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Full Name: Joe Y. Chang, MD, PhD
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First Name: Joe
Job Title: Professor of Radiation Oncology
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Joe Y. Chang, MD, PhD, professor of radiation oncology at The University of Texas MD Anderson Cancer Center

Present Title & Affiliation
Primary Appointment

Professor (Tenure), Department of Radiation Oncology, Division of Radiation Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX

Director, Stereotactic Radiotherapy Program, Department of Radiation Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX

Education & Training
Degree-Granting Education

1997 The University of Texas MD Anderson Cancer Center, Houston, TX, USA, PHD, Cancer Biology
1988 Graduate School, Fudan University, Shanghai, CHN, MS, Immunology
1985 Shanghai Medical College, Fudan University, Shanghai, CHN, MD, Medicine
Postgraduate Training

1997-2002 Clinical Residency, Radiation Oncology, Rush-Presbyterian St. Luke Medical Center, Chicago, IL
1990-1993 Visiting Scientist, Thoracic Surgery, The University of Texas MD Anderson Cancer Center, Houston, TX
1988-1990 Research Residency, Clinical and Translational Oncology, Shanghai Medical College, Fudan University, Shanghai

Board Certifications

2002 American Board of Radiology (Radiation Oncology)

Honors & Awards

2008 Travel Award, American Radium Society
2007 America's Top Oncologists, Consumers' Research Council of America
2005 America's Top Radiologist, Consumers' Research Council of America
2004 RSNA Research Scholar Award, RSNA
2004 Career Developmental Award, The University of Texas Lung Cancer Spore, NIH
2004 America's Top Physicians Award, Consumers' Research Council of America

2000 First Place Winner of Resident Research Competition, Rush-Presbyterian St. Luke's Medical Center
2000 ASTRO 2000 Annual Meeting Travel Award, ASTRO
1995 Dr. Alexander Y. Wang Memorial Award, Society of Chinese Bioscientist in America
1995 First Place Winner of John P. McGovern Graduate Student Award, Graduate School of Biomedical Sciences, The University of Texas M. D. Anderson Cancer Center
1995 NIH Research Training Award, NIH
1985 Shanghai Outstanding Medical Graduates (Top 10) Award, Shanghai Municipal Government
Professional Memberships
International Association for the Study of Lung Cancer

Member-Advanced Radiation Technology Committee, 2013 - Present

Particle Therapy Co-Operative Group (PTCOG)

Chair of Thoracic Sub-committee, 2013 - Present

Sino-American Network for Therapeutic Radiology and Oncology (SANTRO)

President, 2011 - 2014

American College of Radiology (ACR) Appropriateness Criteria Radiation Oncology Lung Cancer Committee

Chair for Expert panel in lung cancer, 2011 - Present

Sino-American Network for Therapeutic Radiology and Oncology (SANTRO)

Founding board of directors, 2006 - Present

Quality Research in Radiation Oncology (ORRO), Philadelphia, PA

Member, 2005 - Present

Radiation Therapy Oncology Group (RTOG), Philadelphia, PA

Member, Lung and Translational Research Committee, 2005 - Present

Radiological Society of North American

Research Scholar, 2004 - 2006

The American Society of Clinical Oncology

Member, 2002 - Present

The American Society for Therapeutic Radiology and Oncology

Member, 1997 - Present

Selected Publications

Peer-Reviewed Articles

Wang X, Schoenhals JE, Li A, Valdecanas DR, Ye H, Zang F, Tang C, Tang M, Liu CG, Liu X, Krishnan S, Allison JP, Sharma P, Hwu P, Komaki R, Overwijk WW, Gomez DR, Chang JY, Hahn SM, Cortez MA, Welsh JW Suppression of type I IFN signaling in tumors mediates resistance to anti-PD-1 treatment that can be overcome by radiotherapy. *Cancer Res* 77 (4) :839-850, 2017. e-Pub 2016. PMID: 27821490

Vial MR, Khan KA, O'Connell O, Peng SA, Gomez DR, Chang JY, Rice DC, Mehran R, Jimenez CJ, Grosu HB, Ost DE, Eapen GA Endobronchial Ultrasound-Guided Transbronchial Needle Aspiration in the Nodal Staging of Stereotactic Ablative Body Radiotherapy Patients. *Ann Thorac Surg* 103 (5) :1600-1605, 2017. e-Pub 2016. PMID: 28027732

Tang C, Welsh JW, de Groot P, Massarelli E, Chang JY, Hess KR, Basu S, Curran MA, Cabanillas ME, Subbiah V, Fu S, Tsimberidou AM, Karp D, Gomez DR, Diab A, Komaki R, Heymach JV, Sharma P, Naing A, Hong DS Ipilimumab with stereotactic ablative radiation therapy: Phase I results and immunologic correlates from peripheral T-cells. *Clin Cancer Res* 23 (6) :1388-1396, 2017. e-Pub 2016. PMID: 27649551

Chance WW, Nguyen QN, Mehran R, Welsh JW, Gomez DR, Balter P, Komaki R, Liao Z, Chang JY Stereotactic ablative radiotherapy for adrenal gland metastases: factors influencing outcomes, patterns of failure, and dosimetric thresholds for toxicity. *Pract Radiat Oncol* 7 (3) :e195-e203, 2017. e-Pub 2016. PMID: 27743801

Chang JY, Zhang W, Komaki R, Choi NC, Chan S, Gomez D, O'Reilly M, Jeter M, Gillin M, Zhu X, Zhang X, Mohan R, Swisher S, Hahn S, Cox JD Long-term outcome of phase I/II prospective study of dose-escalated proton therapy for early-stage non-small cell lung cancer. *Radiother Oncol* 122 (2) :274-280, 2017. e-Pub 2017. PMID: 28139305

Welsh JW, Seyedin SN, Allen PK, Hofstetter WL, Ajani JA, Chang JY, Gomez DR, Amini A, Swisher SG, Blum MA, Younes AI, Nguyen QN, Minsky BD, Erasmus JJ, Lee JH, Bhutani M, Komaki RU Local Control and Toxicity of a Simultaneous Integrated Boost for Dose Escalation in Locally Advanced Esophageal Cancer: Interim Results from a Prospective Phase I/II Trial. *J Thorac Oncol* 12 (2) :375-382, 2017. e-Pub 2016. PMID: 27794500

Chang JY, Senan S, Smit EF, Roth JA Stereotactic radiotherapy or surgery for early-stage non-small-cell lung cancer - Authors' reply. *Lancet Oncol* 17 (2) :e42-e43, 2016. PMID: 26868349

Yu J, Zhang X, Liao L, Li H, Zhu R, Park PC, Sahoo N, Gillin M, Li Y, Chang JY, Komaki R, Lin SH Motion-robust intensity-modulated proton therapy for distal esophageal cancer. *Med Phys* 43 (3) :1111, 2016. PMID: 26936698

Zhao L, Pu X, Ye Y, Lu C, Chang JY, Wu X Association between Genetic Variants in DNA Double-Strand Break Repair Pathways and Risk of Radiation Therapy-Induced Pneumonitis and Esophagitis in Non-Small Cell Lung Cancer. *Cancers (Basel)* 8 (2) , 2016. e-Pub 2016. PMID: 26901225

Bernstein MB, Krishnan S, Hodge JW, Chang JY Immunotherapy and stereotactic ablative radiotherapy (ISABR): a curative approach? *Nat Rev Clin Oncol* 13 (8) :516-524, 2016. e-Pub 2016. PMID: 26951040

Liu W, Schild SE, Chang JY, Liao Z, Chang YH, Wen Z, Shen J, Stoker JB, Ding X, Hu Y, Sahoo N, Herman MG, Vargas C, Keole S, Wong W, Bues M Exploratory Study of 4D versus 3D Robust Optimization in Intensity Modulated Proton Therapy for Lung Cancer. *Int J Radiat Oncol Biol Phys* 95 (1) :523-533, 2016. e-Pub 2015. PMID: 26725727

Chang JY, Jabbour SK, De Ruyscher D, Schild SE, Simone CB, Rengan R, Feigenberg S, Khan AJ, Choi NC, Bradley JD, Zhu XR, Lomax AJ, Hoppe BS, International Particle Therapy Co-operative Group (PTCOG) Thoracic Subcommittee Consensus Statement on Proton Therapy in Early-Stage and Locally Advanced Non-Small Cell Lung Cancer. *Int J Radiat Oncol Biol Phys* 95 (1) :505-516, 2016. e-Pub 2016. PMID: 27084663

Li R, Pu X, Chang JY, Ye Y, Komaki R, Minna JD, Roth JA, Han B, Wu X MiRNA-Related Genetic Variations Associated with Radiotherapy-Induced Toxicities in Patients with Locally Advanced Non-Small Cell Lung Cancer. *PLoS One* 11 (3) :e0150467, 2016. e-Pub 2016. PMID: 26991123

Zhuang H, Yuan X, Zheng Y, Li X, Chang JY, Wang J, Wang X, Yuan Z, Wang P A study on the evaluation method and recent clinical efficacy of bevacizumab on the treatment of radiation cerebral necrosis. *Sci Rep* 6:24364, 2016. e-Pub 2016. PMID: 27067388

Xu JY, Lu S, Xu XY, Hu SL, Li B, Li WX, Chang JY Prognostic significance of nuclear or cytoplasmic nucleolin expression in human non-small cell lung cancer and its relationship with DNA-PKcs. *Tumour Biol* 37 (8) :10349-10356, 2016. e-Pub 2016. PMID: 26846099

Moghanaki D, Chang JY Is surgery still the optimal treatment for stage I non-small cell lung cancer? *Transl Lung Cancer Res* 5 (2) :183-189, 2016. PMID: 27183993

Zhao L, Zhou S, Balter P, Shen C, Gomez DR, Welsh JD, Lin SH, Chang JY Planning Target Volume D95 and Mean Dose Should Be Considered for Optimal Local Control for Stereotactic Ablative Radiation Therapy. *Int J Radiat Oncol Biol Phys* 95 (4) :1226-1235, 2016. e-Pub 2016. PMID: 27209498

