

QIBA and QI/ Imaging Biomarkers in the Literature

If available, article titles are linked to PubMed citations.

2013

Breault SR, Heye T, Bashir MR. [Quantitative Dynamic Contrast-Enhanced MRI of Pelvic and Lumbar Bone Marrow: Effect of Age and Marrow Fat Content on Pharmacokinetic Parameter Values](#). *American Journal of Roentgenology*. 2013; 200:W297-W303. doi: 10.2214/AJR.12.9080

Doherty JR, Trahey GE, Nightingale KR, Palmeri ML. [Acoustic Radiation Force Elasticity Imaging in Diagnostic Ultrasound](#). *IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control*. April 2013; 60(4): 685-701. doi: 10.1109/TUFFC.2013.2617 | URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6489803&isnumber=6489793>

Feltovich H, Hall TJ. [Quantitative Imaging of the Cervix: Setting the Bar](#). *Ultrasound in Obstetrics & Gynecology*, 2013 Feb; 41(2):121-128. DOI: 10.1002/uog.12383.

Goh V, Schaeffter T, Leach M. [Reproducibility of Dynamic Contrast-enhanced MR Imaging: Why We Should Care](#). *Radiology*. 2013 Mar; 266(3):698-700. doi: 10.1148/radiol.12122447. PMID: 23431225 [PubMed - in process]

Hunter, Luke, [Radiomics of NSCLC: Quantitative CT Image Feature Characterization and Tumor Shrinkage Prediction](#) (2013). UT GSBS Dissertations and Theses (Open Access). Paper 330.

Namkug Kim, PhD, et al. [An Engineering View on Megatrends in Radiology: Digitization to Quantitative Tools of Medicine](#). *Korean J Radiol*. 2013 Mar-Apr; 14(2):139-153. English.

2012

Abramson RG, Arlinghaus LR, Weis JA. [Current and Emerging Quantitative Magnetic Resonance Imaging Methods for Assessing and Predicting the Response of Breast Cancer to Neoadjuvant Therapy](#). *Breast Cancer: Targets and Therapy*. 2012 Oct; (4): 139-154.

Abramson RG, Su PF, Shyr Y. [Quantitative Metrics in Clinical Radiology Reporting: A Snapshot Perspective from a Single Mixed Academic-Community Practice](#). *Magn Reson Imaging*. 2012 July 11. [Epub ahead of print]

Ferl, GZ, Port RE. [Quantification of Antiangiogenic and Antivascular Drug Activity by Kinetic Analysis of DCE-MRI Data](#). *American Society of Clinical Pharmacology and Therapeutics*. 2012 May; 167-177.

Heye T, Davenport MS, Horvath JJ. [Reproducibility of Dynamic Contrast-enhanced MR Imaging Part I. Perfusion Characteristics in the Female Pelvis by Using Multiple Computer-aided Diagnosis Perfusion Analysis Solutions](#). *Radiology*. 2013 Mar; 266(3):801-11. doi: 10.1148/radiol.12120278. Epub 2012 Dec 6.

Kurland, BF, Gerstner ER, Mountz, JM, et al. [Promises and Pitfalls of Quantitative Imaging in Oncology Clinical Trials](#). *Magn Reson Imaging*. 2012 August 14. [Epub ahead of print]

McGehee BE, Pollock JM, Maldjian JA. [Brain Perfusion Imaging: How Does it Work and What Should I Use?](#) *Journal of Magnetic Resonance Imaging*. Dec 2012; 36(6) 1257-1272. Article first published online: 16 NOV 2012 | DOI: 10.1002/jmri.23645

Mozley PD, Bendtsen C, Zhao B, Schwartz LH, Thorn M, Rong Y, Zhang L, Perrone A, Korn R, Buckler AJ. [Measurement of Tumor Volumes Improves RECIST-based Response Assessments in Advanced Lung Cancer](#). *Translational Oncology*. 2012; 5:19-25.

Patel N, Harris AL, Gleeson FV, Vallis KA. [Clinical imaging of tumor angiogenesis](#). *Future Oncol*. 2012 Nov; 8(11):1443-59. doi: 10.2217/fon.12.136.

Shankar LK. [The clinical evaluation of novel imaging methods for cancer management](#). *Nature Reviews Clinical Oncology*. 2012 Dec; 9(12):738-744. doi:10.1038/nrclinonc.2012.186.

2011

Bendtsen C, Kietzmann M, Korn R, Mozley PD, Schmidt G, and Binnig G. [X-Ray Computed Tomography: Semi automated Volumetric Analysis of Late-Stage Lung Tumors as a Basis for Response Assessments](#). *International J Biomed Imaging*. 2011; Article ID 361589, 11 pages doi:10.1155/2011/361589.

Boellaard R. [Need for Standardization of 18F-FDG PET/CT for Treatment Response Assessments](#). *J Nucl Med*. 2011; 52 (Suppl 2):93S–100S.

