

News release

FOR IMMEDIATE RELEASE

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Mayo Clinic Health System in Eau Claire using robotic-assisted bronchoscopy to detect lung cancer earlier

EAU CLAIRE, Wis. — Mayo Clinic Health System in Eau Claire now offers robotic-assisted bronchoscopy, the first of its kind in Northwest Wisconsin. This advanced technology allows pulmonologists to examine tiny airways in the lungs, which means they can detect lung cancer in its earliest stages when it's easier to treat and potentially cure.

Lung cancer is the second most common cancer and the No. 1 cause of cancer deaths worldwide. In 2022, about 236,000 people were diagnosed with lung cancer, and about 130,000 people died from the disease in the U.S.

"Lung cancer doesn't always cause symptoms in its earliest stages," says Adel Zurob, M.D., a pulmonologist and intensivist at Mayo Clinic Health System in Eau Claire. "More than half of people with the disease die within a year of being diagnosed. That's why early screening and treatment of lung cancer are critical."

The lungs have a complex, interwoven network of airway passages. This includes bronchial tubes, bronchi, bronchioles and alveoli. Sometimes abnormal growths, or nodules, form in the lungs which can potentially be cancerous. Lung nodules are found during lung cancer screening or by chance when undergoing testing for another concern.

To know if you have lung cancer and to stage the disease, lung nodules require a biopsy. Some can be reached by bronchoscopy, where a thin tube is passed through the nose or mouth into the lungs. However, the scope used during a standard bronchoscopy is too big or inflexible to reach all the areas of the lung.

That's where robotic-assisted bronchoscopy comes in — accessing lung nodules that previously required more invasive biopsy techniques or even surgery. As part of a multicenter trial, Mayo Clinic found that 98% of lung nodules can be reached, even when touching critical organs like the heart.

The robot offers greater flexibility and range of motion compared to human hands and can reach nearly all areas of the lungs with the use of a much smaller and more flexible scope. Using a CT scan as GPS, the physician can easily navigate the lungs with added precision to examine the lungs, biopsy tissues and stage the disease all in one procedure. This decreases the time from diagnosis to treatment so patients can receive the care they need faster.

"Robotic-assisted bronchoscopy has many benefits for the patient," says Dr. Ali Zaied, M.D., a pulmonologist and intensivist at Mayo Clinic Health System in Eau Claire. "It is minimally invasive with no incisions and a lower risk of complications. In most cases, this is an outpatient procedure, and patients can return to daily activities quickly with little or no restrictions."

If you have any [symptoms of lung cancer](#), like a new cough that doesn't subside, changes in chronic cough, shortness of breath or coughing up blood, talk to your primary care clinician. If you've already been diagnosed with a lung nodule or lung cancer, ask a pulmonologist or oncologist if robotic-assisted bronchoscopy is right for you.



Cutline: The Mayo Clinic Health System robotic-assisted bronchoscopy team in the Department of Pulmonology poses with the new technology in Eau Claire, the first of its kind in Northwest Wisconsin. The technology can detect lung cancer in its earliest stages when it's easier to treat and cure. Pictured left to right: Adel Zurob, M.D., pulmonologist; Ali Zaied, M.D., pulmonologist; Erika Maas and Lukas Arnold, registered respiratory therapists.

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About Mayo Clinic Health System

[Mayo Clinic Health System](#) has a physical presence in 44 communities and consists of 53 clinics, 16 hospitals and other facilities that serve the health care needs of people in Iowa, Minnesota and Wisconsin. The community-based providers, paired with the resources and expertise of Mayo Clinic, enable patients in the region to receive the highest-quality physical and virtual health care close to home.

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