



Billy W Loo Jr, MD PhD FASTRO FACR

Professor of Radiation Oncology (Radiation Therapy)
Radiation Oncology - Radiation Therapy

CLINICAL OFFICE (PRIMARY)

- **Stanford Dept Of Radiation Oncology**

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ACADEMIC CONTACT INFORMATION

- **Administrative Contact**

Ejemen (Eje) Idemudia - Assistant Clinical Research
Coordinator

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Bio

BIO

Billy W. Loo Jr., MD PhD is a Professor of Radiation Oncology, a member of the Stanford Cancer Institute, of the Molecular Imaging Program at Stanford (MIPS), Bio-X, and the Biomedical Physics Graduate Program. He is a physician-scientist Radiation Oncologist and Bioengineer who is Director of Thoracic Radiation Oncology, Co-director of Particle Therapy, Director of New Technologies, and Principal Investigator of the FLASH Sciences Lab @Stanford.

His clinical specialty is precision targeted radiotherapy for lung/thoracic cancers, including stereotactic ablative radiotherapy (SABR) and proton therapy. Dr. Loo is a recognized expert in thoracic cancers serving on multiple national committees (including as writing member or vice-chair) that publish clinical guidelines on the treatment of lung cancer and other thoracic malignancies, particularly the National Comprehensive Cancer Network (NCCN).

His clinical research is in clinical trials and implementation of new treatment techniques and technologies, particularly for lung cancer, and development of new medical imaging methods for measuring organ function and predicting response to cancer treatment. He has developed novel applications of SABR including treatment of pulmonary emphysema and cardiac arrhythmias. He also catalyzed the development and clinical introduction of the world's first ultra-compact advanced proton therapy platform.

The research focus of the FLASH Sciences Lab @Stanford, directed by Prof. Loo, is the development and study of extremely rapid FLASH therapy to optimize the biological therapeutic index of cancer radiotherapy, and the technological infrastructure for this basic research and its clinical translation. Prof. Loo is co-inventor of a fundamentally new approach to delivering ultra-rapid, ultra-precise cancer therapy, pluridirectional high-energy agile scanning electronic radiotherapy (PHASER), and co-leads a program to develop it into a transformative and clinically practical technology.

Prof. Loo received his MD from University of California, Davis and his PhD in Bioengineering from University of California, San Francisco and Berkeley. He completed his Radiation Oncology residency training at Stanford Medicine. He is certified by the American Board of Radiology in Radiation Oncology, and is a Fellow of the American Society for Radiation Oncology (ASTRO) and a Fellow of the American College of Radiology (ACR).

CLINICAL FOCUS

- Cancer > Head and Neck Cancer
- Cancer > Radiation Oncology
- Cancer > Thoracic Oncology
- Lung Cancer
- Thoracic Cancers
- Stereotactic Ablative Radiotherapy (SABR)
- Radiation Oncology
- Radiation Therapy

ACADEMIC APPOINTMENTS

- Professor - Univ Med Line, Radiation Oncology - Radiation Therapy
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Stanford Cancer Institute
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Director of Thoracic Radiation Oncology, Radiation Oncology, (2005- present)
- Co-Director of Particle Therapy, Radiation Oncology, (2025- present)
- Director of New Technologies, Radiation Oncology, (2011- present)
- Director of VA Radiation Oncology Services, Radiation Oncology, (2019-2025)

HONORS AND AWARDS

- Catalyst Award - AVATAR project, Stanford Medicine Catalyst (2024)
- Fellow of the American College of Radiology (FACR), ACR (2022)
- Fellow of the American Society for Radiation Oncology (FASTRO), ASTRO (2021)
- Henry S. Kaplan Memorial Prize for Teaching, Stanford University (2021)
- StartX Professor in Residence, StartX (2021)
- Educator of the Year Award, Association of Residents in Radiation Oncology (2012)
- Henry S. Kaplan Memorial Prize for Teaching in Radiation Oncology, Stanford University (2009)
- Basic Science Travel Grant, ASTRO (2005)
- Young Investigator Travel Grant, ECOG (2005)
- Molecular Biology in Clinical Oncology Workshop Scholarship, AACR (2004)
- Roentgen Resident/Fellow Research Award, RSNA (2004)
- Travel Grant Award, Best of ASCO Meeting, Denver, ASCO (2004)
- Malcolm A. Bagshaw Award, Stanford Radiation Oncology (2003)
- Graduate Student Research Award, University of California, San Francisco (1996)

- Regents Fellowship, University of California (1996)
- Laboratory Graduate Fellowship, Associated Western Universities (1994, 1995)
- Research Scholarship, California Medical Education and Research Foundation (1992)
- Rapp/Rummelsberg Research Scholarship, - (1991)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Vice Chair, National Comprehensive Cancer Network Small Cell Lung Cancer Panel (2013 - present)

PROFESSIONAL EDUCATION

- Residency: Stanford University Dept of Radiation Oncology (2005) CA
- Internship, Kaiser Permanente San Francisco Internal Medicine Residency , CA (2001)
- Medical Education: University of California Davis School of Medicine (2000) CA
- Board Certification: Radiation Oncology, American Board of Radiology (2006)
- Ph.D., U.C. San Francisco, U.C. Berkeley , Bioengineering (2000)
- A.B., U.C. Berkeley , Biophysics (1989)

PATENTS

- R. Fahrig, B.W. Loo, P.G. Maxim, S. Tantawi. "United States Patent 10,806,950 B2 Arrays of accelerating structures and rapid imaging for facilitating rapid radiation therapies", The Board of Trustees of the Leland Stanford Junior University, Oct 20, 2020
- V. Bharadwaj, V.A. Dolgashev, R. Fahrig, B.W. Loo, P.G. Maxim, S. Tantawi, C. Limborg, L. Nicolas. "United States Patent 10,576,303 B2 Methods and systems for beam intensity-modulation to facilitate rapid radiation therapies", The Board of Trustees of the Leland Stanford Junior University, Mar 3, 2020
- B.W. Loo, P.G. Maxim, V.A. Dolgashev. "Sweden Patent EP2823501B1 Pluridirectional very high electron energy radiation therapy systems", Leland Stanford Junior University, May 1, 2019
- R. Fahrig, B.W. Loo, P.G. Maxim, S. Tantawi. "United States Patent 9,962,562 B2 Arrays of accelerating structures and rapid imaging for facilitating rapid radiation therapies", The Board of Trustees of the Leland Stanford Junior University, May 8, 2018
- V. Bharadwaj, V.A. Dolgashev, R. Fahrig, B.W. Loo, P.G. Maxim, S. Tantawi, C. Limborg, L. Nicolas. "United States Patent 9,931,522 B2 Methods and systems for beam intensity-modulation to facilitate rapid radiation therapies", The Board of Trustees of the Leland Stanford Junior University, Apr 3, 2018
- B.W. Loo, P.G. Maxim, V.A. Dolgashev. "China P.Rep. Patent CN104246961B Pluridirectional very high electron energy radiation therapy systems and processes", Leland Stanford Junior University, May 17, 2017
- B.W. Loo, P.G. Maxim, V.A. Dolgashev. "United States Patent 9,018,603 B2 Pluridirectional very high electron energy radiation therapy systems and processes", The Board of Trustees of the Leland Stanford Junior University, Apr 28, 2015
- P.J. Keall, A. Sawant, P.G. Maxim, Y. Suh, L. Xing, B.W. Loo Jr., B.C. Cho. "United States Patent 8,849,373 B2 Method and apparatus for real-time target position estimation by combining x-ray and external respiratory signals", Stanford University, Sep 30, 2014
- B.W. Loo Jr., P.G. Maxim, V.A. Dolgashev. "United States Patent 8,618,521 B2 Pluridirectional very high electron energy radiation therapy systems and processes", The Board of Trustees of the Leland Stanford Junior University, Dec 31, 2013
- E. Johnston, B.W. Loo Jr., P.G. Maxim, M. Diehn. "United States Patent 8,526,702 B2 4D anatomically based image selection procedure for medical imaging", The Board of Trustees of the Leland Stanford Junior University, Sep 3, 2013

LINKS

- Dr. Loo's Lab Home Page: <https://med.stanford.edu/loo-lab.html>
- Dr. Loo's Bibliography: <https://www.ncbi.nlm.nih.gov/myncbi/bill.loo.1/bibliography/public/>
- Twitter/X: @BLoo_LT_SABR: https://X.com/BLoo_LT_SABR
- LinkedIn: bill-w-loo: <https://www.linkedin.com/in/bill-w-loo/>
- Stanford Momentum article - A flash of hope 9/2025: <https://momentum.stanford.edu/stories/a-flash-of-hope>
- Curative Cancer Technology of the Future 7/2025: <https://youtu.be/4tdFDD5tfHk>
- Interview on Progress, Potential, & Possibilities 2/2025: <https://x.com/i/status/1892673879350354061>

- Stanford Medicine Magazine article on FLASH 1/2025: <https://stanmed.stanford.edu/advancing-cancer-science-prevention-care/#radiation>
- SLAC Colloquium Series 4/2024: https://stanford.zoom.us/rec/play/r6xAQE2hBFkqbmdw2cJ2gKFdx6ai87dMWKJYzw6pPr9M4XLGjfsIORYDHxHGGEEn_9CWloaHhNx_ojB.VrN0pSZjp1Gr9zx3?canPlayFromShare=true&from=share_recording_detail&continueMode=true&componentName=rec-play&originRequestUrl=https%3A%2F%2Fstanford.zoom.us%2Frec%2Fshare%2FnmjMgLSLnTunk5ufDMcMWctFWdrppi5AxC9Eb6Ro-z1vCieuTWzHqn07AcJ534Vlf.ToUsDRg3Nuyplo4b
- Curing Cancer at Lightning Speed - Stanford Med Alumni Day 4/2022: <https://youtu.be/EarauV5i5Fw>
- ACS Silicon Valley lecture on next generation radiation therapy for cancer 11/2019: <https://youtu.be/dB0dtH4CxEO>
- Physics World article on FLASH 8/2019: <https://physicsworld.com/a/instantaneous-brain-irradiation-limits-cognitive-impairment/>
- Physics World article on PHASER 7/2019: <https://physicsworld.com/a/phaser-linac-will-translate-flash-radiotherapy-to-the-clinic/>
- About PHASER - "The Future of Everything" 3/2019: <https://engineering.stanford.edu/news/billy-loo-flash-radiation-therapy-brings-hope-cancer-patients>
- SLAC press release on PHASER 2/2012: <https://www6.slac.stanford.edu/news/2012-02-09-slac-stanford-team-focuses-on-high-energy-electrons.aspx>
- SABR for early stage lung cancer - SurvivorNet: <https://www.survivor.net.com/articles/stereotactic-radiotherapy-has-some-benefits-for-treating-early-stage-lung-cancer/>
- Precision targeted radiotherapy for advanced lung cancer - SurvivorNet: <https://www.survivor.net.com/author/dr-billy-loo-jr/>
- Get a Second Opinion: <https://stanfordhealthcare.org/second-opinion/overview.html>
- DotMed Proton therapy article 3/2026: https://www.dotmed.com/news/story/66039?p_begin=0

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

As Director of Thoracic Radiation Oncology, my clinical specialty is precision targeted radiotherapy of lung and other thoracic cancers.

My clinical research focus is on clinical trials and clinical translation of advanced high-precision 4-D image-guided radiotherapy and stereotactic ablative radiotherapy (SABR), as well as novel indications of SABR such as severe pulmonary emphysema. I also conduct preclinical and translational research in novel functional and metabolic imaging and imaging biomarkers.

I am Principal Investigator of the FLASH Sciences Lab @Stanford, specializing in preclinical research on the biology, physics, and engineering of ultra-rapid FLASH radiotherapy. I also co-lead the development of a next-generation ultra-rapid and precise medical linear accelerator technology (PHASER).

CLINICAL TRIALS

- Identification of Secreted Markers for Tumor Hypoxia in Patients With Head and Neck or Lung Cancers, Recruiting
- Molecular Analysis of Thoracic Malignancies, Recruiting
- Novel Serum Markers for Monitoring Response to Anti-Cancer Therapy, Recruiting
- 4D-CT-based Ventilation Imaging for Adaptive Functional Guidance in Radiotherapy, Not Recruiting
- Cervical Nodal Mets in Squamous Cell Carcinoma of H&N - MRI, FDG-PET, & Histopathologic Correlation, Not Recruiting
- Chemotherapy and Radiation Therapy With or Without Panitumumab in Treating Patients With Stage IIIA Non-Small Cell Lung Cancer, Not Recruiting
- Cisplatin and Etoposide Plus Radiation Followed By Nivolumab/Placebo For Locally Advanced NSCLC, Not Recruiting
- CT Perfusion Imaging in Predicting Treatment Response in Patients With Non-small Cell Lung Cancer or Lung Metastases Treated With Stereotactic Ablative Radiation Therapy, Not Recruiting
- Erlotinib Hydrochloride or Crizotinib and Chemoradiation Therapy in Treating Patients With Stage III Non-small Cell Lung Cancer, Not Recruiting
- Evaluation of Cyberknife Precision Radiation Delivery System for Unresectable Malignant Lung Cancer, Not Recruiting
- High-Dose or Standard-Dose Radiation Therapy and Chemotherapy With or Without Cetuximab in Treating Patients With Newly Diagnosed Stage III Non-Small Cell Lung Cancer That Cannot Be Removed by Surgery, Not Recruiting

- Imaging and Biomarkers of Hypoxia in Solid Tumors, Not Recruiting
- Individualized Lung Tumor Stereotactic Ablative Radiotherapy (iSABR), Not Recruiting
- Manuka Honey in Preventing Esophagitis-Related Pain in Patients Receiving Chemotherapy and Radiation Therapy For Lung Cancer, Not Recruiting
- Pulmonary Interstitial Lymphography in Early Stage Lung Cancer, Not Recruiting
- Radiation Therapy in Treating Patients With Extensive Stage Small Cell Lung Cancer, Not Recruiting
- Radiation Therapy in Treating Patients With Stage I Non-Small Cell Lung Cancer, Not Recruiting
- Radiation Therapy Regimens in Treating Patients With Limited-Stage Small Cell Lung Cancer Receiving Cisplatin and Etoposide, Not Recruiting
- Radical-Dose Image Guided Radiation Therapy in Treating Patients With Metastatic Non-small Cell Lung Cancer Undergoing Immunotherapy, Not Recruiting
- SABR-ATAC: A Trial of TGF-beta Inhibition and Stereotactic Ablative Radiotherapy for Early Stage Non-small Cell Lung Cancer, Not Recruiting
- Specialized Radiation Therapy in Treating Patients With Stage II, Stage III, Stage IV, or Recurrent Non-Small Cell Lung Cancer and Poor Performance Status, Not Recruiting
- Stereotactic Body Radiation Therapy in Treating Patients With Stage I or Stage II Non-Small Cell Lung Cancer That Can Be Removed By Surgery, Not Recruiting
- Study of Positron Emission Tomography and Computed Tomography in Guiding Radiation Therapy in Patients With Stage III Non-small Cell Lung Cancer, Not Recruiting
- Study to Evaluate Percussive Ventilation Breathhold to Improve Lung Stereotactic Ablative Radiotherapy, Not Recruiting
- Surgery With or Without Internal Radiation Therapy Compared With Stereotactic Body Radiation Therapy in Treating Patients With High-Risk Stage I Non-Small Cell Lung Cancer, Not Recruiting
- The Role of Audiovisual Biofeedback on Image Quality During 4D Anatomic and Functional Imaging, Not Recruiting

Teaching

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Nikita Katila, Vivek Jaysukhlal Maradia, Luis Soto

Doctoral Dissertation Advisor (NonAC)

Dixin Chen

Doctoral Dissertation Co-Advisor (NonAC)

Mindy Harkness

Publications

PUBLICATIONS

- **Emerging FLASH therapy platforms for stereotactic radiosurgery and body radiotherapy.** *Journal of radiosurgery and SBRT*
Chen, D., Schulz, J. B., Melemenidis, S., Skinner, L., Xing, L., Loo, B. W., Ashraf, M. R.
2026; 10 (1-2): 101-121
- **Single Percussive Ventilation Breath-hold Imaging and Delivery in Lung Tumor Stereotactic Ablative Radiation Therapy: Initial Observations From a Prospective Clinical Trial.** *International journal of radiation oncology, biology, physics*
Mai, W. X., Huang, K. Z., Kuo, J., Wang, E., Wong, S., Yauger, A., Langer, J., Free, D., Gebeyehu, P., Kathiravan, A., Swamy, A., Flores, K. Z., Merrill, et al
2026
- **FLASH reduces radiation-induced oral mucositis in a mouse model of Fanconi anemia.** *bioRxiv : the preprint server for biology*
Loo, P., Pan, M., Zhao, M., Melemenidis, S., Chen, D., Whitmore, L., Richter, S., Dirbas, F. M., Casey, K. M., Graves, E. E., Epperly, M. W., Greenberger, J., Loo, et al
2026

- **Non-invasive Reversible Software-based Electron FLASH Irradiation Configuration of a Linear Accelerator in Clinical Use.** *International journal of radiation oncology, biology, physics*
Melemenidis, S., Chen, D., Jensen, C., Schulz, J. B., Surucu, M., Yu, A. S., Graves, E. E., Shi, M., Reilly, M., Maxim, P. G., Currell, A., Loo, B. W., Skinner, et al
2026
- **Applying a portable pocket handheld ultrasound scanner to monitor tumor volume in preclinical studies.** *Medical physics*
Melemenidis, S., Soto, L. A., Kaffas, A. N., Ashraf, R. M., Loo, B. W., Graves, E. E.
2026; 53 (5): e70462
- **Addressing respiratory gating latency for accurate pulse delivery in preclinical electron FLASH irradiation on a clinical linear accelerator.** *ArXiv*
Manjappa, R., Wang, J., Melemenidis, S., Viswanathan, V., Ashraf, R., Skinner, L., Soto, L. A., Lau, B., Ko, R. B., von Eyben, R., Graves, E., Yu, S., Bush, et al
2026
- **Addressing respiratory gating latency for accurate pulse delivery in preclinical electron FLASH irradiation on a clinical linear accelerator.** *ArXiv*
Manjappa, R., Wang, J., Melemenidis, S., Viswanathan, V., Ashraf, R., Skinner, L., Soto, L. A., Lau, B., Ko, R. B., von Eyben, R., Graves, E., Yu, S., J., Bush, et al
2026
- **FLASH reduces radiation-induced oral mucositis in a mouse model of Fanconi anemia**
Loo, P., Pan, M., Zhao, M., Melemenidis, S., Chen, D., Casey, K. M., Epperly, M., Greenberger, J. S., Loo, B. W., Rankin, E.
AMER ASSOC CANCER RESEARCH.2026
- **FLASH radiotherapy maintains tumor control and enables safe re-irradiation while preserving normal tissue in breast cancer PDX models**
Mutahar, A., Verma, B., Melemenidis, S., Dutt, S., Casey, K. M., Qi, Z., Kuo, A., Horst, K. C., Graves, E., Clarke, M. F., Loo, B. W., Dirbas, F. M.
AMER ASSOC CANCER RESEARCH.2026
- **Impact of ultra-high dose rate (FLASH) versus conventional radiotherapy on tumor control in wild-type and cGAS-knockout mice**
Verma, B., Mutahar, A., Melemenidis, S., Verma, R., Whitmore, L., Dutt, S., Horst, K. C., Graves, E., Clarke, M. F., Li, L., Loo, B. W., Dirbas, F. M.
AMER ASSOC CANCER RESEARCH.2026
- **Non-Small Cell Lung Cancer, Version 4.2026** *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK*
Riely, G. J., Wood, D. E., Aisner, D. L., Axtell, A. L., Bauman, J. R., Bharat, A., Chang, J. Y., Desai, A., Dilling, T. J., Dowell, J., Durm, G. A., Gettinger, S., Grotz, et al
2026; 24 (4)
- **Association Between Inter-Fraction Volume Changes and Patient Outcomes from Stereotactic Ablative Radiotherapy for Early-Stage Lung Cancer** *CLINICAL LUNG CANCER*
Mai, W. X., Frick, M. A., Jackson, S., Richter, S. A., Hasan, M., Cheunkarndee, T., Loo, B. W., Diehn, M., Vitzthum, L., Chin, A., Kastelowitz, N., Gensheimer, M. F.
2026; 27 (3): 162-169
- **Radiation Therapy Without Anesthesia for a 7-Month-Old Child Using Audio-Visual Assisted Therapeutic Ambience in Radiation Therapy (AVATAR).** *Advances in radiation oncology*
Turcas, A., Ewongwo, A., Skinner, L., Diaconu, O., Coltea, V., Marosan, A., Gheorghica, L., Vancea, A., Aczberger, C., Savu, E., Mihut, E., Muddle, J., Loo, et al
2026; 11 (4): 102002
- **Ultra high dose rate radiation (FLASH) vs. conventional radiotherapy: normal tissue toxicity and long-term survival in cgas ko and wild-type mice**
Verma, B., Mutahar, A., Melamenidis, S., Dutt, S., Casey, K., Horst, K., Graves, E., Clarke, M., Loo, B., Dirbas, F.
AMER ASSOC CANCER RESEARCH.2026
- **Tumor response to ultra high dose rate radiation (FLASH) vs. conventional radiotherapy in normal and cGAS-knockout mice**
Verma, B., Mutahar, A., Melamenidis, S., Verma, R., Casey, K., Horst, K., Graves, E., Clarke, M., Loo, B., Dirbas, F.
AMER ASSOC CANCER RESEARCH.2026
- **Emerging FLASH therapy platforms for stereotactic radiosurgery and body radiotherapy** *JOURNAL OF RADIOSURGERY AND SBRT*

- Chen, D., Schulz, J. B., Melemenidis, S., Skinner, L., Xing, L., Loo Jr, B. W., Ashraf, M.
2026; 10 (1): 101-121
- **The potential and risks of FLASH radiotherapy in pediatric patients** *ADAPTATION-THE JOURNAL OF LITERATURE ON SCREEN STUDIES*
Schuemann, J., Rothwell, B., Mascia, A., Fan, Y., Loo Jr, B. W., Yock, T., Liu, K. X., Perentesis, J., Haas-Kogan, D. A.
2026; 2 (1)
 - **Small Cell Lung Cancer, Version 2.2026 Featured Updates to the NCCN Guidelines** *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK*
Ganti, A. P., Loo, B. W., Badiyan, S., Bassetti, M., Bestvina, C., Chiang, A., Choudhury, N., D'Avella, C. A., Daly, M., Dowlati, A., Edelman, M., Florsheim, C., Gold, et al
2026; 24 (1)
 - **The potential and risks of FLASH radiotherapy in pediatric patients.** *Neuro-oncology pediatrics*
Schuemann, J., Rothwell, B., Mascia, A., Fan, Y., Loo, B. W., Yock, T., Liu, K. X., Perentesis, J., Haas-Kogan, D. A.
2026; 2 (1): wuaf014
 - **Local Control in Thoracic Stereotactic Ablative Radiotherapy: Analysis of Motion Management and Single Fraction Dosimetry from the iSABR trial.** *International journal of radiation oncology, biology, physics*
Jaoude, J. A., Cui, S., Fu, J., Worth, J. E., Campbell, M. J., Lau, B., Eswarappa, S., Richter, S. A., Meurice, N., Shirato, H., Taguchi, H., Gee, H., Romero, et al
2025
 - **Multi-Institutional Verification of a Novel Predictor (Volume-Scaled SUVmax) for Successful Biology-Guided Radiotherapy Delivery of Small Targets.** *Cancers*
Ashraf, M. R., Pham, D., Bal, G., Chen, H., Park, H. S., Watkins, T., Cai, B., Badiyan, S. N., Vitzthum, L. K., Loo, B. W., Surucu, M.
2025; 17 (22)
 - **Association Between Inter-Fraction Volume Changes and Patient Outcomes from Stereotactic Ablative Radiotherapy for Early-Stage Lung Cancer.** *Clinical lung cancer*
Mai, W. X., Frick, M. A., Jackson, S., Richter, S. A., Hasan, M., Cheunkarndee, T., Loo, B. W., Diehn, M., Vitzthum, L., Chin, A., Kastelowitz, N., Gensheimer, M. F.
2025
 - **Translating FLASH to the clinic: treatment planning system for a FLASH-compatible dose delivery using a novel x-ray UHDR machine.** *Physics in medicine and biology*
Krim, D. E., Whelan, B. M., Harkness, M., Otto, K., Loo, B. W., Bazalova-Carter, M.
2025
 - **Automated Parametric Custom Collimator Creation for Preclinical Irradiation Studies**
Schulz, J. B., Ghomsi, L. K., Chen, D., Ashraf, M. R., Skinner, L., Graves, E. E., Loo, B. W., Melemenidis, S.
WILEY.2025
 - **Unsupervised Task-Specific Histology Image Stain Standardization and Crypt Detection for Evaluating Normal Tissue Flash Irradiation Response**
Yang, Z., Melemenidis, S., Jiang, H., Fu, J., Viswanathan, V., Dutt, S., Manjappa, R., Lau, B. C., Soto, L. A., Ashraf, M. R., Skinner, L., Yu, A. J., Surucu, et al
WILEY.2025
 - **Slit Scanning Delivery Simulation for Flash Radiotherapy**
Chen, D., Melemenidis, S., Garza, A., Ghomsi, L. K., Schulz, J. B., Ashraf, M. R., Skinner, L., Surucu, M., Graves, E. E., Loo, B. W.
WILEY.2025
 - **Differential Gastrointestinal Responses to Synchrotron-Produced Proton and Electron Irradiation Under Flash and Conventional Conditions**
Liu, K., Titt, U., Esplen, N. M., Connell, L., Konradsson, E., Yang, M., Wang, X., Takaoka, T., Li, Z., Koong, A. C., Mitra, D., Mohan, R., Loo, et al
WILEY.2025
 - **Non-Small Cell Lung Cancer, Version 7.2025 Featured Updates to the NCCN Guidelines** *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK*
Riely, G. J., Wood, D. E., Aisner, D. L., Loo Jr, B. W., Axtell, A. L., Bauman, J. R., Bharat, A., Chang, J. Y., Desai, A., Dilling, T. J., Dowell, J., Durm, G. A., Gettinger, et al

2025; 23 (9): 354-362

- **A Dosimetric Comparison between BgRT-SABR Plans and C Arm Linac-Based IGRT-SABR Plans for Lung and Bone Lesions**
Pham, D., Tran, L., Vitzthum, L., Loo, B., Chin, A. L., Han, B., Surucu, M., Kovalchuk, N.
ELSEVIER SCIENCE INC.2025
- **Adaptive vs. Non-Adaptive Radiation Dose Escalation in Locally Advanced Non-Small Cell Lung Cancer (LA-NSCLC): Indirect Comparison of NRG-RTOG 0617 and 1106 Individual Patient Data**
Miccio, J. A., Hu, C., Kong, F. M., Samson, P., Gelblum, D., Loo, B. W., Videtic, J. G. M., Faria, S., Jolly, S., Tian, S., Gerber, D. E., Welsh, J. W., Nakhoul, et al
ELSEVIER SCIENCE INC.2025
- **Rapid Sterilization of Clinical Apheresis Blood Products using Ultra-High Dose Rate Radiation**
Melemenidis, S., Nguyen, K. D., Baraceres-Pineda, R. P., Barclay, C. K., Bautista, J., Lau, H., Ashraf, R. M., Manjappa, R., Dutt, S., Soto, L. A., Katila, N., Lau, B., Viswanathan, et al
ELSEVIER SCIENCE INC.2025
- **Temporal Effects of Dose and Fractionation of FLASH and Conventional Irradiation on Hippocampal Neurogenesis and Mechanisms of FLASH-Induced Neuroprotection**
Katila, N., Melemenidis, S., Dutt, S., Soto, L. A., Chen, D., Ashraf, R. M., Surucu, M., Drayson, O. G., Jensen, K. P., Turcotte, A., Maxim, P. G., Skinner, L., Baulch, et al
ELSEVIER SCIENCE INC.2025: S138
- **Development of Honokiol Prodrug in Alleviating Myocardial Mitochondrial Dysfunction and Restrictive Cardiomyopathy after Irradiation**
Jahng, W. S., Melemenidis, S., Zhou, Y., Cao, X., Hu, E., Achter, J. S., Rhee, S., Cho, S., Lundby, A., Loo, B. W., Wu, J.
ELSEVIER SCIENCE INC.2025
- **Efficacy and toxicity of hyperfractionated thoracic reirradiation. *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology***
Butler, S. S., Raclin, T., Lau, B., Raja, N., Skinner, L., Kastelowitz, N., Chin, A. L., Diehn, M., Loo, B. W., Vitzthum, L. K.
2025: 111001
- **Thymomas and Thymic Carcinomas, Version 2.2025 *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK***
Riely, G. J., Wood, D. E., Loo, B. W., Aisner, D. L., Akerley, W., Bauman, J. R., Bharat, A., Chang, J. Y., Chirieac, L. R., DeCamp, M., Desai, A., Dilling, T. J., Dowell, et al
2025; 23 (6): 255-269
- **Monte Carlo simulation of a novel medical linac concept for highly conformal x-ray FLASH cancer radiotherapy. *Scientific reports***
Krim, D., Whelan, B., Harkness, M., Otto, K., Loo, B. W., Bazalova-Carter, M.
2025; 15 (1): 17604
- **Modification of the microstructure of the CERN- CLEAR-VHEE beam at the picosecond scale modifies ZFE morphogenesis but has no impact on hydrogen peroxide production. *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology***
Kacem, H., Kunz, L., Korysko, P., Ollivier, J., Tsoutsou, P., Martinotti, A., Rieker, V., Bateman, J., Farabolini, W., Baldacchino, G., Loo, B. W., Limoli, C. L., Dosanjh, et al
2025: 110942
- **Discordance in the induction of the FLASH effect between synchrotron-based proton and linac-based electron ultra-high dose rate irradiation**
Liu, K., Titt, U., Esplen, N., Connell, L., Konradsson, E., Yang, M., Wang, X., Takaoka, T., Li, Z., Koong, A., Mitra, D., Mohan, R., Loo, et al
ELSEVIER IRELAND LTD.2025: S3912-S3913
- **Integrating ctDNA Analysis and Radiomics for Dynamic Risk Assessment in Localized Lung Cancer. *Cancer discovery***
Moding, E. J., Shahrokh Esfahani, M., Jin, C., Hui, A. B., Nabet, B. Y., Liu, Y., Chabon, J. J., Binkley, M. S., Kurtz, D. M., Hamilton, E. G., Chaudhuri, A. A., Liu, C. L., Li, et al
2025: OF1-OF21
- **Effectiveness of FLASH vs. Conventional Dose Rate Radiotherapy in a Model of Orthotopic, Murine Breast Cancer. *Cancers***
Melemenidis, S., Viswanathan, V., Dutt, S., Kapadia, N., Lau, B., Soto, L. A., Ashraf, M. R., Thakur, B., Mutahar, A. Z., Skinner, L. B., Yu, A. S., Surucu, M., Casey, et al
2025; 17 (7)