Schoenhals JE, Seyedin SN, Tang C, Cortez MA, Niknam S, Tsouko E, Chang JY, Hahn SM, Welsh JW Preclinical Rationale and Clinical Considerations for Radiotherapy Plus Immunotherapy: Going Beyond Local Control. *Cancer J* 22 (2) :130-137, 2016. PMID: 27111909

Brooks ED, Schoenhals JE, Tang C, Micevic G, Gomez DR, Chang JY, Welsh JW Stereotactic Ablative Radiation Therapy Combined With Immunotherapy for Solid Tumors. *Cancer J* 22 (4) :257-266, 2016. PMID: 27441745

Tang C, Amer A, Hobbs B, Li X, Behrens C, Para Cuentas E, Rodriguez Canales J, Chang JY, Hong D, Welsh JW, Wistuba I, Koay EJ Pathology-Based Non-Small Cell Lung Cancer Radiomics Signature Describing the Local Tumor Immune Environment: Discovery and Validation. *Int J Radiat Oncol Biol Phys* 96 (2S) :S42-S43, 2016. PMID: 27675926

Wang X, Schoenhals JE, Valdecanas DR, Li A, Ye H, Zhang F, Tang M, Tang C, Liu CG, Liu X, Komaki RU, Gomez DR, Chang JY, Cortez MA, Welsh JW Suppression of Major Histocompatibility Complex (MHC) Class I and II Mediates Resistance to Anti-PD-1 in Lung Adenocarcinoma Tumors That Can Be Overcome by Radiation Therapy. *Int J Radiat Oncol Biol Phys* 96 (2S) :S89, 2016. PMID: 27676044

Zhuang H, Zheng Y, Wang J, Chang JY, Wang X, Yuan Z, Wang P Analysis of risk and predictors of brain radiation necrosis after radiosurgery. *Oncotarget* 7 (7) :7773-7779, 2016. e-Pub 2015. PMID: 26675376

Selek U, Chang JY Optimal sequencing of postoperative radiotherapy and chemotherapy in IIIA-N2 non-small cell lung cancer. *J Thorac Dis* 8 (7) :1394-1397, 2016. PMID: 27500390

Iyengar P, Westover KD, Court LE, Patel MK, Shrivani AT, Saunders MW, Li Y, Chang JY, Gao A, Ahn C, Choy H, Timmerman RD A Phase III Randomized Study of Image Guided Conventional (60 Gy/30 fx) Versus Accelerated, Hypofractionated (60 Gy/15 fx) Radiation for Poor Performance Status Stage II and III NSCLC Patients-An Interim Analysis. *Int J Radiat Oncol Biol Phys* 96 (2S) :E451, 2016. PMID: 27674727

Wang Q, Zhou S, Court LE, Koay EJ, Zhang L, Zhang W, Lin SH, Tang C, Welsh JW, Hofstetter WL, Chang JY Risk Stratification Incorporating Complementary Contrast Computed Tomography Texture Features for Prognosis in Primary Gastroesophageal Junction Adenocarcinoma. *Int J Radiat Oncol Biol Phys* 96 (2S) :S152-S153, 2016. PMID: 27675655

Chang JY, Bezjak A, Mornex F, IASLC Advanced Radiation Technology Committee Stereotactic Ablative Radiotherapy for Centrally Located Early-Stage Non-Small-Cell Lung Cancer: What We Have Learned on behalf of the IASLC Advanced Radiation Technology Committee. *J Thorac Oncol* 10 (4) :577-585, 2015. e-Pub 2014. PMID: 25514807

Chance WW, Rice DC, Allen PK, Tsao AS, Fontanilla HP, Liao Z, Chang JY, Tang C, Pan HY, Welsh JW, Mehran RJ, Gomez DR Hemithoracic Intensity Modulated Radiation Therapy After Pleurectomy/Decortication for Malignant Pleural Mesothelioma: Toxicity, Patterns of Failure, and a Matched Survival Analysis. *Int J Radiat Oncol Biol Phys* 91 (1) :149-156, 2015. e-Pub 2014. PMID: 25442335

Swanick CW, Lin SH, Sutton J, Naik NS, Allen PK, Levy LB, Liao Z, Welsh JW, Komaki R, Chang JY, Gomez DR Use of Simultaneous Radiation Boost Achieves High Control Rates in Patients With Non-Small-Cell Lung Cancer Who Are Not Candidates for Surgery or Conventional Chemoradiation *Clin Lung Cancer* 10 (1016) :156-163, 2015. e-Pub 2014. PMID: 25467928

Willers H, Stinchcombe TE, Barriger RB, Chetty IJ, Ginsburg ME, Kestin LL, Kumar S, Loo BW, Movsas B, Rimner A, Rosenzweig KE, Videtic GM, Chang JY, Expert Panel on Radiation Oncology-Lung: ACR Appropriateness Criteria® Induction and Adjuvant Therapy for N2 Non-small-cell Lung Cancer. *Am J Clin Oncol* 38 (2) :197-205, 2015. PMID: 25803563

Videtic GM, Hu C, Singh AK, Chang JY, Parker W, Olivier KR, Schild SE, Komaki R, Urbanic JJ, Choy H. A Randomized Phase 2 Study Comparing 2 Stereotactic Body Radiation Therapy Schedules for Medically Inoperable Patients With Stage I Peripheral Non-Small Cell Lung Cancer: NRG Oncology RTOG 0915 (NCCTG N0927). *Int J Radiat Oncol Biol Phys* 93 (4) :757-764, 2015

Chang JY, Senan S, Paul MA, Mehran RJ, Louie AV, Balter P, Groen HJ, McRae SE, Widder J, Feng L, van den Borne BE, Munsell MF, Hurkmans C, Berry DA, van Werkhoven E, Kresl JJ, Dingemans AM, Dawood O, Haasbeek CJ, Carpenter LS, De Jaeger K, Komaki R, Slotman BJ, Smit EF, Roth JA Stereotactic ablative radiotherapy versus lobectomy for operable stage I non-small-cell lung cancer: a pooled analysis of two randomised trials. *Lancet Oncol* 16 (6) :630-637, 2015. e-Pub 2015. PMID: 25981812

Nguyen QN, Ly NB, Komaki R, Levy LB, Gomez DR, Chang JY, Allen PK, Mehran RJ, Lu C, Gillin M, Liao Z, Cox JD Long-term outcomes after proton therapy, with concurrent chemotherapy, for stage II-III inoperable non-small cell lung cancer. *Radiother Oncol* 115 (3) :367-372, 2015. e-Pub 2015. PMID: 26028228

Reynders K, Illidge T, Siva S, Chang JY, De Ruyscher D The abscopal effect of local radiotherapy: using immunotherapy to make a rare event clinically relevant. *Cancer Treat Rev* 41 (6) :503-510, 2015. e-Pub 2015. PMID: 25872878

Grant JD, Shirvani SM, Tang C, Juloori A, Rebuena NC, Allen PK, Chang JY Incidence and predictors of severe acute esophagitis and subsequent esophageal stricture in patients treated with accelerated hyperfractionated chemoradiation for limited-stage small cell lung cancer. *Pract Radiat Oncol* 5 (4) :e383-391, 2015. e-Pub 2015. PMID: 25731965

Cortez MA, Valdecanas D, Niknam S, Peltier HJ, Diao L, Giri U, Komaki R, Calin GA, Gomez DR, Chang JY, Heymach JV, Bader AG, Welsh JW In Vivo Delivery of miR-34a Sensitizes Lung Tumors to Radiation Through RAD51 Regulation. *Mol Ther Nucleic Acids* 4:e270, 2015. e-Pub 2015. PMID: 26670277

Li H, Zhang X, Park P, Liu W, Chang JY, Liao Z, Frank S, Li Y, Poenisch F, Mohan R, Gillin M, Zhu R Robust optimization in intensity-modulated proton therapy to account for anatomy changes in lung cancer patients. *Radiother Oncol* 114 (5) :367-72, 2015

Chang JY, Li QQ, Xu QY, Allen PK, Rebuena N, Gomez DR, Balter P, Komaki R, Mehran R, Swisher SG, Roth JA Stereotactic ablative radiation therapy for centrally located early stage or isolated parenchymal recurrences of non-small cell lung cancer: how to fly in a "no fly zone". *Int J Radiat Oncol Biol Phys* 88 (5) :1120-1128, 2014. PMID: 24661665

Wang J, Myles B, Wei C, Chang JY, Hofstetter WL, Ajani JA, Swisher SG, Cox JD, Komaki R, Liao Z, Lin SH Obesity and outcomes in patients treated with chemoradiotherapy for esophageal carcinoma. *Dis Esophagus* 27 (2) :168-175, 2014. e-Pub 2013. PMID: 23621168

Gomez DR, Yusuf SW, Munsell MF, Welsh JW, Liao Z, Lin SH, Pan HY, Chang JY, Komaki R, Cox JD, McAleer MF, Grosshans DR Prospective Exploratory Analysis of Cardiac Biomarkers and Electrocardiogram Abnormalities in Patients Receiving Thoracic Radiation Therapy with High-Dose Heart Exposure *J Thorac Oncol* 9 (10) :1554-1560, 2014. PMID: 25521400

McAvoy S, Ciura K, Wei C, Rineer J, Liao Z, Chang JY, Palmer MB, Cox JD, Komaki R, Gomez DR Definitive reirradiation for locoregionally recurrent non-small cell lung cancer with proton beam therapy or intensity modulated radiation therapy: predictors of high-grade toxicity and survival outcomes. *Int J Radiat Oncol Biol Phys* 90 (4) :819-827, 2014. e-Pub 2014. PMID: 25220718

