

# Simple changes in care reduced heart exposure during lung cancer radiation treatment

April 8 2022

---



Credit: Unsplash/CC0 Public Domain

Radiation to the heart during treatment for locally advanced lung cancer is associated with an increased risk of major adverse cardiac events

within the first two years following treatment. The higher the cardiac dose exposure, the higher the risk of a cardiac event.

A team at the University of Michigan Health Rogel Cancer Center, in partnership with the statewide Michigan Radiation Oncology Quality Consortium (MROQC) [lung cancer](#) collaborative, co-led by Shruti Jolly, M.D., and Peter Paximadis, M.D., of Spectrum Health Lakeland in St. Joseph, Michigan, found that raising awareness about the risk of [radiation](#) exposure to the heart and standardizing cardiac exposure limits reduced the average dose to the heart by 15% and reduced the number of patients receiving the highest heart doses by half without minimizing tumor treatment or increasing dosage to other at-risk organs in the chest.

The study, featured in *Practical Radiation Oncology*, assessed the effectiveness of this education across MROQC. The statewide consortium is a comprehensive clinical and physics database to support quality improvement throughout Michigan, funded through support from Blue Cross Blue Shield of Michigan and Blue Care Network as part of the BCBSM Value Partnerships Program.

The educational program involved spreading awareness of new data coming out about cardiac radiation exposure in NSCLC patients and adjusting cardiac goals within MROQC accordingly. Daniel Herr, M.D., Ph.D., radiation oncology resident and first author of this study, says that increased education and awareness regarding the implication of radiation to the [heart](#) had a meaningful impact on [clinical practice](#).

"This study is evidence that relatively simple interventions, when properly targeted, can be effective at improving [patient care](#)," Herr said. "It's more evidence that having a large quality consortium like MROQC is a real advantage in terms of improving the quality of care that patients throughout the state of Michigan receive."

**More information:** Daniel J. Herr et al, Effect of Education and Standardization of Cardiac Dose Constraints on Heart Dose in Patients With Lung Cancer Receiving Definitive Radiation Therapy Across a Statewide Consortium, *Practical Radiation Oncology* (2022). [DOI: 10.1016/j.prro.2022.01.002](https://doi.org/10.1016/j.prro.2022.01.002)

Provided by University of Michigan

Citation: Simple changes in care reduced heart exposure during lung cancer radiation treatment (2022, April 8) retrieved 14 May 2024 from <https://medicalxpress.com/news/2022-04-simple-heart-exposure-lung-cancer.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.