- **Rapid Sterilization of Clinical Apheresis Blood Products Using Ultra-High Dose Rate Radiation.** *International journal of molecular sciences*
Melemenidis, S., Nguyen, K. D., Baraceres-Pineda, R., Barclay, C. K., Bautista, J., Lau, H. D., Ashraf, M. R., Manjappa, R., Dutt, S., Soto, L. A., Katila, N., Lau, B., Viswanathan, et al
2025; 26 (6)
- **Systematic Review of Sublobar Resection for Treatment of High-Risk Patients with Stage I Non-Small Cell Lung Cancer** *SEMINARS IN THORACIC AND CARDIOVASCULAR SURGERY*
Merritt, R. E., Brunelli, A., Walsh, G., Murthy, S., Schuchert, M. J., Varghese Jr, T. K., Lanuti, M., Wolf, A., Keshavarz, H., Loo Jr, B. W., Suh, R. D., Mak, R. H., Criner, et al
2025; 37 (1): 99-105
- **Discordance in acute gastrointestinal toxicity between synchrotron-based proton and linac-based electron ultra-high dose rate irradiation.** *International journal of radiation oncology, biology, physics*
Liu, K., Titt, U., Esplen, N., Connell, L., Konradsson, E., Yang, M., Wang, X., Takaoka, T., Li, Z., Koong, A. C., Mitra, D., Mohan, R., Loo, et al
2025
- **Automated Deep Learning-Based Detection and Segmentation of Lung Tumors at CT.** *Radiology*
Kashyap, M., Wang, X., Panjwani, N., Hasan, M., Zhang, Q., Huang, C., Bush, K., Chin, A., Vitzthum, L. K., Dong, P., Zaky, S., Loo, B. W., Diehn, et al
2025; 314 (1): e233029
- **Rapid Sterilization of Clinical Apheresis Blood Products using Ultra-High Dose Rate Radiation.** *bioRxiv : the preprint server for biology*
Melemenidis, S., Nguyen, K. D., Baraceres-Pineda, R., Barclay, C. K., Bautista, J., Lau, H., Ashraf, M. R., Manjappa, R., Dutt, S., Soto, L. A., Katila, N., Lau, B., Viswanathan, et al
2024
- **Systematic Review of the Comparative Studies of Image-guided Thermal Ablation, Stereotactic Radiosurgery, and Sublobar Resection for Treatment of High-Risk Patients with Stage I Non-Small Cell Lung Cancer.** *Seminars in thoracic and cardiovascular surgery*
Pennathur, A., Lanuti, M., Merritt, R. E., Wolf, A., Keshavarz, H., Loo, B. W., Suh, R. D., Mak, R. H., Brunelli, A., Criner, G. J., Mazzone, P. J., Walsh, G., Liptay, et al
2024
- **Systematic Review of Stereotactic Ablative Radiotherapy (SABR)/ Stereotactic Body Radiation Therapy (SBRT) for Treatment of High-Risk Patients with Stage I Non-Small Cell Lung Cancer.** *Seminars in thoracic and cardiovascular surgery*
Wolf, A., Loo, B. W., Mak, R. H., Liptay, M., Pettiford, B., Rocco, G., Lanuti, M., Merritt, R. E., Keshavarz, H., Suh, R. D., Brunelli, A., Criner, G. J., Mazzone, et al
2024
- **Systematic Review of Sublobar Resection for Treatment of High-Risk Patients with Stage I Non-Small Cell Lung Cancer.** *Seminars in thoracic and cardiovascular surgery*
Merritt, R. E., Brunelli, A., Walsh, G., Murthy, S., Schuchert, M. J., Varghese, T. K., Lanuti, M., Wolf, A., Keshavarz, H., Loo, B. W., Suh, R. D., Mak, R. H., Criner, et al
2024
- **Treatment of High-Risk Patients with Stage I Non-Small Cell Lung Cancer.** *Seminars in thoracic and cardiovascular surgery*
Pennathur, A., Lanuti, M., Merritt, R. E., Wolf, A., Keshavarz, H., Loo, B. W., Suh, R. D., Mak, R. H., Brunelli, A., Criner, G. J., Mazzone, P. J., Walsh, G., Liptay, et al
2024
- **Treatment Selection for the High-risk Patient with Stage I Non-Small Cell Lung Cancer: Sublobar Resection, Stereotactic Ablative Radiotherapy or Image-guided Thermal Ablation?** *Seminars in thoracic and cardiovascular surgery*
Pennathur, A., Lanuti, M., Merritt, R. E., Wolf, A., Keshavarz, H., Loo, B. W., Suh, R. D., Mak, R. H., Brunelli, A., Criner, G. J., Mazzone, P. J., Walsh, G., Liptay, et al
2024
- **The Importance of Pulmonary Nodule Features in the Selection of Treatment for the High-risk Patient with Stage I Non-Small Cell Lung Cancer.** *Seminars in thoracic and cardiovascular surgery*
Pennathur, A., Lanuti, M., Merritt, R. E., Wolf, A., Keshavarz, H., Loo, B. W., Suh, R. D., Mak, R. H., Brunelli, A., Criner, G. J., Mazzone, P. J., Walsh, G., Liptay, et al
2024

- **Systematic Review of Image-guided Thermal Ablation for Treatment of High-Risk Patients with Stage I Non-Small Cell Lung Cancer.** *Seminars in thoracic and cardiovascular surgery*
Lanuti, M., Suh, R. D., Criner, G. J., Mazzone, P. J., Blair Marshall, M., Tong, B., Merritt, R. E., Wolf, A., Keshavarz, H., Loo, B. W., Mak, R. H., Brunelli, A., Walsh, et al
2024
- **Predictors of Atrial Fibrillation After Thoracic Radiotherapy.** *JACC. CardioOncology*
Butler, S., No, H., Guo, F., Merchant, G., Park, N. J., Jackson, S., Clark, D. E., Vitzthum, L., Chin, A., Horst, K., Hoppe, R. T., Loo, B. W., Diehn, et al
2024; 6 (6): 935-945
- **Redefining FLASH RT: the impact of mean dose rate and dose per pulse in the gastrointestinal tract.** *International journal of radiation oncology, biology, physics*
Liu, K., Waldrop, T., Aguilar, E., Mims, N., Neill, D., Delahoussaye, A., Li, Z., Swanson, D., Lin, S. H., Koong, A. C., Taniguchi, C. M., Loo, B. W., Mitra, et al
2024
- **Primary Results of NRG-RTOG1106/ECOG-ACRIN 6697: A Randomized Phase II Trial of Individualized Adaptive (chemo)Radiotherapy Using Midtreatment 18F-Fluorodeoxyglucose Position Emission Tomography/Computed Tomography in Stage III Non-Small Cell Lung Cancer.** *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*
Kong, F. S., Hu, C., Pryma, D. A., Duan, F., Matuszak, M., Xiao, Y., Ten Haken, R., Siegel, M. J., Hanna, L., Curran, W. J., Dunphy, M., Gelblum, D., Piert, et al
2024: JCO2400022
- **Shielding Assessment for the World's First Ultra-Compact Proton Therapy System within the Linac Vault: A Monte Carlo Analysis**
Adadi, S., Rosenstrom, A., Charyyev, S., Loo, B. W., Rokni, S., Dewji, S.
WILEY.2024: 7693-7694
- **A Pilot Study to Evaluate Percussive Ventilation Breath Hold to Improve Lung Stereotactic Ablative Radiotherapy (PVB-SABR)**
Mai, W. X., Swamy, A., Flores, K. Z., Langer, J., Free, D., Gebeyehu, P., Skinner, L., Wong, S., Huang, K. Z., Pranoto, A., Lao, O., Loo, B. W., Blomain, et al
ELSEVIER SCIENCE INC.2024: E45-E46
- **Improving Intestinal Crypt Detection in Deep Learning Models with Reinhard Method-Based Stain Color Normalization for Evaluating Normal Tissue Radiation Response**
Kim, M. J., Yang, Z., Fu, J., Melemenidis, S., Loo, B. W., Gu, X.
ELSEVIER SCIENCE INC.2024: E633
- **Predictors of Atrial Fibrillation after Thoracic Radiotherapy**
Butler, S. S., No, H. J., Guo, F. B., Merchant, G., Park, N. J., Jackson, S., Clark, D. E., Vitzthum, L., Chin, A. L., Horst, K. C., Hoppe, R. T., Loo, B. W., Diehn, et al
ELSEVIER SCIENCE INC.2024: E9-E10
- **Enhancing Histological Image Analysis and Automation through Unsupervised Attention -Guided Deep Learning for Robust Stain Normalization in H&E-Stained Images**
Yang, Z., Melemenidis, S., Jiang, H., Fu, J., Viswanathan, V., Dutt, S., Manjappa, R., Soto, L. A., Ashraf, R. M., Skinner, L., Yu, S. J., Surucu, M., Casey, et al
ELSEVIER SCIENCE INC.2024: E416
- **Local Control by Motion Management Strategy of Thoracic Tumors: Secondary Analysis of the iSABR Trial**
Abi Jaoude, J., Meurice, N., Lau, B., Dubrowski, P., Pham, D., Skinner, L., Kastelowitz, N., Chin, A. L., Gensheimer, M. F., Diehn, M., Loo, B. W., Vitzthum, L.
ELSEVIER SCIENCE INC.2024: E1
- **Multi -Institutional Standardized Dosimetry Protocol for Preclinical Radiobiological Experiments**
Melemenidis, S., Ashraf, R. M., Chen, D., Liu, K., Velasquez, B. D., Connell, L., Schulz, J. B., Duff, S., Katila, N., Flores, K. Z., Schueler, E., Loo, B. W.
ELSEVIER SCIENCE INC.2024: S21-S22
- **Association between Inter-Fraction Tumor Volume Changes and Patient Outcomes from Stereotactic Ablative Radiotherapy for Early-Stage Lung Cancer**
Mai, W. X., Frick, M. A., Jackson, S., Hasan, M., Cheunkarndee, T., Loo, B. W., Diehn, M., Vitzthum, L., Chin, A. L., Gensheimer, M. F.

ELSEVIER SCIENCE INC.2024: E45

- **Applying a Portable Pocket Handheld Ultrasound Scanner to Monitor Tumor Volume in Preclinical Studies**
Melemenidis, S., Soto, L. A., Schulz, J. B., Ashraf, M. R., El Kaffas, A., Loo, B. W., Graves, E. E.
ELSEVIER SCIENCE INC.2024: E388
- **Congruence of the Per-Fraction Pet Signal and the Delivered Doses in Biology-Guided Radiotherapy (BgRT)**
Pham, D., Vitzthum, L., Kovalchuk, N., Han, B., Chin, A. L., Loo, B. W., Surucu, M.
ELSEVIER SCIENCE INC.2024: E55
- **Monte Carlo Based Treatment Planning Workflow for Pre-Clinical and Clinical Electron Flash Studies**
Ashraf, M. R., Melemenidis, S., Schulz, J. B., Loo, B. W.
ELSEVIER SCIENCE INC.2024: E96-E97
- **A Phase 2 Single-Arm Trial of High -Dose Radiotherapy Added to Immunotherapy for Patients with Metastatic Non Small Cell Lung Cancer**
Kotha, N. V., Vitzthum, L., Chin, A. L., Jackson, S., Pratapneni, A., Le-Budka, M. L., Brown, E., Barnick, K., Wakelee, H. A., Das, M., Ramchandran, K. J., Myall, N., Padda, et al
ELSEVIER SCIENCE INC.2024: S60
- **Integrating Audiovisual Immersion Into Pediatric Radiation Therapy Across Multiple Centers: Methodology, Timeliness, and Cost of the Audiovisual-Assisted Therapeutic Ambience in Radiation Therapy Prospective Multi-Institutional Trial.** *Advances in radiation oncology*
Oh, J., Skinner, L., Gutkin, P. M., Jiang, A., Donaldson, S. S., Loo, B. W., Wang, Y. P., Ewongwo, A., Bredfeldt, J. S., Breneman, J. C., Constine, L. S., Faught, A. M., Haas-Kogan, et al
2024; 9 (10): 101589
- **A Pilot Study to Evaluate Percussive Ventilation Breathhold to Improve Lung Stereotactic Ablative Radiotherapy (PVB-SABR)**
Mai, W., Swamy, A., Flores, K., Langer, J., Free, D., Gebeyehu, P., Skinner, L., Wong, S., Huang, K., Pranoto, A., Lao, O., Loo, B., Blomain, et al
LIPPINCOTT WILLIAMS & WILKINS.2024: S3-S4
- **A Novel X-Ray Machine for Ultra-High Dose Rate Delivery: Performance Comparison with VMAT for a Lung Cancer Case**
Krim, D. E., Whelan, B. M., Harkness, M., Otto, K., Loo, B. W., Bazalova-Carter, M.
WILEY.2024: 7697
- **Multi-Institutional Dosimetry Protocol for Standardize Dosimetry across Two Research Facilities for Preclinical Radiobiological Experiments**
Melemenidis, S., Ashraf, M. R., Chen, D., Liu, K., Velasquez, B. D., Connell, L., Dutt, S., Schulz, J. B., Turcotte, A., Katila, N., Schueler, E., Loo, B. W.
WILEY.2024: 7723
- **Avatar 2.0: Advanced Radiolucent Communication Systems for Next-Level Radiotherapy through Face-to-Face Video, Biofeedback, Translation, and Audio-Visual Immersion**
Schulz, J. B., Zalavari, L., Gutkin, P. M., Jiang, A., Wang, Y. P., Bush, K. K., Wang, L., Donaldson, S. S., Loo, B. W., Hiniker, S. M., Skinner, L.
WILEY.2024: 7655
- **Dosimetric calibration of anatomy-specific ultra-high dose rate electron irradiation platform for preclinical FLASH radiobiology experiments.** *Medical physics*
Wang, J., Melemenidis, S., Manjappa, R., Viswanathan, V., Ashraf, R. M., Levy, K., Skinner, L. B., Soto, L. A., Chow, S., Lau, B., Ko, R. B., Graves, E. E., Yu, et al
2024
- **A phase 2 single-arm trial of high-dose precision targeted radiotherapy added to immunotherapy for patients with metastatic non-small cell lung cancer.** *International journal of radiation oncology, biology, physics*
Gensheimer, M. F., Kotha, N. V., Vitzthum, L. K., Chin, A. L., Jackson, S., 't Erve, I. v., Pratapneni, A., Le-Budka, M. L., Wong, S., Brown, E., Barnick, K., Wakelee, H. A., Das, et al
2024
- **FLASH: New intersection of physics, chemistry, biology, and cancer medicine.** *Reviews of modern physics*
Vozenin, M. C., Loo, B. W., Tantawi, S., Maxim, P. G., Spitz, D. R., Bailat, C., Limoli, C. L.
2024; 96 (3)

- **A multi-institutional study to investigate the sparing effect after whole brain electron FLASH in mice: Reproducibility and temporal evolution of functional, electrophysiological, and neurogenic endpoints.** *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology*
Drayson, O. G., Melemenidis, S., Katila, N., Viswanathan, V., Kramár, E. A., Zhang, R., Kim, R., Ru, N., Petit, B., Dutt, S., Manjappa, R., Ramish Ashraf, M., Lau, et al
2024: 110534
- **Enhancing Histological Image Analysis through Unsupervised Attention-Guided Robust Stain Normalization**
Yang, Z., Melemenidis, S., Jiang, H., Fu, J., Viswanathan, V., Dutt, S., Manjappa, R., Lau, B. C., Soto, L. A., Ashraf, M. R., Skinner, L., Yu, A. J., Surucu, et al
WILEY.2024: 6599
- **Consequences of ionizing radiation exposure to the cardiovascular system.** *Nature reviews. Cardiology*
Jahng, J. W., Little, M. P., No, H. J., Loo, B. W., Wu, J. C.
2024
- **Navigating the Critical Translational Questions for Implementing FLASH in the Clinic.** *Seminars in radiation oncology*
Loo, B. W., Verginadis, I. I., Sørensen, B. S., Mascia, A. E., Perentesis, J. P., Koong, A. C., Schüller, E., Rankin, E. B., Maxim, P. G., Limoli, C. L., Vozenin, M. C.
2024; 34 (3): 351-364
- **Non-Small Cell Lung Cancer, Version 4.2024.** *Journal of the National Comprehensive Cancer Network : JNCCN*
Riely, G. J., Wood, D. E., Ettinger, D. S., Aisner, D. L., Akerley, W., Bauman, J. R., Bharat, A., Bruno, D. S., Chang, J. Y., Chirieac, L. R., DeCamp, M., Desai, A. P., Dilling, et al
2024; 22 (4): 249-274
- **Chest wall pain after single-fraction SABR: Dosimetric analysis from the iSABR trial (NCT01463423)**
Lau, B., Wu, Y., Cui, S., Fu, J., Jackson, S., Pham, D., Dubrowski, P., Eswarappa, S., Skinner, L., Shirato, H., Taguchi, H., Gensheimer, M., Gee, et al
ELSEVIER IRELAND LTD.2024: S1674-S1676
- **First-in-Human Experience with Biology-guided Radiotherapy (BgRT) Using the RefleXion X1 System**
Surucu, M., Kotha, N. V., Pham, D., Kovalchuk, N., Han, B., Loo, B. W., Vitzthum, L. K.
ELSEVIER IRELAND LTD.2024: S1807-S1810
- **Chest wall pain after single-fraction thoracic stereotactic ablative Radiotherapy: Dosimetric analysis from the iSABR trial.** *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology*
Lau, B., Wu, Y. F., Cui, S., Fu, J., Jackson, S., Pham, D., Dubrowski, P., Eswarappa, S., Skinner, L., Shirato, H., Taguchi, H., Gensheimer, M. F., Gee, et al
2024: 110317
- **First in human Phase I Clinical Trial of Stereotactic Irradiation to Achieve Lung Volume Reduction (SILVR) in Severe Emphysema.** *International journal of radiation oncology, biology, physics*
Kamtam, D. N., Binkley, M. S., Kapula, N., Sadeghi, C., Nesbit, S., Md, H. H., Chang, J., Maxim, P. G., Diehn, M., Loo, B. W., Shrager, J. B.
2024
- **Multi-Institutional Audit of FLASH and Conventional Dosimetry with a 3D-Printed Anatomically Realistic Mouse Phantom.** *International journal of radiation oncology, biology, physics*
Ashraf, M. R., Melemenidis, S., Liu, K., Grilj, V., Jansen, J., Velasquez, B., Connell, L., Schulz, J. B., Bailat, C., Libed, A., Manjappa, R., Dutt, S., Soto, et al
2024
- **Mesothelioma: Pleural, Version 1.2024.** *Journal of the National Comprehensive Cancer Network : JNCCN*
Stevenson, J., Ettinger, D. S., Wood, D. E., Aisner, D. L., Akerley, W., Bauman, J. R., Bharat, A., Bruno, D. S., Chang, J. Y., Chirieac, L. R., DeCamp, M., Desai, A., Dilling, et al
2024; 22 (2): 72-81
- **Exploring deep learning for estimating the isoeffective dose of FLASH irradiation from mouse intestinal histology images.** *International journal of radiation oncology, biology, physics*
Fu, J., Yang, Z., Melemenidis, S., Viswanathan, V., Dutt, S., Manjappa, R., Lau, B., Soto, L. A., Ashraf, R., Skinner, L., Yu, S. J., Surucu, M., Casey, et al
2024

- **AVATAR 2.0: next level communication systems for radiotherapy through face-to-face video, biofeedback, translation, and audiovisual immersion.** *Frontiers in oncology*
Schulz, J. B., Zalavari, L., Gutkin, P., Jiang, A., Wang, Y., Gibson, C., Garza, A., Bush, K. K., Wang, L., Donaldson, S. S., Loo, B. W., Hiniker, S. M., Skinner, et al
2024; 14: 1405433
- **Pulmonary interstitial lymphography: A prospective trial with potential impact on stereotactic ablative radiotherapy planning for early-stage lung cancer.** *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology*
Ko, R. B., Abelson, J. A., Fleischmann, D., Louie, J. D., Hwang, G. L., Sze, D. Y., Schuler, E., Kielar, K. N., Maxim, P. G., Le, Q., Hara, W. H., Diehn, M., Kothary, et al
2023: 110079
- **Predicting Adverse Cardiac Events After Radiotherapy for Locally Advanced Non-Small Cell Lung Cancer.** *JACC. CardioOncology*
No, H. J., Guo, F. B., Park, N. J., Kastelowitz, N., Rhee, J. W., Clark, D. E., Chin, A. L., Vitzthum, L. K., Horst, K. C., Moding, E. J., Loo, B. W., Diehn, M., Binkley, et al
2023; 5 (6): 775-787
- **Patient Selection and Outcomes for Hypofractionated Accelerated Radiation and Concurrent Chemotherapy for Non-Small-Cell Lung Cancer.** *Clinical lung cancer*
Hui, C., Marquez, C., Lau, B., Das, M., Myall, N. J., Roy, M., Wakelee, H. A., Neal, J. W., Kovalchuk, N., Chin, A., Diehn, M., Loo, B. W., Xiang, et al
2023
- **Personalized Accelerated ChEmoRadiation (PACER) for Lung Cancer: Protocol for a Bayesian Optimal Phase I/II Trial.** *Clinical lung cancer*
Hui, C., Brown, E., Wong, S., Das, M., Wakelee, H., Neal, J., Ramchandran, K., Myall, N. J., Pham, D., Xing, L., Yang, Y., Kovalchuk, N., Yuan, et al
2023
- **Equivalent Dose Estimation in FLASH Irradiation with a Deep Learning Approach.** *International journal of radiation oncology, biology, physics*
Yang, Z., Fu, J., Melemenidis, S., Viswanathan, V., Dutt, S., Lau, B., Soto, L. A., Manjappa, R., Skinner, L., Yu, S. J., Surucu, M., Casey, K., Rankin, et al
2023; 117 (2S): e272
- **Hyperfractionated Reirradiation for Locally Recurrent Thoracic Tumors.** *International journal of radiation oncology, biology, physics*
Butler, S. S., Raclin, T., Lau, B., Raja, N., Chin, A. L., Skinner, L., Diehn, M., Loo, B. W., Vitzthum, L.
2023; 117 (2S): e9
- **Comparison of Tumor Control between FLASH and CONV in an Orthotopic Breast Cancer Model.** *International journal of radiation oncology, biology, physics*
Melemenidis, S., Viswanathan, V., Dutt, S., Manjappa, R., Ashraf, M. R., Soto, L. A., Skinner, L., Yu, S. J., Surucu, M., Graves, E. E., Loo, B., Dirbas, F. M.
2023; 117 (2S): e251-e252
- **Predicting Local Control with Dosimetric Parameters in Patients Receiving Individualized Stereotactic Ablative Radiotherapy for Lung Tumors.** *International journal of radiation oncology, biology, physics*
Wu, Y. F., Lau, B., Fu, J., Cui, S., Pham, D., Dubrowski, P., Eswarappa, S., Zgrabik, J., Candow, L., Skinner, L., Shirato, H., Taguchi, H., Gensheimer, et al
2023; 117 (2S): e76
- **Technical Infrastructure for Clinical Translation of Electron FLASH.** *International journal of radiation oncology, biology, physics*
Ashraf, M. R., Skinner, L., Melemenidis, S., Dworkin, M. L., Wu, Y. F., No, H. J., Manjappa, R., Yu, S. J., Surucu, M., Graves, E. E., Maxim, P. G., Loo, B. W.
2023; 117 (2S): e639
- **Deep Learning-Based Pipeline for Automatic Identification of Intestinal Regenerating Crypts in Mouse Histological Images.** *International journal of radiation oncology, biology, physics*
Fu, J., Jiang, H., Melemenidis, S., Viswanathan, V., Dutt, S., Lau, B., Soto, L. A., Manjappa, R., Skinner, L., Yu, S. J., Surucu, M., Graves, E. E., Casey, et al
2023; 117 (2S): S117-S118
- **Investigating Dosimetry and Imaging Biomarkers for Prediction of Major Adverse Cardiac Events Following Locally Advanced Non-Small Cell Lung Cancer Radiotherapy.** *International journal of radiation oncology, biology, physics*
No, H. J., Park, N. J., Guo, F. B., Kastelowitz, N., Snyder, J. M., Rhee, J. W., Clark, D. E., Chin, A. L., Vitzthum, L., Horst, K. C., Moding, E. J., Loo, B. W., Diehn, et al

