

Curriculum Vitae & Bibliography

Name: Su Min Ha

Present Status & Affiliation: Associate Professor (Breast Section), Department of Radiology, Seoul National University Hospital, Seoul, Korea.

Education

2005-2009: Korea University College of Medicine, M.D.

2010-2012: Korea University Graduate School, M.S.

2017-2019: Ulsan University Graduate School, PhD.

Training

2009-2010: Rotating Internship, Korea University Hospital

2010-2014: Radiology Residency, Korea University Hospital

2014-2016: Radiology Fellowship (Breast Section), Asan Medical Center

2016-2019: Radiology Assistant Professor (Breast Section), Chung-Ang University Hospital

2019-Present: Associate Professor, Department of Radiology, Seoul National University College of Medicine, Seoul, Korea

Other Professional Positions

International committee member of Korean Society of Radiology

Educational committee member of AOSR

Reviewer of *Radiology*

Reviewer of *Korean Journal of Radiology*

Reviewer of *Ultrasonography*

Reviewer of *Journal of Korean Society of radiology*

Reviewer of *Clinical Breast Cancer*

Reviewer of *AJR*

Member

Member, Korean Society of Radiology (KSR)

Member, Korean Society of Breast Imaging (KSBI)

Member, Korean Society of Ultrasound in Medicine (KSUM)

Award

2025: Myung Joo Wan Medical Award, Seoul National University Hospital

2025: Certificate of Outstanding Research Faculty, Seoul National University College of Medicine

2025: Award for the scientific paper, Korean Society of Breast Radiology

2024: Award for the scientific paper, Korean Society of Breast Radiology

2023: Award for the scientific paper, Korean Society of Breast Radiology, Best Investigator

2022: Award for the scientific paper, Korean Society of Breast Radiology

2021: Award for the scientific paper, Korean Society of Breast Radiology

2020: Award for the scientific paper, Korean Society of Breast Radiology

2019: Award for the scientific paper, Korean Society of Breast Radiology, Young Investigator

2018: Award for the best scientific presentation, Korean Society of Ultrasound in Medicine
 2018: Award for the scientific paper, Korean Society of Breast Radiology
 2019: Award for the best scientific paper, Korean Society of Breast Radiology
 2020: Award for the best scientific paper, Korean Society of Ultrasound in Medicine
 2020: Award for the scientific paper, Korean Society of Breast Radiology
 2021: Award for the scientific paper, Korean Society of Breast Radiology
 2022: Award for the scientific paper, Korean Society of Breast Radiology
 2023: Award for the scientific paper, Korean Society of Breast Radiology

Published Papers

Authors	Title	Publication	Year
Ha, Su Min ; Lee, Janie M; Jang, Myoung-jin; Kim, Hong-Kyu; Chang, Jung Min;	Breast Cancer Detection with Standalone AI versus Radiologist Interpretation of Unilateral Surveillance Mammography after Mastectomy	Radiology	2025
Kim, Ha Jung; Partridge, Savannah C; Lee, JungBok; Yoen, Heera; Moon, Woo Kyung; Ha, Su Min ;	Preoperative Diagnosis of Ipsilateral and Contralateral Breast Cancer: Role of Diffusion-weighted MRI	Radiology	2025
Kim, Jong-Min; Ha, Su Min ;	Clinical application of artificial intelligence in breast MRI	Journal of the Korean Society of Radiology	2025
An, Ji Yeong; Lee, Janie M; Jang, Myoung-jin; Ha, Su Min ; Chang, Jung Min;	Application of a Commercial Artificial Intelligence Software in Unilateral Mammography: Simulating Total Mastectomy Scenarios	Journal of Imaging Informatics in Medicine	2025
Yoen, Heera; Shin, Hee-Chul; Yoon, Kyung-Hwak; Oh, Jeong Hun; Park, Jiwon; Choi, Yunhee; Han, Wonshik; Cho, Nariya; Moon, Woo Kyung; Ha, Su Min ;	Preoperative Breast MRI and Survival Outcomes in Women 50 Years or Younger with Breast Cancer	Radiology	2025
Ha, Su Min ; Jang, Myoung-jin; Youn, Inyoung; Yoen, Heera; Ji, Hye; Lee, Su Hyun; Yi, Ann; Chang, Jung Min;	Screening outcomes of mammography with AI in dense breasts: a comparative study with supplemental screening US	Radiology	2024
Ha, Su Min ; Choi, Woo Jung; Han, Boo Kyung; Kim, Hak Hee; Moon, Woo Kyung; Kim, Min-Ji; Kim, Kyunga; Yoen, Heera; Kim, Hee Jeong; Kim, Haejung;	Assessment of nonmass lesions detected with screening breast US based on mammographic findings	Radiology	2024
Kim, Yeon Soo; Lee, Su Hyun; Kim, Soo-Yeon; Kim, Eun Sil; Park, Ah Reum; Chang, Jung Min; Park, Vivian Youngjean; Yoon, Jung Hyun; Kang, Bong Joo; La Yun, Bo; Ha, Su Min	Unenhanced breast MRI with diffusion-weighted imaging for breast cancer detection: effects of training on performance and agreement of subspecialty radiologists	Korean Journal of Radiology	2024
Yoen, Heera; Chung, Hyun-Ah; Lee, So-Min; Kim, Eun-sung; Moon, Woo Kyung; Ha, Su Min ;	Hemorrhagic complications following ultrasound-guided breast biopsy: a prospective patient-centered study	Korean Journal of Radiology	2024
Lee, Su Hyun; Kim, Hajung; Ha, Su Min ; Kim, Soo-Yeon; Chang,	Abstract PO2-28-07: Artificial Intelligence-based Computer-aided	Cancer Research	2024

