

Hyun Koo Kim

•Education

- Korea University, College of Medicine, Department of Thoracic and Cardiovascular Surgery, 2004 (Ph. D.)
- Korea University, College of Medicine, Department of Thoracic and Cardiovascular Surgery, 2000 (M.S.)
- Korea University, College of Medicine, 1996 (B. S.)



•Professional Career

- Chair, Korea University, College of medicine, Department of Thoracic and Cardiovascular Surgery: 2016-Current
- Professor, Korea University, College of Medicine, Department of Thoracic and Cardiovascular Surgery: 2015- Current
- Associate Professor, Korea University, College of Medicine, Department of Thoracic and Cardiovascular Surgery: 2010-2015
- Assistant Professor, Korea University, College of Medicine, Department of Thoracic and Cardiovascular Surgery: 2007-2010
- Clinical Assistant Professor, Korea University, College of Medicine, Department of Thoracic and Cardiovascular Surgery: 2005-2007

•Honors

- The Korean Association for the Study of Lung Cancer, A best presentation Award: 2017
- The Korea University Seok Tap Research Award: 2016
- ESTS-GRILLO Award, European Society of Thoracic Surgeons:2015
- The Korean Bronchoesophagological Society, Dong A best presentation award: 2015
- The Korean Bronchoesophagological Society, Dong A best presentation award: 2014
- Best Surgical Movie Award: 2013
- The Korean Bronchoesophagological Society, Dong A best presentation award: 2012
- 10th International Conference of the Asian Clinical Oncology Society, Merit Award: 2012
- The Korean Cancer Association GSK Award: 2011
- The Korean Association for the Study of Lung Cancer, Dong A best presentation Award: 2010
- The Korean Bronchoesophagological Society, Dong A best presentation award: 2010
- The Korea University Medical College Alumni, The best article: 2005

● **National Funding**

- Korean Health Technology R&D Project, Ministry of Health & Welfare, Republic of Korea (2017)
- National Research Foundation of Korea (NRF), Ministry of Education, Science and Technology (No. 2015R1A2A2A04005760)
- Korean Health Technology R&D Project, Ministry of Health & Welfare, Republic of Korea (No. A121074)
- National Research Foundation of Korea (NRF), Ministry of Education, Science and Technology (No. 2012012166)
- Technology Innovation Program, Ministry of Trade, industry & Energy (No. 10049039)
- National Research Foundation of Korea (NRF), Ministry of Education, Science and Technology (No. 2012012166)
- Korean Health Technology R&D Project, Ministry of Health, Welfare and Family Affairs, Republic of Korea (A070001)

● **Selected Publications (First or Corresponding Author)**

Midterm outcomes of single port thoracoscopic surgery for major pulmonary resection. Han KN, Kim HK, Choi YH. PLoS One. 2017 Nov 14;12(11)

Uniportal Video-Assisted Thoracoscopic Surgery Segmentectomy. Kim HK, Han KN. Thorac Surg Clin. 2017 Nov;27(4):387-398.
Real-time computed tomography fluoroscopy-guided solitary lung tumor model in a rabbit. B.H. Choi, Y.H. Quan, H.K. Kim, J.S. Eo, H.S. Young, J.Y. Rho, K.N. Han, Y.H. Choi, PLOS ONE, 2017 Jun 13;12(6).

The predictive accuracy of sentinel nodes mapping in the setting of pulmonary metastasectomy. Kim HK, Lee K, Han KN, Eo JS, Kim S, Choi YH. Clin Exp Metastasis. 2017 Feb;34(2):125-131.

Clinical innovations in minimally invasive surgery in Korea. Han KN, Kim HK, Choi YH. J Thorac Dis. 2016 (Suppl 8):S627-30.

Effect of the Nuss Procedure on the Physical Development of Patients with Pectus Excavatum. Kim HK, Yoon JY, Han KN, Choi YH. Ann Thorac Cardiovasc Surg. 2016 Dec 20;22(6):327-332

Macrophage-Targeted Indocyanine Green-Neomannosyl Human Serum Albumin for Intraoperative Sentinel Lymph Node Mapping in Porcine Esophagus. Kim HK, Quan YH, Oh Y, Park JY, Park JH, Choi Y, Lee YS, Jeong JM, Choi YH, Kim BM. Ann Thorac Surg. 2016, 102(4):1149-55.