2023; 117 (2S): S170

- **Anatomically Realistic 3D Printed Mouse Phantom for Multi-Institutional Benchmarking of FLASH and CONV Irradiation.** *International journal of radiation oncology, biology, physics*
Ashraf, M. R., Melemenidis, S., Liu, K., Velasquez, B. D., Manjappa, R., Soto, L. A., Dutt, S., Skinner, L., Yu, S. J., Surucu, M., Graves, E. E., Maxim, P. G., Schueler, et al
2023; 117 (2S): e697
- **Anatomically Realistic 3D Printed Mouse Phantom for Multi-Institutional Benchmarking of FLASH and CONV Irradiation.** *International journal of radiation oncology, biology, physics*
Ashraf, M. R., Melemenidis, S., Liu, K., Velasquez, B. D., Manjappa, R., Soto, L. A., Dutt, S., Skinner, L., Yu, S. J., Surucu, M., Graves, E. E., Maxim, P. G., Schueler, et al
2023; 117 (2S): e697
- **Individualized Stereotactic Ablative Radiotherapy for Lung Tumors: The iSABR Phase 2 Nonrandomized Controlled Trial.** *JAMA oncology*
Gensheimer, M. F., Gee, H., Shirato, H., Taguchi, H., Snyder, J. M., Chin, A. L., Vitzthum, L. K., Maxim, P. G., Wakelee, H. A., Neal, J., Das, M., Chang, D. T., Kidd, et al
2023
- **FLASH-RT does not affect chromosome translocations and junction structures beyond that of CONV-RT dose-rates.** *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology*
Barghouth, P. G., Melemenidis, S., Montay-Gruel, P., Ollivier, J., Viswanathan, V., Jorge, P. G., Soto, L. A., Lau, B. C., Sadeghi, C., Edlabadkar, A., Zhang, R., Ru, N., Baulch, et al
2023: 109906
- **Shielding Analysis of a Preclinical Bremsstrahlung X-ray FLASH Radiotherapy System within a Clinical Radiation Therapy Vault.** *Health physics*
Rosenstrom, A., Santana-Leitner, M., Rokni, S., Shumail, M., Tantawi, S., Kwofie, J., Dewji, S., Loo, B. W.
2023
- **The sparing effect of FLASH-RT on synaptic plasticity is maintained in mice with standard fractionation.** *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology*
Limoli, C. L., Kramár, E. A., Almeida, A., Petit, B., Grilj, V., Baulch, J. E., Ballesteros-Zebadua, P., Loo, B. W., Wood, M. A., Vozenin, M. C.
2023: 109767
- **Frontiers in the Application of RF Vacuum Electronics.** *IEEE transactions on electron devices*
Armstrong, C. M., Snively, E. C., Shumail, M., Nantista, C., Li, Z., Tantawi, S., Loo, B. W., Temkin, R. J., Griffin, R. G., Feng, J., Dionisio, R., Mentgen, F., Ayllon, et al
2023; 70 (6): 2643-2655
- **Unilateral diaphragmatic paralysis after stereotactic ablative radiotherapy to a lung tumor abutting the course of the phrenic nerve.** *Practical radiation oncology*
Eke, I., Guo, H. H., Loo, J. B., Sung, A. W., Diehn, M., Vitzthum, L., Chin, A. L., Gensheimer, M. F.
2023
- **Framework for Quality Assurance of Ultra-High Dose Rate Clinical Trials Investigating FLASH Effects and Current Technology Gaps.** *International journal of radiation oncology, biology, physics*
Zou, W., Zhang, R., Schueler, E., Taylor, P. A., Mascia, A. E., Diffenderfer, E. S., Zhao, T., Ayan, A. S., Sharma, M., Yu, S. J., Lu, W., Bosch, W. R., Tsien, et al
2023
- **Clinical LINAC-based electron FLASH: Pathway for practical translation to FLASH clinical trials: LINAC electron FLASH.** *International journal of radiation oncology, biology, physics*
No, H. J., Wu, Y. F., Dworkin, M. L., Manjappa, R., Skinner, L., Ashraf, M. R., Lau, B., Melemenidis, S., Viswanathan, V., Yu, A. S., Surucu, M., Schüler, E., Graves, et al
2023
- **Pulmonary Hemorrhage in Patients Treated with Thoracic Stereotactic Ablative Radiotherapy and Anti-Angiogenic Agents.** *Journal of thoracic oncology : official publication of the International Association for the Study of Lung Cancer*
Lau, B., Wu, Y. F., No, H. J., Ko, R. B., Devine, M., Das, M. S., Neal, J. W., Wakelee, H. A., Ramchandran, K., Gensheimer, M. F., Diehn, M., Chin, A. L., Loo, et al
2023

- **Human enteroids as a tool to study conventional and ultra-high dose rate radiation.** *Integrative biology : quantitative biosciences from nano to macro*
Klett, K. C., Martin-Villa, B. C., Villarreal, V. S., Melemenidis, S., Viswanathan, V., Manjappa, R., Ashraf, M. R., Soto, L., Lau, B., Dutt, S., Rankin, E. B., Loo, B. W., Heilshorn, et al
2023; 15
- **Transformative Technology for FLASH Radiation Therapy.** *Applied sciences (Basel, Switzerland)*
Schulte, R., Johnstone, C., Boucher, S., Esarey, E., Geddes, C. G., Kravchenko, M., Kutsaev, S., Loo, B. W., Méot, F., Mustapha, B., Nakamura, K., Nanni, E. A., Obst-Huebl, et al
2023; 13 (8)
- **Transformative Technology for FLASH Radiation Therapy** *APPLIED SCIENCES-BASEL*
Schulte, R., Johnstone, C., Boucher, S., Esarey, E., Geddes, C. G. R., Kravchenko, M., Kutsaev, S., Loo, B. W., Meot, F., Mustapha, B., Nakamura, K., Nanni, E. A., Obst-Huebl, et al
2023; 13 (8)
- **Feasibility of the Audio-Visual Assisted Therapeutic Ambience in Radiotherapy (AVATAR) system for anesthesia avoidance in pediatric patients: A multicenter trial.** *International journal of radiation oncology, biology, physics*
Gutkin, P. M., Skinner, L., Jiang, A., Donaldson, S. S., Loo, B. W., Oh, J., Wang, Y. P., von Eyben, R., Snyder, J., Bredfeldt, J. S., Breneman, J. C., Constine, L. S., Faught, et al
2023
- **FLASH-RT does not affect chromosome translocations and junction structures beyond that of CONV-RT dose-rates.** *bioRxiv : the preprint server for biology*
Barghouth, P. G., Melemenidis, S., Montay-Gruel, P., Ollivier, J., Viswanathan, V., Jorge, P. G., Soto, L. A., Lau, B. C., Sadeghi, C., Edlabadkar, A., Manjappa, R., Wang, J., Bouteiller, et al
2023
- **Real-world risk of brain metastases in stage III non-small cell lung cancer in the era of PET and MRI staging.** *Frontiers in oncology*
Alhusaini, S., Lanman, T. A., Ko, R. B., Therkelsen, K. E., Eyben, R. V., Diehn, M., Soltys, S. G., Pollom, E. L., Chin, A., Vitzthum, L., Wakelee, H. A., Padda, S. K., Ramchandran, et al
2023; 13: 1139940
- **Frontiers in the Application of RF Vacuum Electronics** *IEEE TRANSACTIONS ON ELECTRON DEVICES*
Armstrong, C. M., Snively, E. C., Shumail, M., Nantista, C., Li, Z., Tantawi, S., Loo, B. W., Temkin, R. J., Griffin, R. G., Feng, J., Dionisio, R., Mentgen, F., Ayllon, et al
2023
- **Monte Carlo simulation of shielding designs for a cabinet form factor preclinical MV-energy photon FLASH radiotherapy system.** *Medical physics*
Rosenstrom, A., Leitner, M. S., Rokni, S. H., Shumail, M., Tantawi, S., Dewji, S., Jr, B. W.
2023
- **STK11 Inactivation Predicts Rapid Recurrence in Inoperable Early-Stage Non-Small-Cell Lung Cancer.** *JCO precision oncology*
Katipally, R. R., Spurr, L. F., Gutiontov, S. I., Turchan, W. T., Connell, P., Juloori, A., Malik, R., Binkley, M. S., Jiang, A. L., Rouhani, S. J., Chervin, C. S., Wanjari, P., Segal, et al
2023; 7: e2200273
- **Mesothelioma: Peritoneal, Version 2.2023, NCCN Clinical Practice Guidelines in Oncology.** *Journal of the National Comprehensive Cancer Network : JNCCN*
Ettinger, D. S., Wood, D. E., Stevenson, J., Aisner, D. L., Akerley, W., Bauman, J. R., Bharat, A., Bruno, D. S., Chang, J. Y., Chirieac, L. R., DeCamp, M., Dilling, T. J., Dowell, et al
2023; 21 (9): 961-979
- **NCCN Guidelines Insights: Non-Small Cell Lung Cancer, Version 2.2023.** *Journal of the National Comprehensive Cancer Network : JNCCN*
Ettinger, D. S., Wood, D. E., Aisner, D. L., Akerley, W., Bauman, J. R., Bharat, A., Bruno, D. S., Chang, J. Y., Chirieac, L. R., DeCamp, M., Dilling, T. J., Dowell, J., Durm, et al
2023; 21 (4): 340-350
- **TopasOpt: An open-source library for optimization with Topas Monte Carlo.** *Medical physics*
Whelan, B., Loo, B. W., Wang, J., Keall, P.

2022

- **Induction EGFR tyrosine kinase inhibitors prior to definitive chemoradiotherapy in unresectable stage III EGFR-mutated non-small cell lung cancer.** *Cancer treatment and research communications*
Aredo, J. V., Wakelee, H. A., Hui, A. B., Padda, S. K., Joshi, N. D., Guo, H. H., Chaudhuri, A., Diehn, M., Loo, B. W., Neal, J. W.
2022; 33: 100659
- **A 10-Center Prospective Clinical Trial of the Audio-Visual Assisted Therapeutic Ambience in Radiotherapy (AVATAR) System for Anesthesia Avoidance in Pediatric Patients**
Gutkin, P. M., Skinner, L., Jiang, A., Donaldson, S. S., Loo, B. W., Oh, J., Von Eyben, R., Bredfeldt, J. S., Breneman, J. C., Constine, L. S., Faight, A. M., Haas-Kogan, D. A., Holmes, et al
ELSEVIER SCIENCE INC.2022: S70
- **Characterizing Metastatic Non-Small Cell Lung Cancer Presenting to an Academic Medical Center in an Era of Changing Treatment Paradigms**
Raja, N., No, H. J., Von Eyben, R., Das, M., Roy, M., Myall, N., Chin, A. L., Diehn, M., Loo, B. W., Chang, D. T., Pollom, E., Vitzthum, L.
ELSEVIER SCIENCE INC.2022: E407
- **Assessing Clinical Feasibility of a LINAC-Based Electron FLASH Radiotherapy System Using an Anthropomorphic Phantom under Realistic Clinical Conditions**
Wu, Y. F., No, H. J., Dworkin, M. L., Manjappa, R., Ashraf, R., Skinner, L., Lau, B., Melemenidis, S., Viswanathan, V., Yu, S. J., Surucu, M., Schueler, E., Graves, et al
ELSEVIER SCIENCE INC.2022: S140
- **Investigating the Impact of Coronary Artery Dosimetry on Major Adverse Cardiac Events after Thoracic Radiation Therapy**
Guo, F. B., No, H. J., Rhee, J. W., Chin, A. L., Vitzthum, L., Horst, K. C., Moding, E. J., Loo, B. W., Diehn, M., Binkley, M. S.
ELSEVIER SCIENCE INC.2022: E418
- **Early Outcomes and Toxicity with Concurrent Chemotherapy and Hypofractionated Radiation Therapy in Patients with Non-Small Cell Lung Cancer**
Hui, C., Marquez, C., Lau, B., Von Eyben, R., Das, M., Myall, N., Roy, M., Chin, A., Diehn, M., Loo, B., Vitzthum, L.
LIPPINCOTT WILLIAMS & WILKINS.2022: S44
- **Intracranial and Metastatic Solitary Fibrous Tumors Treated with Radiotherapy and Radiosurgery**
Mendoza, M., Hui, C., von Eyben, R., Pollom, E., Loo, B., Soltys, S.
LIPPINCOTT WILLIAMS & WILKINS.2022: S34
- **Chest Wall Toxicity after Individualized Stereotactic Ablative Radiotherapy for Lung Tumors**
Lau, B., Wu, Y. F., Fu, J., Cui, S., Pham, D., Gee, H., Skinner, L., Shirato, H., Taguchi, H., Chin, A., Gensheimer, M., Diehn, M., Loo, et al
ELSEVIER SCIENCE INC.2022: S36-S37
- **Dosimetric Predictors of Local Control after Stereotactic Ablative Radiotherapy (SABR) for Lung Tumors: A Secondary Analysis of a Phase II Prospective Trial of Individualized SABR (iSABR)**
Wu, Y., Lau, B., Fu, J., Skinner, L., Gensheimer, M., Gee, H., Diehn, M., Loo, B., Chin, A., Vitzthum, L.
LIPPINCOTT WILLIAMS & WILKINS.2022: S16
- **Design and validation of a dosimetric comparison scheme tailored for ultra-high dose-rate electron beams to support multicenter FLASH preclinical studies.** *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology*
Gonçalves Jorge, P., Melemenidis, S., Grilj, V., Buchillier, T., Manjappa, R., Viswanathan, V., Gondré, M., Vozenin, M. C., Germond, J. F., Bochud, F., Moeckli, R., Limoli, C., Skinner, et al
2022
- **Real-time optical oximetry during FLASH radiotherapy using a phosphorescent nanoprobe.** *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology*
Ha, B., Liang, K., Liu, C., Melemenidis, S., Manjappa, R., Viswanathan, V., Das, N., Ashraf, R., Lau, B., Soto, L., Graves, E. E., Rao, J., Loo, et al
2022
- **Bayesian optimisation to design a novel X-ray shaping device.** *Medical physics*
Whelan, B., Trovati, S., Wang, J., Fahrig, R., Maxim, P. G., Hanuka, A., Shumail, M., Tantawi, S., Merrick, J., Perl, J., Keall, P., Jr, B. W.
2022

- **Isolated Nodal Recurrence After Definitive Stereotactic Ablative Radiotherapy for Non-Small Cell Lung Cancer.** *Practical radiation oncology*
Devine, M., Merriott, D. J., No, H. J., Lau, B., Say, C., Yoo, C., Yi, E., Ko, R. B., Neal, J. W., Wakelee, H. A., Das, M., Loo, B. W., Diehn, et al
2022
- **Bayesian Optimization of a Novel Intensity Modulated X-Ray Source**
Whelan, B., Keall, P., Perl, J., Wang, J., Trovati, S., Tantawi, S., Fahrig, R., Maxim, P., Shumail, M., Loo, B.
WILEY.2022: E320
- **TopasOpt: An Open-Source Library for Optimization with Topas Monte Carlo**
Whelan, B., Loo, B., Keall, P.
WILEY.2022: E307-E308
- **Calibration and Validation of a Real-Time Oximeter for FLASH-RT Experiments**
Liang, K., Prax, G., Manjappa, R., Ha, B., Liu, C., Melemenidis, S., Rao, J., Loo, B.
WILEY.2022: E521-E522
- **Characterization of Metastatic Non-Small Cell Lung Cancer and Oligometastatic Incidence in an Era of Changing Treatment Paradigms.** *International journal of radiation oncology, biology, physics*
No, H. J., Raja, N., Von Eyben, R., Das, M., Roy, M., Myall, N., Neal, J., Wakelee, H., Chin, A., Diehn, M., Loo, B. W., Chang, D. T., Pollom, et al
2022
- **Detection of Recurrence After Thoracic Stereotactic Ablative Radiotherapy Using FDG-PET-CT.** *Clinical lung cancer*
Sodji, Q. H., Harris, J. P., Quon, A., Modlin, L. A., Lau, B., Jiang, A., Trakul, N., Maxim, P. G., Diehn, M., Loo, B. W., Hiniker, S. M.
2022
- **Ultra-high dose rate electron beams and the FLASH effect: from preclinical evidence to a new radiotherapy paradigm.** *Medical physics*
Schüler, E., Acharya, M., Montay-Gruel, P., Loo, B. W., Vozenin, M. C., Maxim, P. G.
2022
- **Non-Small Cell Lung Cancer, Version 3.2022, NCCN Clinical Practice Guidelines in Oncology.** *Journal of the National Comprehensive Cancer Network : JNCCN*
Ettinger, D. S., Wood, D. E., Aisner, D. L., Akerley, W., Bauman, J. R., Bharat, A., Bruno, D. S., Chang, J. Y., Chirieac, L. R., D'Amico, T. A., DeCamp, M., Dilling, T. J., Dowell, et al
2022; 20 (5): 497-530
- **Acute and Late Esophageal Toxicity Following Stereotactic Ablative Radiotherapy to Thoracic Tumors near or Abutting the Esophagus.** *International journal of radiation oncology, biology, physics*
Sodji, Q. H., Ko, R., von Eyben, R., Owen, S. G., Capaldi, D. P., Bush, K., Binkley, M. S., Alrowais, F., Pickthorn, B., Maxim, P. G., Gensheimer, M. F., Diehn, M., Loo, et al
1800
- **Abdominopelvic FLASH Irradiation Improves PD-1 Immune Checkpoint Inhibition in Preclinical Models of Ovarian Cancer.** *Molecular cancer therapeutics*
Eggold, J. T., Chow, S., Melemenidis, S., Wang, J., Natarajan, S., Loo, P. E., Manjappa, R., Viswanathan, V., Kidd, E. A., Engleman, E., Dorigo, O., Loo, B. W., Rankin, et al
2021
- **Deep Learning Based Identification and Segmentation of Lung Tumors on Computed Tomography Images.** *International journal of radiation oncology, biology, physics*
Kashyap, M., Panjwani, N., Hasan, M. A., Huang, C., Bush, K., Dong, P., Zaky, S. S., Chin, A. L., Vitzthum, L., Loo, B. W., Diehn, M., Xing, L., Gensheimer, et al
2021; 111 (3S): e92-e93
- **Pulmonary Hemorrhage in Patients Treated With Thoracic Stereotactic Ablative Radiotherapy and Anti-Angiogenic Agents**
Lau, B., No, H. J., Wu, Y. F., Ko, R. B., Devine, M., Das, M., Neal, J. W., Ramchandran, K. J., Wakelee, H. A., Shaheen, S., Diehn, M., Chin, A. L., Loo, et al
ELSEVIER SCIENCE INC.2021: E423
- **Development of a Smartphone-Based Virtual Reality Platform for Radiation Oncology Patient Education.** *International journal of radiation oncology, biology, physics*
Blomain, E., Capaldi, D. P., Panjwani, N., Skinner, L., Loo, B. W.

2021; 111 (3S): e156

- **Validation of a Novel Cone-Less Set-up for Electron FLASH Radiation Delivery on a Clinical-Use Linear Accelerator.** *International journal of radiation oncology, biology, physics*
Wu, Y. F., No, H. J., Manjappa, R., Skinner, L., Yu, S. J., Lau, B., Surucu, M., Schueler, E., Bush, K., Graves, E. E., Maxim, P. G., Loo, B. W.
2021; 111 (3S): S139
- **A Phase II Trial of Individualized Stereotactic Ablative Radiotherapy for Lung Tumors (iSABR).** *International journal of radiation oncology, biology, physics*
Gensheimer, M. F., Gee, H. E., Von Eyben, R., Shirato, H., Taguchi, H., Wong, S., Brown, E., Nguyen, N., Liang, R., Maxim, P. G., Wakelee, H. A., Neal, J. W., Das, et al
2021; 111 (3S): S89-S90
- **Patterns of Care in Patients With Isolated Nodal Recurrence After Definitive Stereotactic Ablative Radiotherapy for Non-Small Cell Lung Cancer.** *International journal of radiation oncology, biology, physics*
Devine, M., Merriott, D. J., Say, C., Yoo, C., Yi, E., Lau, B., Ko, R. B., Shaheen, S., Neal, J. W., Wakelee, H. A., Das, M., Loo, B. W., Diehn, et al
2021; 111 (3S): e435
- **Deep Learning Based Identification and Segmentation of Lung Tumors on Computed Tomography Images**
Kashyap, M., Panjwani, N., Hasan, M. A., Huang, C., Bush, K., Dong, P., Zaky, S. S., Chin, A. L., Vitzthum, L., Loo, B. W., Diehn, M., Xing, L., Gensheimer, et al
ELSEVIER SCIENCE INC.2021: E92-E93
- **A Phase II Trial of Individualized Stereotactic Ablative Radiotherapy for Lung Tumors (iSABR)**
Gensheimer, M. F., Gee, H. E., Von Eyben, R., Shirato, H., Taguchi, H., Wong, S., Brown, E., Nguyen, N., Liang, R., Maxim, P. G., Wakelee, H. A., Neal, J. W., Das, et al
ELSEVIER SCIENCE INC.2021: S89-S90
- **Impact of Facility Treatment Volume on Stereotactic Ablative Radiotherapy (SABR) Outcomes in Early-Stage Non-Small Cell Lung Cancer (NSCLC).** *International journal of radiation oncology, biology, physics*
Marar, M., Bryant, A. K., Nalawade, V., Das, M., Jr, B. W., Diehn, M., Chin, A. L., Murphy, J. D., Vitzthum, L.
2021; 111 (3S): e447
- **Patterns of Care in Patients With Isolated Nodal Recurrence After Definitive Stereotactic Ablative Radiotherapy for Non-Small Cell Lung Cancer**
Devine, M., Merriott, D. J., Say, C., Yoo, C., Yi, E., Lau, B., Ko, R. B., Shaheen, S., Neal, J. W., Wakelee, H. A., Das, M., Loo, B. W., Diehn, et al
ELSEVIER SCIENCE INC.2021: E435
- **Pulmonary Hemorrhage in Patients Treated With Thoracic Stereotactic Ablative Radiotherapy and Anti-Angiogenic Agents**
Lau, B., No, H. J., Wu, Y. F., Ko, R. B., Devine, M., Das, M., Neal, J. W., Ramchandran, K. J., Wakelee, H. A., Shaheen, S., Diehn, M., Chin, A. L., Loo, et al
ELSEVIER SCIENCE INC.2021: E423
- **Development of a Smartphone-Based Virtual Reality Platform for Radiation Oncology Patient Education.** *International journal of radiation oncology, biology, physics*
Blomain, E., Capaldi, D. P., Panjwani, N., Skinner, L., Loo, B. W.
2021; 111 (3S): e156
- **Validation of a Novel Cone-Less Set-up for Electron FLASH Radiation Delivery on a Clinical-Use Linear Accelerator.** *International journal of radiation oncology, biology, physics*
Wu, Y. F., No, H. J., Manjappa, R., Skinner, L., Yu, S. J., Lau, B., Surucu, M., Schueler, E., Bush, K., Graves, E. E., Maxim, P. G., Loo, B. W.
2021; 111 (3S): S139
- **A Phase II Trial of Individualized Stereotactic Ablative Radiotherapy for Lung Tumors (iSABR).** *International journal of radiation oncology, biology, physics*
Gensheimer, M. F., Gee, H. E., Von Eyben, R., Shirato, H., Taguchi, H., Wong, S., Brown, E., Nguyen, N., Liang, R., Maxim, P. G., Wakelee, H. A., Neal, J. W., Das, et al
2021; 111 (3S): S89-S90
- **Patterns of Care in Patients With Isolated Nodal Recurrence After Definitive Stereotactic Ablative Radiotherapy for Non-Small Cell Lung Cancer.** *International journal of radiation oncology, biology, physics*
Devine, M., Merriott, D. J., Say, C., Yoo, C., Yi, E., Lau, B., Ko, R. B., Shaheen, S., Neal, J. W., Wakelee, H. A., Das, M., Loo, B. W., Diehn, et al

2021; 111 (3S): e435

- **The Nordic-HILUS Trial: Ultracentral Lung Stereotactic Ablative Radiotherapy and a Narrow Therapeutic Window.** *Journal of thoracic oncology : official publication of the International Association for the Study of Lung Cancer*
Rosenberg, S. A., Mak, R., Kotecha, R., Loo, B. W., Senan, S.
2021; 16 (10): e79-e80
- **Treatment Patterns for Isolated Nodal Recurrences in Non-Small Cell Lung Cancer After Definitive Stereotactic Ablative Radiotherapy**
No, H., Devine, M., Lau, B., Loo, B., Diehn, M., Chin, A., Vitzthum, L.
LIPPINCOTT WILLIAMS & WILKINS.2021: S109
- **Pulmonary Hemorrhage in Patients Treated with Thoracic Stereotactic Ablative Radiotherapy and Anti-Angiogenic Agents**
Lau, B., No, H., (Fred) Wu, Y., Devine, M., Ko, R., Loo, B., Diehn, M., Chin, A., Vitzthum, L.
LIPPINCOTT WILLIAMS & WILKINS.2021: S105
- **Local Recurrence Outcomes of Colorectal Cancer Oligometastases Treated With Stereotactic Ablative Radiotherapy.** *American journal of clinical oncology*
Benson, K. R., Sandhu, N., Zhang, C., Ko, R., Toesca, D. A., Lee, P. E., Von Eyben, R., Diehn, M., Gensheimer, M., Maxim, P. G., Bush, K., Loo, B. W., Soltys, et al
2021
- **Radiological tumor classification across imaging modality and histology.** *Nature machine intelligence*
Wu, J., Li, C., Gensheimer, M., Padda, S., Kato, F., Shirato, H., Wei, Y., Schönlieb, C. B., Price, S. J., Jaffray, D., Heymach, J., Neal, J. W., Loo, et al
2021; 3: 787-798
- **Radiological tumour classification across imaging modality and histology** *NATURE MACHINE INTELLIGENCE*
Wu, J., Li, C., Gensheimer, M., Padda, S., Kato, F., Shirato, H., Wei, Y., Schönlieb, C., Price, S., Jaffray, D., Heymach, J., Neal, J. W., Loo, et al
2021
- **Definition and assessment of high risk in patients considered for lobectomy for stage I non-small cell lung cancer: The American Association for Thoracic Surgery expert panel consensus document.** *The Journal of thoracic and cardiovascular surgery*
Writing Committee, Pennathur, A., Brunelli, A., Criner, G., Keshavarz, H., Mazzone, P., Walsh, G., Luketich, J., Liptay, M., Wafford, E., Murthy, S., Marshall, M. B., Tong, B., et al
2021
- **Constrained by Constraints, or Manacled by Margin Mandates?** *International journal of radiation oncology, biology, physics*
Loo, B. W., Pham, D.
2021; 110 (2): 264-266
- **An IOS Surface Audiovisual Biofeedback Smartphone Application for Respiratory Monitoring in Radiation Oncology**
Nano, T., Hirata, E., Blomain, E., Skinner, L., Prionas, N., Loo, B., Capaldi, D.
WILEY.2021
- **NRG-RTOG 1106/ACRIN 6697: A phase IIR trial of standard versus adaptive (mid-treatment PET-based) chemoradiotherapy for stage III NSCLC-Results and comparison to NRG-RTOG 0617 (non-personalized RT dose escalation).**
Kong, F., Hu, C., Ten Haken, R., Xiao, Y., Matuszak, M., Hirsh, V., Pryma, D. A., Siegel, B. A., Gelblum, D. Y., Hayman, J., Robinson, C., Loo, B. W., Videtic, et al
LIPPINCOTT WILLIAMS & WILKINS.2021
- **Local Control After Stereotactic Body Radiation Therapy for Stage I Non-Small Cell Lung Cancer** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Lee, P., Loo Jr, B. W., Biswas, T., Ding, G. X., El Naqa, I. M., Jackson, A., Kong, F., LaCouture, T., Miften, M., Solberg, T., Tome, W. A., Tai, A., Yorke, et al
2021; 110 (1): 160-171
- **Investigating gene expression profiles associated with clinical radiation resistance in KEAP1/NFE2L2 wildtype lung cancer.**
Binkley, M. S., Jeon, Y., Nesselbush, M., Moding, E. J., Nabet, B., Almanza, D., Yoo, C., Kurtz, D. M., Owen, S., Backhus, L. M., Berry, M. F., Shrager, J. B., Ramchandran, et al
AMER ASSOC CANCER RESEARCH.2021
- **Ultra-high dose rate (FLASH) irradiation does not alter microhomology mediated recombination under varying oxygen tension when compared to standard clinical dose rates.**