Jung Min; Cho, Nariya; Moon, Woo Kyung;	Diagnosis for Mammography: Predicting Occult Invasive Cancer in Women with Biopsy-proven Ductal Carcinoma in Situ		
Lee, Su Hyun; Kim, Hajung; Ha, Su Min Kim, Soo-Yeon; Chang, Jung Min; Cho, Nariya; Moon, Woo Kyung;	Artificial Intelligence-based Computer-aided Diagnosis for Mammography: Predicting Occult Invasive Cancer in Women with Biopsy-proven Ductal Carcinoma in Situ	CANCER RESEARCH	2024
Lee, Su Hyun; Jang, Myoung-jin; Yoen, Heera; Lee, Youkyoung; Kim, Yeon Soo; Park, Ah Reum; Ha, Su Min ; Kim, Soo-Yeon; Chang, Jung Min; Cho, Nariya;	Background parenchymal enhancement at postoperative surveillance breast MRI: association with future second breast cancer risk	Radiology	2023
Ha, Su Min ; Lee, Janie M; Kim, Seon-Ok; Moon, Woo Kyung; Chang, Jung Min;	Semiannual breast US or MRI screening in patients with a personal history of breast cancer	Radiology	2023
Ha, Su Min ; Yi, Ann; Yim, Dahae; Jang, Myoung-jin; Kwon, Bo Ra; Shin, Sung Ui; Lee, Eun Jae; Lee, Soo Hyun; Moon, Woo Kyung; Chang, Jung Min;	Digital breast tomosynthesis plus ultrasound versus digital mammography plus ultrasound for screening breast cancer in women with dense breasts	Korean journal of radiology	2023
Kim, Soo-Yeon; Choi, Yunhee; Kim, Yeon Soo; Ha, Su Min ; Lee, Su Hyun; Han, Wonshik; Kim, Hong-Kyu; Cho, Nariya; Moon, Woo Kyung; Chang, Jung Min;	Use of imaging prediction model for omission of axillary surgery in early-stage breast cancer patients	Breast Cancer Research and Treatment	2023
Park, Vivian Youngjean; Shin, Hee Jung; Kang, Bong Joo; Kim, Min Jung; Moon, Woo Kyung; Song, Sung Eun; Ha, Su Min ;	Diffusion-weighted magnetic resonance imaging for preoperative evaluation of patients with breast cancer: Protocol of a prospective, multicenter, observational cohort study	Journal of Breast Cancer	2023
Ha, Su Min ; Chang, Jung Min;	Interpretation of Image-Guided Biopsy Results and Assessment	Journal of the Korean Society of Radiology	2023
Ha, Su Min ; Chang, Jung Min;	Breast cancer detection: digital breast tomosynthesis with synthesized mammography versus digital mammography	Radiology	2023
Park, Vivian Youngjean; Shin, Hee Jung; Kang, Bong Joo; Kim, Min Jung; Moon, Woo Kyung; Song, Sung Eun; Ha, Su Min ;	Corrigendum: Diffusion-Weighted Magnetic Resonance Imaging for Preoperative Evaluation of Patients With Breast Cancer: Protocol of a Prospective, Multicenter, Observational Cohort Study	Journal of Breast Cancer	2023
Moon, Woo Kyung; Song, Sung Eun; Ha, Su Min ;	Vivian Youngjean Park, Hee Jung Shin 2, Bong Joo Kang 3, Min Jung Kim	J Breast Cancer	2023
Kwon, Bo Ra; Shin, Sung Ui; Kim, Soo-Yeon; Choi, Yunhee; Cho, Nariya; Kim, Sun Mi; Yi, Ann; Yun, Bo La; Jang, Mijung; Ha, Su Min ;	Microcalcifications and peritumoral edema predict survival outcome in luminal breast cancer treated with neoadjuvant chemotherapy	Radiology	2022
Ha, Su Min ; Chu, A Jung; Lee, JungBok; Kim, Soo-Yeon; Lee, Su Hyun; Yoen, Heera; Cho,	US evaluation of axillary lymphadenopathy following COVID-19	Radiology	2022