Buckler AJ, Bresolin L, Dunnick NR, Sullivan DC, Aerts HJ, Bendriem B, Bendtsen C, Boellaard R, Boone JM, Cole PE, Conklin JJ, Dorfman GS, Douglas PS, Eidsaunet W, Elsinger C, Frank RA, Gatsonis C, Giger ML, Gupta SN, Gustafson D, Hoekstra OS, Jackson EF, Karam L, Kelloff GJ, Kinahan PE, McLennan G, Miller CG, Mozley PD, Muller KE, Patt R, Raunig D, Rosen M, Rupani H, Schwartz LH, Siegel BA, Sorensen AG, Wahl RL, Waterton JC, Wolf W, Zahlmann G, Zimmerman B. [Quantitative Imaging Test Approval and Biomarker Qualification: Interrelated but Distinct Activities](#). *Radiology*. 2011 Jun; 259(3):875-84. Epub 2011 Feb 15.

Buckler AJ, Bresolin L, Dunnick NR, Sullivan DC; Group. [A Collaborative Enterprise for Multi-stakeholder Participation in the Advancement of Quantitative Imaging](#). *Radiology*. 2011 Mar; 258(3):906-14.

Buckler AJ, Boellaard R. [Standardization of Quantitative Imaging: The Time is Right, and 18F-FDG PET/CT is a Good Place to Start](#). *J Nucl Med*. 2011 Feb; 52(2):171-2. Epub 2011 Jan 13. No abstract available.

McNitt-Gray MF, Kim HJ, Zhao B, Schwartz L, Clunie D, Borradaile K, Byrne K, Kaplan S, Barudin J, Sherman J, Slazak K, Petrick NP, Fenimore C, Lu J, Buckler, AJ, [Estimating the Minimum Detectable Change of Lung Lesions Using Patient Datasets Acquired Under a “No Change” Condition](#), **RSNA 2011**.

Petrick NP, Kim HJ, Clunie D, Borradaile K, Ford R, Zeng R, Gavrielides MA, McNitt-Gray MF, Fenimore C, Lu J, Zhao B, Buckler AJ. [Evaluation of 1D, 2D and 3D Nodule Size Estimation by Radiologists for Spherical and Non-spherical Nodules Through CT Thoracic Phantom Imaging](#), **SPIE, February 2011**.

Tatsch, Klaus. [Standardisation and Harmonization Boost the Credibility of Nuclear Medicine Procedures](#). *European Journal of Medical Molecular Imaging*. 2011 Nov; 1007/s00259-011-1996-5. Epub 2011 Nov 17.

2010

Buckler AJ, Mozley PD, Schwartz L, Petrick N, McNitt-Gray M, Fenimore C, O'Donnell K, Hayes W, Kim HJ, Clarke L, Sullivan D. [Volumetric CT in Lung Cancer: An Example for the Qualification of Imaging as a Biomarker](#). *Acad Radiol*. 2010 Jan; 17(1):107-15.

Buckler AJ, Mulshine JL, Gottlieb R, Zhao B, Mozley PD, Schwartz L. [The Use of Volumetric CT as an Imaging Biomarker in Lung Cancer](#). *Acad Radiol*. **2010** Jan; 17(1):100-6.

Buckler AJ, Schwartz LH, Petrick N, McNitt-Gray M, Zhao B, Fenimore C, Reeves AP, Mozley PD, Avila RS. [Data Sets for the Qualification of Volumetric CT as a Quantitative Imaging Biomarker in Lung Cancer](#). *Opt Express*. **2010** Jul 5; 18(14):15267-82. (See also http://vjbo.osa.org/virtual_issue.cfm)

Jaffe TA, Wickersham NW, Sullivan DC. [Quantitative Imaging in Oncology Patients: Part 1, Radiology Practice Patterns at Major U.S. Cancer Centers](#). *AJR Am J Roentgenol*. 2010; 195:101–106

Mozley PD, Schwartz LH, Bendtsen C, Zhao B, Petrick N, Buckler AJ. [Change in Lung Tumor Volume as a Biomarker of Treatment Response: A Critical Review of the Evidence](#). *Ann Oncol*. **2010** Sep; 21(9):1751-5. Epub 2010 Mar 23. Review. [Free article](#)

2009

Mulshine JL, Jablons DM. [Volume CT for Diagnosis of Nodules Found in Lung-Cancer Screening](#). *N Engl J Med*. **2009** Dec 3; 361(23): 2281-2.

Paldino MJ, Barboriak DP. [Fundamentals of Quantitative Dynamic Contrast-Enhanced MR Imaging](#). *Magn Reson Imaging Clin N Am*. **2009**; 17:277–289

2008

Boellaard R, Oyen WJ, Hoekstra CJ, Hoekstra OS, Visser EP, Willemsen AT, et al. [The Netherlands Protocol for Standardisation and Quantification of FDG Whole Body PET Studies in Multi-Centre Trials](#). *Eur J Nucl Med Mol Imaging*. **2008**; 35:2320–2333

Frank R; FDG-PET/CT Working Group. [Quantitative Imaging Biomarkers Alliance FDG-PET/CT Working Group Report](#). *Mol Imaging Biol*. **2008** Nov-Dec; 10(6):305.