Pu X, Wang L, Chang JY, Hildebrandt MA, Ye Y, Lu C, Skinner HD, Niu N, Jenkins GD, Komaki R, Minna JD, Roth JA, Weinshilboum RM, Wu X Inflammation-related genetic variants predict toxicity following definitive radiotherapy for lung cancer. *Clin Pharmacol Ther* 96 (5) :609-615, 2014. e-Pub 2014. PMID: 25054431

Chang JY, Kestin LL, Barriger RB, Chetty IJ, Ginsburg ME, Kumar S, Loo BW Jr, Movsas B, Rimner A, Rosenzweig KE, Stinchcombe TE, Cm GM, Willers H. ACR Appropriateness Criteria® Nonsurgical Treatment for Locally Advanced Non-Small-Cell Lung Cancer: Good Performance Status/Definitive Intent. *Oncology* 28 (8) :200882, 2014

Kardar L, Li Y, Li X, Li H, Cao W, Chang JY, Liao L, Zhu RX, Sahoo N, Gillin M, Liao Z, Komaki R, Cox JD, Lim G, Zhang X Evaluation and mitigation of the interplay effects of intensity modulated proton therapy for lung cancer in a clinical setting. *Pract Radiat Oncol* 4 (6) :e259-e268, 2014. PMID: 25407877

Zhuang H, Yuan Z, Chang JY, Wang J, Pang Q, Zhao L, Wang P Radiation pneumonitis in patients with non--small-cell lung cancer treated with erlotinib concurrent with thoracic radiotherapy. *J Thorac Oncol* 9 (6) :882-885, 2014. PMID: 24828665

Chang JY, Li H, Zhu XR, Liao Z, Zhao L, Liu A, Li Y, Sahoo N, Poenisch F, Gomez DR, Wu R, Gillin M, Zhang X Clinical implementation of intensity-modulated proton therapy for thoracic malignancies *Int J Radiat Oncol Biol Phys* 90 (4) :809-818, 2014. e-Pub 2014. PMID: 25260491

He L, Allen PK, Potter A, Wang J, Chang JY, Gomez DR, Komaki R, Liao Z, Lin SH Re-evaluating the optimal Radiation dose for definitive chemoradiotherapy for esophageal squamous cell carcinoma. *J Thorac Oncol* 9 (9) :1398-1405, 2014. PMID: 25122435

Zhu Z, Liu W, Gillin M, Gomez DR, Komaki R, Cox JD, Mohan R, Chang JY Assessing the robustness of passive scattering proton therapy with regard to local recurrence in stage III non-small cell lung cancer: A secondary analysis of a phase II trial *Radiat Oncol* 9 (1) :108, 2014. e-Pub 2014. PMID: 24886059

Li Q, Swanick CW, Allen PK, Gomez DR, Welsh JW, Liao Z, Balter PA, Chang JY Stereotactic ablative radiotherapy (SABR) using 70 Gy in 10 fractions for non-small cell lung cancer: Exploration of clinical indications *Radiother Oncol* 112 (2) :256-261, 2014. e-Pub 2014. PMID: 25108807

Zhuang H, Zhao X, Zhao L, Chang JY, Wang P Progress of clinical research on targeted therapy combined with thoracic radiotherapy for non-small-cell lung cancer. *Drug Des Devel Ther* 8:667-675, 2014. e-Pub 2014. PMID: 24936128

Li Y, Kardar L, Li X, Li H, Cao W, Chang JY, Liao L, Zhu RX, Sahoo N, Gillin M, Liao Z, Komaki R, Cox JD, Lim G, Zhang X On the interplay effects with proton scanning beams in stage III lung cancer. *Med Phys* 41 (2) :021721, 2014. PMID: 24506612

Grant JD, Chang JY Proton-Based Stereotactic Ablative Radiotherapy in Early-Stage Non-Small-Cell Lung Cancer. *Biomed Res Int* 2014;389048, 2014. e-Pub 2014. PMID: 25136582

Gomez DR, Chang JY Accelerated dose escalation with proton beam therapy for non-small cell lung cancer *J Thorac Dis* 6 (4) :348-355, 2014. PMID: 24688779

Sanchez-Espiridion B, Chen M, Chang JY, Lu C, Chang DW, Roth JA, Wu X, Gu J Telomere Length in Peripheral Blood Leukocytes and Lung Cancer Risk: A Large Case-Control Study in Caucasians *Cancer Res* 74 (9) :2476-2486, 2014. e-Pub 2014. PMID: 24618342

Kong FM, Lally BE, Chang JY, Chetty IJ, Decker RH, Ginsburg ME, Kestin LL, Langer CJ, Movsas B, Videtic GM, Willers H, Rosenzweig KE, Expert Panel on Radiation Oncology-Lung ACR Appropriateness Criteria® Radiation Therapy for Small-Cell Lung Cancer. *Am J Clin Oncol* 36 (2) :206-213, 2013. PMID: 23511336

Shirvani SM, Chang JY, Roth JA Can stereotactic ablative radiotherapy in early stage lung cancers produce comparable success as surgery? *Thorac Surg Clin* 23 (3) :369-381, 2013. PMID: 23931020

Rosenzweig KE, Chang JY, Chetty IJ, Decker RH, Ginsburg ME, Kestin LL, Kong FM, Lally BE, Langer CJ, Movsas B, Videtic GM, Willers H ACR Appropriateness Criteria Nonsurgical Treatment for Non-Small-Cell Lung Cancer: Poor Performance Status or Palliative Intent. *J Am Coll Radiol* 10 (9) :654-664, 2013. e-Pub 2013

McAvoy SA, Ciura KT, Rineer JM, Allen PK, Liao Z, Chang JY, Palmer MB, Cox JD, Komaki R, Gomez DR Feasibility of proton beam therapy for reirradiation of locoregionally recurrent non-small cell lung cancer. *Radiother Oncol* 109 (1) :38-44, 2013. e-Pub 2013. PMID: 24016675

Chang JY, Liu YH, Zhu Z, Welsh JW, Gomez DR, Komaki R, Roth JA, Swisher SG Stereotactic ablative radiotherapy: A potentially curable approach to early stage multiple primary lung cancer. *Cancer* 119 (18) :3402-3410, 2013. e-Pub 2013. PMID: 23798353

Welsh J, Amini A, Ciura K, Nguyen N, Palmer M, Soh H, Allen PK, Paolini M, Liao Z, Bluett J, Mohan R, Gomez D, Cox JD, Komaki R, Chang JY Evaluating proton stereotactic body radio therapy to reduce chest wall dose in the treatment of lung cancer *Med Dosim* 38 (4) :442-447, 2013. PMID: 24200220

Evans JD, Gomez DR, Chang JY, Gladish GW, Erasmus JJ, Rebueno N, Banchs J, Komaki R, Welsh JW Cardiac (18)F-fluorodeoxyglucose uptake on positron emission tomography after thoracic stereotactic body radiation therapy. *Radiother Oncol* 109 (1) :82-88, 2013. e-Pub 2013. PMID: 24016676

Shirvani SM, Jiang J, Gomez DR, Chang JY, Buchholz TA, Smith BD Intensity modulated radiotherapy for stage III non-small cell lung cancer in the United States: Predictors of use and association with toxicities. *Lung Cancer* 82 (2) :252-259, 2013. e-Pub 2013. PMID: 24018022

Gomez DR, Poenisch F, Pinnix CC, Sheu T, Chang JY, Memon N, Mohan R, Rozner MA, Dougherty AH Malfunctions of implantable cardiac devices in patients receiving proton beam therapy: incidence and predictors. *Int J Radiat Oncol Biol Phys* 87 (3) :570-575, 2013. PMID: 24074931

Welsh JW, Komaki R, Amini A, Munsell MF, Unger W, Allen PK, Chang JY, Wefel JS, McGovern SL, Garland LL, Chen SS, Holt J, Liao Z, Brown P, Sulman E, Heymach JV, Kim ES, Stea B Phase II trial of erlotinib plus concurrent whole-brain radiation therapy for patients with brain metastases from non-small cell lung cancer *J Clin Oncol* 31 (7) :895-902, 2013. e-Pub 2013. PMID: 23341526

Gomez DR, Gillin M, Liao Z, Wei C, Lin SH, Swanick C, Alvarado T, Komaki R, Cox JD, Chang JY Phase 1 study of dose escalation in hypofractionated proton beam therapy for non-small cell lung cancer. *Int J Radiat Oncol Biol Phys* 86 (4) :665-670, 2013. e-Pub 2013. PMID: 23688815

Wang HM, Liao ZX, Komaki R, Welsh JW, O'Reilly MS, Chang JY, Zhuang Y, Levy LB, Lu C, Gomez DR Improved survival outcomes with the incidental use of beta-blockers among patients with non-small-cell lung cancer treated with definitive radiation therapy. *Ann Oncol* 24 (5) :1312-1319, 2013. e-Pub 2013. PMID: 23300016

Pan T, Riegel AC, Ahmad MU, Sun X, Chang JY, Luo D New weighted maximum-intensity-projection images from cine CT for delineation of the lung tumor plus motion. *Med Phys* 40 (6) :061901, 2013. PMID: 23718592

Wu X, Wang L, Ye Y, Aakre JA, Pu X, Chang GC, Yang PC, Roth JA, Marks RS, Lippman SM, Chang JY, Lu C, Deschamps C, Su WC, Wang WC, Huang MS, Chang DW, Li Y, Pankratz VS, Minna JD, Hong WK, Hildebrandt MA, Hsiung CA, Yang P Genome-Wide Association Study of Genetic Predictors of Overall Survival for Non-Small Cell Lung Cancer in Never Smokers. *Cancer Res* 73 (13) :4028-4038, 2013. e-Pub 2013. PMID: 23704207

Shirvani SM, Juloori A, Allen PK, Komaki R, Liao Z, Gomez D, O'Reilly M, Welsh J, Papadimitrakopoulou V, Cox JD, Chang JY Comparison of 2 common radiation therapy techniques for definitive treatment of small cell lung cancer. *Int J Radiat Oncol Biol Phys* 87 (1) :139-147, 2013. PMID: 23920393