- Barghouth, P., Ollivier, J., Montay-Gruel, P., Loo, B. W., Vozenin, M., Limoli, C., Frock, R.
AMER ASSOC CANCER RESEARCH.2021
- **Circulating tumor DNA kinetics to identify genomic predictors of rapid response to chemoradiation in non-small cell lung cancer.**
Moding, E. J., Liu, Y., Hui, A. B., He, J., Qiao, Y., Xu, T., Yao, L., Gandhi, S., Liao, Z., Das, M., Ramchandran, K. J., Padda, S. K., Neal, et al
AMER ASSOC CANCER RESEARCH.2021
 - **Implementing New Paradigms for Delivering Radiation Therapy in the Clinic**
Loo, B.
ELSEVIER SCIENCE INC.2021: S67
 - **Randomized Phase II Trial (RTOG1106) on Midtreatment PET/CT Guided Adaptive Radiotherapy in Locally Advanced Non-Small Cell Lung Cancer**
Kong, F., Hu, C., Machtay, M., Matuszak, M., Xiao, Y., Ten Haken, R., Hirsh, V., Pryma, D., Siegel, B. A., Gelblum, D., Hayman, J., Robinson, C., Loo, et al
ELSEVIER SCIENCE INC.2021: S104–S105
 - **Multicellular spheroids as in vitro models of oxygen depletion during FLASH irradiation.** *International journal of radiation oncology, biology, physics*
Khan, S., Bassenne, M., Wang, J., Manjappa, R., Melemenidis, S., Breikreutz, D. Y., Maxim, P. G., Xing, L., Loo, B. W., Pratz, G.
2021
 - **NCCN Guidelines Insights: Non-Small Cell Lung Cancer, Version 2.2021.** *Journal of the National Comprehensive Cancer Network : JNCCN*
Ettinger, D. S., Wood, D. E., Aisner, D. L., Akerley, W., Bauman, J. R., Bharat, A., Bruno, D. S., Chang, J. Y., Chirieac, L. R., D'Amico, T. A., Dilling, T. J., Dowell, J., Gettinger, et al
2021; 19 (3): 254–66
 - **Small Cell Lung Cancer, Version 2.2022, NCCN Clinical Practice Guidelines in Oncology.** *Journal of the National Comprehensive Cancer Network : JNCCN*
Ganti, A. K., Loo, B. W., Bassetti, M., Blakely, C., Chiang, A., D'Amico, T. A., D'Avella, C., Dowlati, A., Downey, R. J., Edelman, M., Florsheim, C., Gold, K. A., Goldman, et al
1800; 19 (12): 1441-1464
 - **Durvalumab for Patients with Stage III EGFR-Mutated Non-Small Cell Lung Cancer Receiving Definitive Chemoradiotherapy**
Aredo, J. V., Hellyer, J. A., Neal, J. W., Padda, S. K., McCoach, C. E., Riess, J. W., Cabebe, E. C., Loo, B. W., Diehn, M., Wakelee, H. A.
ELSEVIER SCIENCE INC.2021: S15
 - **Durvalumab for Stage III EGFR-Mutated Non-Small Cell Lung Cancer After Definitive Chemoradiotherapy.** *Journal of thoracic oncology : official publication of the International Association for the Study of Lung Cancer*
Aredo, J. V., Mambetsariev, I. n., Hellyer, J. A., Amini, A. n., Neal, J. W., Padda, S. K., McCoach, C. E., Riess, J. W., Cabebe, E. C., Naidoo, J. n., Abuall, T. n., Salgia, R. n., Loo, et al
2021
 - **An automated optimization strategy to design collimator geometry for small field radiation therapy systems.** *Physics in medicine and biology*
Wang, J. n., Wang, L. n., Maxim, P. G., Loo, B. W.
2021
 - **A robotically assisted 3D printed quality assurance lung phantom for Calypso.** *Physics in medicine and biology*
Capaldi, D. P., Skinner, L. B., Dubrowski, P. n., Zhang, H. n., Xing, L. n., Chuang, C. F., Loo, B. W., Bush, K. K., Fahimian, B. P., Yu, A. S.
2021
 - **Effects of ultra-high dose rate FLASH irradiation on the tumor microenvironment in Lewis lung carcinoma: role of myosin light chain.** *International journal of radiation oncology, biology, physics*
Kim, Y., Gwak, S., Hong, B., Oh, J., Choi, H., Kim, M. S., Oh, D., Lartey, F., Rafat, M., Schuler, E., Kim, H., von Eyben, R., Weissman, et al
2020
 - **Cardiac Toxicities and Outcomes Following Stereotactic Ablative Radiation to Thoracic Cancers**
Obeid, J. P., Natarajan, J. M., Ko, R., Jani, K., Sodji, Q., Merriott, D. J., Pickthorn, W., Bush, K., Maxim, P. G., Diehn, M., Loo, B. W.
ELSEVIER SCIENCE INC.2020: E158–E159
 - **Pre-Treatment Lung FDG-PET Uptake is Correlated with Radiologic Lung Fibrosis after Stereotactic Ablative Radiotherapy (SABR)**

- Ross, J. B., Merriott, D. J., Alhumaid, S., Schueler, E., Ko, R., Bush, K., Maxim, P. G., Gensheimer, M. F., Loo, B. W., Diehn, M.
ELSEVIER SCIENCE INC.2020: E155
- **Parametric Response Mapping as an Imaging Biomarker for Regional Ventilation in Stereotactic Ablative Radiotherapy**
Capaldi, D. P., Binkley, M. S., Ko, R., Xing, L., Maxim, P. G., Diehn, M., Loo, B. W.
ELSEVIER SCIENCE INC.2020: E359
 - **FLASH Irradiation Of Avascular Tumor Spheroids**
Khan, S., Bassenne, M., Wang, J., Manjappa, R., Loo, B. W., Pratz, G.
ELSEVIER SCIENCE INC.2020: E558
 - **Combination total abdominal ultra-rapid flash irradiation and PD-1 inhibition provides enhanced tumor burden control in a preclinical ovarian cancer model**
Chow, S., Eggold, J., Levy, K., Wang, J., Manjappa, R., Dorigo, O., Loo, B., Rankin, E.
ACADEMIC PRESS INC ELSEVIER SCIENCE.2020: 103
 - **FLASH irradiation enhances the therapeutic index of abdominal radiotherapy in mice**
Natarajan, S., Levy, K., Wang, J., Chow, S., Eggold, J., Loo, P., Manjappa, R., Lartey, F. M., Schuler, E., Skinner, L., Rafat, M., Ko, R., Kim, et al
AMER ASSOC CANCER RESEARCH.2020
 - **Total abdominal ultra-rapid FLASH irradiation enhances the efficacy of PD-1 inhibition in preclinical models of ovarian cancer**
Chow, S., Eggold, J. T., Levy, K., Wang, J., Manjappa, R., Breikreutz, D. Y., Yu, A. S., Bush, K., Dorigo, O., Loo, B. W., Rankin, E. B.
AMER ASSOC CANCER RESEARCH.2020
 - **Ultrarapid total abdominal FLASH irradiation in a preclinical model of ovarian cancer.**
Levy, K., Wang, J., Eggold, J., Natarajan, S., Maxim, P., Loo, B., Rankin, E.
AMER ASSOC CANCER RESEARCH.2020: 49
 - **Initial Steps Towards A Clinical FLASH Radiotherapy System: Pediatric Whole Brain Irradiation with 40 MeV Electrons**
Breikreutz, D., Shumail, M., Bush, K., Tantawi, S., Maxim, P., Loo, B.
WILEY.2020: E799
 - **Resection following concurrent chemotherapy and high-dose radiation for stage IIIA non-small cell lung cancer. *The Journal of thoracic and cardiovascular surgery***
Donington, J. S., Paulus, R., Edelman, M. J., Krasna, M. J., Le, Q., Suntharalingam, M., Loo, B. W., Hu, C., Bradley, J. D., NRG Oncology Lung Group
2020
 - **KEAP1/NFE2L2 mutations to predict local recurrence after radiotherapy but not surgery in localized non-small cell lung cancer.**
Binkley, M. S., Jeon, Y., Nesselbush, M., Moding, E. J., Nabet, B., Almanza, D. S., Yoo, C., Kurtz, D., Owen, S., Backhus, L., Berry, M. F., Shrager, J. B., Ramchandran, et al
AMER SOC CLINICAL ONCOLOGY.2020
 - **A mid-chemoradiation dynamic risk model integrating tumor features and ctDNA analysis for lung cancer outcome prediction.**
Moding, E. J., Esfahani, M., Nabet, B., Liu, Y., Chabon, J. J., He, J., Qiao, Y., Xu, T., Yao, L., Gandhi, S., Liao, Z. X., Das, M., Ramchandran, et al
AMER SOC CLINICAL ONCOLOGY.2020
 - **Integrating genomic features for non-invasive early lung cancer detection. *Nature***
Chabon, J. J., Hamilton, E. G., Kurtz, D. M., Esfahani, M. S., Moding, E. J., Stehr, H., Schroers-Martin, J., Nabet, B. Y., Chen, B., Chaudhuri, A. A., Liu, C. L., Hui, A. B., Jin, et al
2020; 580 (7802): 245-251
 - **Circulating Tumor DNA Dynamics Predict Benefit from Consolidation Immunotherapy in Locally Advanced Non-Small Cell Lung Cancer. *Nature cancer***
Moding, E. J., Liu, Y., Nabet, B. Y., Chabon, J. J., Chaudhuri, A. A., Hui, A. B., Bonilla, R. F., Ko, R. B., Yoo, C. H., Gojenola, L., Jones, C. D., He, J., Qiao, et al
2020; 1 (2): 176-183
 - **Impact of Audio-Visual Assisted Therapeutic Ambience in Radiotherapy (AVATAR) on Anesthesia Use, Payer Charges, and Treatment Time in Pediatric Patients. *Practical radiation oncology***

Balazy, K. E., Gutkin, P. M., Skinner, L., von Eyben, R., Fowler, T., Pinkham, D. W., Rodriguez, S., Maxim, P. G., Donaldson, S. S., Loo, B. W., Bush, K., Hiniker, S. M.
2020

- **Initial Steps Towards a Clinical FLASH Radiotherapy System: Pediatric Whole Brain Irradiation with 40 MeV Electrons at FLASH Dose Rates.** *Radiation research*
Breitkreutz, D. Y., Shumail, M. n., Bush, K. K., Tantawi, S. G., Maxim, P. G., Loo, B. W.
2020
- **Abdominal FLASH irradiation reduces radiation-induced gastrointestinal toxicity for the treatment of ovarian cancer in mice.** *Scientific reports*
Levy, K. n., Natarajan, S. n., Wang, J. n., Chow, S. n., Eggold, J. T., Loo, P. E., Manjappa, R. n., Melemenidis, S. n., Lartey, F. M., Schüler, E. n., Skinner, L. n., Rafat, M. n., Ko, et al
2020; 10 (1): 21600
- **FLASH Irradiation Results in Reduced Severe Skin Toxicity Compared to Conventional-Dose-Rate Irradiation.** *Radiation research*
Soto, L. A., Casey, K. M., Wang, J. n., Blaney, A. n., Manjappa, R. n., Breitkreutz, D. n., Skinner, L. n., Dutt, S. n., Ko, R. B., Bush, K. n., Yu, A. S., Melemenidis, S. n., Strober, et al
2020
- **Evaluating the Reproducibility of Mouse Anatomy under Rotation in a Custom Immobilization Device for Conformal FLASH Radiotherapy.** *Radiation research*
Ko, R. B., Soto, L. A., von Eyben, R. n., Melemenidis, S. n., Rankin, E. B., Maxim, P. G., Graves, E. E., Loo, B. W.
2020
- **Predicting per-lesion local recurrence in locally advanced non-small cell lung cancer following definitive radiation therapy using pre- and mid-treatment metabolic tumor volume.** *Radiation oncology (London, England)*
Binkley, M. S., Koenig, J. L., Kashyap, M. n., Xiang, M. n., Liu, Y. n., Sodji, Q. n., Maxim, P. G., Diehn, M. n., Loo, B. W., Gensheimer, M. F.
2020; 15 (1): 114
- **Patient motion tracking for non-isocentric and non-coplanar treatments via fixed frame-of-reference 3D camera.** *Journal of applied clinical medical physics*
Gasparyan, S. n., Ko, K. n., Skinner, L. B., Ko, R. B., Loo, B. W., Fahimian, B. P., Yu, A. S.
2020
- **KEAP1/NFE2L2 mutations predict lung cancer radiation resistance that can be targeted by glutaminase inhibition.** *Cancer discovery*
Binkley, M. S., Jeon, Y. J., Nesselbush, M. n., Moding, E. J., Nabet, B. Y., Almanza, D. n., Kunder, C. n., Stehr, H. n., Yoo, C. H., Rhee, S. n., Xiang, M. n., Chabon, J. J., Hamilton, et al
2020
- **Understanding High-Dose, Ultra-High Dose-Rate and , Spatially Fractionated Radiotherapy.** *International journal of radiation oncology, biology, physics*
Griffin, R. J., Ahmed, M. M., Amendola, B. n., Belyakov, O. n., Bentzen, S. M., Butterworth, K. T., Chang, S. n., Coleman, C. N., Djonov, V. n., Formenti, S. C., Glatstein, E. n., Guha, C. n., Kalnicki, et al
2020
- **Novel Radiation Therapy Paradigms and Immunomodulation: Heresies and Hope.** *Seminars in radiation oncology*
Dutt, S. n., Ahmed, M. M., Loo, B. W., Strober, S. n.
2020; 30 (2): 194–200
- **Circulating tumor DNA dynamics predict benefit from consolidation immunotherapy in locally advanced non-small-cell lung cancer** *NATURE CANCER*
Moding, E. J., Liu, Y., Nabet, B. Y., Chabon, J. J., Chaudhuri, A. A., Hui, A. B., Bonilla, R. F., Ko, R. B., Gojenola, L., Jones, C. D., He, J., Qiao, Y., Heymach, et al
2020; 1: 176–183
- **Abdominal FLASH irradiation reduces radiation-induced gastrointestinal toxicity for the treatment of ovarian cancer in mice.** *Scientific reports*
Levy, K. n., Natarajan, S. n., Wang, J. n., Chow, S. n., Eggold, J. T., Loo, P. E., Manjappa, R. n., Melemenidis, S. n., Lartey, F. M., Schüler, E. n., Skinner, L. n., Rafat, M. n., Ko, et al
2020; 10 (1): 21600

- **Non-Small Cell Lung Cancer, Version 1.2020 Featured Updates to the NCCN Guidelines** *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK*
Ettinger, D. S., Wood, D. E., Aggarwal, C., Aisner, D. L., Akerley, W., Bauman, J. R., Bharat, A., Bruno, D. S., Chang, J. Y., Chirieac, L. R., D'Amico, T. A., Dilling, T. J., Dobelbower, et al
2019; 17 (12): 1464–72
- **Deep segmentation networks predict survival of non-small cell lung cancer.** *Scientific reports*
Baek, S., He, Y., Allen, B. G., Buatti, J. M., Smith, B. J., Tong, L., Sun, Z., Wu, J., Diehn, M., Loo, B. W., Plichta, K. A., Seyedin, S. N., Gannon, et al
2019; 9 (1): 17286
- **TOTAL ABDOMINAL ULTRA-RAPID FLASH IRRADIATION DEMONSTRATES DECREASED GASTROINTESTINAL TOXICITY COMPARED TO CONVENTIONAL TOTAL ABDOMINAL IRRADIATION IN MICE**
Levy, K., Eggold, J., Rafat, M., Schuler, E., Shehade, H., Fregoso, D., Vilches-Moure, J., Koong, A., Maxim, P., Loo, B. W., Rankin, E.
AMER ASSOC CANCER RESEARCH.2019: 182
- **The Real-World Risk of Brain Metastases in Stage 3 Lung Cancer Patients in the Era of PET and MRI Staging**
Ko, R., Therkelsen, K., Von Eyben, R., Neal, J., Loo, B., Nagpal, S.
ELSEVIER SCIENCE INC.2019: S585–S586
- **Circulating Tumor DNA Changes During Chemoradiation for Lung Cancer Predict Patient Outcomes**
Moding, E. J., Nabet, B. Y., Liu, Y., Chabon, J. J., Chaudhuri, A. A., Hui, A. B., Binkley, M. S., He, J., Qiao, Y., Xu, T., Yao, L., Gandhi, S., Liao, et al
ELSEVIER SCIENCE INC.2019: S113
- **Lessons Learned From Hurricane Maria in Puerto Rico: Practical Measures to Mitigate the Impact of a Catastrophic Natural Disaster on Radiation Oncology Patients** *PRACTICAL RADIATION ONCOLOGY*
Gay, H. A., Santiago, R., Gil, B., Remedios, C., Montes, P. J., Lopez-Araujo, J., Chevere, C. M., Imbert, W. S., White, J., Arthur, D. W., Horton, J. K., Jagsi, R., Rabinovich, et al
2019; 9 (5): 305–21
- **Lessons Learned from Hurricane Maria in Puerto Rico: Practical Measures to Mitigate the Impact of a Catastrophic Natural Disaster on Radiation Oncology Patients**
Gay, H. A., Santiago, R., Gil, B., Remedios, C., Montes-Garcia, P. J., Lopez Araujo, J., Chevere, C. M., Imbert, W. S., White, J. R., Arthur, D. W., Horton, J. K., Jagsi, R., Rabinovitch, et al
ELSEVIER SCIENCE INC.2019: E612–E613
- **Outcomes of Oligometastatic Colorectal Cancer treated with Stereotactic Ablative Radiotherapy**
Benson, K., Sandhu, N., Zhang, C., Ko, R. B., Toesca, D. S., Von Eyben, R., Diehn, M., Bush, K., Maxim, P. G., Gensheimer, M. F., Soltys, S. G., Loo, B. W., Pollom, et al
ELSEVIER SCIENCE INC.2019: E161–E162
- **Symptomatic Cardiac Events in Patients with Lung Tumors Near The Heart Treated with Stereotactic Ablative Radiotherapy (SABR): A Single Institution Experience**
Ko, R. B., Jani, K., Sodji, Q., Merriott, D. J., Pickthorn, W., Bush, K., Maxim, P. G., Diehn, M., Loo, B. W.
ELSEVIER SCIENCE INC.2019: S148
- **Influence of Dose and Fractionation on Radiologic Lung Fibrosis after Stereotactic Ablative Radiotherapy (SABR)**
Ross, J. B., Ross, J. B., Merriott, D. J., Alhumaid, S., Schueler, E., Ko, R. B., Bush, K., Maxim, P. G., Gensheimer, M. F., Loo, B. W., Diehn, M.
ELSEVIER SCIENCE INC.2019: E527–E528
- **Investigating and Validating Metabolic Tumor Volume As a Prognostic Factor for Local Recurrence in Early Stage Lung Cancer**
Binkley, M. S., Stehr, H., Moding, E. J., Owen, S. G., Ko, R., Maxim, P. G., Loo, B. W., Diehn, M.
ELSEVIER SCIENCE INC.2019: E497
- **Radiotherapy and Immunotherapy-Shining Further Together.** *JAMA oncology*
Walker, J., Loo, B. W.
2019
- **PHASER: A platform for clinical translation of FLASH cancer radiotherapy.** *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology*
Maxim, P. G., Tantawi, S. G., Loo, B. W.
2019

- **The Promise of FLASH**
Koong, A., Pollard-Larkin, J., Dong, L., Loo, B.
WILEY.2019: E395
- **Mortality of lung cancer as a second primary malignancy: A population-based cohort study** *CANCER MEDICINE*
Deng, L., Hardardottir, H., Song, H., Xiao, Z., Jiang, C., Wang, Q., Valdimarsdottir, U., Cheng, H., Loo, B. W., Lu, D.
2019; 8 (6): 3269–77
- **FLT-PET-CT for the Detection of Disease Recurrence After Stereotactic Ablative Radiotherapy or Hyperfractionation for Thoracic Malignancy: A Prospective Pilot Study.** *Frontiers in oncology*
Hiniker, S. M., Sodji, Q., Quon, A., Gutkin, P. M., Arksey, N., Graves, E. E., Chin, F. T., Maxim, P. G., Diehn, M., Loo, B. W.
2019; 9: 467
- **Conical beam geometry intensity-modulated radiation therapy.** *Physics in medicine and biology*
Schueler, E., Wang, L., Loo, B., Maxim, P. G.
2019
- **Preclinical testing of ultra-rapid FLASH total abdominal irradiation demonstrates survival benefit and decreased gastrointestinal toxicity compared to conventional external beam radiation.**
Levy, K., Rafat, M., Schueler, E., Eggold, J., Wang, J., Casey, K., Koong, A., Maxim, P., Loo, B. W., Rankin, E.
AMER SOC CLINICAL ONCOLOGY.2019
- **ctDNA analysis for personalization of consolidation immunotherapy in localized non-small cell lung cancer.**
Moding, E. J., Liu, Y., Nabet, B., Chabon, J. J., Chaudhuri, A., Hui, A. B., He, J., Qiao, Y., Heymach, J., Tsao, A. S., Liao, Z. X., Gomez, D., Ramchandran, et al
AMER SOC CLINICAL ONCOLOGY.2019
- **SABR-COMET: harbinger of a new cancer treatment paradigm** *LANCET*
Loo, B. W., Diehn, M.
2019; 393 (10185): 2013–14
- **Mortality of lung cancer as a second primary malignancy: A population-based cohort study.** *Cancer medicine*
Deng, L., Hardardottir, H., Song, H., Xiao, Z., Jiang, C., Wang, Q., Valdimarsdottir, U., Cheng, H., Loo, B. W., Lu, D.
2019
- **Lessons Learned from Hurricane Maria in Puerto Rico: Practical Measures to Mitigate the Impact of a Catastrophic Natural Disaster on Radiation Oncology Patients.** *Practical radiation oncology*
Gay, H. A., Santiago, R., Gil, B., Remedios, C., Montes, P. J., Lopez-Araujo, J., Chevere, C. M., Imbert, W. S., White, J., Arthur, D. W., Horton, J. K., Jaggi, R., Rabinovich, et al
2019
- **HyTEC: Organ-Specific Paper Thoracic: Lung TCP.** *International journal of radiation oncology, biology, physics*
Lee, P., Loo, B. W., Biswas, T., Ding, G. X., El Naqa, I. M., Jackson, A., Kong, F., LaCouture, T., Miften, M., Solberg, T., Tome, W. A., Tai, A., Yorke, et al
2019
- **Increases in Serial Pretreatment 18F-FDG PET-CT Metrics Predict Survival in Early Stage Non-Small Cell Lung Cancer Treated With Stereotactic Ablative Radiation Therapy.** *Advances in radiation oncology*
Prionas, N. D., von Eyben, R., Yi, E., Aggarwal, S., Shaffer, J., Bazan, J., Eastham, D., Maxim, P. G., Graves, E. E., Diehn, M., Gensheimer, M. F., Loo, B. W.
2019; 4 (2): 429–37
- **Increases in Serial Pretreatment F-18-FDG PET-CT Metrics Predict Survival in Early Stage Non-Small Cell Lung Cancer Treated With Stereotactic Ablative Radiation Therapy** *ADVANCES IN RADIATION ONCOLOGY*
Prionas, N. D., von Eyben, R., Yi, E., Aggarwal, S., Shaffer, J., Bazan, J., Eastham, D., Maxim, P. G., Graves, E. E., Diehn, M., Gensheimer, M. F., Loo, B. W.
2019; 4 (2): 429–37
- **Reduced cognitive deficits after FLASH irradiation of whole mouse brain are associated with less hippocampal dendritic spine loss and neuroinflammation.** *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology*

- Simmons, D. A., Lartey, F. M., Schüler, E. n., Rafat, M. n., King, G. n., Kim, A. n., Ko, R. n., Semaan, S. n., Gonzalez, S. n., Jenkins, M. n., Pradhan, P. n., Shih, Z. n., Wang, et al
2019
- **Stereotactic Ablative Radiotherapy for Central and Ultra-Central Lung Tumors.** *Therapeutic radiology and oncology*
Chaudhuri, A. A., Chen, K. n., Diehn, M. n., Loo, B. W.
2019; 3
 - **Cost Analysis of Audiovisual-Assisted Therapeutic Ambiance in Radiation Therapy (AVATAR) Aided Omission of Anesthesia in Radiation for Pediatric Malignancies.** *Practical radiation oncology*
McClelland, S. n., Overton, K. W., Overshiner, B. n., Bush, K. n., Loo, B. W., Skinner, L. B., Watson, G. A., Holmes, J. A., Hiniker, S. M., Maxim, P. G.
2019
 - **The use of texture-based radiomics CT analysis to predict outcomes in early-stage non-small cell lung cancer treated with stereotactic ablative radiotherapy** *BRITISH JOURNAL OF RADIOLOGY*
Starkov, P., Aguilera, T. A., Golden, D., Shultz, D. B., Trakul, N., Maxim, P. G., Quynh-Thu Le, Loo, B. W., Diehn, M., Depeursinge, A., Rubin, D. L.
2019; 92 (1094)
 - **Predictors of Respiratory Decline Following Stereotactic Ablative Radiotherapy to Multiple Lung Tumors.** *Clinical lung cancer*
Moding, E. J., Liang, R. n., Lartey, F. M., Maxim, P. G., Sung, A. n., Diehn, M. n., Loo, B. W., Gensheimer, M. F.
2019
 - **Stressed out: DNA damage delivered at ultrahigh dose rates reduces cellular stress and apoptosis**
Al Rawi, D. H., Rafat, M., Vemireddy, S., Maxim, P., Loo, B. W.
AMER SOC CELL BIOLOGY.2018
 - **The use of texture-based radiomics CT analysis to predict outcomes in early-stage non-small cell lung cancer treated with stereotactic ablative radiotherapy.** *The British journal of radiology*
Starkov, P., Aguilera, T. A., Golden, D. I., Shultz, D. B., Trakul, N., Maxim, P. G., Le, Q., Loo, B. W., Diehn, M., Depeursinge, A., Rubin, D. L.
2018: 20180228
 - **A Quantitative CT Imaging Signature Predicts Survival and Complements Established Prognosticators in Stage I Non-Small Cell Lung Cancer** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Lee, J., Li, B., Cui, Y., Sun, X., Wu, J., Zhu, H., Yu, J., Gensheimer, M. F., Loo, B. W., Diehn, M., Li, R.
2018; 102 (4): 1098–1106
 - **F-18-EF5 PET-based Imageable Hypoxia Predicts Local Recurrence in Tumors Treated With Highly Conformal Radiation Therapy** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Qian, Y., Von Eyben, R., Liu, Y., Chin, F. T., Miao, Z., Apte, S., Carter, J. N., Binkley, M. S., Pollom, E. L., Harris, J. P., Prionas, N. D., Kissel, M., Simmons, et al
2018; 102 (4): 1183–92
 - **Analysis of Circulating Tumor DNA Kinetics during Stereotactic Ablative Radiation Therapy for Non-Small Cell Lung Cancer**
Chen, E. L., Chaudhuri, A. A., Nabet, B. Y., Chabon, J. J., Merriott, D. J., Loo, B. W., Alizadeh, A. A., Diehn, M.
ELSEVIER SCIENCE INC.2018: E676
 - **Radiologic Quantification and Predictors of Lung Fibrosis after Stereotactic Ablative Radiation Therapy(SABR)**
Ross, J. B., Schueler, E., Ko, R., Bush, K., Maxim, P. G., Gensheimer, M. F., Loo, B. W., Diehn, M.
ELSEVIER SCIENCE INC.2018: E703
 - **Esophagitis in Patients Treated with Thoracic Stereotactic Ablative Radiation Therapy (SABR) to Tumors within 2 cm of the Esophagus**
Quaavi, S., Ko, R., Bush, K., Binkley, M. S., Pickthorn, W., Maxim, P. G., Gensheimer, M. F., Diehn, M., Loo, B. W.
ELSEVIER SCIENCE INC.2018: E666
 - **Predicting Per-Lesion Local Recurrence in Locally Advanced Lung Cancer using Metabolic Tumor Volume on Pre- and Mid-Radiation FDG-PET**
Binkley, M. S., Koenig, J. L., Sodji, Q., Maxim, P. G., Diehn, M., Loo, B. W., Gensheimer, M. F.
ELSEVIER SCIENCE INC.2018: E674
 - **Pulmonary Interstitial Lymphography and Patterns of Recurrence after Stereotactic Ablative Radiation Therapy(SABR) of Lung Tumors**