Nariya; Moon, Woo Kyung; Chang, Jung Min;	vaccination: a prospective longitudinal study		
Kim, Soo-Yeon; Cho, Nariya; Hong, Hyunsook; Lee, Youkyoung; Yoen, Heera; Kim, Yeon Soo; Park, Ah Reum; Ha, Su Min ; Lee, Su Hyun; Chang, Jung Min;	Abbreviated screening MRI for women with a history of breast cancer: comparison with full-protocol breast MRI	Radiology	2022
Ha, Su Min ; Cheun, Jong-Ho; Lee, Su Hyun; Kim, Soo-Yeon; Park, Ah Reum; Kim, Yeon Soo; Yoen, Heera; Lee, Youkyoung; Cho, Nariya; Moon, Woo Kyung;	Ipsilateral lymphadenopathy after COVID-19 vaccination in patients with newly diagnosed breast cancer	Journal of Breast Cancer	2022
Kim, Eun Sil; Cho, Nariya; Kim, Soo-Yeon; Lee, Su Hyun; Chang, Jung Min; Kim, Yeon Soo; Ha, Su Min ; Moon, Woo Kyung;	Added value of ultrafast sequence in abbreviated breast MRI surveillance in women with a personal history of breast cancer: A multireader study	European Journal of Radiology	2022
Hong, Min Ji; Ahn, Hye Shin; Ha, Su Min ; Park, Hyun Jeong; Oh, Jiyun;	Quantitative analysis of vascularity for thyroid nodules on ultrasound using superb microvascular imaging: Can nodular vascularity differentiate between malignant and benign thyroid nodules?	Medicine	2022
Kim, Yeon Soo; Jang, Myoung-jin; Lee, Su Hyun; Kim, Soo-Yeon Ha, Su Min ; Kwon, Bo Ra; Moon, Woo Kyung; Chang, Jung Min;	Use of artificial intelligence for reducing unnecessary recalls at screening mammography: a simulation study	Korean Journal of Radiology	2022
Chang, Jung Min; Ha, Su Min ;	Regional lymphadenopathy following COVID-19 vaccination in patients with or suspicious of breast cancer: a quick summary of current key facts and recommendations	Korean Journal of Radiology	2022
Ha, Su Min ; Kim, Hong-Kyu; Kim, Yumi; Noh, Dong-Young; Han, Wonshik; Chang, Jung Min;	Diagnostic performance improvement with combined use of proteomics biomarker assay and breast ultrasound	Breast Cancer Research and Treatment	2022
Chang, Jung Min; Ha, Su Min ;	The Optimal Timing of Imaging Examinations in Patients With Newly Diagnosed Breast Cancer in the COVID-19 Pandemic Era	Journal of Breast Cancer	2022
Lee, Su Hyun; Ryu, Han-Suk; Jang, Myoung-jin; Yi, Ann; Ha, Su Min ; Kim, Soo-Yeon; Chang, Jung Min; Cho, Nariya; Moon, Woo Kyung;	Glandular tissue component and breast cancer risk in mammographically dense breasts at screening breast US	Radiology	2021
Kim, Soo-Yeon; Cho, Nariya; Choi, Yunhee; Lee, Su Hyun; Ha, Su Min; Kim, Eun Sil; Chang, Jung Min; Moon, Woo Kyung;	Factors affecting pathologic complete response following neoadjuvant chemotherapy in breast cancer: development and validation of a predictive nomogram	Radiology	2021
Ha, Su Min; Chang, Jung Min; Lee, Su Hyun; Kim, Eun Sil; Kim, Soo-Yeon; Kim, Yeon Soo; Cho, Nariya; Moon, Woo Kyung;	Detection of contralateral breast cancer using diffusion-weighted magnetic resonance imaging in women with newly diagnosed breast cancer: comparison with	Korean Journal of Radiology	2021

