

Thoracic Surgery

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Other Faculty Members

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Major Scientific Interests of the Group

Lung cancer has become a major cause of death in most of countries. Surgical resection is the most effective for the treatment of lung cancer. Minimal invasive video assisted thoracic surgery (VATS) lobectomy appears to be a safe and effective procedure for treatment of lung cancer. We are making progress not only in reducing surgical stress but also in improving the quality of surgery by developing original devises and techniques. We are focusing also on the multimodal treatment of lung cancer, surgical simulation and estimation of postoperative lung regeneration and function using 3D-CT, development of novel sealant material for surgery, mechanism of invasion of lung cancer, and the mechanism of acute lung injury.

Projects for Regular Students in Doctoral or Master's Programs

- 1) Surgical simulation and estimation of postoperative lung regeneration and function using 3D-CT
- 2) Development of novel sealant material for surgery
- 3) Mechanism of invasion of lung cancer
- 4) Mechanism of acute lung injury

Study Programs for Short Stay Students (one week – one trimester)

- 1) Surgical simulation and estimation of postoperative lung regeneration and function using 3D-CT
- 2) Mechanism of acute lung injury

Selected Publications

- 1) Ashoka Indranatha Wijesinghe, Naohiro Kobayashi, Shinsuke Kitazawa, Naoki Maki, Takahiro Yanagihara, Yusuke Saeki, Shinji Kikuchi, Yukinobu Goto, Hideo Ichimura, Yukio Sato. Sex-specific emphysematous changes evaluated by a three-dimensional computed tomography volumetric analysis among patients with smoking histories who underwent resection for lung cancer. *Surgery Today*. 54(2), 113-121, 2024.2
- 2) Naoki Yoshimura, Yukio Sato, Hiroya Takeuchi, Tomonobu Abe , Shunsuke Endo, Yasutaka Hirata , Michiko Ishida , Hisashi Iwata, Takashi Kamei , Nobuyoshi Kawaharada, Shunsuke Kawamoto, Kohji Kohno, Hiraku Kumamaru, Kenji Minatoya, Noboru Motomura, Rie Nakahara, Morihito Okada, Hisashi Saji, Aya Saito, Masanori Tsuchida, Kenji Suzuki, Hirofumi Takemura, Tsuyoshi Takeda, Yasushi Toh, Wataru Tatsuishi, Hiroyuki Yamamoto, Takushi Yasuda, Masayuki Watanabe , Goro Matsumiya , Yoshiki Sawa, Hideyuki Shimizu, Masayuki Chida. Thoracic and cardiovascular surgeries in Japan during 2021 : Annual report by the Japanese Association for Thoracic Surgery. *General Thoracic & Cardiovascular Surger*. 2024.2
- 3) Sato Y, Yamamoto H, Ikeda N, Konishi H, Hibi T, Endo S, Inoue M, Okada Y, Shintani Y, Toyooka S, Nakamura H, Hoshikawa , Chen-Yoshikawa TF, Uramoto H, Tsubochi Y, Kakizoe T, Chida M, Yoshino I. The consecutive impact of COVID-19 on thoracic surgical procedures in Japan: an analysis of data from the National Clinical Database. *Surg Today*. 54(6), 627-633, 2024.1
- 4) Matsumiya, Goro; Sato, Yukio; Takeuchi, Hiroya; Abe, Tomonobu; Endo, Shunsuke; Hirata, Yasutaka; Ishida, Michiko; Iwata, Hisashi; Kamei, Takashi; Kawaharada, Nobuyoshi; Kawamoto, Shunsuke; Kohno, Kohji;