Zhang X, Liu H, Balter P, Allen PK, Komaki R, Pan T, Chuang HH, Chang JY Positron Emission Tomography for Assessing Local Failure after Stereotactic Body Radiotherapy for Non-small Cell Lung Cancer *Int J Radiat Oncol Biol Phys* 85 (5) :1558-1565, 2012. e-Pub 2012. PMID: 22572078

Xiang ZL, Zeng ZC, Fan J, Tang ZY, He J, Zeng HY, Chang JY The expression of HIF-1a in primary hepatocellular carcinoma and its correlation with radiotherapy response and clinical outcome. *Mol Biol Rep* 39 (2) :2021-2029, 2012. e-Pub 2011. PMID: 21647551

Zhang X, Fang B, Mohan R, Chang JY Coxsackie-adenovirus receptor as a novel marker of stem cells in treatment-resistant non-small cell lung cancer. *Radiother Oncol* 105 (2) :250-257, 2012. e-Pub 2012. PMID: 23022172

Liu H, Zhang X, Vinogradskiy YY, Swisher SG, Komaki R, Chang JY Predicting Radiation Pneumonitis After Stereotactic Ablative Radiation Therapy in Patients Previously Treated With Conventional Thoracic Radiation Therapy. *Int J Radiat Oncol Biol Phys* 84 (4) :1017-1023, 2012. e-Pub 2012. PMID: 22543216

Gomez DR, Niiibe Y, Chang JY Oligometastatic disease at presentation or recurrence for non-small cell lung cancer *Pulm Med* 84 (1) :69-76, 2012. e-Pub 2012. PMID: 22900169

Shirvani SM, Komaki R, Heymach JV, Fossella FV, Chang JY Positron Emission Tomography/Computed Tomography-Guided Intensity-Modulated Radiotherapy for Limited-Stage Small-Cell Lung Cancer. *Int J Radiat Oncol Biol Phys* 82 (1) :e91-97, 2012. e-Pub 2011. PMID: 21489716

Marks JL, Hofstetter W, Correa AM, Mehran RJ, Rice D, Roth J, Walsh G, Vaporciyan A, Erasmus J, Chang JY, Maru D, Lee JH, Lee J, Ajani JA, Swisher SG Salvage esophagectomy after Failed definitive chemoradiation for esophageal adenocarcinoma *Ann Thorac Surg* 94 (4) :1126, 2012. e-Pub 2012

Chang JY, Liu H, Balter P, Komaki R, Liao Z, Welsh J, Mehran RJ, Roth JA, Swisher SG Clinical outcome and predictors of survival and pneumonitis after stereotactic ablative radiotherapy for stage I non-small cell lung cancer *Radiat Oncol* 7 (1) :152, 2012. e-Pub 2012. PMID: 22963661

Niiibe Y, Chang JY Novel insights of oligometastases and oligo-recurrence and review of the literature. *Pulm Med* 2012:261096, 2012. e-Pub 2012. PMID: 22966429

Shirvani SM, Jiang J, Chang JY, Welsh JW, Gomez DR, Swisher S, Buchholz TA, Smith BD Comparative effectiveness of five treatment strategies for early-stage non-small cell lung cancer *Int J Radiat Oncol Biol Phys* 84 (5) :1060-1070, 2012. e-Pub 2012. PMID: 22975611

Koay EJ, Lege D, Mohan R, Komaki R, Cox JD, Chang JY Adaptive/Nonadaptive Proton Radiation Planning and Outcomes in a Phase II Trial for Locally Advanced Non-small Cell Lung Cancer. *Int J Radiat Oncol Biol Phys* 84 (5) :1093-1100, 2012. e-Pub 2012. PMID: 22543217

Quan EM, Chang JY, Liao Z, Xia T, Yuan Z, Liu H, Li X, Wages CA, Mohan R, Zhang X Automated Volumetric Modulated Arc Therapy Treatment Planning for Stage III Lung Cancer: How Does It Compare With Intensity-Modulated Radio Therapy? *Int J Radiat Oncol Biol Phys* 84 (1) :e69-76, 2012. PMID: 22901421

Grosshans DR, Boehling NS, Palmer M, Spicer C, Erice R, Cox JD, Komaki R and Chang JY Alternative Beam Arrangements for IMRT Planning in Patients with Carcinoma of the Distal Esophagus *Practical Radiation Oncology* 2:41-45, 2012

Xiang ZL, Erasmus J, Komaki R, Cox JD, Chang JY FDG uptake correlates with recurrence and survival after treatment of unresectable stage III non-small cell lung cancer with high-dose proton therapy and chemotherapy *Radiat Oncol* 7 (1) :144, 2012. e-Pub 2012. PMID: 22929048

Amini A, Correa AM, Komaki R, Chang JY, Tsao AS, Roth JA, Swisher SG, Rice DC, Vaporciyan AA, Lin SH The role of consolidation therapy for stage III non-small cell lung cancer with persistent N2 disease after induction chemotherapy. *Ann Thorac Surg* 94 (3) :914-920, 2012. e-Pub 2012. PMID: 22819472

Grosshans D, Boehling NS, Palmer M, Spicer C, Erice R, Cox JD, Komaki R, Chang JY Improving cardiac dosimetry: Alternative beam arrangements for intensity modulated radiation therapy planning in patients with carcinoma of the distal esophagus. *Pract Radiat Oncol* 2 (1) :41-5, 2012. e-Pub 2011. PMID: 24674035

Register SP, Zhang X, Mohan R, Chang JY Proton Stereotactic Body Radiation Therapy for Clinically Challenging Cases of Centrally and Superiorly Located Stage I Non-Small-Cell Lung Cancer. *Int J Radiat Oncol Biol Phys* 80 (4) :1015-1022, 2011. e-Pub 2010. PMID: 20615629

Nguyen GH, Murph MM, Chang JY Cancer Stem Cell Radioresistance and Enrichment: Where Frontline Radiation Therapy May Fail in Lung and Esophageal Cancers. *Cancers (Basel)* 3 (1) :1232-1252, 2011. PMID: 21603589

Yu W, Fu XL, Zhang YJ, Xiang JQ, Shen L, Chang JY A Prospective Evaluation of Staging and Target Volume Definition of Lymph Nodes by (18)FDG PET/CT in Patients with Squamous Cell Carcinoma of Thoracic Esophagus. *Int J Radiat Oncol Biol Phys* 81 (5) :e759-765, 2011. e-Pub 2011. PMID: 21470788

Decker RH, Langer CJ, Rosenzweig KE, Chang JY, Gewanter RM, Ginsburg ME, Kong FM, Lally BE, Videtic GM, Movsas B ACR Appropriateness Criteria® postoperative adjuvant therapy in non-small cell lung cancer. *Am J Clin Oncol* 34 (5) :537-544, 2011. PMID: 21946673

Komaki R, Wei X, Allen PK, Liao Z, Milas L, Cox JD, O'Reilly MS, Chang JY, McAleer MF, Jeter M, Blumenschein GR, Kies MS Phase I study of celecoxib with concurrent irinotecan, cisplatin, and radiation therapy for patients with unresectable locally advanced non-small cell lung cancer *Frontiers in Oncology* 1:52, 2011. e-Pub 2011. PMID: 22649768

Peng Y, Vedam S, Chang JY, Gao S, Sadagopan R, Bues M, Balter P Implementation of Feedback-Guided Voluntary Breath-Hold Gating for Cone Beam CT-Based Stereotactic Body Radiotherapy. *Int J Radiat Oncol Biol Phys* 80 (3) :909-917, 2011. e-Pub 2011. PMID: 21470784

Shirvani SM and Chang JY Scalpel or SABR for Treatment of Early-Stage Lung Cancer: Clinical Considerations for the Multidisciplinary Team *Cancers* 3:3432-3448, 2011

Chang JY, Komaki R, Lu C, Wen HY, Allen PK, Tsao A, Gillin M, Mohan R, Cox JD Phase 2 study of high-dose proton therapy with concurrent chemotherapy for unresectable stage III nonsmall cell lung cancer. *Cancer* 117 (20) :4707-4713, 2011. e-Pub 2011. PMID: 21437893

Wu X, Ye Y, Rosell R, Amos CI, Stewart DJ, Hildebrandt MA, Roth JA, Minna JD, Gu J, Lin J, Buch SC, Nukui T, Ramirez Serrano JL, Taron M, Cassidy A, Lu C, Chang JY, Lippman SM, Hong WK, Spitz MR, Romkes M, Yang P Genome-Wide Association Study of Survival in Non-Small Cell Lung Cancer Patients Receiving Platinum-Based Chemotherapy *J Natl Cancer Inst* 103 (10) :817-825, 2011. e-Pub 2011. PMID: 21483023

Welsh J, Thomas J, Shah D, Allen PK, Wei X, Mitchell K, Gao S, Balter P, Komaki R, Chang JY Obesity increases the risk of chest wall pain from thoracic stereotactic body radiation therapy *Int J Radiat Oncol Biol Phys* 81 (1) :91-96, 2011. e-Pub 2010. PMID: 20542388

Chang JY, Komaki R, Wen HY, De Gracia B, Bluett JB, McAleer MF, Swisher SG, Gillin M, Mohan R, Cox JD Toxicity and Patterns of Failure of Adaptive/Ablative Proton Therapy for Early-Stage, Medically Inoperable Non-Small Cell Lung Cancer *Int J Radiat Oncol Biol Phys* 80 (5) :1350-1357, 2011. e-Pub 2011. PMID: 21251767

Ikushima H, Balter P, Komaki R, Hunjun S, Bucci MK, Liao Z, McAleer MF, Yu ZH, Zhang Y, Chang JY, Dong L Daily Alignment Results of In-Room Computed Tomography-Guided Stereotactic Body Radiation Therapy for Lung Cancer. *Int J Radiat Oncol Biol Phys* 79 (2) :473-480, 2011. e-Pub 2010. PMID: 20399032