- Ko, R. B., Abelson, J. A., Kothary, N., Fleischmann, D., Hofmann, L., Hovsepian, D., Louie, J. D., Hwang, G., Sze, D. H., Kielar, K., Maxim, P. G., Le, Q. T., Diehn, et al
ELSEVIER SCIENCE INC.2018: E689
- **Invasive nodal evaluation prior to stereotactic ablative radiation for non-small cell lung cancer** *LUNG CANCER*
Harris, J. P., Nwachukwu, C., Qian, Y., Pollom, E., Loo, B. W., Das, M., Diehn, M.
2018; 124: 76–85
 - **Invasive nodal evaluation prior to stereotactic ablative radiation for non-small cell lung cancer.** *Lung cancer (Amsterdam, Netherlands)*
Harris, J. P., Nwachukwu, C., Qian, Y., Pollom, E., Loo, B. W., Das, M., Diehn, M.
2018; 124: 76–85
 - **The Future of Stereotactic Ablative Radiotherapy (SABR)**
Loo, B.
ELSEVIER SCIENCE INC.2018: S283–S284
 - **Invasive nodal evaluation prior to stereotactic ablative radiation for non-small cell lung cancer.** *Lung cancer (Amsterdam, Netherlands)*
Harris, J. P., Nwachukwu, C., Qian, Y., Pollom, E., Loo, B. W., Das, M., Diehn, M.
2018; 124: 76–85
 - **Stereotactic Body Radiation Therapy for Operable Early-Stage Lung Cancer Findings From the NRG Oncology RTOG 0618 Trial** *JAMA ONCOLOGY*
Timmerman, R. D., Paulus, R., Pass, H. I., Gore, E. M., Edelman, M. J., Galvin, J., Straube, W. L., Nedzi, L. A., McGarry, R. C., Robinson, C. G., Schiff, P. B., Chang, G., Loo, et al
2018; 4 (9): 1263–66
 - **Changing the global radiation therapy paradigm** *RADIOTHERAPY AND ONCOLOGY*
Pistenmaa, D. A., Dosanjh, M., Amaldi, U., Jaffray, D., Zubizarreta, E., Holt, K., Lievens, Y., Pipman, Y., Coleman, C., Workshop Participants
2018; 128 (3): 393–99
 - **Prognostic Value of Pretreatment FDG-PET Parameters in High-dose Image-guided Radiotherapy for Oligometastatic Non-Small-cell Lung Cancer** *CLINICAL LUNG CANCER*
Chin, A. L., Kumar, K. A., Guo, H. H., Maxim, P. G., Wakelee, H., Neal, J. W., Diehn, M., Loo, B. W., Gensheimer, M. F.
2018; 19 (5): E581–E588
 - **NCCN Guidelines Insights: Non-Small Cell Lung Cancer, Version 5.2018.** *Journal of the National Comprehensive Cancer Network : JNCCN*
Ettinger, D. S., Aisner, D. L., Wood, D. E., Akerley, W., Bauman, J., Chang, J. Y., Chirieac, L. R., D'Amico, T. A., Dilling, T. J., Dobelbower, M., Govindan, R., Gubens, M. A., Hennon, et al
2018; 16 (7): 807–21
 - **Chest wall dose reduction using noncoplanar volumetric modulated arc radiation therapy for lung stereotactic ablative radiation therapy** *PRACTICAL RADIATION ONCOLOGY*
Yu, A. S., Maxim, P. G., Loo, B. W., Gensheimer, M. F.
2018; 8 (4): E199–E207
 - **Feasibility of a Novel Conical Beams Arrangement in Radiation Therapy**
Schueler, E., Wang, L., Loo, B., Maxim, P.
WILEY.2018: E127
 - **Circulating Tumor DNA Quantitation for Early Response Assessment of Immune Checkpoint Inhibitors for Metastatic Non-Small Cell Lung Cancer**
Chaudhuri, A. A., Nabet, B. Y., Merriott, D. J., Jin, M., Chen, E. L., Chabon, J. J., Newman, A. M., Stehr, H., Say, C., Carter, J. N., Walters, S., Becker, H., Das, et al
ELSEVIER SCIENCE INC.2018: E1–E2
 - **Biological effects by the next generation of ultra-fast dose rate ionizing radiation 'FLASH'**
Kim, H., Hong, B., Shueler, E., Rafat, M., Maxim, P., Loo, B. J., Ahn, G.
ELSEVIER IRELAND LTD.2018: S301
 - **A Feasibility Study of Single-inhalation, Single-energy Xenon-enhanced CT for High-resolution Imaging of Regional Lung Ventilation in Humans.** *Academic radiology*

- Pinkham, D. W., Negahdar, M., Yamamoto, T., Mitra, E., Diehn, M., Nair, V. S., Keall, P. J., Maxim, P. G., Loo, B. W.
2018
- **Optimal imaging surveillance after stereotactic ablative radiation therapy for early-stage non-small cell lung cancer: Findings of an International Delphi Consensus Study** *PRACTICAL RADIATION ONCOLOGY*
Nguyen, T. K., Senan, S., Bradley, J. D., Franks, K., Giuliani, M., Guckenberger, M., Landis, M., Loo, B. W., Louie, A. V., Onishi, H., Schmidt, H., Timmerman, R., Videtic, et al
2018; 8 (2): E71–E78
 - **A Quantitative CT Imaging Signature Predicts Survival and Complements Established Prognosticators in Stage I Non-Small Cell Lung Cancer.** *International journal of radiation oncology, biology, physics*
Lee, J. n., Li, B. n., Cui, Y. n., Sun, X. n., Wu, J. n., Zhu, H. n., Yu, J. n., Gensheimer, M. F., Loo, B. W., Diehn, M. n., Li, R. n.
2018
 - **Line-Enhanced Deformable Registration of Pulmonary Computed Tomography Images Before and After Radiation Therapy With Radiation-Induced Fibrosis** *TECHNOLOGY IN CANCER RESEARCH & TREATMENT*
King, M., Sensakovic, W. F., Maxim, P., Diehn, M., Loo, B. W., Xing, L.
2018; 17
 - **Line-Enhanced Deformable Registration of Pulmonary Computed Tomography Images Before and After Radiation Therapy With Radiation-Induced Fibrosis.** *Technology in cancer research & treatment*
King, M., Sensakovic, W. F., Maxim, P., Diehn, M., Loo, B. W., Xing, L.
2018; 17: 1533034617749419
 - **18F-EF5 PET-based Imageable Hypoxia Predicts Local Recurrence in Tumors Treated With Highly Conformal Radiation Therapy.** *International journal of radiation oncology, biology, physics*
Qian, Y. n., Von Eyben, R. n., Liu, Y. n., Chin, F. T., Miao, Z. n., Apte, S. n., Carter, J. N., Binkley, M. S., Pollom, E. L., Harris, J. P., Prionas, N. D., Kissel, M. n., Simmons, et al
2018
 - **Prognostic Value of Pretreatment FDG-PET Parameters in High-dose Image-guided Radiotherapy for Oligometastatic Non-Small-cell Lung Cancer.** *Clinical lung cancer*
Chin, A. L., Kumar, K. A., Guo, H. H., Maxim, P. G., Wakelee, H. n., Neal, J. W., Diehn, M. n., Loo, B. W., Gensheimer, M. F.
2018
 - **Mid-radiotherapy PET/CT for prognostication and detection of early progression in patients with stage III non-small cell lung cancer** *RADIOTHERAPY AND ONCOLOGY*
Gensheimer, M. F., Hong, J. C., Chang-Halpenny, C., Zhu, H., Eclov, N. C. W., To, J., Murphy, J. D., Wakelee, H. A., Neal, J. W., Le, Q., Hara, W. Y., Quon, A., Maxim, et al
2017; 125 (2): 338–43
 - **Practical workflow for rapid prototyping of radiation therapy positioning devices** *PRACTICAL RADIATION ONCOLOGY*
Gensheimer, M. F., Bush, K., Juang, T., Herzberg, B., Villegas, M., Maxim, P. G., Diehn, M., Loo, B. W.
2017; 7 (6): 442–45
 - **Clinical and Pathological Variables Influencing Noninvasive Detection of Early Stage Lung Cancer Using Circulating Tumor DNA**
Chabon, J., Chaudhuri, A., Azad, T., Kurtz, D., Stehr, H., Liu, C. L., Martin, J., Merriott, D., Carter, J., Ayers, K., Mansfield, A., Jen, J., Ren, et al
ELSEVIER SCIENCE INC.2017: S1851
 - **Comparison of Circulating Tumor DNA Analysis and Surveillance Imaging After Treatment for Localized Lung Cancer**
Chaudhuri, A. A., Chabon, J. J., Lovejoy, A. F., Newman, A., Stehr, H., Azad, T. D., Carter, J. N., Merriott, D. J., Liu, C. L., Kurtz, D. M., Gensheimer, M. F., Shrager, J. B., Wakelee, et al
ELSEVIER SCIENCE INC.2017: S114
 - **Optimal Imaging Follow-up Schedules after Stereotactic Ablative Radiotherapy for Early Non-Small-Cell Lung Cancer: Findings of an International Delphi Consensus Study**
Nguyen, T., Senan, S., Bradley, J. D., Franks, K. N., Giuliani, M. E., Guckenberger, M., Landis, M., Loo, B. W., Louie, A. V., Onishi, H., Schmidt, H., Timmerman, R. D., Videtic, et al
ELSEVIER SCIENCE INC.2017: S241–S242
 - **Safety and Efficacy of Stereotactic Ablative Radiotherapy (SABR) to Multiple (3 or More) Lung Tumors**
Moding, E. J., Maxim, P. G., Diehn, M., Loo, B. W., Gensheimer, M. F.

ELSEVIER SCIENCE INC.2017: E482

- **Outcomes of Moderately Hypofractionated Intensity-Modulated Thoracic Radiotherapy with Concurrent Chemotherapy for Treatment of Non-Small Cell Lung Cancer**
Xiang, M., Gensheimer, M. F., Maxim, P. G., Wakelee, H. A., Neal, J. W., Diehn, M., Loo, B. W.
ELSEVIER SCIENCE INC.2017: E504
- **Mid-radiation Therapy PET/CT for Prognostication and Detection of Early Progression in Patients With Stage III Non-small Cell Lung Cancer**
Gensheimer, M. F., Hong, J. C., Chang-Halpenny, C. N., Eclov, N., To, J., Murphy, J. D., Wakelee, H. A., Neal, J. W., Le, Q. T., Hara, W., Quon, A., Maxim, P. G., Graves, et al
ELSEVIER SCIENCE INC.2017: E456
- **Radiogenomic Analysis of a Peritumoral CT Image Feature and Its Prognostic Value in Early Stage NSCLC**
Lee, J., Cui, Y., Gensheimer, M. F., Loo, B. W., Diehn, M., Li, R.
ELSEVIER SCIENCE INC.2017: S48
- **Lesion Response to Stereotactic Body Radiation Therapy Concurrent With Nelfinavir for Solid Tumor Oligometastases**
Yan, J., Tran, P. T., Hu, C., McIntyre, R., Di Pasquale, S., Kim, H., Loo, B. W., Hales, R. K., Herman, J., Terezakis, S. A.
ELSEVIER SCIENCE INC.2017: E529
- **Impact of Audio-Visual Assisted Therapeutic Ambience in Radiotherapy (AVATAR) on Anesthesia Use, Cost, and Time in Pediatric Patients**
Balazy, K. E., Hiniker, S. M., Bush, K., Fowler, T. L., White, E. C., Rodriquez, S., Maxim, P. G., Donaldson, S. S., Loo, B. W.
ELSEVIER SCIENCE INC.2017: E564–E565
- **Single-Arm Phase 2 Study of Stereotactic Body Radiation Therapy (SBRT) Concurrent with Nelfinavir for Solid Tumor Oligometastases**
Terezakis, S. A., Herman, J., Hu, C., Yan, J., Di Pasquale, S., McIntyre, R., Kim, H., Loo, B. W., Hales, R. K., Tran, P. T.
ELSEVIER SCIENCE INC.2017: S221
- **Circulating Tumor DNA Quantitation for Early Response Assessment of Immune Checkpoint Inhibitors for Lung Cancer**
Merriott, D. J., Chaudhuri, A. A., Jin, M., Chabon, J. J., Newman, A., Stehr, H., Say, C., Carter, J. N., Walters, S., Becker, H. R., Das, M., Padda, S., Loo, et al
ELSEVIER SCIENCE INC.2017: S20–S21
- **Circulating Tumor DNA Analysis during Radiation Therapy for Localized Lung Cancer Predicts Treatment Outcome**
Chaudhuri, A. A., Lovejoy, A. F., Chabon, J. J., Newman, A., Stehr, H., Merriott, D. J., Carter, J. N., Azad, T. D., Padda, S., Gensheimer, M. F., Wakelee, H. A., Neal, J. W., Loo, et al
ELSEVIER SCIENCE INC.2017: S1–S2
- **Normal Tissue Constraints for Abdominal and Thoracic Stereotactic Body Radiotherapy. *Seminars in radiation oncology***
Pollom, E. L., Chin, A. L., Diehn, M., Loo, B. W., Chang, D. T.
2017; 27 (3): 197-208
- **Stereotactic Ablative Radiotherapy for Early-Stage Lung Cancer. *Seminars in radiation oncology***
Shah, J. L., Loo, B. W.
2017; 27 (3): 218-228
- **Conical Beam Geometry in Radiation Therapy**
Schueler, E., Loo, B., Maxim, P.
WILEY.2017: 3209
- **Delivery of Ultra-Rapid Flash Radiation Therapy and Demonstration of Normal Tissue Sparing After Abdominal Irradiation of Mice**
Loo, B. W., Schuler, E., Lartey, F. M., Rafat, M., King, G. J., Trovati, S., Koong, A. C., Maxim, P. G.
ELSEVIER SCIENCE INC.2017: E16
- **A population-based comparative effectiveness study of chemoradiation regimens and sequences in stage III non-small cell lung cancer *LUNG CANCER***
Harris, J. P., Patel, M. I., Loo, B. W., Wakelee, H. A., Diehn, M.
2017; 108: 173–82
- **A Method for the Generation of Treatment Plans for a Novel X-Ray Target and Collimation System (SPHINX)**

Trovati, S., Schueler, E., King, G., Hynning, E., Loo, B., Maxim, P.
WILEY.2017

- **Pulmonary function after lung tumor stereotactic ablative radiotherapy depends on regional ventilation within irradiated lung.** *Radiotherapy and oncology*
Binkley, M. S., King, M. T., Shrager, J. B., Bush, K., Chaudhuri, A. A., Popat, R., Gensheimer, M. F., Maxim, P. G., Henry Guo, H., Diehn, M., Nair, V. S., Loo, B. W.
2017; 123 (2): 270-275
- **Pilot study of F-18-FSPG vs F-18-FDG PET imaging for response assessment in cancer**
Park, S., Hatami, N., Rutledge, O., Koglin, N., Loo, B., Fan, A., Mitra, E.
SOC NUCLEAR MEDICINE INC.2017
- **Optimal Radiation Therapy for Small Cell Lung Cancer.** *Current treatment options in oncology*
Gensheimer, M. F., Loo, B. W.
2017; 18 (4): 21-?
- **Non-Small Cell Lung Cancer, Version 5.2017 Clinical Practice Guidelines in Oncology** *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK*
Ettinger, D. S., Wood, D. E., Aisner, D. L., Akerley, W., Bauman, J., Chirieac, L. R., D'Amico, T. A., DeCamp, M. M., Dilling, T. J., Dobelbower, M., Doebele, R. C., Govindan, R., Gubens, et al
2017; 15 (4): 504-535
- **Very high-energy electron (VHEE) beams in radiation therapy; Treatment plan comparison between VHEE, VMAT, and PPBS.** *Medical physics*
Schüler, E., Eriksson, K., Hynning, E., Hancock, S. L., Hiniker, S. M., Bazalova-Carter, M., Wong, T., Le, Q., Loo, B. W., Maxim, P. G.
2017
- **Sinoatrial node dysfunction after stereotactic ablative radiation therapy in the chest**
Qian, Y., Dudley, S., Kumar, K., Chaudhuri, A., Chin, A., Harris, J., Prionas, N., Nwachukwu, C., Bagshaw, H., Pollom, E. L., Ben Durkee, Shultz, D., Gensheimer, M. F., et al
AMER SOC CLINICAL ONCOLOGY.2017
- **Tumor control probability modeling for stereotactic body radiation therapy of early-stage lung cancer using multiple bio-physical models.** *Radiotherapy and oncology*
Liu, F., Tai, A., Lee, P., Biswas, T., Ding, G. X., El Naqa, I., Grimm, J., Jackson, A., Kong, F. S., LaCouture, T., Loo, B., Miften, M., Solberg, et al
2017; 122 (2): 286-294
- **Dynamic CT imaging of volumetric changes in pulmonary nodules correlates with physical measurements of stiffness.** *Radiotherapy and oncology*
Lartey, F. M., Rafat, M., Negahdar, M., Malkovskiy, A. V., Dong, X., Sun, X., Li, M., Doyle, T., Rajadas, J., Graves, E. E., Loo, B. W., Maxim, P. G.
2017; 122 (2): 313-318
- **Initial clinical outcomes of audiovisual-assisted therapeutic ambience in radiation therapy (AVATAR).** *Practical radiation oncology*
Hiniker, S. M., Bush, K., Fowler, T., White, E. C., Rodriguez, S., Maxim, P. G., Donaldson, S. S., Loo, B. W.
2017
- **Metabolic tumor volume predicts overall survival and local control in patients with stage III non-small cell lung cancer treated in ACRIN 6668/RTOG 0235** *EUROPEAN JOURNAL OF NUCLEAR MEDICINE AND MOLECULAR IMAGING*
Bazan, J. G., Duan, F., Snyder, B. S., Horng, D., Graves, E. E., Siegel, B. A., Machtay, M., Loo, B. W.
2017; 44 (1): 17-24
- **Chest wall dose reduction using noncoplanar volumetric modulated arc radiation therapy for lung stereotactic ablative radiation therapy.** *Practical radiation oncology*
Yu, A. S., Maxim, P. G., Loo, B. W., Gensheimer, M. F.
2017
- **Role of KEAP1/NRF2 and TP53 Mutations in Lung Squamous Cell Carcinoma Development and Radiation Resistance** *CANCER DISCOVERY*
Jeong, Y., Hoang, N. T., Lovejoy, A., Stehr, H., Newman, A. M., Gentles, A. J., Kong, W., Diana Truong, D., Martin, S., Chaudhuri, A., Heiser, D., Zhou, L., Say, et al

2017; 7 (1): 86-101

- **Thermal limits on MV x-ray production by bremsstrahlung targets in the context of novel linear accelerators.** *Medical physics*
Wang, J. n., Trovati, S. n., Borchard, P. M., Loo, B. W., Maxim, P. G., Fahrig, R. n.
2017; 44 (12): 6610–20
- **Stressed out: DNA damage delivered at ultrahigh dose rates reduces cellular stress and apoptosis.**
Al-Rawi, D. H., Rafat, M., Vemireddy, S., Schuler, E., Maxim, P., Loo, B. W., King, G.
AMER SOC CELL BIOLOGY.2017
- **Early detection of molecular residual disease in localized lung cancer by circulating tumor DNA profiling.** *Cancer discovery*
Chaudhuri, A. A., Chabon, J. J., Lovejoy, A. F., Newman, A. M., Stehr, H. n., Azad, T. D., Khodadoust, M. S., Esfahani, M. S., Liu, C. L., Zhou, L. n., Scherer, F. n., Kurtz, D. M., Say, et al
2017
- **Prognostic value and molecular correlates of a CT image-based quantitative pleural contact index in early stage NSCLC.** *European radiology*
Lee, J. n., Cui, Y. n., Sun, X. n., Li, B. n., Wu, J. n., Li, D. n., Gensheimer, M. F., Loo, B. W., Diehn, M. n., Li, R. n.
2017
- **Chest wall dose reduction using noncoplanar volumetric modulated arc radiation therapy for lung stereotactic ablative radiation therapy.** *Practical radiation oncology*
Yu, A. S., Maxim, P. G., Loo, B. W., Gensheimer, M. F.
2017
- **Role of KEAP1/NRF2 and TP53 Mutations in Lung Squamous Cell Carcinoma Development and Radiation Resistance** *CANCER DISCOVERY*
Jeong, Y., Hoang, N. T., Lovejoy, A., Stehr, H., Newman, A. M., Gentles, A. J., Kong, W., Diana Truong, D., Martin, S., Chaudhuri, A., Heiser, D., Zhou, L., Say, et al
2017; 7 (1): 86-101
- **Thermal limits on MV x-ray production by bremsstrahlung targets in the context of novel linear accelerators.** *Medical physics*
Wang, J. n., Trovati, S. n., Borchard, P. M., Loo, B. W., Maxim, P. G., Fahrig, R. n.
2017; 44 (12): 6610–20
- **A 3-D Riesz-Covariance Texture Model for Prediction of Nodule Recurrence in Lung CT** *IEEE TRANSACTIONS ON MEDICAL IMAGING*
Cirujeda, P., Cid, Y. D., Muller, H., Rubin, D., Aguilera, T. A., Loo, B. W., Diehn, M., Binefa, X., Depeursinge, A.
2016; 35 (12): 2620-2630
- **Hypofractionated Intensity-Modulated Radiotherapy for Patients With Non-Small-Cell Lung Cancer.** *Clinical lung cancer*
Pollom, E. L., Qian, Y., Durkee, B. Y., von Eyben, R., Maxim, P. G., Shultz, D. B., Gensheimer, M., Diehn, M., Loo, B. W.
2016; 17 (6): 588-594
- **Prognostic value of midtreatment FDG-PET in oropharyngeal cancer.** *Head & neck*
Pollom, E. L., Song, J., Durkee, B. Y., Aggarwal, S., Bui, T., von Eyben, R., Li, R., Brizel, D. M., Loo, B. W., Le, Q., Hara, W. Y.
2016; 38 (10): 1472-1478
- **Patterns of Failure After Hypofractionated Intensity Modulated Radiation Therapy for Patients With Non-Small Cell Lung Cancer**
Qian, Y., Pollom, E., Durkee, B. Y., von Eyben, R., Gensheimer, M. F., Shultz, D. B., Diehn, M., Loo, B. W.
ELSEVIER SCIENCE INC.2016: E422–E423
- **CAPP-Seq Circulating Tumor DNA Analysis for Early Detection of Tumor Progression After Definitive Radiation Therapy for Lung Cancer**
Chaudhuri, A. A., Lovejoy, A. F., Chabon, J. J., Newman, A., Stehr, H., Say, C., Aggarwal, S., Carter, J. N., West, R. B., Neal, J. W., Wakelee, H. A., Loo, B. W., Alizadeh, et al
ELSEVIER SCIENCE INC.2016: S41–S42
- **Remotely Preplanned Stereotactic Ablative Radiation Therapy Using Rapid Prototyping of Immobilization Devices**
Gensheimer, M. F., Bush, K., Juang, T., Loo, B. W.
ELSEVIER SCIENCE INC.2016: E680
- **Effectiveness of Radiation Therapy for Low- to Intermediate-Grade Neuroendocrine Tumors**

- Carter, J. N., Aggarwal, S., Radish, K., Allen, J. R., Koong, A. C., Chang, D. T., Loo, B. W., Diehn, M., Kunz, P. L., Gensheimer, M. F.
ELSEVIER SCIENCE INC.2016: E202–E203
- **Regional Ventilation Predicts Change in Pulmonary Function After Stereotactic Ablative Radiation Therapy of Lung Tumors**
Binkley, M. S., King, M., Bush, K., Shrager, J. B., Chaudhuri, A. A., Papat, R., Maxim, P. G., Guo, H. H., Diehn, M., Nair, V. S., Loo, B. W.
ELSEVIER SCIENCE INC.2016: E456–E457
 - **Intratumor Partitioning of Serial Computed Tomography and FDG Positron Emission Tomography Images Identifies High-Risk Tumor Subregions and Predicts Patterns of Failure in Non-Small Cell Lung Cancer After Radiation Therapy** *58th Annual Meeting of the American Society-for-Radiation-Oncology (ASTRO)*
Wu, J., Gensheimer, M. F., Dong, X., Rubin, D. L., Napel, S., Diehn, M., Loo, B. W., Li, R.
ELSEVIER SCIENCE INC.2016: S100–S100
 - **Early-Stage Non-Small Cell Lung Cancer: Quantitative Imaging Characteristics of (18)F Fluorodeoxyglucose PET/CT Allow Prediction of Distant Metastasis.** *Radiology*
Wu, J., Aguilera, T., Shultz, D., Gudur, M., Rubin, D. L., Loo, B. W., Diehn, M., Li, R.
2016; 281 (1): 270-278
 - **Experimental Platform for Ultra-high Dose Rate FLASH Irradiation of Small Animals Using a Clinical Linear Accelerator.** *International journal of radiation oncology, biology, physics*
Schüler, E., Trovati, S., King, G., Lartey, F., Rafat, M., Villegas, M., Praxel, A. J., Loo, B. W., Maxim, P. G.
2016
 - **The impact of audiovisual biofeedback on 4D functional and anatomic imaging: Results of a lung cancer pilot study.** *Radiotherapy and oncology*
Yang, J., Yamamoto, T., Pollock, S., Berger, J., Diehn, M., Graves, E. E., Loo, B. W., Keall, P. J.
2016; 120 (2): 267-272
 - **Robust Intratumor Partitioning to Identify High-Risk Subregions in Lung Cancer: A Pilot Study.** *International journal of radiation oncology, biology, physics*
Wu, J., Gensheimer, M. F., Dong, X., Rubin, D. L., Napel, S., Diehn, M., Loo, B. W., Li, R.
2016; 95 (5): 1504-1512
 - **NCCN Guidelines Insights: Malignant Pleural Mesothelioma, Version 3.2016.** *Journal of the National Comprehensive Cancer Network*
Ettinger, D. S., Wood, D. E., Akerley, W., Bazhenova, L. A., Borghaei, H., Camidge, D. R., Cheney, R. T., Chirieac, L. R., D'Amico, T. A., Dilling, T., Dobelbower, M., Govindan, R., Hennon, et al
2016; 14 (7): 825-836
 - **Pre-treatment non-target lung FDG-PET uptake predicts symptomatic radiation pneumonitis following Stereotactic Ablative Radiotherapy (SABR).** *Radiotherapy and oncology*
Chaudhuri, A. A., Binkley, M. S., Rigdon, J., Carter, J. N., Aggarwal, S., Dudley, S. A., Qian, Y., Kumar, K. A., Hara, W. Y., Gensheimer, M., Nair, V. S., Maxim, P. G., Shultz, et al
2016; 119 (3): 454-460
 - **SU-D-207B-05: Robust Intra-Tumor Partitioning to Identify High-Risk Subregions for Prognosis in Lung Cancer.** *Medical physics*
Wu, J., Gensheimer, M., Dong, X., Rubin, D., Napel, S., Diehn, M., Loo, B., Li, R.
2016; 43 (6): 3349-?
 - **Integrated digital error suppression for noninvasive detection of circulating tumor DNA in NSCLC.**
Newman, A. M., Lovejoy, A. F., Klass, D. M., Kurtz, D., Chabon, J. J., Scherer, F., Stehr, H., Liu, C., Bratman, S., Say, C., Zhou, L., Carter, J. N., West, et al
AMER SOC CLINICAL ONCOLOGY.2016
 - **Randomized phase II study of preoperative chemoradiotherapy (CRT) plus /-Panitumumab (P) followed by consolidation chemotherapy (C) in potentially operable locally advanced (stage Ma, N2+) non -small cell lung cancer (LANSCLC): Nrg oncology/RTOG 0839.**
Edelman, M. J., Hu, C., Le, Q., Donington, J., D'Souza, W. D., Dicker, A., Loo, B. W., Gore, E., Videtic, G. M. M., Evans, N. R., Leach, J., Diehn, M., Feigenberg, et al
AMER SOC CLINICAL ONCOLOGY.2016
 - **Integrated digital error suppression for improved detection of circulating tumor DNA** *NATURE BIOTECHNOLOGY*
Newman, A. M., Lovejoy, A. F., Klass, D. M., Kurtz, D. M., Chabon, J. J., Scherer, F., Stehr, H., Liu, C. L., Bratman, S. V., Say, C., Zhou, L., Carter, J. N., West, et al

2016; 34 (5): 547-555

- **Assessment of the quality of very high-energy electron radiotherapy planning** *RADIOTHERAPY AND ONCOLOGY*
Palma, B., Bazalova-Carter, M., Hardemark, B., Hynning, E., Qu, B., Loo, B. W., Maxim, P. G.
2016; 119 (1): 154-158
- **Tracheal Diverticulum Following Paratracheal Hypofractionated Radiotherapy in the Setting of Prior and Subsequent Bevacizumab** *CUREUS*
Chaudhuri, A. A., Chen, J., Carter, J. N., Binkley, M. S., Kumar, K. A., Dudley, S. A., Sung, A. W., Loo, B. W.
2016; 8 (4)
- **Dosimetric Factors and Toxicity in Highly Conformal Thoracic Reirradiation.** *International journal of radiation oncology, biology, physics*
Binkley, M. S., Hiniker, S. M., Chaudhuri, A., Maxim, P. G., Diehn, M., Loo, B. W., Shultz, D. B.
2016; 94 (4): 808-815
- **NCCN Guidelines Insights: Non-Small Cell Lung Cancer, Version 4.2016.** *Journal of the National Comprehensive Cancer Network*
Ettinger, D. S., Wood, D. E., Akerley, W., Bazhenova, L. A., Borghaei, H., Camidge, D. R., Cheney, R. T., Chirieac, L. R., D'Amico, T. A., Dilling, T. J., Dobelbower, M. C., Govindan, R., Hennon, et al
2016; 14 (3): 255-264
- **CT ventilation functional image-based IMRT treatment plans are comparable to SPECT ventilation functional image-based plans.** *Radiotherapy and oncology*
Kida, S., Bal, M., Kabus, S., Negahdar, M., Shan, X., Loo, B. W., Keall, P. J., Yamamoto, T.
2016; 118 (3): 521-527
- **Severe Chest Wall Toxicity From Cryoablation in the Setting of Prior Stereotactic Ablative Radiotherapy** *CUREUS*
Chaudhuri, A. A., Binkley, M. S., Aggarwal, S., Qian, Y., Carter, J. N., Shah, R., Loo, B. W.
2016; 8 (2)
- **Tracheal Diverticulum Following Paratracheal Hypofractionated Radiotherapy in the Setting of Prior and Subsequent Bevacizumab.** *Cure^{us}*
Chaudhuri, A. A., Chen, J. J., Carter, J. N., Binkley, M. S., Kumar, K. A., Dudley, S. A., Sung, A. W., Loo, B. W.
2016; 8 (4)
- **CONCEPTUAL LAYOUT FOR AWAFAER-SCALE DIELECTRIC LASER ACCELERATOR**
England, R. J., Noble, R. J., Fahimian, B., Loo, B., Abel, E., Hanuka, A., Schachter, L.
edited by Hogan, M. J.
AMER INST PHYSICS.2016
- **Stereotactic Arrhythmia Radioablation (STAR) of Ventricular Tachycardia: A Treatment Planning Study.** *Cure^{us}*
Wang, L., Fahimian, B., Soltys, S. G., Zei, P., Lo, A., Gardner, E. A., Maguire, P. J., Loo, B. W.
2016; 8 (7)
- **Time course and predictive factors for lung volume reduction following stereotactic ablative radiotherapy (SABR) of lung tumors.** *Radiation oncology*
Binkley, M. S., Shrager, J. B., Chaudhuri, A., Popat, R., Maxim, P. G., Shultz, D. B., Diehn, M., Loo, B. W.
2016; 11 (1): 40-?
- **Severe Chest Wall Toxicity From Cryoablation in the Setting of Prior Stereotactic Ablative Radiotherapy.** *Cure^{us}*
Chaudhuri, A. A., Binkley, M. S., Aggarwal, S., Qian, Y., Carter, J. N., Shah, R., Loo, B. W.
2016; 8 (2)
- **Outcomes of Modestly Hypofractionated Radiation for Lung Tumors: Pre- and Mid-Treatment Positron Emission Tomography-Computed Tomography Metrics as Prognostic Factors.** *Clinical lung cancer*
Harris, J. P., Chang-Halpeny, C. N., Maxim, P. G., Quon, A., Graves, E. E., Diehn, M., Loo, B. W.
2015; 16 (6): 475-485
- **First In-Human Stereotactic Arrhythmia Radioablation (STAR) of Ventricular Tachycardia: Dynamic Tracking Delivery Analysis and Implications**
Fahimian, B. P., Loo, B. W., Soltys, S. G., Zei, P., Lo, A. T., Maguire, P. J., Gardner, E., Wang, L.
ELSEVIER SCIENCE INC.2015: E466-E467