	combined mammography and whole-breast ultrasound		
Ha, Su Min; Chang, Jung Min; Kim, Soo-Yeon; Lee, Su Hyun; Kim, Eun Sil; Kim, Yeon Soo; Cho, Nariya; Moon, Woo Kyung;	Prediction of axillary nodal burden in patients with invasive lobular carcinoma using MRI	Breast Cancer Research and Treatment	2021
Suh, June; Kim, Jun-Hyeong; Kim, Soo-Yeon; Cho, Nariya; Kim, Dong-Hyun; Kim, Rihyeon; Kim, Eun Sil; Jang, Myoung-jin; Ha, Su Min; Lee, Su Hyun;	Noncontrast-enhanced MR-based conductivity imaging for breast cancer detection and lesion differentiation	Journal of Magnetic Resonance Imaging	2021
Ha, Su Min; Baek, Jung Hwan; Na, Dong Gyu; Jung, Chan Kwon; Suh, Chong Hyun; Shong, Young Kee; Sung, Tae-Yon; Song, Dong Eun; Lee, Jeong Hyun;	Assessing the diagnostic performance of thyroid biopsy with recommendations for appropriate interpretation	Ultrasonography	2021
Ha, Su Min; Kim, Hak Hee; Kang, Eunhee; Seo, Bo Kyoung; Choi, Nami; Kim, Tae Hee; Ku, You Jin; Ye, Jong Chul;	Radiation dose reduction in digital mammography by deep-learning algorithm image reconstruction: a preliminary study	Journal of the Korean Society of Radiology (Taehan Yŏngsang Ŭihakhoe chi)	2021
Ha, Su Min; Chang, Jung Min;	Precautions for breast ultrasound examination following COVID-19 vaccination.	Journal of the Korean Medical Association/Taeha n Uisa Hyophoe Chi	2021
Chang, Jung Min; Leung, Jessica WT; Moy, Linda; Ha, Su Min; Moon, Woo Kyung;	Axillary nodal evaluation in breast cancer: state of the art	Radiology	2020
Ha, Su Min; Chang, Jung Min; Lee, Su Hyun; Kim, Eun Sil; Kim, Soo-Yeon; Cho, Nariya; Moon, Woo Kyung;	Diffusion-weighted MRI at 3.0 T for detection of occult disease in the contralateral breast in women with newly diagnosed breast cancer	Breast Cancer Research and Treatment	2020
Kim, Eun Sil; Cho, Nariya; Kim, Soo-Yeon; Kwon, Bo Ra; Yi, Ann; Ha, Su Min; Lee, Su Hyun; Chang, Jung Min; Moon, Woo Kyung;	Comparison of abbreviated MRI and full diagnostic MRI in distinguishing between benign and malignant lesions detected by breast MRI: a multireader study	Korean journal of radiology	2020
Kim, Soo-Yeon; Cho, Nariya; Kim, Soo Yeon; Choi, Yunhee; Kim, Eun Sil; Ha, Su Min; Lee, Su Hyun; Chang, Jung Min; Moon, Woo Kyung;	Supplemental breast US screening in women with a personal history of breast cancer: a matched cohort study	Radiology	2020
Ha, Su Min; Chae, Eun Young; Cha, Joo Hee; Shin, Hee Jung; Choi, Woo Jung; Kim, Hak Hee;	Diagnostic performance of standard breast MR imaging compared to dedicated axillary MR imaging in the evaluation of axillary lymph node	BMC Medical Imaging	2020
Jeong, Seok-min; Ha, Su Min; Ahn, Hye Shin; Woo, SeungTae; Sung, Jae Kon; Shin, Hee-Chul;	A preliminary study of the combination of ultrafast and abbreviated dynamic contrast: enhanced breast magnetic resonance imaging	Medicine	2020
Beck, Kyongmin Sarah; Jung, Seung Chai; Choo, Hye Jung; Ha,	Asian Oceanian Radiology Forum 2018: international education of radiology in Asian Oceanian countries	Korean Journal of Radiology	2020