Sejpal S, Komaki R, Tsao A, Chang JY, Liao Z, Wei X, Allen PK, Lu C, Gillin M, Cox JD Early findings on toxicity of proton beam therapy with concurrent chemotherapy for nonsmall cell lung cancer. *Cancer* 117 (13) :3004-3013, 2011. e-Pub 2011. PMID: 21264827

Gomez DR, Chang JY Adaptive Radiation for Lung Cancer. *J Oncol* 2011, 2011. e-Pub 2010. PMID: 20814539

Kelly P, Balter PA, Rebueno N, Sharp HJ, Liao Z, Komaki R, Chang JY Stereotactic body radiation therapy for patients with lung cancer previously treated with thoracic radiation *Int J Radiat Oncol Biol Phys* 78 (5) :1387-1393, 2010. e-Pub 2010. PMID: 20381271

Gewanter RM, Rosenzweig KE, Chang JY, Decker R, Dubey S, Kong FM, Lally BE, Langer CJ, Lee HK, Movsas B ACR Appropriateness Criteria: nonsurgical treatment for non-small-cell lung cancer: good performance status/definitive intent. *Curr Probl Cancer* 34 (3) :228-249, 2010. PMID: 20541060

Kim MP, Correa AM, Lee J, Rice DC, Roth JA, Mehran RJ, Walsh GL, Ajani JA, Maru DM, Chang JY, Marom EM, Macapinlac HA, Lee JH, Vaporciyan AA, Rice T, Swisher SG, Hofstetter WL Pathologic T0N1 Esophageal Cancer After Neoadjuvant Therapy and Surgery: An Orphan Status *Ann Thorac Surg* 90 (3) :884-890, 2010. e-Pub 2010. PMID: 20732513

Zhang X, Li Y, Pan X, Xiaoqiang L, Mohan R, Komaki R, Cox JD, Chang JY Intensity-modulated proton therapy reduces normal tissue doses compared with intensity-modulated radiation therapy or passive scattering proton therapy and enables individualized radical radiotherapy for extensive stage IIIB-non-small cell lung cancer: a virtual clinical study *Int J Radiat Oncol Biol Phys* 77 (2) :357-366, 2010. e-Pub 2009. PMID: 19660879

Gopal RS, Dubey S, Rosenzweig KE, Chang JY, Decker R, Gewanter RM, Kong FM, Lally BE, Langer CJ, Lee HK, Movsas B ACR Appropriateness Criteria® on Induction and Adjuvant Therapy for Stage N2 Non-Small-Cell Lung Cancer: expert panel on radiation oncology-lung. *Int J Radiat Oncol Biol Phys* 78 (4) :969-974, 2010. e-Pub 2010. PMID: 20813465

Hildebrandt MA, Komaki R, Liao Z, Gu J, Chang JY, Ye Y, Lu C, Stewart DJ, Minna JD, Roth JA, Lippman SM, Cox JD, Hong WK, Spitz MR, Wu X Genetic variants in inflammation-related genes are associated with radiation-induced toxicity following treatment for non-small cell lung cancer. *PLoS One* 5 (8) :pii: e12402, 2010. e-Pub 2010. PMID: 20811626

Nelson C, Balter P, Morice RC, Bucci K, Dong L, Tucker S, Vedam S, Chang JY, Starkschall G Evaluation of Tumor Position and PTV Margins Using Image Guidance and Respiratory Gating *Int J Radiat Oncol Biol Phys* 76 (5) :1578-1585, 2010. e-Pub 2010. PMID: 20137865

McGovern SL, Liao Z, Bucci MK, McAleer MF, Jeter MD, Chang JY, O'Reilly MS, Cox JD, Allen PK, Komaki R Is sex associated with the outcome of patients treated with radiation for nonsmall cell lung cancer? *Cancer* 115 (14) :3233-3242, 2009. PMID: 19472405

Ezhil M, Vedam S, Balter P, Choi B, Mirkovic D, Starkschall G, Chang JY Determination of patient-specific internal gross tumor volumes for lung cancer using four-dimensional computed tomography *Radiat Oncol* 4:4, 2009. PMID: 19173738

Vassiliev ON, Kry SF, Chang JY, Balter PA, Titt U, Mohan R Stereotactic radiotherapy for lung cancer using a flattening filter free Clinac *J Appl Clin Med Phys* 10 (1) :2880, 2009. e-Pub 2009. PMID: 19223837

Zhang Z, Chen Y, Chen Y, Jeter M, Hofstetter WL, Ajani J, Swisher SG, Chang JY, Allen PK, Cox JD, Komaki R, Liao ZX Outcomes with Esophageal Cancer Radiation Therapy *J Thorac Oncol* 4 (7) :880-888, 2009. e-Pub 2009. PMID: 19458557

Riegel AC, Chang JY, Vedam SS, Johnson V, Chi PC, Pan T Cine Computed Tomography Without Respiratory Surrogate in Planning Stereotactic Radiotherapy for Non-Small-Cell Lung Cancer. *Int J Radiat Oncol Biol Phys* 73 (2) :433-441, 2009. e-Pub 2008. PMID: 18644683

Gayed IW, Liu HH, Wei X, Liao Z, Yusuf SW, Chang JY, Bassett R, Komaki R Patterns of cardiac perfusion abnormalities after chemoradiotherapy in patients with lung cancer *J Thorac Oncol* 4 (2) :179-184, 2009

Yu W, Fu XL, Zhang YJ, Xiang JQ, Shen L, Jiang GL, Chang JY GTV spatial conformity between different delineation methods by (18)FDG PET/CT and pathology in esophageal cancer *Radiother Oncol* 93 (3) :441-446, 2009. e-Pub 2009. PMID: 19682760

Sulman EP, Komaki R, Klopp AH, Cox JD, Chang JY Exclusion of elective nodal irradiation is associated with minimal elective nodal failure in non-small cell lung cancer *Radiat Oncol* 4 (1) :5, 2009. PMID: 19183471

Wu X, Lu C, Ye Y, Chang JY, Yang H, Lin J, Gu J, Hong WK, Stewart D, Spitz MR Germline genetic variations in drug action pathways predict clinical outcomes in advanced lung cancer treated with platinum-based chemotherapy *Pharmacogenet Genomics* 18 (11) :955-965, 2008. PMID: 18854777

Zhang X, Komaki R, Wang L, Fang B, Chang JY Treatment of radioresistant stem-like esophageal cancer cells by an apoptotic gene-armed, telomerase-specific oncolytic adenovirus. *Clin Cancer Res* 14 (9) :2813-2823, 2008

Chang JY, Balter PA, Dong L, Yang Q, Liao Z, Jeter M, Bucci MK, McAleer MF, Mehran RJ, Roth JA, Komaki R Stereotactic body radiation therapy in centrally and superiorly located stage I or isolated recurrent non-small-cell lung cancer. *Int J Radiat Oncol Biol Phys* 72 (4) :967-971, 2008

Gayed IW, Chang JY, Kim EE, Nuñez R, Chasen B, Liu HH, Kobayashi K, Zhang Y, Liao Z, Gohar S, Jeter M, Henderson L, Erwin W, Komaki R Lung perfusion imaging can risk stratify lung cancer patients for the development of pulmonary complications after chemoradiation. *J Thorac Oncol* 3 (8) :858-864, 2008. PMID: 18670303

Chang JY, Dong L, Liu H, Starkschall G, Balter P, Mohan R, Liao Z, Cox JD, Komaki R Image-guided radiation therapy for non-small cell lung cancer. *J Thorac Oncol* 3 (2) :177-186, 2008

Britton KR, Starkschall G, Liu H, Chang JY, Bilton S, Ezhil M, John-Baptiste S, Kantor M, Cox JD, Komaki R, Mohan R. Consequences of anatomic changes and respiratory motion on radiation dose distributions in conformal radiotherapy for locally advanced non-small-cell lung cancer *Int J Radiat Oncol Biol Phys* 73 (1) :94-102, 2008. e-Pub 2008

Kennedy MP, Jimenez CA, Chang JY, Fossella F, Eapen GA, Morice RC Optimisation of bronchial brachytherapy catheter placement with a modified airway stent. *Eur Respir J* 31 (4) :902-903, 2008

Hui Z, Zhang X, Starkschall G, Li Y, Mohan R, Komaki R, Cox JD, Chang JY Effects of interfractional motion and anatomic changes on proton therapy dose distribution in lung cancer *Int J Radiat Oncol Biol Phys* 72 (5) :1385-1395, 2008. e-Pub 2008

Qiao XY, Wang W, Zhou ZG, Gao XS, Chang JY Comparison of efficacy of regional and extensive clinical target volumes in postoperative radiotherapy for esophageal squamous cell carcinoma. *Int J Radiat Oncol Biol Phys* 70 (2) :396-402, 2008. e-Pub 2007. PMID: 17855004

Wagener M, Zhang X, Villarreal HG, Levy L, Allen P, Shentu S, Fang B, Krishnan S, Chang JY, Cheung MR Effect of combining anti-epidermal growth factor receptor antibody C225 and radiation on DU145 prostate cancer. *Oncol Rep* 19 (5) :1071-1077, 2008

Nelson C, Balter P, Morice RC, Choi B, Kudchadker RJ, Bucci K, Chang JY, Dong L, Tucker S, Vedam S, Briere T, Starkschall G A technique for reducing patient setup uncertainties by aligning and verifying daily positioning of a moving tumor using implanted fiducials *J Appl Clin Med Phys* 9 (4) :2766, 2008

Liu HH, Balter P, Tutt T, Choi B, Zhang J, Wang C, Chi M, Luo D, Pan T, Hunjan S, Starkschall G, Rosen I, Prado K, Liao Z, Chang JY, Komaki R, Cox JD, Mohan R, Dong L Assessing respiration-induced tumor motion and internal target volume using four-dimensional computed tomography for radiotherapy of lung cancer. *Int J Radiat Oncol Biol Phys* 68 (2) :531-540, 2007. e-Pub 2007. PMID: 17398035