- **Imaging Based Parameters Associated With Disease Progression of Early-Stage NSCLC Treated With Surgical Resection**
Wang, A., von Eyben, R., Loo, B. W., Diehn, M., Shrager, J. B., Maxim, P. G., Guo, H. H., Burt, B., Shultz, D. B.
ELSEVIER SCIENCE INC.2015: E414
- **Time Course and Predictive Factors for Lung Volume Reduction Following Stereotactic Ablative Radiation Therapy (SABR) of Lung Tumors**
Binkley, M. S., Shrager, J. B., Chaudhuri, A., Papat, R., Maxim, P. G., Shultz, D. B., Diehn, M., Loo, B. W.
ELSEVIER SCIENCE INC.2015: E424
- **Pruritus as a Paraneoplastic Symptom of Thymoma** *JOURNAL OF THORACIC ONCOLOGY*
Padda, S. K., Shrager, J. B., Riess, J. W., Pagtama, J. Y., Tisch, A. J., Kwong, B. Y., Liang, Y., Schwartz, E. J., Loo, B. W., Neal, J. W., Hardy, R., Wakelee, H. A.
2015; 10 (11): E110-E112
- **Optimization of an on-board imaging system for extremely rapid radiation therapy.** *Medical physics*
Cherry Kemmerling, E. M., Wu, M., Yang, H., Maxim, P. G., Loo, B. W., Fahrig, R.
2015; 42 (11): 6757-?
- **Anatomic optimization of lung tumor stereotactic ablative radiation therapy.** *Practical radiation oncology*
Yu, A. S., von Eyben, R., Yamamoto, T., Diehn, M., Shultz, D. B., Loo, B. W., Maxim, P. G.
2015; 5 (6): e607-13
- **Precision Hypofractionated Radiation Therapy in Poor Performing Patients With Non-Small Cell Lung Cancer: Phase 1 Dose Escalation Trial.** *International journal of radiation oncology, biology, physics*
Westover, K. D., Loo, B. W., Gerber, D. E., Iyengar, P., Choy, H., Diehn, M., Hughes, R., Schiller, J., Dowell, J., Wardak, Z., Sher, D., Christie, A., Xie, et al
2015; 93 (1): 72-81
- **Colorectal Histology Is Associated With an Increased Risk of Local Failure in Lung Metastases Treated With Stereotactic Ablative Radiation Therapy** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Binkley, M. S., Trakul, N., Jacobs, L. R., von Eyben, R., Quynh-Thu Le, Q. T., Maxim, P. G., Loo, B. W., Shultz, D. B., Diehn, M.
2015; 92 (5): 1044-1052
- **3D Riesz-wavelet based Covariance descriptors for texture classification of lung nodule tissue in CT.** *Conference proceedings : ... Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Annual Conference*
Cirujeda, P., Muller, H., Rubin, D., Aguilera, T. A., Loo, B. W., Diehn, M., Binefa, X., Depeursinge, A.
2015; 2015: 7909-7912
- **Gastrointestinal Toxicities With Combined Antiangiogenic and Stereotactic Body Radiation Therapy.** *International journal of radiation oncology, biology, physics*
Pollom, E. L., Deng, L., Pai, R. K., Brown, J. M., Giaccia, A., Loo, B. W., Shultz, D. B., Le, Q. T., Koong, A. C., Chang, D. T.
2015; 92 (3): 568-576
- **Analysis of Long-Term 4-Dimensional Computed Tomography Regional Ventilation After Radiation Therapy** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
King, M. T., Maxim, P. G., Diehn, M., Loo, B. W., Xing, L.
2015; 92 (3): 683-690
- **Stereotactic ablative radiotherapy (SABR) for treatment of central and ultra-central lung tumors** *LUNG CANCER*
Chaudhuri, A. A., Tang, C., Binkley, M. S., Jin, M., Wynne, J. F., von Eyben, R., Hara, W. Y., Trakul, N., Loo, B. W., Diehn, M.
2015; 89 (1): 50-56
- **Stereotactic ablative radiotherapy for the treatment of refractory cardiac ventricular arrhythmia.** *Circulation. Arrhythmia and electrophysiology*
Loo, B. W., Soltys, S. G., Wang, L., Lo, A., Fahimian, B. P., Iagaru, A., Norton, L., Shan, X., Gardner, E., Fogarty, T., Maguire, P., Al-Ahmad, A., Zei, et al
2015; 8 (3): 748-750
- **TH-AB-304-04: Tumor Control Probability Modeling for Stereotactic Body Radiation Therapy of Early-Stage Lung Cancer Using Multiple Bio-Physical Models.** *Medical physics*
Liu, F., Tai, A., Lee, P., Biswas, T., Ding, G., El Naqa, I., Grimm, J., Jackson, A., Kong, F., LaCouture, T., Loo, B., Miften, M., Solberg, et al

- 2015; 42 (6): 3701-?
- **TU-G-BRA-04: Changes in Regional Lung Function Measured by 4D-CT Ventilation Imaging for Thoracic Radiotherapy.** *Medical physics*
Nakajima, Y., KADOYA, N., Kabus, S., Loo, B., Keall, P., Yamamoto, T.
2015; 42 (6): 3630-?
 - **MO-FG-303-06: Evaluation of the Performance of Very High-Energy Electron (VHEE) Beams in Radiotherapy: Five Clinical Cases.** *Medical physics*
Palma, B., Bazalova-Carter, M., Hardemark, B., Hynning, E., Qu, B., Loo, B., Maxim, P.
2015; 42 (6): 3568-?
 - **TU-AB-201-06: Evaluation of Electromagnetically Guided High- Dose Rate Brachytherapy for Ablative Treatment of Lung Metastases.** *Medical physics*
Pinkham, D. W., Shultz, D., Loo, B. W., Sung, A., Diehn, M., Fahimian, B. P.
2015; 42 (6): 3595-?
 - **SU-F-207-13: Comparison of Four Dimensional Computed Tomography (4D CT) Versus Breath Hold Images to Determine Pulmonary Nodule Elasticity.** *Medical physics*
Negahdar, M., Loo, B., Maxim, P.
2015; 42 (6): 3544-?
 - **SU-E-T-514: Investigating the Dose Distributions of Equiangular Spaced Noncoplanar Beams.** *Medical physics*
Mitchell, T., Maxim, P., Hadsell, M., Loo, B.
2015; 42 (6): 3453-?
 - **TU-AB-BRA-10: Prognostic Value of Intra-Radiation Treatment FDG-PET and CT Imaging Features in Locally Advanced Head and Neck Cancer.** *Medical physics*
Song, J., Cui, Y., Pollom, E., Durkee, B., Aggarwal, S., Bui, T., Le, Q., Loo, B., Hara, W., Li, R.
2015; 42 (6): 3588-?
 - **TU-CD-304-01: FEATURED PRESENTATION and BEST IN PHYSICS (THERAPY): Trajectory Modulated Arc Therapy: Development of Novel Arc Delivery Techniques Integrating Dynamic Table Motion for Extended Volume Treatments.** *Medical physics*
Chin, E., Otto, K., Hoppe, R., Million, L., Loo, B., Koong, A., Xing, L., Hsu, A., Fahimian, B.
2015; 42 (6): 3598-?
 - **Non-Small Cell Lung Cancer, Version 6.2015.** *Journal of the National Comprehensive Cancer Network*
Ettinger, D. S., Wood, D. E., Akerley, W., Bazhenova, L. A., Borghaei, H., Camidge, D. R., Cheney, R. T., Chirieac, L. R., D'Amico, T. A., Demmy, T. L., Dilling, T. J., Dobelbower, M. C., Govindan, et al
2015; 13 (5): 515-524
 - **Non-Small Cell Lung Cancer, Version 6.2015 Featured Updates to the NCCN Guidelines** *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK*
Ettinger, D. S., Wood, D. E., Akerley, W., Bazhenova, L. A., Borghaei, H., Camidge, D. R., Cheney, R. T., Chirieac, L. R., D'Amico, T. A., Demmy, T. L., Dilling, T. J., Dobelbower, M. C., Govindan, et al
2015; 13 (5): 515-524
 - **Treatment planning for radiotherapy with very high-energy electron beams and comparison of VHEE and VMAT plans** *MEDICAL PHYSICS*
Bazalova-Carter, M., Qu, B., Palma, B., Hardemark, B., Hynning, E., Jensen, C., Maxim, P. G., Loo, B. W.
2015; 42 (5): 2615-2625
 - **ACR Appropriateness Criteria (R) Induction and Adjuvant Therapy for N2 Non-small-cell Lung Cancer** *AMERICAN JOURNAL OF CLINICAL ONCOLOGY-CANCER CLINICAL TRIALS*
Willers, H., Stinchcombe, T. E., Barriger, R. B., Chetty, I. J., Ginsburg, M. E., Kestin, L. L., Kumar, S., Loo, B. W., Movsas, B., Rimner, A., Rosenzweig, K. E., Videtic, G. M., Chang, et al
2015; 38 (2): 197-205
 - **To SABR or not to SABR? Indications and contraindications for stereotactic ablative radiotherapy in the treatment of early-stage, oligometastatic, or oligoprogressive non-small cell lung cancer.** *Seminars in radiation oncology*
Shultz, D. B., Diehn, M., Loo, B. W.
2015; 25 (2): 78-86

- **Noninvasive pulmonary nodule elastometry by CT and deformable image registration.** *Radiotherapy and oncology*
Negahdar, M., Fasola, C. E., Yu, A. S., von Eyben, R., Yamamoto, T., Diehn, M., Fleischmann, D., Tian, L., Loo, B. W., Maxim, P. G.
2015; 115 (1): 35-40
- **Comparison of film measurements and Monte Carlo simulations of dose delivered with very high-energy electron beams in a polystyrene phantom** *MEDICAL PHYSICS*
Bazalova-Carter, M., Liu, M., Palma, B., Dunning, M., McCormick, D., Hemsing, E., Nelson, J., Jobe, K., Colby, E., Koong, A. C., Tantawi, S., Dolgashev, V., Maxim, et al
2015; 42 (4): 1606-1613
- **The relationship between serial [(18)F]PBR06 PET imaging of microglial activation and motor function following stroke in mice.** *Molecular imaging and biology*
Lartey, F. M., Ahn, G., Ali, R., Rosenblum, S., Miao, Z., Arksey, N., Shen, B., Colomer, M. V., Rafat, M., Liu, H., Alejandro-Alcazar, M. A., Chen, J. W., Palmer, et al
2014; 16 (6): 821-829
- **Non-Small Cell Lung Cancer, Version 1.2015** *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK*
Ettinger, D. S., Wood, D. E., Akerley, W., Bazhenova, L. A., Borghaei, H., Camidge, D. R., Cheney, R. T., Chirieac, L. R., D'Amico, T. A., Demmy, T. L., Dilling, T. J., Govindan, R., Grannis, et al
2014; 12 (12): 1738-1761
- **Ultrasensitive Detection of Circulating Tumor DNA in Non-Small Cell Lung Cancer by Deep Sequencing**
Diehn, M., Bratman, S. V., Newman, A. M., Neal, J. W., Wakelee, H. A., Merritt, R. E., Shrager, J. B., Loo, B. W., Alizadeh, A.
ELSEVIER SCIENCE INC.2014: S75
- **Noninvasive Pulmonary Nodule Elastometry by CT and Deformable Image Registration**
Negahdar, M., Shultz, D. B., Eyben, R. V., Fasola, C., Yu, A. S., Tian, L., Fleischmann, D., Gable, L., Shan, X., Diehn, M., Loo, B. W., Maxim, P. G.
ELSEVIER SCIENCE INC.2014: S10
- **Metabolic Tumor Volume Predicts Overall Survival in Patients With Stage III Non-Small Cell Lung Cancer Treated on ACRIN 6668/RTOG 0235**
Bazan, J. G., Duan, F., Snyder, B. S., Horng, D., Graves, E. E., Siegel, B. A., Machtay, M., Loo, B. W.
ELSEVIER SCIENCE INC.2014: S3-S4
- **Galectin-1 mediates radiation-related lymphopenia and attenuates NSCLC radiation response.** *Clinical cancer research*
Kuo, P., Bratman, S. V., Shultz, D. B., von Eyben, R., Chan, C., Wang, Z., Say, C., Gupta, A., Loo, B. W., Giaccia, A. J., Koong, A. C., Diehn, M., Le, et al
2014; 20 (21): 5558-5569
- **Pulmonary Ventilation Imaging Based on 4-Dimensional Computed Tomography: Comparison With Pulmonary Function Tests and SPECT Ventilation Images** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Yamamoto, T., Kabus, S., Lorenz, C., Mitra, E., Hong, J. C., Chung, M., Eclow, N., To, J., Diehn, M., Loo, B. W., Keall, P. J.
2014; 90 (2): 414-422
- **Motion management during IMAT treatment of mobile lung tumors-A comparison of MLC tracking and gated delivery** *MEDICAL PHYSICS*
Falk, M., Pommer, T., Keall, P., Korreman, S., Persson, G., Poulsen, P., af Rosenschold, P.
2014; 41 (10): 101707
- **Pulmonary ventilation imaging based on 4-dimensional computed tomography: comparison with pulmonary function tests and SPECT ventilation images.** *International journal of radiation oncology, biology, physics*
Yamamoto, T., Kabus, S., Lorenz, C., Mitra, E., Hong, J. C., Chung, M., Eclow, N., To, J., Diehn, M., Loo, B. W., Keall, P. J.
2014; 90 (2): 414-422
- **Stereotactic Ablative Radiotherapy for Pulmonary Oligometastases and Oligometastatic Lung Cancer** *JOURNAL OF THORACIC ONCOLOGY*
Shultz, D. B., Filippi, A. R., Thariat, J., Mornex, F., Loo, B. W., Ricardi, U.
2014; 9 (10): 1426-1433
- **Stereotactic ablative radiotherapy for pulmonary oligometastases and oligometastatic lung cancer.** *Journal of thoracic oncology*
Shultz, D. B., Filippi, A. R., Thariat, J., Mornex, F., Loo, B. W., Ricardi, U.
2014; 9 (10): 1426-1433

- **Lung Volume Reduction After Stereotactic Ablative Radiation Therapy of Lung Tumors: Potential Application to Emphysema** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Binkley, M. S., Shrager, J. B., Leung, A. N., Popat, R., Trakul, N., Atwood, T. F., Chaudhuri, A., Maxim, P. G., Diehn, M., Loo, B. W.
2014; 90 (1): 216-223
- **Noninvasive Pulmonary Nodule Elastometry by CT and Deformable Image Registration**
Negahdar, M., Shultz, D. B., Eyben, R. V., Fasola, C., Yu, A. S., Tian, L., Fleischmann, D., Gable, L., Shan, X., Diehn, M., Loo, B. W., Maxim, P. G.
ELSEVIER SCIENCE INC.2014: S623–S624
- **Impact of Optimally-Gated PET on Tumor Localization and Quantification**
Lee, K., Loo, B. W., Diehn, M., Atwood, T. F., Hristov, D. H.
ELSEVIER SCIENCE INC.2014: S795
- **Impact of Very Rapid Irradiation on Clonogenic Survival**
Rafat, M., Bazalova, M., Palma, B. A., Kozak, M. M., Jiang, D., Dunning, M., McCormick, D. J., Nelson, J. L., Hemsing, E., Lartey, F. M., Graves, E.
E., Koong, A. C., Maxim, et al
ELSEVIER SCIENCE INC.2014: S790
- **Optimization of Beam Parameters for Very High-Energy Electron Radiation Therapy: A Lung Cancer Case**
Palma, B. A., Bazalova, M., Bjoern, H., Hynning, E., Qu, B., Maxim, P. G., Loo, B. W.
ELSEVIER SCIENCE INC.2014: S933–S934
- **Treatment-Planning Study for Very High-Energy Electron Beam Radiation Therapy: Integral Dose Reduction for Pediatric Patients**
Bazalova, M., Qu, B., Palma, B., Hynning, E., Hardemark, B., Maxim, P. G., Loo, B. W.
ELSEVIER SCIENCE INC.2014: S935–S936
- **Relationship of Dose and TCP for SBRT of Lung Cancer as Analyzed From a Pooled 118 Studies Using a New Radiobiological Model**
Liu, F., Tai, A., Lee, P., Biswas, T., Ding, G. X., Naqa, I., Grimm, J., Kong, F., LaCouture, T. A., Loo, B. W., Miften, M., Solberg, T., Li, et al
ELSEVIER SCIENCE INC.2014: S189–S190
- **Lung volume reduction after stereotactic ablative radiation therapy of lung tumors: potential application to emphysema.** *International journal of radiation oncology, biology, physics*
Binkley, M. S., Shrager, J. B., Leung, A. N., Popat, R., Trakul, N., Atwood, T. F., Chaudhuri, A., Maxim, P. G., Diehn, M., Loo, B. W.
2014; 90 (1): 216-223
- **PRURITUS AS A PARANEOPLASTIC SYMPTOM OF THYMOMA**
Padda, S., Pagtama, J. Y., Tisch, A. H., Neal, J. W., Riess, J. W., Loo, B. W., Hardy, R., Shrager, J. B., Wakelee, H. A.
LIPPINCOTT WILLIAMS & WILKINS.2014: S240–S241
- **Circulating Tumor DNA Concentrations Reflect Metabolic Tumor Volume in NSCLC**
Modlin, L. A., Bratman, S. V., Newman, A. M., Eclow, N. W., Neal, J. W., Wakelee, H. A., Shrager, J. B., Loo, B. W., Alizadeh, A. A., Diehn, M.
ELSEVIER SCIENCE INC.2014: S812
- **ACR Appropriateness Criteria® nonsurgical treatment for locally advanced non-small-cell lung cancer: good performance status/definitive intent.** *Oncology (Williston Park, N.Y.)*
Chang, J. Y., Kestin, L. L., Barriger, R. B., Chetty, I. J., Ginsburg, M. E., Kumar, S., Loo, B. W., Movsas, B., Rimner, A., Rosenzweig, K. E.,
Stinchcombe, T. E., Videtic, G. M., Willers, et al
2014; 28 (8): 706-?
- **Feasibility of a Table-Top Total Body Irradiation Technique using Robotic Couch Motion**
Chin, E., Otto, K., Hoppe, R., Hsu, A., Loo, B., Million, L., Xing, L., Fahimian, B.
AMER ASSOC PHYSICISTS MEDICINE AMER INST PHYSICS.2014: 15
- **Circulating Tumor Microemboli Diagnostics for Patients with Non-Small-Cell Lung Cancer** *JOURNAL OF THORACIC ONCOLOGY*
Carlsson, A., Nair, V. S., Luttgren, M. S., Keu, K. V., Horng, G., Vasanawala, M., Kolatkar, A., Jamali, M., Iagaru, A. H., Kuschner, W., Loo, B. W.,
Shrager, J. B., Bethel, et al
2014; 9 (8): 1111-1119
- **Feasibility and Potential Utility of Multicomponent Exhaled Breath Analysis for Predicting Development of Radiation Pneumonitis After Stereotactic Ablative Radiotherapy** *JOURNAL OF THORACIC ONCOLOGY*

- More, J. M., Eclov, N. C., Chung, M. P., Wynne, J. F., Shorter, J. H., Nelson, D. D., Hanlon, A. L., Burmeister, R., Banos, P., Maxim, P. G., Loo, B. W., Diehn, M.
2014; 9 (7): 957-964
- **Feasibility and potential utility of multicomponent exhaled breath analysis for predicting development of radiation pneumonitis after stereotactic ablative radiotherapy.** *Journal of thoracic oncology : official publication of the International Association for the Study of Lung Cancer*
Moré, J. M., Eclov, N. C., Chung, M. P., Wynne, J. F., Shorter, J. H., Nelson, D. D., Hanlon, A. L., Burmeister, R., Banos, P., Maxim, P. G., Loo, B. W., Diehn, M.
2014; 9 (7): 957-64
 - **Vagal and recurrent laryngeal neuropathy following stereotactic ablative radiation therapy in the chest.** *Practical radiation oncology*
Shultz, D. B., Trakul, N., Maxim, P. G., Diehn, M., Loo, B. W.
2014; 4 (4): 272-278
 - **Imaging features associated with disease progression after stereotactic ablative radiotherapy for stage I non-small-cell lung cancer.** *Clinical lung cancer*
Shultz, D. B., Trakul, N., Abelson, J. A., Murphy, J. D., Maxim, P. G., Le, Q., Loo, B. W., Diehn, M.
2014; 15 (4): 294-301 e3
 - **4D-CT Ventilation Image-Based IMRT Plans Are Dosimetrically Comparable to SPECT Ventilation Image-Based Plans**
Kida, S., Bal, M., Kabus, S., Loo, B., Keall, P., Yamamoto, T.
WILEY.2014: 569
 - **The Effect of Beam Parameters On Very High-Energy Electron Radiotherapy: A Planning Study**
Palma, B., Bazalova, M., Hardemark, B., Hynning, E., Qu, B., Loo, B., Maxim, P.
WILEY.2014: 111
 - **Radiobiological Advantage of Very Rapid Irradiation**
Rafat, M., Bazalova, M., Palma, B., Kozak, M., Jiang, D., Dunning, M., McCormick, D., Nelson, J., Hemsing, E., Lartey, F., Graves, E., Koong, A., Maxim, et al
WILEY.2014: 95
 - **Dynamic Treatment of Clinical Margins Beyond the PET-Avid Target in Emission Guided Radiation Therapy: A Retrospective Patient Study**
Nanduri, A., Fan, Q., Yang, J., Yamamoto, T., Graves, E., Loo, B., Mazin, S.
WILEY.2014: 571
 - **Positron Emission Tomography (PET)-Guided Dynamic Lung Tumor Tracking for Cancer Radiotherapy: First Patient Simulations**
Yang, J., Yamamoto, T., Loo, B., Graves, E., Keall, P.
WILEY.2014: 522–23
 - **Calibration-Free Combined KV/MV Short Scan CBCT**
Wu, M., Loo, B., Bazalova, M., Star-Lack, J., Fahrig, R.
WILEY.2014
 - **FEATURED PRESENTATION - Treatment Planning Tool for Radiotherapy with Very High-Energy Electron Beams**
Bazalova, M., Qu, B., Hynning, E., Hardemark, B., Palma, B., Loo, B., Maxim, P.
WILEY.2014
 - **Positron Emission Tomography (PET)-Guided Dynamic Lung Tumor Tracking for Cancer Radiotherapy: First Patient Simulations**
Yang, J., Yamamoto, T., Loo, B., Graves, E., Keall, P.
WILEY.2014: 522–23
 - **Calibration-Free Combined KV/MV Short Scan CBCT**
Wu, M., Loo, B., Bazalova, M., Star-Lack, J., Fahrig, R.
WILEY.2014
 - **FEATURED PRESENTATION - Treatment Planning Tool for Radiotherapy with Very High-Energy Electron Beams**
Bazalova, M., Qu, B., Hynning, E., Hardemark, B., Palma, B., Loo, B., Maxim, P.
WILEY.2014
 - **Noninvasive and ultrasensitive quantitation of circulating tumor DNA by hybrid capture and deep sequencing.**

- Bratman, S., Newman, A. M., To, J., Wynne, J. F., Neal, J. W., Wakelee, H. A., Shrager, J. B., Loo, B. W., Diehn, M., Alizadeh, A. A.
AMER SOC CLINICAL ONCOLOGY.2014
- **The effect of arm position on the dosimetry of thoracic stereotactic ablative radiation therapy using volumetric modulated arc therapy.** *Practical radiation oncology*
Shultz, D. B., Jang, S. S., Hanlon, A. L., Diehn, M., Loo, B. W., Maxim, P. G.
2014; 4 (3): 192-197
 - **An ultrasensitive method for quantitating circulating tumor DNA with broad patient coverage.** *Nature medicine*
Newman, A. M., Bratman, S. V., To, J., Wynne, J. F., Eclow, N. C., Modlin, L. A., Liu, C. L., Neal, J. W., Wakelee, H. A., Merritt, R. E., Shrager, J. B., Loo, B. W., Alizadeh, et al
2014; 20 (5): 548-554
 - **ACR Appropriateness Criteria((R)) Early-Stage Non-Small-Cell Lung Cancer** *AMERICAN JOURNAL OF CLINICAL ONCOLOGY-CANCER CLINICAL TRIALS*
Videtic, G. M., Chang, J. Y., Chetty, I. J., Ginsburg, M. E., Kestin, L. L., Kong, F. (., Lally, B. E., Loo, B. W., Movsas, B., Stinchcombe, T. E., Willers, H., Rosenzweig, K. E.
2014; 37 (2): 201-207
 - **A Population-Based Comparative Effectiveness Study of Radiation Therapy Techniques in Stage III Non-Small Cell Lung Cancer.** *International journal of radiation oncology, biology, physics*
Harris, J. P., Murphy, J. D., Hanlon, A. L., Le, Q., Loo, B. W., Diehn, M.
2014; 88 (4): 872-884
 - **PET Imaging of Stroke-Induced Neuroinflammation in Mice Using [F-18]PBR06** *MOLECULAR IMAGING AND BIOLOGY*
Lartey, F. M., Ahn, G., Shen, B., Cord, K., Smith, T., Chua, J. Y., Rosenblum, S., Liu, H., James, M. L., Chernikova, S., Lee, S. W., Pisani, L. J., Tirouvanziam, et al
2014; 16 (1): 109-117
 - **Investigating the feasibility of rapid MRI for image-guided motion management in lung cancer radiotherapy.** *BioMed research international*
Sawant, A., Keall, P., Pauly, K. B., Alley, M., Vasanawala, S., Loo, B. W., Hinkle, J., Joshi, S.
2014; 2014: 485067-?
 - **Clinical implementation of intrafraction cone beam computed tomography imaging during lung tumor stereotactic ablative radiation therapy.** *International journal of radiation oncology, biology, physics*
Li, R., Han, B., Meng, B., Maxim, P. G., Xing, L., Koong, A. C., Diehn, M., Loo, B. W.
2013; 87 (5): 917-923
 - **4D CT lung ventilation images are affected by the 4D CT sorting method.** *Medical physics*
Yamamoto, T., Kabus, S., Lorenz, C., Johnston, E., Maxim, P. G., Diehn, M., Eclow, N., Barquero, C., Loo, B. W., Keall, P. J.
2013; 40 (10): 101907-?
 - **Simultaneous Tracking of Multiple Metastases Using FDG-PET Emission-Guided Radiation Therapy (EGRT) in a Breast Cancer Patient**
Fan, Q., Nanduri, A., Yang, J., Yamamoto, T., Loo, B., Graves, E., Zhu, L., Mazin, S.
ELSEVIER SCIENCE INC.2013: S95
 - **Lung Tumor Stereotactic Ablative Radiation Therapy With Individualized Anatomic Optimization**
Yu, S., Loo, B. W., Maxim, P. G.
ELSEVIER SCIENCE INC.2013: S737-S738
 - **Lung Volume Reduction After Stereotactic Ablative Radiation Therapy of Lung Tumors: Potential Application to Emphysema**
Binkley, M. S., Shrager, J. B., Trakul, N., Leung, A. N., Popat, R., Atwood, T. F., Maxim, P. G., Diehn, M., Loo, B. W.
ELSEVIER SCIENCE INC.2013: S545-S546
 - **Noninvasive and Ultrasensitive Quantitation of Circulating Tumor DNA by Hybrid Capture and Deep Sequencing**
Bratman, S. V., Newman, A. M., To, J., Wynne, J. F., Neal, J. W., Wakelee, H., Shrager, J., Loo, B. W., Alizadeh, A. A., Diehn, M.
ELSEVIER SCIENCE INC.2013: S92
 - **Clinical impact of dose overestimation by effective path length calculation in stereotactic ablative radiation therapy of lung tumors** *PRACTICAL RADIATION ONCOLOGY*
Liu, M. B., Eclow, N. C. W., Trakul, N., Murphy, J., Diehn, M., Le, Q., Dieterich, S., Maxim, P. G., Loo, B. W.

