

Selected Publications

2023

1. Moore SM, et al. Co-clinical Imaging Metadata Information (CIMI) for Cancer Research to Promote Open Science, Standardization, and Reproducibility in Preclinical Imaging. *Tomography* **2023**, 9, 995-1009. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10204428/>
2. Zhang H. The National Cancer Institute's Co-Clinical Imaging Quantitative Research Resources for Precision Medicine in Preclinical and Clinical Settings. *Tomography* **2023**, 9, 931-941. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10204454/>
3. Alkim E, et al. Toward Practical Integration of Omic and Imaging Data in Co-Clinical Trials. *Tomography* **2023**, 9, 810-828. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10144684/>
4. Gammon ST, et al. An Online Repository for Pre-clinical Imaging Protocols (PIPs). *Tomography* **2023**, 9, 750-758. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10145184/>
5. Sahin SI, et al. Metabolite-specific Echo Planar Imaging for Preclinical Studies with Hyperpolarized ¹³C-pyruvate MRI. *Tomography* **2023**, 9, 736-749. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10143874/>
6. Peehl DM, et al. Animal Models and Their Role in Imaging-assisted Co-clinical Trials. *Tomography* **2023**, 9, 657-680. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10037611/>
7. Kushwaha A, et al. Improved repeatability of mouse tibia volume segmentation in murine myelofibrosis model using deep learning. *Tomography* **2023**, 9, 589-602. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10037585/>
8. Ross BD, et al. Repeatability of Quantitative Imaging Biomarkers in the Tibia Bone Marrow of a Murine Myelofibrosis Model. *Tomography* **2023**, 9, 552-566. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10037563/>
9. Bae S-W, et al. Feasibility of [18F] FSPG-PET for Early Response Assessment to Blockade of EGFR and Glutamine Metabolism in Wild-type KRAS Colorectal Cancer. *Tomography* **2023**, 9, 497-508. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10037609/>
10. Malyarenko D, et al. Evaluation of ADC Repeatability and Reproducibility of Pre-Clinical MRIs Using Standardized Procedures and DWI Phantom. *Tomography* **2023**, 9, 375-386. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9964373/>
11. Patel R, et al. Neoadjuvant Radiation Therapy and Surgery Improves Metastasis-Free Survival over Surgery Alone in a Primary Mouse Model of Soft Tissue Sarcoma, *Mol Cancer Ther* **2023**, 22, 112-122. <https://pubmed.ncbi.nlm.nih.gov/36162051/>

2022

1. Pickup S, et al. Dynamic Contrast Enhanced MRI in the Abdomen of Mice with High Temporal and Spatial Resolution using Stack of Stars Sampling and KWIC Reconstruction. *Tomography* **2022**, 8, 2113-2128. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9498490/>
2. Pemmaraju R, et al. Web-Based Application for Biomedical Image Registry, Analysis, and Translation (BiRAT). *Tomography* **2022**, 8, 1453-1462. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9228304/>
3. Allphin AJ, et al. Photon Counting CT and Radiomic Analysis Enables Differentiation of Tumors Based on Lymphocyte Burden. *Tomography* **2022**, 8, 740-753. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8938796/>
4. Joaquim MR, et al. DWI Metrics Differentiating Benign Intraductal Papillary Mucinous Neoplasms from Invasive Pancreatic Cancer: A Study in GEM Models, *Cancers (Basel)* **2022**, 14, 4017. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9406679/>
5. Roy S, et al. Coclinical FDGPET radiomic signature in predicting response to neoadjuvant chemotherapy in triplenegative breast cancer, *European Journal of Nuclear Medicine and Molecular Imaging*, **2022**, 49, 550-562. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8800941/>
6. Cohen AS, et al. First-in-Human PET Imaging and Estimated Radiation Dosimetry of L-[5-¹¹C]-Glutamine in Patients with Metastatic Colorectal Cancer, *J Nucl Med.* **2022**, 63, 36-43. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8717201/>

2021

1. Dutta K, et al. Deep Learning Segmentation of Triple-Negative Breast Cancer (TNBC) Patient Derived Tumor Xenograft (PDX) and Sensitivity of Radiomic Pipeline to Tumor Probability Boundary, *Cancers* **2021**, 13, 3795. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8345151/>
2. Holbrook MD, et al. Detection of Lung Nodules in Micro-CT Imaging Using Deep Learning, *Tomography* **2021**, 7, 358-372. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8396172/>
3. Blocker S, et al. Ex Vivo MR Histology and Cytometric Feature Mapping Connect Three-dimensional in Vivo MR Images to Two dimensional Histopathologic Images of Murine Sarcomas, *Radiology: Imaging Cancer* **2021**, 3, e200103. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8183263/>
4. Cao J, et al. Respiratory Motion Mitigation and Repeatability of Two Diffusion- Weighted MRI Methods Applied to a Murine Model of Spontaneous Pancreatic Cancer. *Tomography* **2021**, 7, 66-79. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8048371/>
5. Du T, et al. Adaptive convolutional neural networks for accelerating magnetic resonance imaging via k-space data interpolation, *Med Image Anal* **2021**, 72, e102098. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8734583/>

2020

1. Cohen AS, et al. Combined blockade of EGFR and glutamine metabolism in preclinical models of colorectal cancer, *Translational Oncology* **2020**, 13, e100828. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7348062/>
2. Shoghi KI, et al., Co-Clinical Imaging Resource Program (CIRP): Bridging the Translational Divide to Advance Precision Medicine, *Tomography* **2020**, 6, 273-287. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7442091/>
3. Holbrook MD, et al. MRI-Based Deep Learning Segmentation and Radiomics of Sarcoma in Mice, *Tomography* **2020**, 6, 23-33. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7138523/>
4. Wisdom AJ, et al. Single cell analysis reveals distinct immune landscapes in transplant and primary sarcomas that determine response or resistance to immunotherapy, *NATURE COMMUNICATIONS* **2020**, 6410 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7746723/>
5. Roy S, et al. Shoghi, Optimal co-clinical radiomics: Sensitivity of radiomic features to tumour volume, image noise and resolution in co-clinical T1-weighted and T2-weighted magnetic resonance imaging, *EBioMedicine* **2020**, 59, e102963. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7479492/>

6. Savaikar MA, et al. Preclinical PERCIST and 25% of SUVmax Threshold: Precision Imaging of Response to Therapy in Co-clinical 18F-FDG PET Imaging of Triple-Negative Breast Cancer Patient-Derived Tumor Xenografts, *J Nucl Med* **2020**, 61, 842–849, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7262224/>
7. Blocker SJ, et al. The impact of respiratory gating on improving volume measurement of murine lung tumors in micro-CT imaging, *PLoS ONE* **2020**, 15, e0225019, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7041814/>

2019

1. Ge X, et al. Test–Retest Performance of a 1-Hour Multiparametric MR Image Acquisition Pipeline with Orthotopic Triple-Negative Breast Cancer Patient-Derived Tumor Xenografts, *Tomography* **2019**, 5, 320-331, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6752291/>
2. Cao J, et al. Dynamic Contrast-enhanced MRI Detects Responses to Stroma-directed Therapy in Mouse Models of Pancreatic Ductal Adenocarcinoma, *Clin Cancer Res* **2019**, 25, 2314-2322, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6445712/>
3. Blocker SJ, et al. Bridging the translational gap: Implementation of multimodal small animal imaging strategies for tumor burden assessment in a co-clinical trial, *PLoS ONE* **2019**, 14, e0207555, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6453461/>