

ROBIN OligoMET Center

Monthly Research Update: August 2023

Publications

AUGUST AT A GLANCE TOTALS	
Publications	8
Grants and contracts	
New awards	1
Submitted	0
Oral Presentations	1
Abstracts	0
Clinical trials	
TERPS	1
Awards/Honors	1

Please submit all monthly updates to Jadyne Stewart at jadynstewart@som.umaryland.edu by second Wednesday of each month.

1. Bazayr S, Sutera P, Deek MP, Marshall CH, **Tran PT**. [Cell-free DNA sequencing sheds additional insights on BRCA-altered metastatic castration-resistant prostate cancer](#). EBioMedicine. 2023 Sep;95:104756. doi: 10.1016/j.ebiom.2023.104756. Epub 2023 Aug 9. PMID: 37566929; PMCID: PMC10432590.
2. **Cao Y**, Kunaprayoon D, **Ren L**. [Interpretable AI-assisted clinical decision making \(CDM\) for dose prescription in radiosurgery of brain metastases](#). Radiother Oncol. 2023 Oct;187:109842. doi: 10.1016/j.radonc.2023.109842. Epub 2023 Aug 4. PMID: 37543055.
3. Karargyris A, Umeton R, Sheller MJ, Aristizabal A, George J, Wuest A, Pati S, Kassem H, Zenk M, Baid U, Narayana Moorthy P, Chowdhury A, Guo J, Nalawade S, Rosenthal J, Kanter D, Xenochristou M, Beutel DJ, Chung V, Bergquist T, Eddy J, Abid A, Tunstall L, Sanseviero O, Dimitriadis D, Qian Y, Xu X, Liu Y, Goh RSM, Bala S, Bittorf V, Reddy Puchala S, Ricciuti B, Samineni S, Sengupta E, Chaudhari A, Coleman C, Desinghu B, Diamos G, Dutta D, Feddema D, Fursin G, Huang X, Kashyap S, Lane N, Mallick I; FeTS Consortium; BraTS-2020 Consortium; AI4SafeChole Consortium; Mascagni P, Mehta V, Ferro Moraes C, Natarajan V, Nikolov N, Padoy N, Pekhimenko G, Reddi VJ, Reina GA, Ribalta P, Singh A, Thiagarajan JJ, Albrecht J, Wolf T, Miller G, Fu H, Shah P, Xu D, Yadav P, Talby D, Awad MM, Howard JP, Rosenthal M, Marchionni L, Loda M, Johnson JM, Bakas S, Mattson P. [Federated benchmarking of medical artificial intelligence with MedPerf](#). Nat Mach Intell. 2023 Jul;5(7):799-810. doi: 10.1038/s42256-023-00652-2. Epub 2023 Jul 17. PMID: 38706981; PMCID: PMC11068064.
4. Papachristodoulou A, Heidegger I, Virk RK, Di Bernardo M, Kim JY, Laplaca C, Picech F, Schäfer G, De Castro GJ, Hibshoosh H, **Loda M**, Klocker H, Rubin MA, Zheng T, Benson MC, McKiernan JM, Dutta A, Abate-Shen C. [Metformin Overcomes the Consequences of NKX3.1 Loss to Suppress Prostate Cancer Progression](#). Eur Urol. 2024 Apr;85(4):361-372. doi: 10.1016/j.eururo.2023.07.016. Epub 2023 Aug 31. PMID: 37659962; PMCID: PMC10902192.
5. Prabhu RS, Akinyelu T, Vaslow ZK, Matsui JK, Haghghi N, Dan T, **Mishra MV**, Murphy ES, Boyles S, Perlow HK, Palmer JD, Udovicich C, Patel TR, Wardak Z, Woodworth GF, Ksendzovsky A, Yang K, Chao ST, Asher AL, Burri SH. [Risk Factors for Progression and Toxic Effects After Preoperative Stereotactic Radiosurgery for Patients With Resected Brain Metastases](#). JAMA Oncol. 2023 Aug 1;9(8):1066-1073. doi: 10.1001/jamaoncol.2023.1629. PMID: 37289451; PMCID: PMC10251241.
6. So EC, Zhou H, Greenwell A, Burch EE, Ji Y, Mériegeon EY, Olsen HS, **Bentzen SM**, Block DS, Zhang X, Strome SE. [Complement component C1q is an immunological rheostat that regulates FcγR interactions](#). Immunogenetics. 2023 Aug;75(4):369-383. doi: 10.1007/s00251-023-01311-x. Epub 2023 Jun 15. PMID: 37322230..

ROBIN OligoMET Center
Monthly Research Update: August 2023

Publications (continued)

7. Sutera P, Shetty AC, Song Y, Hodges T, Hoang T, **Rana Z**, Pienta K, Feng F, Song DY, DeWeese T, Gillissen S, Sweeney C, James N, Attard G, Deek M, **Tran PT**. [Identification of a Predictive Genomic Biomarker for Prostate-directed Therapy in Synchronous Low-volume Metastatic Castration-sensitive Prostate Cancer](#). *Eur Urol Oncol*. 2024 Apr;7(2):241-247. doi: 10.1016/j.euo.2023.07.014. Epub 2023 Aug 8. PMID: 37558543; PMCID: PMC10850431.
8. Zawadzka EM, Biavati L, Thomas A, Zanettini C, **Marchionni L**, Leone R, Borrello I. [Tumor-Specific CD8+ T Cells from the Bone Marrow Resist Exhaustion and Exhibit Increased Persistence in Tumor-Bearing Hosts as Compared to Tumor Infiltrating Lymphocytes](#). *bioRxiv* [Preprint]. 2023 Aug 29:2023.08.28.555119. doi: 10.1101/2023.08.28.555119. PMID: 37693379; PMCID: PMC10491133.

Grants and Contracts

Funded:

- **Phuoc T. Tran, MD, PhD, PI** UMB, sub UWisconsin, NIH R01 PAR-22-139 program Systematic Testing of Radionuclides in Preclinical Experiments (STRIPE), “Tumor-Barcoding and High-Throughput Sequencing to Assess Genomic Predictors of TRT Response and Immunomodulation in NSCLC” (\$1,267,325).

Submitted:

- None reported

Oral Presentations

- **Amit S.** AAPM Annual National Meeting. (July 23-July 27 – Houston, TX). “Quantum Computing in Medical Physics: Technology Basics and Opportunities for Clinical Impact”

Abstracts

- None reported

Clinical Trial Enrollment

- 1 patient was enrolled (10/122 total) on the **TERPS** trial.

Awards/Honors

- **Mark M.** promoted to Professor at the University of Maryland School of Medicine.

Please note that these examples are representative of productivity from the ROBIN OligoMET Center members and are not exclusively attributable to the U54 grant.