Ho Yun Lee, MD

MD graduation in 2001 Hanyang University, PhD 2012 Seoul National University

Academic appointments
Associate Professor, Radiology, Sungkyunkwan University School of Medicine, Seoul, Korea

Hospital appointments
Associate Professor in Chest Section, Department of Radiology, Samsung Medical Center

Articles published in SCI journals

- Total: 134
- As first or corresponding author: 92
- h-index: 38
- i10 index: 77

https://scholar.google.com/citations?user=hoyunlee

Book chapters, letters, invited publications: 13

Current Grant & contract support:

- Title: Radiation-targeted liquid biopsy and response prediction of immuno-radiotherapy based on circulating tumor DNA and radiomics
- Funding Source: Radiation Technology Development Program through the National Research Foundation of Korea (NRF) funded by the Ministry of Science, ICT & Future Planning, Republic of Korea (grant number: 2017M2A2A7A02018446)
- Role: Principal Investigator
- Duration: 5/1/2017 - 1/31/2020
- $ 619,469

- Title: Image-guided targeted liquid biopsy based on radiomics-based novel image analysis system
- Funding Source: The Korea Health Technology R&D Project through the Korea Health Industry Development Institute (KHIDI), funded by the Ministry of Health & Welfare, Republic of Korea (grant number: HI17C0086)
- Role: Principal Investigator
- Duration: 4/1/2017 - 12/31/2019
- $ 176,991

- Title: Quantitative image analysis of cancer microenvironment and tracing cancer evolution through space and time using radiomics-based novel image analysis system

- Funding Source: - Basic Science Research Program through the National Research Foundation of Korea (NRF) funded by the Ministry of Science, ICT & Future Planning, Republic of Korea (grant number: NRF-2016R1A2B4013046)
- Role: - Principal Investigator
- Duration: - 6/1/2016 - 5/31/2019
- $ 265,487

Major Research Interests

1. Radiomics and imaging genomics for thoracic oncology

Lee G, Lee HY(corresponding author), Park H, Schiebler ML, van Beek EJR, Ohno Y, Seo JB, Leung A. Radiomics and its emerging role in lung cancer research, imaging biomarkers and clinical management: State of the art. Eur J Radiol. 2017 Jan;86:297-307.
Song SH, Park H, Lee G, Lee HY(corresponding author), Sohn I, Kim HS, Lee SH, Jeong JY, Kim J, Lee KS, Shim YM. Imaging phenotyping using radiomics approach to predict micropapillary pattern within a lung adenocarcinoma. J Thorac Oncol. 2017 Apr;12(4):624-632.

2. Multimodal imaging approach through CT, PET and thoracic MRI

Kim J, Ryu SY, Lee SH, Lee HY(corresponding author), Park H. Clustering approach to identify intratumour heterogeneity combining FDG PET and diffusion-weighted MRI in lung adenocarcinoma. Eur Radiol. 2019 Jan 29(1):468-475.
Lee HY, Hyun SH, Lee KS, et al. Volume-based parameter of 18)F-FDG PET/CT in malignant pleural mesothelioma: prediction of therapeutic response and prognostic implications. Ann Surg Oncol. 2010 Oct;17(10):2787-2794.
Lee HY, Lee HJ, Kim YT, et al. Value of combined interpretation of computed tomography response and positron emission tomography response for prediction of prognosis after neoadjuvant chemotherapy in non-small cell lung cancer. J Thorac Oncol 2010;5:497-503.

3. Percutaneous lung biopsy for genomic study and imaging-based targeted liquid biopsy

Yoon HJ, Lee HY(corresponding author), Lee KS, et al. Repeat biopsy for mutational analysis of non-small cell lung cancers resistant to previous chemotherapy: adequacy and complications. Radiology 2012;265:939-948.
Kim HK, Lee HY(corresponding author), Choi YL, Choi SJ, Choi H, Lee J, Han J, Ahn MJ, Lee KS, Kim J. Assessment of Intratumoral Heterogeneity of Oncogenic Driver Mutations in Surgically-resected Lung Adenocarcinoma: Implications of Percutaneous Biopsy-based Molecular Assay for Target-directed Therapy. Anticancer Res. 2014 Feb;34(2):707-714.

4. Functional imaging analysis for lung perfusion and ventilation through CT and MRI

Ohno Y, Koyama H, Lee HY, Miura S, Yoshikawa T, Sugimura K. Contrast-enhanced CT- and MRI-based perfusion assessment for pulmonary diseases: basics and clinical applications. Diagn Interv Radiol. 2016 Sep-Oct;22(5):407-21
Lee HY, Kim N, Goo JM, Chie EK, Song HJ. Perfusion parameters as potential imaging biomarkers for the early prediction of radiotherapy response in a rat tumor model. Diagn Interv Radiol. 2016 May-Jun;22(3):231-40.