2013; 3 (4): 294–300

- **Adaptive Replanning Does Not Inherently Improve Dose to Pharyngeal Constrictors in Patients With Cancer of the Oropharynx**
Durkee, B. Y., Ognibene, G., Chen, C., Loo, B., Le, Q., Hara, W.
ELSEVIER SCIENCE INC.2013: S435
- **Clinical impact of dose overestimation by effective path length calculation in stereotactic ablative radiation therapy of lung tumors.** *Practical radiation oncology*
Liu, M. B., Eclov, N. C., Trakul, N., Murphy, J., Diehn, M., Le, Q., Dieterich, S., Maxim, P. G., Loo, B. W.
2013; 3 (4): 294-300
- **Radiotherapy for nonadenoid cystic carcinomas of major salivary glands.** *American journal of otolaryngology*
Chung, M. P., Tang, C., Chan, C., Hara, W. Y., Loo, B. W., Kaplan, M. J., Fischbein, N., Le, Q., Chang, D. T.
2013; 34 (5): 425-430
- **Toward a planning scheme for emission guided radiation therapy (EGRT): FDG based tumor tracking in a metastatic breast cancer patient** *MEDICAL PHYSICS*
Fan, Q., Nanduri, A., Yang, J., Yamamoto, T., Loo, B., Graves, E., Zhu, L., Mazin, S.
2013; 40 (8)
- **Non-small cell lung cancer, version 2.2013.** *Journal of the National Comprehensive Cancer Network*
Ettinger, D. S., Akerley, W., Borghaei, H., Chang, A. C., Cheney, R. T., Chirieac, L. R., D'Amico, T. A., Demmy, T. L., Govindan, R., Grannis, F. W., Grant, S. C., Horn, L., Jahan, et al
2013; 11 (6): 645-653
- **Thymomas and Thymic Carcinomas Clinical Practice Guidelines in Oncology** *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK*
Ettinger, D. S., Riely, G. J., Akerley, W., Borghaei, H., Chang, A. C., Cheney, R. T., Chirieac, L. R., D'Amico, T. A., Demmy, T. L., Govindan, R., Grannis, F. W., Grant, S. C., Horn, et al
2013; 11 (5): 562-576
- **Developing a non-invasive, diagnostic test for stage I non-small cell lung cancer using circulating tumor cells.**
Luttgen, M. S., Keu, K., Nair, V. S., Horng, G., Vasanaawala, M., Kolatkar, A., Carlsson, A., Sabouri, M., Loo, B. W., Shrager, J. B., Iagaru, A., Kuschner, W., Kuhn, et al
AMER ASSOC CANCER RESEARCH.2013
- **Migration of implanted markers for image-guided lung tumor stereotactic ablative radiotherapy.** *Journal of applied clinical medical physics*
Hong, J. C., Eclov, N. C., Yu, Y., Rao, A. K., Dieterich, S., Le, Q., Diehn, M., Sze, D. Y., Loo, B. W., Kothary, N., Maxim, P. G.
2013; 14 (2): 4046-?
- **Metabolic Tumor Volume Predicts Disease Progression and Survival in Patients with Squamous Cell Carcinoma of the Anal Canal** *JOURNAL OF NUCLEAR MEDICINE*
Bazan, J. G., Koong, A. C., Kapp, D. S., Quon, A., Graves, E. E., Loo, B. W., Chang, D. T.
2013; 54 (1): 27-32
- **An observational study of circulating tumor cells and (18)F-FDG PET uptake in patients with treatment-naive non-small cell lung cancer.** *PLoS one*
Nair, V. S., Keu, K. V., Luttgen, M. S., Kolatkar, A., Vasanaawala, M., Kuschner, W., Bethel, K., Iagaru, A. H., Hoh, C., Shrager, J. B., Loo, B. W., Bazhenova, L., Nieva, et al
2013; 8 (7)
- **Small Cell Lung Cancer** *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK*
Kalemkerian, G. P., Akerley, W., Bogner, P., Borghaei, H., Chow, L. Q., Downey, R. J., Gandhi, L., Ganti, A. K., Govindan, R., Grecula, J. C., Hayman, J., Heist, R. S., Horn, et al
2013; 11 (1): 78-98
- **The Optimal Use of Radiotherapy in Small Cell Lung Cancer** *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK*
Shultz, D. B., Grecula, J. C., Hayman, J., Diehn, M., Loo, B. W.
2013; 11 (1): 107-114
- **American College of Chest Physicians and Society of Thoracic Surgeons Consensus Statement for Evaluation and Management for High-Risk Patients With Stage I Non-small Cell Lung Cancer** *CHEST*

- Donington, J., Ferguson, M., Mazzone, P., Handy, J., Schuchert, M., Fernando, H., Loo, B., Lanuti, M., de Hoyos, A., Detterbeck, F., Pennathur, A., Howington, J., Landreneau, et al
2012; 142 (6): 1620-1635
- **Metabolic imaging metrics correlate with survival in early stage lung cancer treated with stereotactic ablative radiotherapy.** *Lung cancer*
Abelson, J. A., Murphy, J. D., Trakul, N., Bazan, J. G., Maxim, P. G., Graves, E. E., Quon, A., Le, Q., Diehn, M., Loo, B. W.
2012; 78 (3): 219-224
 - **Reproducibility of Four-dimensional Computed Tomography-based Lung Ventilation Imaging** *ACADEMIC RADIOLOGY*
Yamamoto, T., Kabus, S., von Berg, J., Lorenz, C., Chung, M. P., Hong, J. C., Loo, B. W., Keall, P. J.
2012; 19 (12): 1554-1565
 - **Cell-free DNA as a Biomarker of Residual Disease Following Radiation Therapy for Non-small Cell Lung Cancer** *54th Annual Meeting of the American-Society-for-Radiation-Oncology (ASTRO)*
Bratman, S. V., Eclow, N. C., Modlin, L. A., Neal, J., Loo, B. W., Wu, G., Richardson, K., Newman, A. M., Alizadeh, A., Diehn, M.
ELSEVIER SCIENCE INC.2012: S713-S713
 - **Improved Outcomes in Stage I NSCLC Patients Treated in the Stereotactic Ablative Radiation Therapy Era: A Population-based Analysis**
Trakul, N., Murphy, J. D., Loo, B. W., Diehn, M.
ELSEVIER SCIENCE INC.2012: S608
 - **Stereotactic Radiosurgery for Stage I NSCLC in Medically Inoperable Patients: A Prospective Multicenter Phase II Study**
Pennathur, A., Loo, B. W., Heron, D. E., Whyte, R. I., Zajac, A., Brachman, D., Gooding, W. E., Christie, N. A., Urschel, H. C., Luketich, J. D.
ELSEVIER SCIENCE INC.2012: S593-S594
 - **Anatomic and Metabolic Predictors of Failure After Stereotactic Ablative Radiation Therapy for Non-small Cell Lung Cancer**
Shultz, D. B., Trakul, N., Abelson, J. A., Murphy, J. D., Lee, Q. T., Loo, B. W., Diehn, M.
ELSEVIER SCIENCE INC.2012: S571-S572
 - **Is Recontouring Organs-at-Risk (OAR) for Adaptive Radiation Therapy Plans for Locally Advanced Lung Cancer Necessary? A Preactivation Analysis From Radiation Therapy Oncology Group (RTOG) 1106** *54th Annual Meeting of the American-Society-for-Radiation-Oncology (ASTRO)*
Chen, W., Cui, Y., Kong, F., Machtay, M., Videtic, G., Loo, B., Gore, E., Galvin, J., Yu, Y., Xiao, Y.
ELSEVIER SCIENCE INC.2012: S602-S602
 - **Quantitative Evaluation of Impact Upon Tumor Control Probability (TCP) From Quality Assurance Criteria for Non-small Cell Lung Cancer From RTOG 1106 Study** *54th Annual Meeting of the American-Society-for-Radiation-Oncology (ASTRO)*
Chen, W., Cui, Y., Kong, F., Machtay, M., Videtic, G., Loo, B., Gore, E., Galvin, J., Yan, Y., Xiao, Y.
ELSEVIER SCIENCE INC.2012: S601-S601
 - **Acute Changes in Composition of Exhaled Breath Predict Radiation Pneumonitis Following Stereotactic Ablative Radiation Therapy** *54th Annual Meeting of the American-Society-for-Radiation-Oncology (ASTRO)*
More, J. M., Eclow, N. C., Chung, M., Shorter, J. H., BURMEISTER, R., BANOS, P., Maxim, P., Loo, B. W., Diehn, M.
ELSEVIER SCIENCE INC.2012: S155-S156
 - **Feasibility of Pulmonary Interstitial Lymphography-guided Targeting in Stereotactic Ablative Radiation Therapy of Lung Tumors** *54th Annual Meeting of the American-Society-for-Radiation-Oncology (ASTRO)*
Abelson, J. A., Kothary, N., Fleischmann, D., Hofmann, L., Kielar, K., Maxim, P., Le, Q., Diehn, M., Loo, B. W.
ELSEVIER SCIENCE INC.2012: S173-S173
 - **Non-Small Cell Lung Cancer** *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK*
Ettinger, D. S., Akerley, W., Borghaei, H., Chang, A. C., Cheney, R. T., Chirieac, L. R., D'Amico, T. A., Demmy, T. L., Ganti, A. K., Govindan, R., Grannis, F. W., Horn, L., Jahan, et al
2012; 10 (10): 1236-1271
 - **Postchemoradiotherapy Positron Emission Tomography Predicts Pathologic Response and Survival in Patients With Esophageal Cancer** *53rd Annual Meeting of the American-Society-of-Radiation-Oncology (ASTRO)*
Jayachandran, P., Pai, R. K., Quon, A., Graves, E., Krakow, T. E., La, T., Loo, B. W., Koong, A. C., Chang, D. T.
ELSEVIER SCIENCE INC.2012: 471-77
 - **Esophageal tolerance to high-dose stereotactic ablative radiotherapy** *DISEASES OF THE ESOPHAGUS*

- Abelson, J. A., Murphy, J. D., Loo, B. W., Chang, D. T., Daly, M. E., Wiegner, E. A., Hancock, S., Chang, S. D., Le, Q., Soltys, S. G., Gibbs, I. C.
2012; 25 (7): 623-629
- **Stereotactic Ablative Radiotherapy for Reirradiation of Locally Recurrent Lung Tumors** *JOURNAL OF THORACIC ONCOLOGY*
Trakul, N., Harris, J. P., Le, Q., Hara, W. Y., Maxim, P. G., Loo, B. W., Diehn, M.
2012; 7 (9): 1462-1465
 - **Tumor Volume-Adapted Dosing in Stereotactic Ablative Radiotherapy of Lung Tumors** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Trakul, N., Chang, C. N., Harris, J., Chapman, C., Rao, A., Shen, J., Quinlan-Davidson, S., Filion, E. J., Wakelee, H. A., Colevas, A. D., Whyte, R. I., Dieterich, S., Maxim, et al
2012; 84 (1): 231-237
 - **Prognostic Value of Metabolic Tumor Volume and Velocity in Predicting Head-and-Neck Cancer Outcomes** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Chu, K. P., Murphy, J. D., La, T. H., Krakow, T. E., Iagaru, A., Graves, E. E., Hsu, A., Maxim, P. G., Loo, B., Chang, D. T., Quynh-Thu Le, Q. T.
2012; 83 (5): 1521-1527
 - **Intrafraction Verification of Gated RapidArc by Using Beam-Level Kilovoltage X-Ray Images** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Li, R., Mok, E., Chang, D. T., Daly, M., Loo, B. W., Diehn, M., Quynh-Thu Le, Q. T., Koong, A., Xing, L.
2012; 83 (5): E709-E715
 - **Validation that metabolic tumor volume predicts outcome in head-and-neck cancer.** *International journal of radiation oncology, biology, physics*
Tang, C., Murphy, J. D., Khong, B., La, T. H., Kong, C., Fischbein, N. J., Colevas, A. D., Iagaru, A. H., Graves, E. E., Loo, B. W., Le, Q.
2012; 83 (5): 1514-1520
 - **4D-CT Lung Ventilation Images Vary with 4D-CT Sorting Techniques** *54th Annual Meeting and Exhibition of the American-Association-of-Physicists-in-Medicine (AAPM)*
Yamamoto, T., Kabus, S., Lorenz, C., Johnston, E., Maxim, P., Loo, B., Keall, P.
AMER ASSOC PHYSICISTS MEDICINE AMER INST PHYSICS.2012: 3614-14
 - **SU-D-BRB-01: 4D-CT Lung Ventilation Images Vary with 4D-CT Sorting Techniques.** *Medical physics*
Yamamoto, T., Kabus, S., Lorenz, C., Johnston, E., Maxim, P., Loo, B., Keall, P.
2012; 39 (6Part3): 3614
 - **Lung Cancer Patient Feasibility Study for Emission Guided Radiation Therapy**
Mazin, S., Nanduri, A., Yang, J., Yamamoto, T., Loo, B., Graves, E.
AMER ASSOC PHYSICISTS MEDICINE AMER INST PHYSICS.2012: 3888-89
 - **Monte Carlo Simulations and Experimental Validation of Rapid Dose Delivery with Very High-Energy Electron Beams**
Bazalova, M., Maxim, P., Tantawi, S., Colby, E., Koong, A., Loo, B. W.
AMER ASSOC PHYSICISTS MEDICINE AMER INST PHYSICS.2012: 3944
 - **SU-D-BRB-01: 4D-CT Lung Ventilation Images Vary with 4D-CT Sorting Techniques.** *Medical physics*
Yamamoto, T., Kabus, S., Lorenz, C., Johnston, E., Maxim, P., Loo, B., Keall, P.
2012; 39 (6Part3): 3614
 - **The Management of Patients With Stage IIIA Non-Small Cell Lung Cancer With N2 Mediastinal Node Involvement** *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK*
Martins, R. G., D'Amico, T. A., Loo, B. W., Pinder-Schenck, M., Borghaei, H., Chaft, J. E., Ganti, A. K., Kong, F. (., Kris, M. G., Lennes, I. T., Wood, D. E.
2012; 10 (5): 599-613
 - **Interim-treatment quantitative PET parameters predict progression and death among patients with hodgkin's disease** *RADIATION ONCOLOGY*
Tseng, D., Rachakonda, L. P., Su, Z., Advani, R., Horning, S., Hoppe, R. T., Quon, A., Graves, E. E., Loo, B. W., Tran, P. T.
2012; 7
 - **Metabolic Tumor Volume is an Independent Prognostic Factor in Patients Treated Definitively for Non-Small-Cell Lung Cancer** *CLINICAL LUNG CANCER*

- Lee, P., Bazan, J. G., Lavori, P. W., Weerasuriya, D. K., Quon, A., Quynh-Thu Le, Q. T., Wakelee, H. A., Graves, E. E., Loo, B. W.
2012; 13 (1): 52-58
- **Evaluation of a metal artifact reduction technique in tonsillar cancer delineation** *PRACTICAL RADIATION ONCOLOGY*
Abelson, J. A., Murphy, J. D., Wiegner, E. A., Abelson, D., Sandman, D. N., Boas, F., Hristov, D., Fleischmann, D., Daly, M. E., Chang, D. T., Loo, B. W., Hara, W., Le, et al
2012; 2 (1): 27-34
 - **Evaluation of a metal artifact reduction technique in tonsillar cancer delineation.** *Practical radiation oncology*
Abelson, J. A., Murphy, J. D., Wiegner, E. A., Abelson, D., Sandman, D. N., Boas, F. E., Hristov, D., Fleischmann, D., Daly, M. E., Chang, D. T., Loo, B. W., Hara, W., Le, et al
2012; 2 (1): 27-34
 - **An automated method for comparing motion artifacts in cine four-dimensional computed tomography images.** *Journal of applied clinical medical physics*
Cui, G., Jew, B., Hong, J. C., Johnston, E. W., Loo, B. W., Maxim, P. G.
2012; 13 (6): 3838-?
 - **Malignant Pleural Mesothelioma** *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK*
Ettinger, D. S., Akerley, W., Borghaei, H., Chang, A., Cheney, R. T., Chirieac, L. R., D'Amico, T. A., Demmy, T. L., Ganti, A. K., Govindan, R., Grannis, F. W., Horn, L., Jahan, et al
2012; 10 (1): 26-41
 - **Correlation between metabolic tumor volume and pathologic tumor volume in squamous cell carcinoma of the oral cavity** *RADIOTHERAPY AND ONCOLOGY*
Murphy, J. D., Chisholm, K. M., Daly, M. E., Wiegner, E. A., Truong, D., Iagaru, A., Maxim, P. G., Loo, B. W., Graves, E. E., Kaplan, M. J., Kong, C., Le, Q.
2011; 101 (3): 356-361
 - **ON-BOARD IMAGING VALIDATION OF OPTICALLY GUIDED STEREOTACTIC RADIOSURGERY POSITIONING SYSTEM FOR CONVENTIONALLY FRACTIONATED RADIOTHERAPY FOR PARANASAL SINUS AND SKULL BASE CANCER** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Maxim, P. G., Loo, B. W., Murphy, J. D., Chu, K. P., Hsu, A., Quynh-Thu Le, Q. T.
2011; 81 (4): 1153-1159
 - **RESPONSE TO "STEREOTACTIC ABLATIVE RADIOTHERAPY IN THE FRAMEWORK OF CLASSICAL RADIOBIOLOGY: RESPONSE TO DRS. BROWN, DIEHN, AND LOO." (INT J RADIAT ONCOL BIOL PHYS 2011;79:1599-1600) AND "INFLUENCE OF TUMOR HYPOXIA ON STEREOTACTIC ABLATIVE RADIOTHERAPY (SABR): RESPONSE TO DRS. MAYER AND TIMMERMAN." (INT J RADIATION ONCOL BIOL PHYS 2011;78:1600) REPLY** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Brown, M., Loo, B. W., Diehn, M., Carlson, D. J.
2011; 81 (4): 1194
 - **What the Diagnostic Radiologist Needs to Know about Radiation Oncology** *RADIOLOGY*
Terezakis, S. A., Heron, D. E., Lavigne, R. F., Diehn, M., Loo, B. W.
2011; 261 (1): 30-44
 - **Molecular Imaging with C-11-PD153035 PET/CT Predicts Survival in Non-Small Cell Lung Cancer Treated with EGFR-TKI: A Pilot Study** *JOURNAL OF NUCLEAR MEDICINE*
Meng, X., Loo, B. W., Ma, L., Murphy, J. D., Sun, X., Yu, J.
2011; 52 (10): 1573-1579
 - **Stereotactic ablative radiotherapy (SABR) for lung cancer: What does the future hold?** *Journal of thoracic disease*
Loo, B. W.
2011; 3 (3): 150-152
 - **Results from a Single Institution Phase II Trial of Concurrent Docetaxel/Carboplatin/Radiotherapy Followed by Surgical Resection and Consolidation Docetaxel/Carboplatin in Stage III Non-Small-Cell Lung Cancer** *CLINICAL LUNG CANCER*
Das, M., Donington, J. S., Murphy, J., Kozak, M., Eclov, N., Whyte, R. I., Hoang, C. D., Zhou, L., Le, Q., Loo, B. W., Wakelee, H.
2011; 12 (5): 280-285

- **HIGH RETENTION AND SAFETY OF PERCUTANEOUSLY IMPLANTED ENDOVASCULAR EMBOLIZATION COILS AS FIDUCIAL MARKERS FOR IMAGE-GUIDED STEREOTACTIC ABLATIVE RADIOTHERAPY OF PULMONARY TUMORS** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Hong, J. C., Yu, Y., Rao, A. K., Ditererich, S., Maxim, P. G., Le, Q., Diehn, M., Sze, D. Y., Kothary, N., Loo, B. W.
2011; 81 (1): 85-90
- **INTENSITY-MODULATED RADIOTHERAPY FOR ORAL CAVITY SQUAMOUS CELL CARCINOMA: PATTERNS OF FAILURE AND PREDICTORS OF LOCAL CONTROL** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Daly, M. E., Quynh-Thu Le, Q. T., Kozak, M. M., Maxim, P. G., Murphy, J. D., Hsu, A., Loo, B. W., Kaplan, M. J., Fischbein, N. J., Chang, D. T.
2011; 80 (5): 1412-1422
- **IN REGARD TO BROWN ET AL. (INT J RADIAT ONCOL BIOL PHYS 2010;78:323-327) REPLY** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Brown, J. M., Loo, B. W., Diehn, M., Carlson, D. J.
2011; 80 (5): 1605-1605
- **POSTRADIATION METABOLIC TUMOR VOLUME PREDICTS OUTCOME IN HEAD-AND-NECK CANCER** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Murphy, J. D., La, T. H., Chu, K., Quon, A., Fischbein, N. J., Maxim, P. G., Graves, E. E., Loo, B. W., Le, Q.
2011; 80 (2): 514-521
- **MID-RADIATION THERAPY PET CORRELATES WITH SURVIVAL IN LOCALLY ADVANCED NSCLC**
Loo, B. W., Chang, C., Hong, J., Wakelee, H., Quynh Thu Le, Hara, W. Y., Quon, A., Maxim, P. G., Graves, E. E., Diehn, M., Olson, M.
LIPPINCOTT WILLIAMS & WILKINS.2011: S694–S695
- **THE FUTURE ROLE OF DIFFERENT SPECIALISTS IN MULTIMODALITY MEDICINE (LUNG CANCER) - RADIOTHERAPIST**
Loo, B. W.
LIPPINCOTT WILLIAMS & WILKINS.2011: S269
- **USING DURING-RT PET TO INDIVIDUALIZE ADAPTIVE RT FOR PATIENTS WITH STAGE III NSCLC: A MULTICENTER PLANNING STUDY**
Kong, F., Xiao, Y., Machtay, M., Werner-Wasik, M., Videtic, G. M., Loo, B. W., Wagner, H., Gore, E. M., Varlotto, J., Faria, S., Dilling, T. J., Sun, A., Swanson, et al
LIPPINCOTT WILLIAMS & WILKINS.2011: S834–S835
- **Tumor Volume as a Potential Imaging-Based Risk-Stratification Factor in Trimodality Therapy for Locally Advanced Non-small Cell Lung Cancer** *JOURNAL OF THORACIC ONCOLOGY*
Kozak, M. M., Murphy, J. D., Schipper, M. L., Donington, J. S., Zhou, L., Whyte, R. I., Shrager, J. B., Hoang, C. D., Bazan, J., Maxim, P. G., Graves, E. E., Diehn, M., Hara, et al
2011; 6 (5): 920-926
- **Reducing 4D CT artifacts using optimized sorting based on anatomic similarity** *MEDICAL PHYSICS*
Johnston, E., Diehn, M., Murphy, J. D., Loo, B. W., Maxim, P. G.
2011; 38 (5): 2424-2429
- **Investigation of four-dimensional computed tomography-based pulmonary ventilation imaging in patients with emphysematous lung regions** *PHYSICS IN MEDICINE AND BIOLOGY*
Yamamoto, T., Kabus, S., Klinder, T., Lorenz, C., von Berg, J., Blaffert, T., Loo, B. W., Keall, P. J.
2011; 56 (7): 2279-2298
- **HYPOFRACTIONATION RESULTS IN REDUCED TUMOR CELL KILL COMPARED TO CONVENTIONAL FRACTIONATION FOR TUMORS WITH REGIONS OF HYPOXIA** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Carlson, D. J., Keall, P. J., Loo, B. W., Chen, Z. J., Brown, J. M.
2011; 79 (4): 1188-1195
- **Four-dimensional computed tomography pulmonary ventilation images vary with deformable image registration algorithms and metrics** *MEDICAL PHYSICS*
Yamamoto, T., Kabus, S., Klinder, T., von Berg, J., Lorenz, C., Loo, B. W., Keall, P. J.
2011; 38 (3): 1348-1358
- **Stereotactic ablative radiotherapy: what's in a name?** *Practical Radiation Oncology*
BW Loo Jr, JY Chang, LA Dawson, BD Kavanagh, AC Koong, S Senan, RD Timmerman

2011; 1 (1): 38-39

- **Stereotactic ablative radiotherapy: what's in a name?** *PRACTICAL RADIATION ONCOLOGY*
Loo, B. W., Chang, J. Y., Dawson, L. A., Kavanagh, B. D., Koong, A. C., Senan, S., Timmerman, R. D.
2011; 1 (1): 38-39
- **An efficient protocol for the radiosynthesis of clinical grade F-18-EF5**
Apte, S. D., Chin, F. T., Loo, B. W., Chang, D., Graves, E. E.
WILEY-BLACKWELL.2011: S408
- **Stereotactic Radiosurgery for the Treatment of Stage I NSCLC in Medically Inoperable Patients: A Prospective Multicenter Phase II Study**
Pennathur, A., Whyte, R. I., Heron, D. E., Loo, B. W., Gooding, W. E., Brachman, D. G., Zajac, A., Urschel, H. D., Christie, N. A., Luketich, J. D.
ELSEVIER SCIENCE INC.2011: S81
- **Postchemoradiotherapy Positron Emission Tomography for Predicting Survival in Patients with Esophageal Cancer**
Jayachandran, P., Krakow, T., La, T., Loo, B. W., Koong, A. C., Chang, D. T.
ELSEVIER SCIENCE INC.2011: S310
- **Using during RT PET to Individualize Adaptive RT for Patients with Stage III NSCLC: A RTOG Planning Study**
Kong, F. P., Machtay, M., Videtic, G., Loo, B. W., Gore, E., Wagner, H., Varlotto, J., Faria, S., Dilling, T. J., Sun, A.
ELSEVIER SCIENCE INC.2011: S603
- **Volume Doubling Times and Outcomes in Stereotactic Ablative Radiotherapy of Early-stage Non-small Cell Lung Cancer**
Chung, M. P., Trakul, N., Le, Q., Hara, W. Y., Dieterich, S., Maxim, P. G., Diehn, M., Loo, B. W.
ELSEVIER SCIENCE INC.2011: S592-S592
- **Analysis of Migration of Implanted Markers for Image-Guided Lung Tumor Stereotactic Ablative Radiotherapy**
Hong, J. C., Eclov, N. C., Yu, Y., Rao, A. K., Dieterich, S., Maxim, P. G., Le, Q., Diehn, M., Kothary, N., Loo, B. W.
ELSEVIER SCIENCE INC.2011: S580-S581
- **Stereotactic Ablative Radiotherapy for Previously Irradiated Lung Tumors**
Trakul, N., Harris, J. P., Le, Q., Hara, W. Y., Maxim, P. G., Loo, B. W., Diehn, M.
ELSEVIER SCIENCE INC.2011: S605-S605
- **Targeting Lung Tumors in Image-Guided Stereotactic Ablative Radiotherapy using Pulmonary Interstitial Lymphography**
Abelson, J. A., Kothary, N., Fleischmann, D., Hofmann, L., Kielar, K. N., Maxim, P. G., Le, Q., Hara, W. Y., Diehn, M., Loo, B. W.
ELSEVIER SCIENCE INC.2011: S601-S601
- **Changes in FDG-PET/CT Parameters on Serial Pre-radiotherapy Scans Predict Disease Progression and Survival in Patients with Non-small Cell Lung Cancer**
Bazan, J. G., Chung, M. P., Eastham, D. V., Wakelee, H., Hara, W. Y., Maxim, P. G., Graves, E., Le, Q. T., Diehn, M., Loo, B. W.
ELSEVIER SCIENCE INC.2011: S579-S580
- **PET imaging of cerebral ischemia-induced neuroinflammation in mice using F-18-PBR06**
Lartey, F. M., Ahn, G., Shen, B., Cord, K., Smith, T., Chua, J. Y., Rosenblum, S., Tirouvanziam, R., Palmer, T., Guzman, R., Chin, F. T., Graves, E., Loo, et al
WILEY-BLACKWELL.2011: S319-S319
- **Motion Management and Image Guidance for Thoracic Tumor Radiotherapy: Clinical Treatment Programs** *IMRT IGRT SBRT- ADVANCES IN THE TREATMENT PLANNING AND DELIVERY OF RADIOTHERAPY*
Loo, B. W., Kavanagh, B. D., Meyer, J. L.
2011; 43: 271-291
- **INTENSITY-MODULATED RADIOTHERAPY FOR LOCALLY ADVANCED CANCERS OF THE LARYNX AND HYPOPHARYNX** *HEAD AND NECK-JOURNAL FOR THE SCIENCES AND SPECIALTIES OF THE HEAD AND NECK*
Daly, M. E., Le, Q., Jain, A. K., Maxim, P. G., Hsu, A., Loo, B. W., Kaplan, M. J., Fischbein, N. J., Colevas, A. D., Pinto, H., Chang, D. T.
2011; 33 (1): 103-111
- **CyberKnife Stereotactic Ablative Radiotherapy for Lung Tumors** *TECHNOLOGY IN CANCER RESEARCH & TREATMENT*
Gibbs, I. C., Loo, B. W.
2010; 9 (6): 589-596