Klopp AH, Chang JY, Tucker SL, Sulman EP, Balter PA, Liu HH, Bucci MK, Macapinlac HA, Komaki R, Cox JD Intrathoracic patterns of failure for non-small-cell lung cancer with positron-emission tomography/computed tomography-defined target delineation. *Int J Radiat Oncol Biol Phys* 69 (5) :1409-1416, 2007. e-Pub 2007. PMID: 17904303

Nelson C, Starkschall G, Balter P, Morice RC, Stevens CW, Chang JY Assessment of lung tumor motion and setup uncertainties using implanted fiducials *Int J Radiat Oncol Biol Phys* 67:915-923, 2007

Huang EH, Liao Z, Cox JD, Guerrero TM, Chang JY, Jeter M, Borghero Y, Wei X, Fossella F, Herbst RS, Blumenschein GR, Moran C, Allen PK, Komaki R Comparison of outcomes for patients with unresectable, locally advanced non-small-cell lung cancer treated with induction chemotherapy followed by concurrent chemoradiation vs. concurrent chemoradiation alone. *Int J Radiat Oncol Biol Phys* 68 (3) :779-785, 2007. e-Pub 2007. PMID: 17418967

Kang Y, Zhang X, Chang JY, Wang H, Wei X, Liao Z, Komaki R, Cox JD, Balter PA, Liu H, Zhu XR, Mohan R, Dong L 4D Proton treatment planning strategy for mobile lung tumors *Int J Radiat Oncol Biol Phys* 67:906-914, 2007

Takahashi N, Yang DJ, Kohanim S, Oh CS, Yu DF, Azhdarinia A, Kurihara H, Zhang X, Chang JY, Kim EE Targeted functional imaging of estrogen receptors with (99m)Tc-GAP-EDL *Eur J Nucl Med Mol Imaging* 34:354-362, 2007

Gao XS, Qiao X, Wu F, Cao L, Meng X, Dong Z, Wang X, Gao G, Wu TT, Komaki R, Chang JY Pathological analysis of clinical target volume margin for radiotherapy in patients with esophageal and gastroesophageal junction carcinoma *Int J Radiat Oncol Biol Phys* 67:389-396, 2007

Zhu G, Cao X, Chang JY, Milas L, Wallace S, Li C Polymeric retinoid prodrug PG-4HPR enhances the radiation response of lung cancer *Oncol Rep* 18(3) (3) :645-651, 2007. PMID: 17671714

Britton KR, Starkschall G, Tucker SL, Pan T, Nelson C, Chang JY, Cox JD, Mohan R, Komaki R Assessment of gross tumor volume regression and motion changes during radiotherapy for non-small-cell lung cancer as measured by four-dimensional computed tomography *Int J Radiat Oncol Biol Phys* 68 (4) :1036-1046, 2007. e-Pub 2007. PMID: 17379442

Rice DC, Smythe WR, Liao Z, Guerrero T, Chang JY, McAleer MF, Jeter MD, Correa A, Vaporciyan AA, Liu HH, Komaki R, Forster KM, Stevens CW Dose-dependent pulmonary toxicity after postoperative intensity-modulated radiotherapy for malignant pleural mesothelioma. *Int J Radiat Oncol Biol Phys* 69 (2) :350-357, 2007. e-Pub 2007. PMID: 17467922

Shioyama Y, Jang SY, Liu HH, Guerrero T, Wang X, Gayed IW, Erwin WD, Liao Z, Chang JY, Jeter M, Yaremko BP, Borghero YO, Cox JD, Komaki R, Mohan R Preserving functional lung using perfusion imaging and intensity-modulated radiation therapy for advanced-stage non-small-cell lung cancer *Int J Radiat Oncol Biol Phys* 68(5):1349-1358 (5) :1349-1358, 2007. e-Pub 2007. PMID: 17446001

Wang S, Liao Z, Chen Y, Chang JY, Jeter M, Guerrero T, Ajani J, Phan A, Swisher S, Allen P, Cox JD, Komaki R Esophageal cancer located at the neck and upper thorax treated with concurrent chemoradiation: a single-institution experience. *J Thorac Oncol* 1 (3) :252-259, 2006. PMID: 17409865

Nelson C, Starkschall G, Chang JY The potential for dose escalation in lung cancer as a result of systematically reducing margins used to generate planning target volume *Int J Radiat Oncol Biol Phys* 65:573-586, 2006

Chang JY, Zhang X, Komaki R, Cheung R, Fang B Tumor-specific apoptotic gene targeting overcomes radiation resistance in esophageal adenocarcinoma. *Int J Radiat Oncol Biol Phys* 64:1482-1494, 2006

Gayed IW, Liu HH, Yusuf SW, Komaki R, Wei X, Wang X, Chang JY, Swafford J, Broemeling L, Liao Z The prevalence of myocardial ischemia after concurrent chemoradiation therapy as detected by gated myocardial perfusion imaging in patients with esophageal cancer *J Nucl Med* 47:1756-1762, 2006

Chang JY, Moughan J, Johnstone DW, Komaki R, Goldberg M, Langer CJ, Beadle BM, Owen J, Movsas B Surgical patterns of care in operable lung carcinoma treated with radiation *J Thorac Oncol* 6 (6) :526-531, 2006. PMID: 17409912

Xia T, Li H, Sun Q, Wang Y, Fan N, Yu Y, Li P, Chang JY Promising clinical outcome of stereotactic body radiation therapy for patients with inoperable Stage I/II non-small-cell lung cancer *Int J Radiat Oncol Biol Phys* 66:117-125, 2006

Ettinger DS, Bepler G, Bueno R, Chang A, Chang JY, Cgureac LR, D'Amico TA, Demmy TL, Feigenberg SJ, Grannis FW Jr., Jahan T, Jahanzeb M, Kessinger A, Komaki R, Kris MG, Langer CJ, Le QT, Martins R, Otterson GA, Robert F, Sugarbaker DJ, Wood DE Non-small cell lung cancer clinical practice guidelines in oncology *J Natl Compr Canc Netw* 4 (6) :548-582, 2006

Wang XS, Fairclough DL, Liao Z, Komaki R, Chang JY, Mobley GM, Cleeland CS Longitudinal study of the relationship between chemoradiation therapy for non-small-cell lung cancer and patient symptoms *J Clin Oncol* 24:4485-4491, 2006

Lu C, Spitz MR, Zhao H, Dong Q, Truong M, Chang JY, Blumenschein GR, Jr, Hong WK, Wu X Association between glutathione S-transferase pi polymorphisms and survival in patients with advanced nonsmall cell lung carcinoma. *Cancer* 106:441-447, 2006

Chang JY, Zhang X, Wang X, Kang Y, Riley B, Bilton S, Mohan R, Komaki R, Cox JD Significant reduction of normal tissue dose by proton radiotherapy compared with three-dimensional conformal or intensity-modulated radiation therapy in Stage I or Stage III non-small-cell lung cancer. *Int J Radiat Oncol Biol Phys* 65 (4) :1087-1096, 2006. e-Pub 2006. PMID: 16682145

Wang H, Dong L, O'Daniel J, Mohan R, Garden AS, Ang KK, Kuban DA, Bonnen M, Chang JY, Cheung R Validation of an accelerated 'demons' algorithm for deformable image registration in radiation therapy. *Phys Med Biol* 50:2887-2905, 2005

Liao Z, Komaki R, Milas L, Yuan C, Kies M, Chang JY, Jeter M, Guerrero T, Blumenschein G, Smith CM, Fossella F, Brown B, Cox JD A phase I clinical trial of thoracic radiotherapy and concurrent celecoxib for patients with unfavorable performance status inoperable/unresectable non-small cell lung cancer. *Clin Cancer Res* 11:3342-3348, 2005

Komaki R, Chang JY, Wu X, Allen PK, Milas L, Liao Z, Fossella FV, Travis E, Spitz MR Mutagen sensitivity may predict lung protection by amifostine for patients with locally advanced non-small cell lung cancer treated by chemoradiotherapy. *Semin Oncol* 32:S92-98, 2005

Zhang Z, Liao Z, Jin J, Ajani J, Chang JY, Jeter M, Guerrero T, Stevens CW, Swisher S, Ho L, Yao J, Allen P, Cox JD, Komaki R Dose-response relationship in locoregional control for patients with stage II-III esophageal cancer treated with concurrent chemotherapy and radiotherapy. *Int J Radiat Oncol Biol Phys* 61:656-664, 2005. PMID: 15708243

Chandra A, Guerrero TM, Liu HH, Tucker SL, Liao Z, Wang X, Murshed H, Bonnen MD, Garg AK, Stevens CW, Chang JY, Jeter MD, Mohan R, Cox JD, Komaki R Feasibility of using intensity-modulated radiotherapy to improve lung sparing in treatment planning for distal esophageal cancer. *Radiother Oncol* 77:247-253, 2005

Chang JY, Komaki R, Sasaki R, Liao Z, Stevens CW, Lu C, Fossella FV, Allen PK, Cox JD, Spitz MR, Wu X High mutagen sensitivity in peripheral blood lymphocytes predicts poor overall and disease-specific survival in patients with stage III non-small cell lung cancer treated with radiotherapy and chemotherapy. *Clin Cancer Res* 11:2894-2898, 2005

Zhang X, Cheung RM, Komaki R, Fang B, Chang JY Radiotherapy sensitization by tumor-specific TRAIL gene targeting improves survival of mice bearing human non-small cell lung cancer. *Clin Cancer Res* 11:6657-6668, 2005

Taylor NA, Liao ZX, Cox JD, Stevens C, Roth J, Walsh G, Chang JY, Guerrero T, Jeter M, Putnam J, Jr, Fossella FV, Allen P, Komaki R Equivalent outcome of patients with clinical Stage IIIA non-small-cell lung cancer treated with concurrent chemoradiation compared with induction chemotherapy followed by surgical resection. *Int J Radiat Oncol Biol Phys* 58:204-212, 2004. PMID: 14697440

