Minimally invasive surgery for lung or other chest procedures typically requires three to four incisions that can be as large as two inches each. However, a new approach employed by Virginia Mason requires only a single, one-inch incision, meaning a smaller scar, less acute and chronic pain, and a quicker recovery.

“Our single-incision approach allows us to accomplish the same goals as traditional lung and chest surgeries without compromising the quality of expected clinical or oncological outcomes,” says Madhan Kuppusamy, MD, thoracic surgeon at Virginia Mason. The single-port technique has been applied for almost all traditional video-assisted lung or mediastinal surgeries, including simple diagnostic/therapeutic lung or mediastinal lesion resections, routine anatomical lobectomy, bronchoplasty procedures, lung-preserving segmentectomy, sleeve lobectomy, and extended/complex mediastinal or lung resections.

“By using a smaller single-incision approach, we open only one intercostal space at one location,” says Dr. Kuppusamy. “Compared to other minimally invasive chest surgery approaches that require multiple incisions, this minimizes side effects and postoperative pain, and produces better cosmetic results.”

Dr. Kuppusamy performs more than 85 percent of lung/mediastinal surgeries with a single incision and does not require additional incisions for chest tube placements. The approach experiences limitations only when tumors are very large, requiring an incision that’s big enough to allow removal of the tumor/lesion en bloc.

The single-port approach for lung surgery is commonly used at specialist centers in China and parts of Europe. However, the U.S. has been slow to adopt the technique.

For more information, contact: 206-341-1905 • VirginiaMason.org/Lung-Cancer

Virginia Mason Leads the Way in Precision Medicine for IBD Treatment

To date, treatments for inflammatory bowel disease (IBD) have produced mixed results, with about half of patients responding to today’s drugs and perhaps 20 percent achieving remission. However, Virginia Mason’s IBD Center of Excellence is leading efforts to identify biomarkers and bring small molecule therapies to patients as part of a new era of precision medicine for IBD.

“We are quickly moving toward a day when we will be able to use a patient’s clinical, genetic and biochemical information to identify their particular form of IBD and match them with therapies that give them a much better chance of overcoming it,” says Michael Chiorean, MD, director of the Center.

Patients appreciate new small molecule therapies because they can be taken orally, and often work faster and more effectively than today’s biologic therapies — without added toxicity.

The IBD Center of Excellence team is especially intrigued by Janus kinase (JAK) inhibitors, which can potentially reduce gastrointestinal inflammation by preventing a signaling cascade that causes overactive immune cells to mature and proliferate. In addition to offering recently FDA-approved therapies such as tofacitinib to patients, Virginia Mason is participating in Phase III clinical trials of JAK inhibitor upadacitinib for Crohn’s disease and ulcerative colitis.

“Tofacitinib illustrates why this class of drugs has such huge potential,” says James Lord, MD, PhD, gastroenterologist at Virginia Mason. “It’s oral, it’s fast, it’s relatively affordable to produce, and it’s forgiving — patients can go back on it if they temporarily stop taking it, and the interruption is not likely to make them lose response.”

The team is also involved in clinical trials of drugs that target the S1P-1 and S1P-5 receptors, which can reduce gastrointestinal inflammation by modulating the number of activated lymphocytes that enter the blood stream from lymph nodes.

For more information, contact: 206-223-2319 • VirginiaMason.org/IBD-Center
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