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Quitting smoking after being diagnosed with kidney cancer lowers the risks of cancer progression and mortality

Lyon, France, 29 March 2023 – A new prospective study of more than 200 adults who were current smokers when they were diagnosed with kidney cancer, published in the *Journal of Clinical Oncology*,¹ provides robust evidence that quitting smoking after being diagnosed with kidney cancer significantly improves survival and lowers the risk of disease progression.

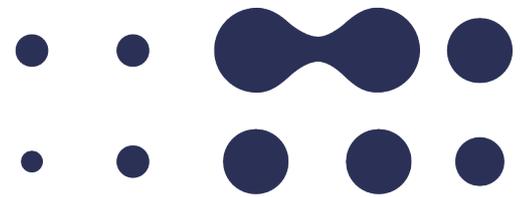
This report is based on a 15-year collaborative study between the International Agency for Research on Cancer (IARC) and the Ministry of Health of the Russian Federation. This study recruited 212 patients with newly diagnosed renal cell carcinoma who were current smokers, from the Department of Urology of the N.N. Blokhin National Medical Research Center of Oncology in Moscow (Russian Federation), and followed them up annually for an average of 8 years to record any changes in their smoking behaviour and disease status.

“About 40% of the patients (84 participants) in this study quit smoking, mostly within the first 3 months after diagnosis, and remained non-smokers until the end of the follow-up time. We observed that patients lived significantly longer and had lower risks of progression of the disease when they quit smoking than when they continued smoking,” says Dr Mahdi Sheikh, a scientist in the Genomic Epidemiology Branch at IARC and the lead author of the study. Dr Sheikh adds, “After accounting for differences in the patient characteristics, the timing of when patients quit smoking, tumour features, and the treatments received, we found that patients had a 50% lower risk of death and a 56% lower risk of disease progression during the time when they no longer smoked compared with the time when they smoked.”

The researchers assessed whether the beneficial effects of smoking cessation could vary on the basis of lifetime smoking intensity and tumour stage at diagnosis. They found that the beneficial effect of smoking cessation on cancer survival was evident across all subgroups of patients, including those with earlier- and later-stage tumours, and among mild smokers and moderate to heavy smokers.

“This study adds to the evidence that it is never too late to quit smoking, even if you have already been diagnosed with cancer,” says Professor David Zaridze, the head of the Department of Clinical Epidemiology at

¹ Sheikh M, Mukeriyah A, Zahed H, Feng X, Robbins HA, Shangina O, et al. Smoking cessation after diagnosis of kidney cancer is associated with reduced risk of mortality and cancer progression: a prospective cohort study. *J Clin Oncol*. Published online 29 March 2023. <https://doi.org/10.1200/JCO.22.02472>



the N.N. Blokhin National Medical Research Center of Oncology, the president of the Russian Cancer Society, and the senior author of the study. He adds, “These findings reinforce the importance of smoking cessation as a crucial component of care for patients with cancer that could improve their outcomes and overall health.”

An estimated 15–20% of patients with kidney cancer are active smokers at diagnosis. The results of this study emphasize the need for collaborative efforts at various policy-making and health-care levels to promote and implement smoking cessation programmes in cancer care settings. The researchers hope that their findings will prompt clinicians to discuss the advantages of smoking cessation with their patients, support patients in their efforts to quit smoking, and motivate patients to quit smoking after a cancer diagnosis.

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The International Agency for Research on Cancer (IARC) is part of the World Health Organization. Its mission is to coordinate and conduct research on the causes of human cancer, the mechanisms of carcinogenesis, and to develop scientific strategies for cancer control. The Agency is involved in both epidemiological and laboratory research and disseminates scientific information through publications, meetings, courses, and fellowships. If you wish your name to be removed from our press release emailing list, please write to com@iarc.who.int.