- **STEREOTACTIC ABLATIVE RADIOTHERAPY SHOULD BE COMBINED WITH A HYPOXIC CELL RADIOSENSITIZER** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Brown, J. M., Diehn, M., Loo, B. W.
2010; 78 (2): 323-327
- **Alternatives to Surgery for Early Stage Non-Small Cell Lung Cancer-Ready for Prime Time?** *CURRENT TREATMENT OPTIONS IN ONCOLOGY*
Das, M., Abdelmaksoud, M. H., Loo, B. W., Kothary, N.
2010; 11 (1-2): 24-35
- **Stereotactic radiosurgery for stage I NSCLC in medically inoperable patients: A prospective multicenter study.**
Pennathur, A., Whyte, R. I., Zajac, A., Brachman, D. G., Gooding, W. E., Christie, N. A., Urschel, H. C., Loo, B. W., Heron, D. E., Luketich, J. D., Multictr Stereotactic Radiosurg
AMER SOC CLINICAL ONCOLOGY.2010
- **Stereotactic radiosurgery for stage I NSCLC in medically inoperable patients: A prospective multicenter phase II study**
Pennathur, A., Whyte, R. I., Zajac, A., Brachman, D. G., Gooding, W. E., Christie, N. A., Urschel, H. C., Loo, B. W., Heron, D. E., Luketich, J. D., Multictr Stereotactic Radiosurg
AMER SOC CLINICAL ONCOLOGY.2010
- **Stereotactic body radiation therapy (stereotactic ablative radiotherapy) for stage I non-small cell lung cancer--updates of radiobiology, techniques, and clinical outcomes.** *Discovery medicine*
Hadziahmetovic, M., Loo, B. W., Timmerman, R. D., Mayr, N. A., Wang, J. Z., Huang, Z., Grecula, J. C., Lo, S. S.
2010; 9 (48): 411-417
- **INTENSITY-MODULATED RADIOTHERAPY IN THE TREATMENT OF OROPHARYNGEAL CANCER: CLINICAL OUTCOMES AND PATTERNS OF FAILURE** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Daly, M. E., Le, Q., Maxim, P. G., Loo, B. W., Kaplan, M. J., Fischbein, N. J., Pinto, H., Chang, D. T.
2010; 76 (5): 1339-1346
- **High Retention and Safety of Percutaneously Implanted Endovascular Embolization Coils as Fiducial Markers for Image-guided Stereotactic Ablative Radiotherapy of Pulmonary Tumors** *52nd Annual Meeting of the American-Society-for-Therapeutic-Radiation-Oncology (ASTRO)*
Hong, J. C., Yu, Y., Rao, A. K., Dieterich, S., Maxim, P. G., Le, Q. T., Diehn, M., Sze, D. Y., Kothary, N., Loo, B. W.
ELSEVIER SCIENCE INC.2010: S518-S519
- **Esophageal Dose Tolerance in Stereotactic Body Radiotherapy**
Abelson, J. A., Murphy, J., Chang, S. D., Soltys, S. G., Le, Q., Loo, B. W., Gibbs, I. C.
ELSEVIER SCIENCE INC.2010: S267
- **4D-CT Pulmonary Ventilation Image-guided Radiotherapy Planning Is Significantly Influenced by Deformable Image Registration Algorithms and Metrics**
Yamamoto, T., Kabus, S., von Berg, J., Lorenz, C., Loo, B. W., Keall, P. J.
ELSEVIER SCIENCE INC.2010: S185
- **A Prospective Multicenter Study of Stereotactic Radiosurgery for the Treatment of Stage I NSCLC in Medically Inoperable Patients**
Pennathur, A., Whyte, R. I., Heron, D. E., Loo, B. W., Brachman, D. G., Gooding, W. E., Zajac, A., Christie, N. A., Urschel, H. D., Luketich, J. D.
ELSEVIER SCIENCE INC.2010: S520-S521
- **Hypoxia Imaging for Image-Guided Radiotherapy** *MOLECULAR IMAGING FOR INTEGRATED MEDICAL THERAPY AND DRUG DEVELOPMENT*
Le, Q., Loo, B. W., Lee, N.
edited by Tamaki, N., Kuge, Y.
2010: 7-18
- **Mid-treatment Metabolic Tumor Volume Predicts Progression and Death among Patients with Hodgkin's Disease** *52nd Annual Meeting of the American-Society-for-Therapeutic-Radiation-Oncology (ASTRO)*
Tseng, D., Rachakonda, L. P., Su, Z., Advani, R., Horning, S., Rosenberg, S. A., Hoppe, R. T., Quon, A., Graves, E. E., Loo, B. W., Tran, P. T.
ELSEVIER SCIENCE INC.2010: S546-S547

- **Prognostic Value of Metabolic Tumor Volume and Velocity in Predicting Head and Neck Cancer Outcomes** *52nd Annual Meeting of the American-Society-for-Therapeutic-Radiation-Oncology (ASTRO)*
Chu, K. P., Murphy, J., La, T. H., Loo, B. W., Krakow, T. E., Hsu, A., Maxim, P. G., Graves, E., Chang, D., Le, Q.
ELSEVIER SCIENCE INC.2010: S460–S460
- **Clinical Management of Patients with Temporal Lobe Necrosis** *52nd Annual Meeting of the American-Society-for-Therapeutic-Radiation-Oncology (ASTRO)*
Krakow, T. E., Hara, W., Yun, S., Soltys, S., Chang, S., Fischbein, N., Loo, B., Le, Q.
ELSEVIER SCIENCE INC.2010: S455–S455
- **Definitive Radiotherapy for New Primary Tumors in the Lung: The Benefit of the Doubt** *52nd Annual Meeting of the American-Society-for-Therapeutic-Radiation-Oncology (ASTRO)*
Jones, J. C., Trakul, N., Hara, W., Abelson, J. A., Maxim, P., Dieterich, S., Le, Q., Diehn, M., Loo, B. W.
ELSEVIER SCIENCE INC.2010: S500–S500
- **Volume Adapted Dosing in Stereotactic Ablative Radiotherapy of Lung Tumors** *52nd Annual Meeting of the American-Society-for-Therapeutic-Radiation-Oncology (ASTRO)*
Trakul, N., Harris, J., Dieterich, S., Maxim, P., Le, Q., Loo, B. W., Diehn, M.
ELSEVIER SCIENCE INC.2010: S179–S179
- **Can Temporal Lobe Necrosis be Prevented in Patients with Nasopharyngeal/Skull Base Tumors Undergoing a Stereotactic Radiosurgery Boost? A Dose Volume Analysis** *52nd Annual Meeting of the American-Society-for-Therapeutic-Radiation-Oncology (ASTRO)*
Hara, W., Yun, S., Hsu, A., Soltys, S., Adler, J., Le, Q., Loo, B. W.
ELSEVIER SCIENCE INC.2010: S431–S431
- **Marked Tumor Response and Fatal Hemoptysis During Radiation for Lung Cancer in a Human Immunodeficiency Virus-Positive Patient Taking Nelfinavir** *JOURNAL OF THORACIC ONCOLOGY*
Chapman, C. H., Shen, J., Filion, E. J., Tran, P. T., Hara, W., Asuncion, A., Marko, D., Wakelee, H., Berry, G. J., Dimmick, K. W., Loo, B. W., Green, J.
2009; 4 (12): 1587-1589
- **Re: "The safety and efficacy of robotic image-guided radiosurgery system treatment for intra- and extracranial lesions: A systematic review of the literature" [Radiotherapy and Oncology 89 (2009) 245-253]** *RADIOTHERAPY AND ONCOLOGY*
Gibbs, I. C., Levendag, P. C., Fariselli, L., Bondiau, P., Lartigau, E., Loo, B. W., Gagnon, G. J., Koong, A.
2009; 93 (3): 656-657
- **Cooperative Group Research Efforts in Thoracic Malignancies 2009: A Review From the 10th Annual International Lung Cancer Congress** *CLINICAL LUNG CANCER*
Wakelee, H., Loo, B. W., Kernstine, K. H., Putnam, J. B., Edelman, M. J., Vokes, E. E., Schiller, J. H., Baas, P., Saijo, N., Adjei, A., Goss, G., Choy, H., Gandara, et al
2009; 10 (6): 395-404
- **Quantification of pre-treatment metabolic tumor growth rate in lung cancer**
Eastham, D., Chapman, C. H., Rao, A. K., Balasubramanian, N., Quon, A., Vasanawala, M. S., Wakelee, H., Le, Q., Colevas, D. A., Maxim, P. A., Graves, E., Loo, B. W.
LIPPINCOTT WILLIAMS & WILKINS.2009: S733–S733
- **Four-dimensional computed tomography-based pulmonary ventilation imaging for adaptive functional guidance in radiotherapy**
Yamamoto, T., Kabus, S., von Berg, J., Lorenz, C., Mittra, E. S., Quon, A., Loo, B. W., Keall, P. J.
LIPPINCOTT WILLIAMS & WILKINS.2009: S959–S960
- **Mid-treatment PET predicts progression in hypofractionated accelerated radiation therapy for lung tumors**
Chang, C. N., Fillion, E., Chapman, C., Rao, A., Wakelee, H., Ganjoo, K., Le, Q., Maxim, P., Quon, A., Graves, E. E., Loo, B. W.
LIPPINCOTT WILLIAMS & WILKINS.2009: S939–S939
- **Excellent early local control with tumor volume adapted dosing of stereotactic body radiation therapy for pulmonary tumors**
Chang, C. N., Zhou, L. Y., MacFarlane, G., Tran, P., Rao, A., Chapman, C., Le, Q., Wakelee, H., Colevas, A. D., Whyte, R., Hristov, D., Dieterich, S., Maxim, et al
LIPPINCOTT WILLIAMS & WILKINS.2009: S938–S939
- **METABOLIC TUMOR VOLUME PREDICTS FOR RECURRENCE AND DEATH IN HEAD-AND-NECK CANCER** *50th Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology (ASTRO)*

- La, T. H., Fillion, E. J., Turnbull, B. B., Chu, J. N., Lee, P., Nguyen, K., Maxim, P., Quon, A., Graves, E. E., Loo, B. W., Le, Q.
ELSEVIER SCIENCE INC.2009: 1335-41
- **Safety and Efficacy of Percutaneous Fiducial Marker Implantation for Image-guided Radiation Therapy** *JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY*
Kothary, N., Heit, J. J., Louie, J. D., Kuo, W. T., Loo, B. W., Koong, A., Chang, D. T., Hovsepian, D., Sze, D. Y., Hofmann, L. V.
2009; 20 (2): 235-239
 - **Stereotactic body radiotherapy for primary and oligometastatic cancers** *Community Oncology*
MT Spiotto, BW Loo Jr, DT Chang
2009; 6 (10): 456-462
 - **Metabolic Tumor Volume and Oropharynx Subsite as Prognostic Factors in Advanced Head and Neck Cancer**
Raben, D., Chen, C., Loo, B., Graves, E., Kavanagh, B.
ELSEVIER SCIENCE INC.2009: S412
 - **Does Pre-treatment Metabolic Tumor Growth Rate (MTGR) Predict Progression in Lung Cancer?** *51st Annual Meeting of the American-Society-for-Radiation-Oncology (ASTRO)*
Eastham, D. V., Chapman, C. H., Rao, A. K., Narasimhan, B., Quon, A., Vasanawala, M. S., Wakelee, H., Le, Q., Colevas, A. D., Loo, B. W.
ELSEVIER SCIENCE INC.2009: S446-S446
 - **Post-Operative Radiation Therapy (PORT) in Completely Resected Non-Small-Cell Lung Cancer** *CURRENT TREATMENT OPTIONS IN ONCOLOGY*
Krupitskaya, Y., Loo, B. W.
2008; 9 (4-6): 343-356
 - **RETROSPECTIVE ANALYSIS OF ARTIFACTS IN FOUR-DIMENSIONAL CT IMAGES OF 50 ABDOMINAL AND THORACIC RADIOTHERAPY PATIENTS** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Yamamoto, T., Langner, U., Loo, B. W., Shen, J., Keall, P. J.
2008; 72 (4): 1250-1258
 - **Excellent local control with stereotactic radiotherapy boost after external beam radiotherapy in patients with nasopharyngeal carcinoma** *87th Annual Meeting of the American-Radium-Society*
Hara, W., Loo, B. W., Goffinet, D. R., Chang, S. D., Adler, J. R., Pinto, H. A., Fee, W. E., Kaplan, M. J., Fischbein, N. J., Le, Q.
ELSEVIER SCIENCE INC.2008: 393-400
 - **Complications of ablative therapies in lung cancer** *CLINICAL LUNG CANCER*
Padda, S., Kothary, N., Donington, J., Cannon, W., Loo, B. W., Kee, S., Wakelee, H.
2008; 9 (2): 122-126
 - **Initial evaluation of F-18-fluorothymidine (FLT) PET/CT scanning for primary pancreatic cancer** *EUROPEAN JOURNAL OF NUCLEAR MEDICINE AND MOLECULAR IMAGING*
Quon, A., Chang, S. T., Chin, F., Kamaya, A., Dick, D. W., Loo, B. W., Gambhir, S. S., Koong, A. C.
2008; 35 (3): 527-531
 - **Metabolic tumor volume predicts for recurrence and death in head and neck cancer** *50th Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology (ASTRO)*
La, T. H., Fillion, E. J., Turnbull, B. B., CHU, J. N., Lee, P., Nguyen, K., Maxim, P., Loo, B. W., Graves, E. E., Le, Q.
ELSEVIER SCIENCE INC.2008: S159-S160
 - **Metabolic tumor volume predicts overall survival in lung cancer patients treated definitively**
Lee, P., Bazan, J. G., Weerasuriya, D. K., Lavori, P. W., Quon, A., Le, Q., Loo, B. W.
ELSEVIER SCIENCE INC.2008: S462
 - **Time interval to FDG PET/CT after mediastinal radiation impacts the dose response of pneumonitis related metabolic activity**
Teo, B. K., Abelson, J., Teo, A., Graves, E. E., Guerrero, T., Loo, B. W.
ELSEVIER SCIENCE INC.2008: S67-S68
 - **Salvage re-irradiation using intensity-modulated radiotherapy for squamous cell carcinoma of the head and neck**
Chin, R. K., Daly, M. E., Maxim, P. G., Loo, B. W., Le, Q. T., Chang, D. T.
ELSEVIER SCIENCE INC.2008: S420

- **Good concordance between on-board imaging and an optically guided stereotactic positioning system for paranasal sinus and skull base radiotherapy**
Maxim, P. G., Hristov, D., Loo, B. W., Le, Q.
ELSEVIER SCIENCE INC.2008: S423
- **Intensity modulated radiotherapy for squamous cell carcinoma of the hypopharynx and larynx: Clinical outcomes and patterns of failure**
Daly, M. E., Le, Q. T., Loo, B. W., Maxim, P. G., Pinto, H. A., Colevas, A. D., Fee, W. E., Kaplan, M. J., Chang, D. T.
ELSEVIER SCIENCE INC.2008: S405–S406
- **Dose escalation feasible due to gating in lung cancer patients** *50th Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology (ASTRO)*
Luxion, G., Antony, J., Loo, B. W., Carlson, D., Maxim, P. G., Xing, L.
ELSEVIER SCIENCE INC.2008: S625–S625
- **Tumor size is a critical determinant of local control in single fraction stereotactic radiotherapy of pulmonary tumors** *50th Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology (ASTRO)*
Loo, B. W., Shen, J., Quinlan-Davidson, S., Fillion, E., Dieterich, S., Maxim, P. G., Wakelee, H. A., Whyte, R. I., Le, Q.
ELSEVIER SCIENCE INC.2008: S467–S468
- **Quantification of motion of different thoracic locations using four-dimensional computed tomography: Implications for radiotherapy planning** *48th Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology (ASTRO)*
Maxim, P. G., Loo, B. W., Shirazi, H., Thorndyke, B., Luxton, G., Le, Q.
ELSEVIER SCIENCE INC.2007: 1395–1401
- **Metabolic tumor burden predicts for disease progression and death in lung cancer** *47th Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology*
Lee, P., Weerasuriya, D. K., Lavori, P. W., Quon, A., Hara, W., Maxim, P. G., Le, Q., Wakelee, H. A., Donington, J. S., Graves, E. E., Loo, B. W.
ELSEVIER SCIENCE INC.2007: 328–33
- **Respiratory gated beam delivery cannot facilitate margin reduction, unless combined with respiratory correlated image guidance**
Korremann, S., Juhler-Notttrup, T., Boyer, A., Loo, B., Pedersen, A. N., Specht, L., Nystroem, H.
ELSEVIER IRELAND LTD.2007: S87–S88
- **RT_Image: An open-source tool for investigating PET in radiation oncology** *TECHNOLOGY IN CANCER RESEARCH & TREATMENT*
Graves, E. E., Quon, A., Loo, B. W.
2007; 6 (2): 111-121
- **Impact of integrated PET/CT on variability of target volume delineation in rectal cancer** *TECHNOLOGY IN CANCER RESEARCH & TREATMENT*
Patel, D. A., Chang, S. T., Goodman, K. A., Quon, A., Thorndyke, B., Gambhir, S. S., McMillan, A., Loo, B. W., Koong, A. C.
2007; 6 (1): 31-36
- **Clinical role of F-18-FDG PET/CT in the management of squamous cell carcinoma of the head and neck and thyroid carcinoma** *JOURNAL OF NUCLEAR MEDICINE*
Quon, A., Fischbein, N. J., McDougall, I. R., Le, Q., Loo, B. W., Pinto, H., Kaplan, M. J.
2007; 48: 58S-67S
- **Mid-treatment FDG-PET predicts disease progression in patients with non-small cell lung cancer**
Olson, M. R., Weerasuriya, D. K., Wakelee, H. A., Quon, A., Maxim, P. G., Le, Q., Graves, E. E., Loo, B. W.
ELSEVIER SCIENCE INC.2007: S504
- **Quantification of progression of non-small cell lung cancer in the interval between diagnostic and radiotherapy treatment planning PET scans**
Eastham, D. V., Weerasuriya, D., Wakelee, H., Quon, A., Maxim, P., Le, Q., Graves, E. E., Loo, B. W.
ELSEVIER SCIENCE INC.2007: S520–S521
- **Results of a phase I dose-escalation study using single-fraction stereotactic radiotherapy for lung tumors** *47th Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology*
Le, Q., Loo, B. W., Ho, A., Cotrutz, C., Koong, A. C., Wakelee, H., Kee, S. T., Constantinescu, D., Whyte, R. I., Donington, J.
LIPPINCOTT WILLIAMS & WILKINS.2006: 802–9

- **Indirect MR lymphangiography of the head and neck using conventional gadolinium contrast: A pilot study in humans** *45th Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology (ASTRO)*
Loo, B. W., Draney, M. T., Sivanandan, R., Ruehm, S. G., Pawlicki, T., Xing, L., Herfkens, R. J., Le, Q.
ELSEVIER SCIENCE INC.2006: 462–68
- **Four-dimensional cone-beam computed tomography using an on-board imager** *MEDICAL PHYSICS*
Li, T., Xing, L., Munro, P., McGuinness, C., Chao, M., Yang, Y., Loo, B., Koong, A.
2006; 33 (10): 3825-3833
- **4D cone-beam CT (CBCT) using an on-board imager** *48th Annual Meeting of the American-Association-of-Physicists-in-Medicine*
Li, T., Xing, L., Munro, P., Yang, Y., Loo, B., Koong, A.
AMER ASSOC PHYSICISTS MEDICINE AMER INST PHYSICS.2006: 2234–34
- **Dosimetric impact by temporal changes of the GTV in head and neck cancers**
Maxim, P., Le, Q., Loo, B., Pawlicki, T.
AMER ASSOC PHYSICISTS MEDICINE AMER INST PHYSICS.2006: 2032
- **Dosimetric impact by temporal changes of the PTV in head in neck cancers** *48th Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology (ASTRO)*
Maxim, P. G., Tran, P., Hsu, A., Daly, M., Loo, B. W., Wu, R., Pawlicki, T., Le, Q.
ELSEVIER SCIENCE INC.2006: S638–S639
- **Deep inspiration breath-hold decreases dose to the left ventricle with whole breast or accelerated partial breast radiotherapy for left sided breast cancers**
Jarvis, L. A., Loo, B., Chang, W., Thorndyke, B., Maxim, P., Horst, K.
ELSEVIER SCIENCE INC.2006: S179
- **Quantification of motion for different thoracic locations using 4DCT: Implications for radiation treatment planning**
Shirazi, H., Thorndyke, B., Maxim, P., Loo, B., Luxton, G., Le, Q.
ELSEVIER SCIENCE INC.2006: S477–S478
- **Analysis of daily set-up error by on-board imaging and its implications for PTV margin expansion**
Olson, M. R., Cox, B., Wu, R., Le, Q., Koong, A., Loo, B. W.
ELSEVIER SCIENCE INC.2006: S634–S635
- **A dosimetric study of dynamic conformal arc therapy for lung cancer**
Cho, N. K., Maxim, P. G., Loo, B. W.
ELSEVIER SCIENCE INC.2006: S687
- **Integrated analysis of pancreatic tumor motion using multiple image-guided modalities** *48th Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology (ASTRO)*
Cox, B., Ho, T., Thorndyke, B., Pawlicki, T., Loo, B., Xing, L., Goodman, K., Koong, A.
ELSEVIER SCIENCE INC.2006: S53–S54
- **Optical detection of tumors in vivo by visible light tissue oximetry** *TECHNOLOGY IN CANCER RESEARCH & TREATMENT*
Maxim, P. G., Carson, J. J., Benaron, D. A., Loo, B. W., Xing, L., Boyer, A. L., Friedland, S.
2005; 4 (3): 227-234
- **Enhancing 4D PET through retrospective stacking** *47th Annual Meeting of the American-Association-of-Physicists-in-Medicine*
Thorndyke, B., Schreibmann, E., Maxim, P., Loo, B., Boyer, A., Koong, A., Xing, L.
AMER ASSOC PHYSICISTS MEDICINE AMER INST PHYSICS.2005: 2096–96
- **Effect of respiratory cycle irregularities on image quality in four-dimensional computed tomography** *47th Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology*
Thorndyke, B., Xing, L., Graves, E., Loo, B. W.
ELSEVIER SCIENCE INC.2005: S506–S506
- **Respiratory Gating during accelerated partial breast irradiation (APBI) permits reduced planning tumor volumes and improved normal tissue dose distributions**
Cox, B., Horst, K., Thorndyke, B., Loo, B., Maxim, P., Dirbas, F.

ELSEVIER SCIENCE INC.2005: S249

- **Metabolic tumor burden predicts for disease progression in lung cancer**
Lee, P., Le, Q., Lavori, P. W., Quon, A., Graves, E., Loo, B. W.
ELSEVIER SCIENCE INC.2005: S387–S388
- **Left anterior descending coronary artery motion in deep inspiration breath-hold and free breathing using 4D-CT scanning: Potential impact on left-sided breast cancer radiotherapy**
Jarvis, L. A., Loo, B. W., Thorndyke, B. R., Horst, K. C.
ELSEVIER SCIENCE INC.2005: S491
- **Determining margin for target deformation and rotation in respiratory motion-tracked stereotactic radiosurgery of pancreatic cancer** *47th Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology*
Loo, B. W., Thorndyke, B. R., Maxim, P. G., Ho, A., Goodman, K. A., Xing, L., Yang, G. P., Koong, A. C.
ELSEVIER SCIENCE INC.2005: S31–S31
- **Results of a phase I dose escalation study using single fraction stereotactic radiosurgery (SFSR) for lung tumors** *47th Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology*
Le, Q. X., Ho, A., Cotrutz, C., Loo, B., Petrik, D., Wakelee, H., Kee, S. T., Whyte, R. I., Donington, J. S.
ELSEVIER SCIENCE INC.2005: S226–S226
- **Implementation of molecular imaging-guided radiation therapy: Software development and validation**
Graves, E., Loo, B.
AMER ASSOC PHYSICISTS MEDICINE AMER INST PHYSICS.2004: 1892
- **A method of target definition in PET-based radiotherapy planning** *46th Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology*
Loo, B. W., Quon, A., Vasanaawala, M. S., Le, Q., Graves, E. E.
ELSEVIER SCIENCE INC.2004: S602–S602
- **Plasmablastic lymphoma presenting in a human immunodeficiency virus-negative patient: a case report** *ANNALS OF HEMATOLOGY*
Nguyen, D. D., Loo, B. W., Tillman, G., Natkunam, Y., Cao, T. M., Vaughan, W., Dorfman, R. F., Goffinet, D. R., Jacobs, C. D., Advani, R. H.
2003; 82 (8): 521-525
- **A new sample preparation method for biological soft X-ray microscopy: nitrogen-based contrast and radiation tolerance properties of glycol methacrylate-embedded and sectioned tissue** *JOURNAL OF MICROSCOPY-OXFORD*
Loo, B. W., Sauerwald, I. M., Hitchcock, A. P., Rothman, S. S.
2001; 204: 69-86
- **Automatic image acquisition, calibration and montage assembly for biological X-ray microscopy** *JOURNAL OF MICROSCOPY-OXFORD*
Loo, B. W., Meyer-Ilse, W., Rothman, S. S.
2000; 197: 185-201
- **Two- and three-dimensional segmentation for measurement of particles in the analysis of microscopic digital images of biological samples** *Conference on Three-Dimensional Microscopy - Image Acquisition and Processing III*
Loo, B. W., Parvin, B., Rothman, S. S.
SPIE - INT SOC OPTICAL ENGINEERING.1996: 209–215
- **High resolution microscopic imaging with x-rays: Technology and application to the biological sciences** *Wescon/95 - Microelectronics, Communications Technology, Producing Quality Products, Mobile and Portable Power, Emerging Technologies*
Loo, B. W., Rothman, S. S.
I E E E.1995: 668–672
- **X-RAY MICROTOMOGRAPHY - 3-DIMENSIONAL RECONSTRUCTION METHODS FOR X-RAY MICROSCOPY OF BIOLOGICAL SAMPLES** *3-Dimensional Microscopy - Image Acquisition and Processing II Conference*
Loo, B. W., Brown, J. K., Rothman, S. S.
SPIE - INT SOC OPTICAL ENGINEERING.1995: 196–209
- **AN ENVIRONMENTAL SAMPLE CHAMBER FOR X-RAY MICROSCOPY** *JOURNAL OF MICROSCOPY-OXFORD*
Goncz, K. K., Batson, P., CIARLO, D., Loo, B. W., Rothman, S. S.
1992; 168: 101-110

- **X-RAY STEREOMICROSCOPY - HIGH-RESOLUTION 3-D IMAGING OF HUMAN SPERMATOOZOA IN AQUEOUS SUSPENSION WITH NATURAL CONTRAST** *JOURNAL OF MICROSCOPY-OXFORD*

Loo, B. W., Williams, S., Meizel, S., Rothman, S. S.
1992; 166: RP5-RP6

- **An environmental sample chamber for x-ray microscopy** *J Microsc*

Goncz KK, Batson P, Ciarlo D, Loo BW Jr, Rothman SS
1992; 168: 101-110