Su Min Han, Kichang; Lee, Whal;			
Ko, Ara; Ahn, Hye Shin; Lee, Seungho; Ha, Su Min ; Kim, Min Kyoon; Kim, Hee Sung;	Radiologic and pathologic findings of atypical ductal hyperplasia in the male breast: case report and literature review	Journal of the Korean Society of Radiology (Taehan Yŏngsang Ŭihakhoe chi)	2020
Kim, Soo-Yeon; Seo, Wontaek; Yi, Ann; Lee, Su Hyun; Ha, Su Min ; Kim, Eun Sil; Jung, Kahee; Na, Yong Ju; Jo, Mijung; Shin, Choul Woo;	Preliminary data on TruviewMAG to assess the visibility of microcalcifications and image quality of mammograms: Comparison with the standard magnification view	Medical Imaging 2020: Physics of Medical Imaging	2020
Ha, Su Min Shin, Jun Young; Baek, Jung Hwan; Song, Dong Eun; Chung, Sae Rom; Choi, Young Jun; Lee, Jeong Hyun;	Does radiofrequency ablation induce neoplastic changes in benign thyroid nodules: a preliminary study	Endocrinology and Metabolism	2019
Ha, Su Min Baek, Jung Hwan; Na, Dong Gyu; Suh, Chong Hyun; Chung, Sae Rom; Choi, Young Jun; Lee, Jeong Hyun;	Diagnostic performance of practice guidelines for thyroid nodules: thyroid nodule size versus biopsy rates	Radiology	2019
Ha, Su Min ; Chung, Yun Jae; Ahn, Hye Shin; Baek, Jung Hwan; Park, Sung Bin;	Echogenic foci in thyroid nodules: diagnostic performance with combination of TIRADS and echogenic foci	BMC Medical Imaging	2019
Ha, Su Min ; Baek, Jung Hwan; Choi, Young Jun; Chung, Sae Rom; Sung, Tae Yon; Kim, Tae Yong; Lee, Jeong Hyun;	Malignancy risk of initially benign thyroid nodules: validation with various Thyroid Imaging Reporting and Data System guidelines	European radiology	2019
Ha, Su Min ; Chae, Eun Young; Cha, Joo Hee; Kim, Hak Hee; Shin, Hee Jung; Choi, Woo Jung;	Long-term survival outcomes in invasive lobular carcinoma patients with and without preoperative MR imaging: a matched cohort study	European Radiology	2019
Ha, Su Min ; Cha, Joo Hee; Shin, Hee Jung; Chae, Eun Young; Choi, Woo Jung; Kim, Hak Hee;	Mammography, US, and MRI to assess outcomes of invasive breast cancer with extensive intraductal component: a matched cohort study	Radiology	2019
Ha, Su Min ; Na, Dong Gyu; Kim, Ji-Hoon; Kim, Soo Chin; Baek, Jung Hwan;	Validation of web-based thyroid imaging reporting and data system in atypia or follicular lesion of undetermined significance thyroid nodules	Head & Neck	2019
Ha, Su Min ; Cha, Joo Hee; Shin, Hee Jung; Chae, Eun Young; Choi, Woo Jung; Kim, Hak Hee; Oh, Ha-Yeon;	Radial scars/complex sclerosing lesions of the breast: radiologic and clinicopathologic correlation	BMC Medical Imaging	2018
Ha, Su Min ; Chae, Eun Young; Cha, Joo Hee; Kim, Hak Hee; Shin, Hee Jung; Choi, Woo Jung;	Breast MR imaging before surgery: outcomes in patients with invasive lobular carcinoma by using propensity score matching	Radiology	2018
Ha, Su Min ; Chae, Eun Young; Cha, Joo Hee; Shin, Hee Jung; Choi, Woo Jung; Kim, Hak Hee;	Growing BI-RADS category 3 lesions on follow-up breast ultrasound: malignancy rates and worrisome features	The British Journal of Radiology	2018
Ahn, Hye Shin; Seo, Mirinae; Ha, Su Min ; Kim, Hee Sung;	Comparison of the Diagnostic Efficacy of Ultrasound-Guided Core Needle Biopsy With 18-Versus 20-Gauge Needles for Thyroid Nodules	Journal of Ultrasound in Medicine	2018