Single-port thoracoscopic surgery for pneumothorax under two-lung ventilation with carbon dioxide insufflation. Han KN, Kim HK, Lee HJ, Lee DK, Kim H, Lim SH, Choi YH. J Thorac Dis. 2016;8(6):1080-6.

Uniportal video-assisted thoracoscopic surgical (VATS) segmentectomy with preoperative dual localization: right upper lobe wedge resection and left upper lobe upper division segmentectomy. Han KN, Kim HK, Choi YH. Ann Cardiothorac Surg. 2016 5(2):147-50.

Comparison of single port versus multiport thoracoscopic segmentectomy. Han KN, Kim HK, Choi YH. J Thorac Dis. 2016 8(Suppl 3):S279-86.

Single-port video-assisted thoracoscopic pulmonary segmentectomy: a report on 30 cases. Han KN, Kim HK, Lee HJ, Choi YH. Eur J Cardiothorac Surg. 2016 49 Suppl 1:i42-7.

Pulmonary Function Changes Over 1 Year After Lobectomy in Lung Cancer. Kim HK, Lee YJ, Han KN, Choi YH. Respir Care. 2016 61(3):376-82.

Intraoperative pulmonary neoplasm identification using near-infrared fluorescence imaging. Eur J Cardiothorac Surg. Kim HK, Quan YH, Choi BH, Park JH, Han KN, Choi Y, Kim BM, Choi YH., **2016. 49.1497**

Intraoperative fluorescence image-guided pulmonary segmentectomy. Oh Y, Quan YH, Kim M, Kim BM, Kim HK., *J Surg Res.*

2015. 199.287

Single-Port Video-Assisted Thoracoscopic Major Lung Resections: Experience with 150 Consecutive Cases. Ng CS, Kim HK, Wong RH, Yim AP, Mok TS, Choi YH. *Thorac Cardiovasc Surg.* 2016, 64(4):348-53.

The feasibility of single-incision video-assisted thoracoscopic major pulmonary resection performed by surgeons experienced with a two-incision technique. Kim HK, Choi YH. *Interact Cardiovasc Thorac Surg.* 2015, 20(3):310-5.

Optimal Respiratory Rate for Low-Tidal Volume and Two-Lung Ventilation in Thoracoscopic Bleb Resection. Lee DK, Kim HK, Lee K, Choi YH, Lim SH, Kim H. *J Cardiothorac Vasc Anesth.* 2015, 29(4):972-6.

Gallium-68 neomannosylated human serum albumin-based PET/CT lymphoscintigraphy for sentinel lymph node mapping in non-small cell lung cancer. Eo JS, Kim HK, Kim S, Lee YS, Jeong JM, Choi YH, *Ann Surg Oncol.* **2015.** 22.636

Needlescopic resection of small and superficial pulmonary nodule after computed tomographic fluoroscopy-guided dual localization with radiotracer and hookwire. Doo KW, Yong HS, Kim HK, Kim S, Kang EY, Choi YH, *Ann Surg Oncol.* **2015.** 22.331

Highly sensitive and selective anticancer effect by conjugated HA-cisplatin in non-small cell lung cancer overexpressed with CD44. Quan YH, Kim B, Park JH, Choi Y, Choi YH, Kim HK. *Exp Lung Res.* **2014.** 40.475

The effects of sonic hedgehog signaling pathway components on non-small-cell lung cancer progression and clinical outcome.

Hwang J, Kang MH, Yoo YA, Quan YH, Kim HK, Oh SC, Choi YH. *World J Surg Oncol.* **2014.** 21.268

Thoracoscopic color and fluorescence imaging system for sentinel lymph node mapping in porcine lung using indocyanine green-neomannosyl human serum albumin: intraoperative image-guided sentinel nodes navigation. Oh Y, Lee YS, Quan YH, Choi Y, Jeong JM, Kim BM, Kim HK. *Ann Surg Oncol.* **2014.** 21.1182

Intraoperative combined color and fluorescent images-based sentinel node mapping in the porcine lung: comparison of indocyanine green with or without albumin premixing. Oh Y, Quan YH, Choi Y, Kim CK, Kim H, Kim HK, Kim BM. *J Thorac Cardiovasc Surg.* **2013.** 146.