Jin J, Liao Z, Zhang Z, Ajani J, Swisher S, Chang JY, Jeter M, Guerrero T, Stevens CW, Vaporciyan A, Putnam J, Jr, Walsh G, Smythe R, Roth J, Yao J, Allen P, Cox JD, Komaki R Induction chemotherapy improved outcomes of patients with resectable esophageal cancer who received chemoradiotherapy followed by surgery. *Int J Radiat Oncol Biol Phys* 60:427-436, 2004

Yang DJ, Bryant J, Chang JY, Mendez R, Oh CS, Yu DF, Ito M, Azhdarinia A, Kohanim S, Edmund Kim E, Lin E, Podoloff DA Assessment of cyclooxygenase-2 expression with 99mTc-labeled celebrex. *Anticancer Drugs* 15:255-263, 2004

Murshed H, Liu HH, Liao Z, Barker JL, Wang X, Tucker SL, Chandra A, Guerrero T, Stevens C, Chang JY, Jeter M, Cox JD, Komaki R, Mohan R Dose and volume reduction for normal lung using intensity-modulated radiotherapy for advanced-stage non-small-cell lung cancer. *Int J Radiat Oncol Biol Phys* 58:1258-1267, 2004

Ahamad A, Stevens CW, Smythe WR, Liao Z, Vaporciyan AA, Rice D, Walsh G, Guerrero T, Chang JY, Bell B, Komaki R, Forster KM Promising early local control of malignant pleural mesothelioma following post-operative intensity modulated radiotherapy (IMRT) to the chest. *Cancer J* 9 (6) :476-484, 2003. PMID: 14740977

Xing X, Zhang S, Chang JY, Tucker SD, Chen H, Huang L, Hung MC Safety study and characterization of E1A liposome complex gene delivery protocol in an ovarian cancer model *Gene Therapy*:1538-1544, 1998

Hung MC, Chang JY, Xing X Preclinical and clinical study of HER-2/neu-targeting gene therapy. *Adv Drug Deliv Rev* 30:219-227, 1998

Chang JY, Xia W, Shao R, Sorgi F, Hortobagyi GN, Huang L, Hung MC The tumor suppression activity of E1A in HER-2/neu-overexpressing breast cancer. *Oncogene* 14:561-568, 1997

Chang JY, Xia W, Shao R, Hung MC Inhibition of intratracheal lung cancer development by systemic delivery of E1A. *Oncogene* 13:1405-1412, 1996

Chang JY, Yu D, Xia W, Hung MC HER-2/neu-targeting cancer therapy via adenovirus-mediated E1A delivery in an animal model. *Oncogene* 10:1947-1954, 1995

Hung MC, Matin A, Chang JY, Xing XM, Sorgi F, Huang L, Yu D HER-2/neu-targeting gene therapy. *Gene* 159:65-71, 1995

Tang ZY, Liu KD, Fan Z, Lu JZ, Chang JY, Xi H, Schroder CH, Arosio P A decade's studies on the immunotargeting therapy of hepatocellular carcinoma. *Antibody, Immunoconjugates, and Radiopharm* 6:155-165, 1993

Chang JY, Mukhodayay T, Donehower LA, Georges RN, Roth JA Retroviral vector-mediated transduction of K-ras antisense RNA into human lung cancer cells inhibits expression of the malignant phenotype. *Hum Gene Ther* 4:451-460, 1993

Georges RN, Mukhopadhyay T, Chang JY, Nancy Yen, Roth JA Prevention of orthotopic human lung cancer growth by intratracheal installation of a retroviral antisense K-ras construct. *Cancer Res* 53:1743-1746, 1993

Chang JY, Tang ZY, Xie H, Yuan AN, Zhao HY, Lu JZ Imaging and therapy of human hepatocellular carcinoma with radiolabeled monoclonal antibody. *J Exp Clin Cancer Res* 10:243-252, 1991

Wang XS, Shi Q, Williams LA, Komaki R, Gomez DR, Lin SH, Chang JY, O'Reilly MS, Bokhari RH, Cox JD, Mohan R, Cleeland CS, Liao Z Prospective Study of Patient-Reported Symptom Burden in Patients With Non-Small-Cell Lung Cancer Undergoing Proton or Photon Chemoradiation Therapy. *J Pain Symptom Manage.* e-Pub 2016. PMID: 26891607

Sun B, Brooks ED, Komaki R, Liao Z, Jeter M, McAleer M, Balter PA, Welsh JD, O'Reilly M, Gomez D, Hahn SM, Sepesi B, Rice DC, Heymach JV, Chang JY Long-Term Outcomes of Salvage Stereotactic Ablation Radiotherapy for Isolated Lung Recurrence of Non-Small-Cell Lung Cancer: A Phase II Clinical Trial. *J Thorac Oncol.* e-Pub 2017. PMID: 28259750

Zhuang H, Yuan X, Chang JY, Song Y, Wang J, Yuan Z, Wang X, Wang P Exploration of the recurrence in radiation brain necrosis after bevacizumab discontinuation. *Oncotarget.* e-Pub 2016. PMID: 26934327

Sun B, Brooks ED, Komaki RU, Liao Z, Jeter MD, McAleer MF, Allen PK, Balter PA, Welsh JD, O'Reilly MS, Gomez D, Hahn SM, Roth JA, Mehran RJ, Heymach JV, Chang JY 7-year follow-up after stereotactic ablative radiotherapy for patients with stage I non-small cell lung cancer: Results of a phase 2 clinical trial. *Cancer.* e-Pub 2017. PMID: 28346656

Smith BD, Jiang J, Chang JY, Welsh J, Likhacheva A, Buchholz TA, Swisher SG, Shirvani SM Cost-effectiveness of stereotactic radiation, sublobar resection, and lobectomy for early non-small cell lung cancers in older adults. *J Geriatr Oncol.* e-Pub 2015. PMID: 26094172

Seyedin SN, Schoenhals JE, Lee DA, Cortez MA, Wang X, Niknam S, Tang C, Hong DS, Naing A, Sharma P, Allison JP, Chang JY, Gomez DR, Heymach JV, Komaki RU, Cooper LJ, Welsh JW Strategies for combining immunotherapy with radiation for anticancer therapy. *Immunotherapy.* e-Pub 2015. PMID: 26310908

Zhuang H, Yuan X, Sun D, Bian J, Chang JY, Yuan Z, Wang P Acquired-resistance of bevacizumab treatment for radiation brain necrosis: a case report. *Oncotarget.* e-Pub 2016. PMID: 26933810

Invited Articles

Chang JY, Intensity-Modulated Radiotherapy, Not 3 Dimensional Conformal, Is the Preferred Technique for Treating Locally Advanced Lung Cancer., 25 (2) :110-116, 2015

Selek U, Chang JY, Evolution of modern-era radiotherapy strategies for unresectable advanced non-small cell lung cancer, 2 (3) :213, 2013

Shirvani SM, Roth JA, Chang JY, Can stereotactic body radiation therapy (SBRT) in early stage tumors produce comparable success as surgery?, 23 (3) :369-381, 2013

De Ruysscher D, Chang JY, Clinical controversies: proton therapy for thoracic tumors., 23 (2) :115-119, 2013

Shirvani SM, Chang JY, Proton therapy for non-small cell lung cancer: current evidence and future directions, 3:99-108, 2012

Liu H, Chang JY, Proton therapy in clinical practice., 30 (5) :315-326, 2011

Lin SH, Chang JY, Esophageal cancer: diagnosis and management, 29 (10) :843-854, 2010

Chang JY, Cox JD, Improving radiation conformality in the treatment of non-small cell lung cancer., 20 (3) :171-177, 2010

Chang JY, Roth JA, Stereotactic body radiation therapy for stage I NSCLC, 17:251-259, 2007

Chang JY, Liu HH, Komaki R, Intensity modulated radiation therapy and proton radiotherapy for non-small cell lung cancer., 7:255-259, 2005

Editorials

Chang JY, De Ruysscher D, *J Thorac Dis*, 6 (4) :285-286, 2014

Chang JY, *Int J Radiat Oncol Biol Phys*, 87 (1) :1-4, 2013

Niibe Y, Chang JY, Onishi H, Salama J, Hiraki T, and Yamashita H, Pulmonary medicine (438236) , 2013
 Chang JY, J Thorac Dis, 3 (3) :144-146, 2011
 Loo BW, Chang JY, Dawson L, Kavanagh BD, Koong A, Senan S, Timmerman R, Practical Radiation Oncology, 1:38-39, 2011
 Chang JY, J Surg Oncol, 87:1, 2004
 Abstracts

