanding of the risk factors of bladder cancer within schistosomiasis endemic communities in Tanzania, where such information is currently lacking. Additionally, the identification of potential biomarkers for diagnosing bladder cancer can contribute to early detection.

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