

Ricky R. Savjani, MD, PhD

Featured publications

(Rev. Oct. 2023)

2023

1. Ma TM, Wong DJ, Chai-Ho W, Mendelsohn A, St John M, Abemayor E, Chhetri D, Sajed D, Dang A, Chu F, Xiang M, **Savjani RR**, Weidhaas J, Steinberg ML, Cao M, Kishan AU*, Chin RK*. (2023). High recurrence for HPV-positive oropharyngeal cancer with neoadjuvant radiotherapy to gross disease plus immunotherapy: analysis from a prospective phase Ib/II clinical trial. *IJROBP*. PMID: [37141981](#).
2. Miller MS*, Kim W*, Harary M, **Savjani RR**, Lee J, Telesca D, Tenn S, Hegde J, Kaprealian T. (2023). Seizure outcomes following single fraction versus hypofractionated radiosurgery for brain metastases: a single center experience. *Journal of Neurosurgery*.
3. Pan X, Feng T, Chen L, **Savjani RR**, Chin RK, Qi XS. (2023). A survival prediction model via interpretable machine learning for patients with oropharyngeal cancer following radiotherapy. *Journal of Cancer Research and Clinical Oncology*. PMID: [36807760](#).

2022

1. **Savjani RR**, Ati S, Sadeghi S, Bonelli L, Kaprealian T, Hegde J. (2022). Radiotherapy for mantle cell lymphoma with orbital involvement. *Radiology: Imaging Cancer*. PMID: [35866891](#).
2. Pham J, **Savjani RR**, Yoon SM, Yang T, Gao Y, Cao M, Hu P, Sheng K, Low D, Steinberg M, Kishan AU, Yang Y. (2022). Urethral interfractional geometric and dosimetric variations of prostate cancer patients: a study using an onboard MRI. *Frontiers in Oncology*. PMID: [35912253](#).
3. Shidoh S*, **Savjani RR***, Cho NS, Ullman HE, Hagiwara A, Raymond C, Lai A, Nghiemphu PL, Liao LM, Pope WB, Cloughesy TF, Kaprealian TB, Salamon N, Ellingson BM. (2022). Relapse patterns and radiation dose exposure in IDH wild-type glioblastoma at first radiographic recurrence following chemoradiation. *Journal of Neuro-Oncology*. PMID: [36053452](#).
4. Xu D, Ma TM, **Savjani RR**, Cao M, Yang Y, Kisha AU, Scalzo F, Sheng K. (2022). Fully automated segmentation of prostatic urethra for MR-guided radiation therapy (MRgRT). *Medical Physics*. PMID: [36106703](#).
5. **Savjani RR**, Lauria M, Bose S, Deng J, Yuan Y, Andrearczyk V. (2022). Automated tumor segmentation in radiotherapy. *Seminars in Radiation Oncology*. PMID: [36202435](#)
6. Ati S, Chhetri D, Wiedau M, Soltanzadeh P, Bordelon Y, Chin R, **Savjani RR**. (2022). Using intensity modulated radiation therapy for the treatment of sialorrhea in amyotrophic lateral sclerosis. *Advances in Radiation Oncology*. PMID: [36420480](#).