- Kumamaru, Hiraku; Minatoya, Kenji; Motomura, Noboru; Nakahara, Rie; Okada, Morihito; Saji, Hisashi; Saito, Aya; Shimizu, Hideyuki; Suzuki, Kenji; Takemura, Hirofumi; Taketani, Tsuyoshi; Toh, Yasushi; Tatsuishi, Wataru; Yamamoto, Hiroyuki; Yasuda, Takushi; Watanabe, Masayuki; Yoshimura, Naoki; Tsuchida, Masanori; Sawa, Yoshiaki. Thoracic and cardiovascular surgeries in Japan during 2020: Annual report by the Japanese Association for Thoracic Surgery. General Thoracic & Cardiovascular Surgeon. 72(1), 61-94, 2024.1
- 5) Kazuto Sugai, Naohiro Kobayashi, Yusuke Saeki, Shinji Kikuchi, Yukinobu Goto, Hideo Ichimura, Yukio Sato. Silicone stent placement using a rigid bronchoscope via a tracheostoma in a patient with postpneumonectomy syndrome. General Thoracic and Cardiovascular Surgery Cases. 2023.12
 - 6) Kazuto Sugai , Yasuharu Sekine , Tomoyuki Kawamura , Takahiro Yanagihara , Yusuke Saeki , Shinsuke Kitazawa , Naohiro Kobayashi , Shinji Kikuchi, Yukinobu Goto, Hideo Ichimura, Yukio Sato. Sphericity of lymph nodes using 3D-CT predicts metastasis in lung cancer patients. Cancer Imaging. 23(1), 124, 2023.12
 - 7) Tomoyuki Kawamura, Yasuharu Sekine, Kazuto Sugai, Takahiro Yanagihara, Yusuke Saeki, Shinsuke Kitazawa, Naohiro Kobayashi, Yukinobu Goto, Hideo Ichimura, Tomohiro Ohigashi, Kazushi Maruo & Yukio Sato. Three-dimensional analysis reveals a high incidence of lung adenocarcinoma in the upper region. Surg Today. 2023.12
 - 8) Takahiro Yanagihara, Tomoyuki Kawamura, Kenji Minagi, Yasuharu Sekine, Kazuto Sugai, Hideo Ichimura, Yukio Sato. Successful long-term management for postoperativesternal infectin with multiple disseminated lymphadenitis caused by Mycobacterium abscessus. Surgical Case Reports. 9(1), 2023.8
 - 9) Kazuto Sugai, Naohiro Kobayashi, Kawamura Tomoyuki,Yukinobu Goto, Hideo Ichimura, Yukio Sato. A novel approach to the lung apex avoiding dissection of severe pleural adhesions. General Thoracic and Cardiovascular Surgery. 71(8), 487-490, 2023.8
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 - 11) Keisuke Kobayashi, Hideo Ichimura, Shuntaro Kawabata, Hisashi Suzuki, Katsuyuki Endo, Naohiro Kobayashi, Shinji Kikuchi, Yukinobu Goto, Yukio Sato. Comparison of patient-reported outcomes and clinical outcomes between pleurectomy and pleural covering added to thoracoscopic bullectomy for primary spontaneous pneumothorax. J Thorac Dis. 15(7), 3818-3828, 2023.7
 - 12) Yusuke Saeki, Junko Okamura, Sho Ueda, Yukio Sato. Middle lobe pulmonary artery branch running ventral to the upper lobe pulmonary vein. European Journal of Cardio-Thoracic Surgery. 64(1), 2023.7
 - 13) Hideo Ichimura , Keisuke Kobayashi, Masahiko Gosho, Yasuharu Sekine, Kazuto Sugai, Tomoyuki Kawamura, Yusuke Saeki, Hisashi Suzuki, Naohiro Kobayashi ,Yukinobu Goto, Yukio Sato. Relationship between changes in pulmonary function and patient-reported outcomes of lung cancer surgery. Surgery Today. 2023.6
 - 14) Yukinobu Goto, Yuji Hiramatsu, Naohide Ageyama, Bryan J Mathis, Naoki Maki, Muneaki Matsubara, Yoshiaki Inoue, Yukio Sato. Myeloid Progenitor Inhibitory Factor-1 (CCL23) Inhibits Lung Leukocyte Recruitment in a Primate Cardiopulmonary Bypass-Induced Pulmonary Ischaemia Model. Heart Lung Circ. 32(3), 424-433, 2023.3
 - 15) Kikuchi Shinji, Sekine Yasuharu, Nakaoka Koji, Kobayashi Naohiro, Suzuki Hisashi, Goto Yukinobu, Ichimura Hideo, Kioshima Moriyuki, Sato Yukio, Surgery for small-cell lung cancer: Clinical characteristics and prognostic factors, cancer science,114(1:Sl), 627, 2023.3
 - 16) Naohiro Kobayashi,Yusuke Saeki, Shinji Kikuchi, Yukinobu Goto, Hideo Ichimura, Yukio Sato. Impacts of pleural adhesions on lobectomies for malignant lung tumors. General Thoracic and Cardiovascular Surgery Cases. 70(12),1042-1047,2022.12
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- 18) Yasushi Hoshikawa, Toyofumi Fengshi Chen-Yoshikawa, Ichiro Yoshino, Tadao Kakizoe, Masayuki Chida
- 19) Takahiro Yanagihara, Naoki Maki, Tomoyuki Kawamura, Naohiro Kobayashi, Shinji Kikuchi, Yukinobu Goto, Hideo Ichimura, Shiharu Watanabe, Tetsushi Taguchi, Yukio Sato. Alaska pollock gelatin sealant shows long-term efficacy and safety in a pulmonary air leakage rat model. *Eur J Cardiothorac Surg.* 62(5),2022.10
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- 22) Tomoyuki Kawamura, Naohiro Kobayashi, Yukinobu Goto, Yukio Sato. Increase of Micro-vessels Beneath the Pleural Surface on CT Predicts Pleural Adhesions. *Thorac Cardiovasc Surg.* 2022.6
- 23) Takahiro Yanagihara, Naohiro Kobayashi, Tomoyuki Kawamura, Shinji Kikuchi, Yukinobu Goto, Hideo Ichimura , Yukio Sato. Rapid enlargement of pulmonary benign metastasizing leiomyoma with fluid-containing cystic change. *Surg Case Rep.*8(1), 2022.5
- 24) Naoki Maki, Harumi Sakamoto, Yu Takata; Keisuke Taniguchi, Ashoka Wijesinghe,,Junko Okamura, Tomoyuki Kawamura; Yakahiro Yanagihara, Yusuke Saeki ; Shinsuke Kitazawa, Naohiro Kobayashi, Shinji Kikuchi, Yukinobu Goto, Hideo Ichimura,,Yukio Sato, Hisako Yanagi. Effect of Pulmonary Training for Community-Dwelling Frail Elderly with Chronic Stroke: A Randomized Controlled Pilot Trial.23(30),140-148,2021.11
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