The feasibility of a Two-incision video-assisted thoracoscopic lobectomy. Kim HK, Sung HK, Lee HJ, Choi YH. *J Cardiothorac Surg.* 2013, 15;8:88.509

Vibration response imaging in prediction of pulmonary function after pulmonary resection. Kim HK, Yoo D, Sung HK, Lee HJ, Choi YH. The quality of life after bar removal in patients after the nuss procedure for pectus excavatum.

Comparison between preoperative versus intraoperative injection of technetium-99 m neomannosyl human serum albumin for sentinel lymph node identification in early stage lung cancer. *Ann Surg Oncol.* Kim HK, Kim S, Sung HK, Lee YS, Jeong JM, Choi YH. **2012.** 19.1343

The quality of life after bar removal in patients after the nuss procedure for pectus excavatum. Kim HK, Shim JH, Choi KS, Choi YH. *World J Surg.* 2011 35(7):1656-61

Sentinel node identification using technetium-99m neomannosyl human serum albumin in esophageal cancer. Kim HK, Kim S, Park JJ, Jeong JM, Mok YJ, Choi YH. *Ann Thorac Surg.* **2011.** 91.1517

A comparative study of two- versus one-lung ventilation for needlescopic bleb resection. Kim H, Kim HK, Kang DY, Lee DK, Choi YH, Lim SH. *Eur Respir J.* 2011 May;37(5):1183-8.

Needlescopic assisted resection of pulmonary nodule after dual localisation. Kang DY, Kim HK, Kim YK, Yong HS, Kang EY, Choi YH.

Intra-operative sentinel lymph node identification using a novel receptor-binding agent (technetium-99m neomannosyl human serum albumin, 99mTc-MSA) in stage I non-small cell lung cancer. Kim S, Kim HK, Kang DY, Jeong JM, Choi YH. Eur J Cardiothorac Surg. 2010, 37(6):1450-6.

Thoracoscopic bleb resection using two-lung ventilation anesthesia with low tidal volume for primary spontaneous pneumothorax. Kim H, Kim HK, Choi YH, Lim SH. Ann Thorac Surg. 2009 Mar;87(3):880-5.

Endovenous laser versus ambulatory phlebectomy of varicose tributaries in conjunction with endovenous laser treatment of the great or small saphenous vein. Kim HK, Kim HJ, Shim JH, Baek MJ, Sohn YS, Choi YH. Ann Vasc Surg. 2009 23(2):207-11

Endoscopic evaluation of the quality of the anastomosis after esophagectomy with gastric tube reconstruction. Kim HK, Choi YH, Shim JH, Cho YH, Baek MJ, Sohn YS, Kim HJ. World J Surg. 2008 Sep;32(9):2010-4.

A comparative study of pericostal and submuscular bar fixation technique in the Nuss procedure. Kim HK, Choi YH, Cho YH, Ryu SM, Sohn YS, Kim HJ. J Korean Med Sci. 2007, 22(2):254-7.

Changes in N-terminal pro B-type natriuretic peptide concentration: comparative study of percutaneous transluminal coronary angioplasty and off-pump coronary artery bypass graft. Kim HK, Kim HJ, Kim JW, Sohn YS, Choi YH. J Korean Med Sci. 2007, 22(1):16-9.

Surgical strategy for pulmonary coarctation in the univentricular heart. Kim HK, Kim WH, Kim SC, Lim C, Lee CH, Kim SJ. Eur J Cardiothorac Surg. 2006, 29(1):100-4

Predictive value of intraoperative transesophageal echocardiography in complete atrioventricular septal defect. Kim HK, Kim WH, Hwang SW, Lee JY, Song JY, Kim SJ, Jang KY. Ann Thorac Surg. 2005, 80(1):56-9.

The effects of pulsatile flow upon renal tissue perfusion during cardiopulmonary bypass: a comparative study of pulsatile and nonpulsatile flow. Kim HK, Son HS, Fang YH, Park SY, Hwang CM, Sun K. ASAIO J. 2005, 51(1):30-6.