2021

1. Xiang M, Ma TM, **Savjani RR**, Pollom EL, Karnes RJ, Grogan T, Wong JK, Motterle G, Tosoian JJ, Trock BJ, Klein EA, Stish BJ, Dess RT, Spratt DE, Pilar A, Reddy C, Levin-Epstein R, Wedde TB, Lilleby WA, Fiano R, Merrick GS, Stock RG, Demanes DJ, Moran BJ, Huland H, Tran PT, Martin S, Martinez-Monge R, Krauss DJ, Abu-Isa EI, Alam R, Schwen Z, Pisansky TM, Choo CR, Song DY, Greco S, Deville C, McNutt T, DeWeese TL, Ross AE, Ciezki JP, Boutros PC, Nickols NG, Bhat P, Shabsovich D, Juarez JE, Chong N, Kupelian PA, Rettig MB, Zaorsky NG, Berlin A, Tward JD, Davis BJ, Reiter RE, Steinberg ML, Elashoff D, Horwitz EM, Tendulkar RD, Tilki D, Czernin J, Gafita A, Romero T, Calais J, Kishan AU. (2021). Performance of a prostate-specific membrane antigen positron emission tomography/computed tomography-derived risk-stratification tool for high-risk and very high-risk prostate cancer. *JAMA Network Open*. PMID: [34902034](#).
2. Pham J, **Savjani RR**, Gao Y, Cao M, Hu P, Sheng K, Low DA, Steinberg M, Kishan AU, Yang Y. (2021). Evaluation of T2-weighted MRI for visualization and sparing of urethra with MR-guided radiation therapy (MRgRT) on-board MRI. *Cancers (Basel)*. PMID: [34298777](#).

3. **Savjani RR**, Salamon N, Deng J, Ma TM, Tenn S, Agazaryan N, Hegde J, Kaprealian T. (2021). A framework for sharing radiation dose distribution maps in the electronic medical record for improving multidisciplinary patient management. *Radiology: Imaging Cancer*. PMID: [33817649](#).
4. Ma TM, Gafita A, Shabsovich D, Juarez J, Pan T, Armstrong W, Sonni I, Nguyen K, Lok V, Reiter RE, Rettig MB, Steinberg ML, Yang DD, Muralidhar V, Chu C, Feng F, **Savjani RR**, Deng J, Parikh NR, Nickols NG, Czernin J, Calais J, Kishan AU. (2021). Identifying the best candidates for prostate-specific membrane antigen positron emission tomography/computed tomography as the primary staging approach among men with high-risk prostate cancer and negative conventional imaging. *European Urology Oncology*. PMID: [33602654](#).

2020

1. Gau Y, Yoon S, **Savjani RR**, Pham J, Kalbasi A, Raldow A, Peng H, Yang Y. (2020). Comparison and evaluation of distortion correction techniques on an MR-guided radiotherapy system. *Medical Physics*. PMID: [33280128](#).
2. Truong P, Kim J, **Savjani RR**, Sitek K, Hagberg G, Scheffler K, Ress D. (2020). Depth relationships and measures of tissue thickness in dorsal midbrain. *Human Brain Mapping*. PMID: [32870572](#).

2019

1. Deng J, **Savjani RR**, Lee P. (2019). Online search behavior for cancer immunotherapy resources and readability analysis: an opportunity to aid in medical decision-making. *Cureus*. PMID: [31763080](#).
2. Dalwadi SM, **Savjani RR**, Bernicker EH, Butler EB, Teh BS, Farach AM. (2019). A matter of comprehensive informed consent: short-term mortality rates with definitive treatment options in elderly stage I NSCLC. *American Journal of Clinical Oncology*. PMID: [31573986](#).

2018

1. Vaughn DA*, **Savjani RR***, Cohen MS, Eagleman DM. (2018). Empathic neural responses predict group allegiance. *Frontiers in Human Neuroscience*. PMID: [30108493](#).
*These authors contributed equally to this work.
2. Chiang ACA, Fowler SW, **Savjani RR**, Hilsenbeck SG, Wallace CE, Cirrito JR, Das P, Jankowsky JL. (2018). Combination anti-A β treatment maximizes cognitive recovery and rebalances mTOR signaling in APP mice. *Journal of Experimental Medicine*. PMID: [29626114](#).
3. **Savjani RR**, Katyal S, Halfen E, Kim JH, Ress D. (2018). Polar-angle representation of saccadic eye movements in human superior colliculus. *NeuroImage*. PMID: [29292132](#).