Ha, Su Min ; Cha, Joo Hee; Shin, Hee Jung; Chae, Eun Young; Choi, Woo Jung; Kim, Hak Hee;	Mucocelelike lesions in the breast: radiologic and clinicopathologic correlations with upgrade rate	American Journal of Roentgenology	2018
Kang, Hyein; Ha, Su Min ; Ahn, Hye Shin; Kim, Hee Sung; Kim, Hee-Jun;	A Case Report of Male Occult Breast Cancer Manifested as Superior Vena Cava Syndrome	Journal of the Korean Society of Radiology	2018
Ha, Su Min ; Kim, Jae Kyun; Baek, Jung Hwan;	Detection of malignancy among suspicious thyroid nodules < 1 cm on ultrasound with various thyroid image reporting and data systems	Thyroid	2017
Ha, Su Min ; Chae, Eun Young; Cha, Joo Hee; Kim, Hak Hee; Shin, Hee Jung; Choi, Woo Jung;	Association of BRCA mutation types, imaging features, and pathologic findings in patients with breast cancer with BRCA1 and BRCA2 mutations	American Journal of Roentgenology	2017
Ha, Su Min ; Sung, Jin Yong; Baek, Jung Hwan; Na, Dong Gyu; Kim, Ji-hoon; Yoo, Hyunju; Lee, Ducky; Whan Choi, Dong;	Radiofrequency ablation of small follicular neoplasms: initial clinical outcomes	International Journal of Hyperthermia	2017
Ha, Su Min ; Ahn, Hye Shin; Baek, Jung Hwan; Ahn, Hwa Young; Chung, Yun Jae; Cho, Bo Youn; Park, Sung Bin;	Validation of three scoring risk-stratification models for thyroid nodules	Thyroid	2017
Ha, Su Min ; Cha, Joo Hee; Kim, Hak Hee; Shin, Hee Jung; Chae, Eun Young; Choi, Woo Jung;	Diagnostic performance of breast ultrasonography and MRI in the prediction of lymph node status after neoadjuvant chemotherapy for breast cancer	Acta Radiologica	2017
Ha, Su Min ; Cha, Joo Hee; Kim, Hak Hee; Shin, Hee Jung; Chae, Eun Young; Choi, Woo Jung;	Retrospective analysis on malignant calcification previously misdiagnosed as benign on screening mammography	Journal of the Korean Society of Radiology	2017
Shin, Hee Jung; Chae, Eun Young; Choi, Woo Jung; Ha, Su Min ; Park, Jin Young; Shin, Ki Chang; Cha, Joo Hee; Kim, Hak Hee;	Diagnostic performance of fused diffusion-weighted imaging using unenhanced or postcontrast T1-weighted MR imaging in patients with breast cancer	Medicine	2016
Ha, Su Min ; Suh, Sang-il; Seo, Woo-Keun; Seol, Hae Young;	Arterial wall imaging in symptomatic carotid stenosis: Delayed enhancement on MDCT angiography	Neurointervention	2016
Ha, Su Min ; Lee, Chang Hee; Kim, Baek Hui; Park, Yang Shin; Lee, Jongmee; Choi, Jae Woong; Kim, Kyeong Ah; Park, Cheol Min;	Paradoxical uptake of Gd-EOB-DTPA on the hepatobiliary phase in the evaluation of hepatic metastasis from breast cancer: is the "target sign" a common finding?	Magnetic Resonance Imaging	2012
Jang, Seonah; Suh, Sang-il; Ha, Su Min ; Byeon, Jung Hye; Eun, Baik-Lin; Lee, Young Hen; Seo, Hyung Suk; Eun, So-Hee; Seol, Hae-Young;	Enterovirus 71-related encephalomyelitis: usual and unusual magnetic resonance imaging findings	Neuroradiology	2012