B Farina, S Lin, C Tang, P Allen, Z Liao, JY Chang, J Welsh, R Komaki, R Mehran, D Gomez Conformal fields in postoperative radiation therapy for NSCLC are not associated with high rates of regional nodal recurrence International Journal of Radiation Oncology, Biology, Physics 90 (1S) :S214, 2014
 Chang JY, Xu Q, Balter P, James W, Gomez D, Komaki R, Roth J, Swisher S Clinical Outcome and Toxicity in Central Located Stage I or Isolated Recurrent Non-Small Cell Lung Cancer Treated With Stereotactic Ablative Radiation Therapy International Journal of Radiation Oncology, Biology, Physics 87 (2S) :S514-S515, 2013
 Evans JD, Gomez DR, Chang JY, Gladish GW, Erasmus JJ, Rebueno N, Banchs J, Komaki R, Welsh JW Cardiac Isodose Distributions and Increases in Focal F-18-Fluorodeoxyglucose Uptake on Positron Emission Tomography After Thoracic Stereotactic Ablative Radiation Therapy International Journal of Radiation Oncology, Biology, Physics 87 (2S) :S645, 2013
 Grant JD, Sobremonte A, Hillebrandt E, Allen PK, Chang JY, Komaki R, Liao Z, Heymach JV, and Gomez D Dosimetric Impact of Induction Chemotherapy on Subsequent Radiation Treatment Planning in Patients With Inoperable Non-Small Cell Lung Cancer International Journal of Radiation Oncology, Biology, Physics 87 (2S) :S536-S537, 2013
 Swanick CW, Naik NS, Liao Z, Allen PK, Welsh J, Komaki R, Chang JY, O'Reilly MS, Lin SH, and Gomez DR Toxicity and Local Control With Intensity Modulated Radiation Therapy (IMRT) Using a Simultaneous Integrated Boost (SIB) Hypofractionated Approach for Non-Small Cell Lung Cancer (NSCLC) International Journal of Radiation Oncology, Biology, Physics 87 (2S) :S508, 2013
 Nguyen Q, Komaki R, Liao Z, Allen P, Gomez D, Chang JY, Crawford C, Lu C, Tsao A, and Cox JD Risk Factors Predicting Failure and Survival in Lung Cancer Patients Treated With Definitive Dose-Escalated Proton Radiation Therapy International Journal of Radiation Oncology, Biology, Physics 87 (2S) :S78, 2013
 Videtic GM, Hu C, Singh A, Chang JY, Parker W, Olivier K, Schild S, Komaki R, Urbanic J, and Choy H Radiation Therapy Oncology Group (RTOG) Protocol 0915: A Randomized Phase 2 Study Comparing 2 Stereotactic Body Radiation Therapy (SBRT) Schedules for Medically Inoperable Patients With Stage I Peripheral Non-Small Cell Lung Cancer International Journal of Radiation Oncology, Biology, Physics 87 (2S) :S3, 2013
 Naik NS, Swanick CW, Wei C, Liao Z, Welsh J, Komaki R, Chang JY, O'Reilly MS, Gomez D, and Lin SH High Local Failure Rates Despite Dose Escalation May Support the Metastatic Self-Seeding Phenomenon in Non-Small Cell Lung Cancer International Journal of Radiation Oncology, Biology, Physics 87 (2S) :S519, 2013
 McAvoy S, Komaki R, Allen P, Rineer J, Liao X, Chang JY, Welsh J, Palmer M, Cox JD, Gomez D Reirradiation with Proton Beam Therapy or Intensity Modulated Radiation Therapy for Non-Small Cell Lung Cancer: An Institutional Experience International Journal of Radiation Oncology, Biology, Physics 84 (3S) :S608-609, 2012
 Wang H, Gomez D, Komaki R, Welsh J, O'Reilly M, Chang JY, Zhuang Y, Levy L, Lu C, Liao Z Improved Survival Outcomes in Non-small Cell Lung Cancer Patients with Incidental Concurrent Use of Beta-Blockers and Definitive Radiation Therapy International Journal of Radiation Oncology, Biology, Physics 84 (3S) :S587, 2012
 Zhuang Y, Gomez D, Komaki R, O'Reilly M, Welsh J, Lin SH, Chang JY, Jeter M, and Liao ZX Prognostic Factors for Overall Survival in Stage IIIA/IIIB Non-small Cell Lung Cancer After Definitive (Chemo)radiation Therapy International Journal of Radiation Oncology, Biology, Physics 84 (84) :S591-592, 2012
 Mohan R, Matney JE, Bluett J, Palmer M, Choi N, Chang JY, Komaki R, Cox J, Liao Z IMRT Versus Passively Scattered Proton Therapy (PSPT) for Locally Advanced NSCLC - Impact of Changing Techniques and Technologies Over the Course of a Randomized Trial International Journal of Radiation Oncology, Biology, Physics 84 (3S) :S565-566, 2012
 Xiang Z, Hess K, Zhang X, Liang S, Chang JY A Dosimetric Model for Predicting Radiation Pneumonitis After Stereotactic Ablative Radiotherapy for Stage I Non-small Cell lung cancer International Journal of Radiation Oncology, Biology, Physics 84 (3S) :S557, 2012
 Gomez DR, Liao K, Chang JY, Liao Z, Shirvani SM, Komaki R, Welsh JW, Heymach JV, Swisher SG, and Smith BD Patient Selection for Treatment Modality in Stage III Non-small Cell Lung Cancer: A Population-based Analysis International Journal of Radiation Oncology, Biology, Physics 84 (3S) :S540-541, 2012

Grant J, Gomez D, Zhuang Y, Chang JY, Komaki R, Fossella F, Gold K, Liao Z, and Cox J Impact of Chemotherapy Response and Radiation Dose on Overall Survival in Patients With Inoperable Non-small Cell Lung Cancer Treated With Induction Chemotherapy Followed by Concurrent Chemoradiation International Journal of Radiation Oncology, Biology, Physics 84 (3S) :S593, 2012

Shirvani SM, Juloori A, Gomez D, Allen PK, Komaki R, O'Reilly M, Liao Z, Welsh J, Papadimitrakopoulou V, Chang JY Patterns of Failure for Limited-Stage Small Cell Lung Cancer Following Definitive Radiation Therapy in the Modern Era International Journal of Radiation Oncology, Biology, Physics 84 (3S) :S595-596, 2012

Liu Y, Balter P, Komaki R, Xu Q, Swisher S, Chang JY Stereotactic Ablative Radiotherapy for Multiple Primary Lung Cancer International Journal of Radiation Oncology, Biology, Physics 84 (3S) :S172-173, 2012

Gomez DR, Liao K, Chang JY, Liao Z, Shirvani SM, Komaki R, Welsh JW, Heymach JV, Swisher SG, and Smith BD Treatment Modality and Other Prognostic Factors for Overall Survival in Stage III Non-Small Cell Lung Cancer (NSCLC): A Population-based Analysis International Journal of Radiation Oncology, Biology, Physics 84 (3S) :S540, 2012

Chang JY Combined Modality Management and Imaging Guided Radiotherapy for Non-small Cell Lung Cancer The Journal of JASTRO 16:29, 2007

Book Chapters

Shirvani SM and Chang JY, Charged particles in stereotactic radiosurgery, In: Principles and Practice of Stereotactic Radiosurgery, 2nd, Springer, 2015

Chang JY and Cox JD, Proton Therapy, In: Lung Cancer, 4, Blackwell, 338-352, 2014

Chang JY, Cancer of the lung, In: Technical basis of radiation therapy: Practical clinical applications, Fifth edition, Springer, 755-775, 2012

Chang JY, Shirvani SM, Loo BW, Lamond JP, Slotman B, Nagata Y, Primary lung cancer, In: Stereotactic Body Radiation Therapy, Springer: New York, 137-162, 2012

Truong MT, Gomez D, Chang JY and Mehran RJ, Pleural tumors, In: Oncologic Imaging: a multidisciplinary approach, Elsevier, 79-93, 2012

Christodouleas JP and Chang JY, Early stage non-small cell lung cancer, In: Radiation Oncology: a question-based review, Lippincott Williams and Wilkins: Philadelphia, 199-209, 2011

Chang JY, Thorax, In: Uncertainties in external beam radiation therapy, Medical Physics Publishing, 575-592, 2011

Shirvani SM and Chang JY, Hypofractionated proton therapy in the treatment of non-small cell lung cancer, In: Hypofractionation: scientific concepts and clinical experiences, Lumi Text Publishing, 339-353, 2011

Lin SH and Chang JY, Lung cancer, In: Decision making in Radiation Oncology, Springer: New York, 261-328, 2011

Chang JY and Komaki R, Proton therapy in lung and thoracic cancers, In: Radiation Medicine Rounds: Proton Therapy, Demos Medical Publishing: New York, 523-537, 2010

Chang JY, Komaki R, Roth JA, Herbst R, Cox JD, Image guidance of combined modality management of NSCLC, In: Image-guided radiation therapy for lung cancer, Informa, 1-18, 2008

Chang JY, Smith A, Cox JD, Proton therapy, In: Lung Cancer, 3, Blackwell Publishing Ltd, 271-282, 2008

Chang JY, Image-guided radiotherapy guidelines and techniques for NSCLC, In: Image-guided radiation therapy for lung cancer, Informa, 19-38, 2008

Chang JY, Balter P, Komaki R, Stereotactic body radiation therapy (SBRT) in stage I, selective stage II and isolated peripheral recurrent NSCLC, In: Image-guided radiation therapy for lung cancer, Informa, 93-102, 2008

Chang JY, Bradley J, Govindan R, Komaki R, Lung, In: Principles and Practice of Radiation Oncology, 5th, 5th Edition. Lippincott Williams & Wilkin, 1076-1108, 2008

Chang JY, Mohan R, Cox JD, Image-guided proton radiotherapy, In: Image-guided radiation therapy for lung cancer, Informa, 127-139, 2008

Onn A, Vaprociyan A, Chang JY, Komaki R, Roth JA, Herbst RS, Cancer of the lung, In: Cancer Medicine, 27, BC Decker Inc, 1179-1225, 2006

Janjan NA, Strom E, Perkins G, Ha, C, Chang JY, Effects of radiation on the heart, In: Cancer and the Heart, BC Decker Inc, 75-113, 2006

Komaki R, Chang JY, Liao Z, Cox JD, Mason KA, Milas L, Radioprotectors and chemoprotectors in the management of lung cancer., In: Medical Radiology-Radiation Oncology: Advances in radiation Oncology in lung cancer, Springer-Verlag, 123-134, 2004

Chang JY, Mukhopadhyay T, Georges RN, Roth JA, Molecular targeting of cancer: retroviral vector-mediated antisense nucleic acid therapy., In: Gene Therapy From Laboratory to the Clinic, World Scientific Publishing Co: New Jersey, 70-106, 1994

Chang JY, Immunotherapy of human hepatocellular carcinoma with lymphokine-activated killer cells and interleukin-2., In: The Advance in Primary Liver Cancer Research, 26, Shanghai Medical University Press, 263-272, 1990
Letters to the Editor

Chang JY, Senan S, Smitd EF, Roth JA, Surgery versus SABR for resectable non-small-cell lung cancer, Lancet Oncology, 16: 374-375, 2015