Before 2018

1. **Savjani RR***, Taylor BA*, Acion L, Wilde EA, Jorge RE. (2017). Accelerated changes in cortical thickness measurements with age in military service members with traumatic brain injury. *Journal of Neurotrauma*. PMID: [28657432](#).
2. Lal T, Baldwin PR, Cai M, **Savjani RR**, Eagleman DM, Ress D, Salas R. (2016). Real-time functional MRI training to decrease motion in imaging studies: Lack of significant improvement. *Bulletin of the Menninger Clinic*. PMID: [27936900](#).
3. Viswanath H, Velasquez KM, Thompson DG, **Savjani RR**, Carter AQ, Eagleman DM, Baldwin PR, De La Garza R, Salas R. (2015). Alterations in interhemispheric functional and anatomical connectivity are associated with tobacco smoking in humans. *Frontiers in Human Neuroscience*. PMID: [25805986](#).
4. Viswanath H, Velasquez KM, **Savjani RR**, Molfese DL, Curtis K, Molfese PJ, Eagleman DM, Baldwin PR, Frueh BC, Fowler JC, Salas R. (2015). Interhemispheric insular and inferior frontal connectivity are associated with substance abuse in a psychiatric population. *Neuropharmacology*. PMID: [25592214](#).
5. **Savjani RR**, Velasquez K, Thompson DG, Eagleman DM, De La Garza R, Salas, R. (2014). Characterizing white matter changes in cigarette smokers via diffusion tensor imaging. *Drug and Alcohol Dependence*. PMID: [25457737](#).

6. Plitt MH*, **Savjani RR***, Eagleman DM. (2014). Are corporations people too?: The neural correlates of moral judgments about companies and humans. *Social Neuroscience*. PMID: [25384262](#).
7. Fowler SW, Chiang ACA, **Savjani RR**, Larson ME, Sherman M, Schuler DR, Cirrito JR, Lesne S, Jankowsky JL. (2014). Genetic modulation of soluble A β rescues cognitive and synaptic impairment in a mouse model of AD. *Journal of Neuroscience*. PMID: [24899710](#).
8. Born HA, Kim JY, **Savjani RR**, Das P, Dabaghian Y, Guo Q, Yoo JW, Schuler DR, Cirrito JR, Zheng H, Golde TE, Noebels JL, Jankowsky JL. (2014). Genetic suppression of transgenic APP rescues hypersynchronous network activity in a mouse model of AD. *Journal of Neuroscience*. PMID: [24623762](#).

Editorials

1. Laird R, Delery W, **Savjani RR**. (2023). Breast cancer brain metastases and secondary obstructive hydrocephalus: considering the role of aromatase. *Radiology: Imaging Cancer*. PMID: [37350739](#).
2. Delery W, **Savjani RR**. (2023). Radiation necrosis versus tumor progression: The path toward an optimal discriminator. *Radiology: Imaging Cancer*. PMID: [36897223](#).
3. Singh P, **Savjani RR**. (2022). Racial identity remains embedded within medical imaging data. *Radiology: Imaging Cancer*. PMID: [35866890](#).
4. Rizzo A, **Savjani RR**. (2022). The current landscape of clinical predictions from brain tumor imaging. *Radiology: Imaging Cancer*. PMID: [35621523](#).
5. **Savjani RR**, Singh P. (2022). How to successfully build and run AI competitions for medical imaging: Insights from the PANDA Challenge. *Radiology: Imaging Cancer*. PMID: [35593717](#).
6. **Savjani RR**. (2021). nnU-Net: further automating biomedical image autosegmentation. *Radiology: Imaging Cancer*. PMID: [33778763](#).
7. **Savjani RR**. (2021). Intratumoral immunotherapy: a potential treatment for gastrointestinal malignancies. *Radiology: Imaging Cancer*. PMID: [34047665](#).
8. **Savjani RR**. (2021). A systematic approach for integrating machine learning models into the clinic. *Radiology: Imaging Cancer*. PMID: [34328352](#).

Case Reports

1. **Savjani, RR**, Yang, Y, Kishan AU. (2020). Hydrogel between prostate and rectum disappears on CT. [RSNA Case Collection](#).

Reviews

1. Ormachea P*, **Savjani RR***, De La Garza R, Eagleman DM. (2016). How neuroscience can craft effective drug policy. [Journal of Science and Law](#)