

ROBIN OligoMET Center

Monthly Research Update: February 2025

Publications

FEBRUARY AT A GLANCE TOTALS	
Publications	6
Grants and contracts	
New awards	0
Submitted	3
Oral Presentations	0
Abstracts	8
Clinical trials	
TERPS	2
Awards/Honors	0

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

- Dal Pra A, Ghadjar P, Ryu HM, Proudfoot JA, Hayoz S, Michalski JM, Spratt DE, Liu Y, Schär C, Berlin AM, Zwahlen DR, Simko JP, Hölscher T, Efsthathiou JA, Polat B, Sandler HM, Hildebrandt G, Parliament MB, Mueller AC, Dayes IS, Plasswilm L, Correa RJM, Robertson JM, Karrison TG, Davicioni E, Hall WA, Feng FY, Pollack A, Thalmann GN, Nguyen PL, Aebbersold DM, **Tran PT**, Zhao SG. [Predicting dose response to prostate cancer radiotherapy: validation of a radiation signature in the randomized phase III NRG/RTOG 0126 and SAKK 09/10 trials](#). Ann Oncol. 2025 Feb 13:S0923-7534(25)00025-0. doi: 10.1016/j.annonc.2025.01.017. Epub ahead of print. PMID: 39986927.
- Ling X, Bazyar S, Ferris M, Molitoris J, Allor E, Thomas H, Arons D, Schumaker L, Krc R, Mendes WS, **Tran PT**, **Sawant A**, Mehra R, Gaykalova DA, **Ren L**. [Author Correction: Identification of CT based radiomic biomarkers for progression free survival in head and neck squamous cell carcinoma](#). Sci Rep. 2025 Feb 21;15(1):6358. doi: 10.1038/s41598-025-90567-2. Erratum for: Sci Rep. 2025 Jan 8;15(1):1279. doi: 10.1038/s41598-025-85498-x. PMID: 39984635; PMCID: PMC11845740.
- Patel KR, Spratt DE, **Tran PT**, Krauss DJ, D'Amico AV, Nguyen PL. [The Benefit of Short-Term Androgen Deprivation Therapy with Radiation Therapy for Intermediate-Risk Prostate Cancer](#). Int J Radiat Oncol Biol Phys. 2025 Feb 6:S0360-3016(25)00086-0. doi: 10.1016/j.ijrobp.2025.01.022. Epub ahead of print. PMID: 39922318.
- Poiset SJ, Lombardo J, Castillo E, Castillo R, Jones B, Miften M, Kavanagh B, Dicker AP, Boyle C, **Simone NL**, Movsas B, Grills I, Rusthoven CG, Vinogradskiy Y, Wilson L. [Patient-Reported Outcomes: Comparing Functional Avoidance and Standard Thoracic Radiation Therapy in Lung Cancer](#). JCO Clin Cancer Inform. 2025 Feb;9:e2400202. doi: 10.1200/CCI-24-00202. Epub 2025 Feb 4. PMID: 39903899; PMCID: PMC11801246.
- Wang JH, Shi X, **Tran PT**, Sutera P. [Integrating Prostate Specific Membrane Antigen-PET into Clinical Practice for Prostate Cancer](#). PET Clin. 2025 Apr;20(2):205-217. doi: 10.1016/j.cpet.2025.01.001. Epub 2025 Feb 8. PMID: 39924369.
- Zawidzka 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 with tumor-infiltrating lymphocytes](#). J Immunother Cancer. 2025 Feb 25;13(2):e009367. doi: 10.1136/jitc-2024-009367. PMID: 40010772; PMCID: PMC11865787.

Grants and Contracts

Funded:

- None reported

Grants and Contracts (continued)

Submitted:

- **Erika Davies, PhD, PI/PI**, to NIH Development of Alternative Human Models of Radiation-Induced Injuries (U01) for “Development of air liquid interface (ALI) organ-on-a-chip models of radiation-induced lung alveolar and microvasculature injury for evaluation of medical countermeasures” (\$2,681,917).
- **Phuoc Tran, MD, PhD, lead PI/PI**, to NIH Exploratory/Developmental Bioengineering Research Grants (R21) for “Deciphering clinical data on oligometastatic prostate cancer using a precision medicine quantitative systems pharmacology modeling platform” (\$441,282).
- France Carrier, PhD, lead PI/PI, and **Amit Sawant, PhD, PI/PI**, to NIH/NCI Research Projects to Enhance Applicability of Mammalian Models for Translational Research (R01) for “Development of a porcine orthotopic pancreatic cancer model for facilitating clinical translation of ultra-high dose rate (FLASH) radiotherapy” (\$3,877,703).

Oral Presentations

- None reported

Abstracts

- Alan Pollack, Marla Johnson, James Proudfoot, Elai Davicioni, Alan Dal Pra, Jeffry Simko, André-Guy Martin, Steve Angyal, Himanshu Lukka, Jeff Michalski, Marie Duclos, George Rodrigues, R Jeffrey Lee, Kevin S Roof, Angela Y Jia, Samantha Seaward, Nader Khaouam, Theodore Karrison, Felix Y Feng, **Phuoc T Tran**. Decipher Score As A Predictor of Response To Treatment Intensification In The NRG Oncology-RTOG 0534 (SPPORT) Phase III Randomized Post-Prostatectomy Salvage Radiotherapy Trial. Genitourinary Cancers Symposium 2025.
- Alexander D. Sherry, Cara Haymaker, Bryan M. Fellman, Tharakeswara K. Bathala, Marina N. Medina-Rosales, Suyu Liu, Stephen G. Chun, Lauren L. Mayo, Seungtaek L. Choi, Ryan M. Phillips, Matthew P. Deek, Ana Aparicio, Amado J. Zurita, Patrick G. Pilie, Bilal A. Siddiqui, Sumit K. Subudhi, Alexandre Reuben, Paul G. Corn, **Phuoc T. Tran**, Chad Tang. Metastasis-Directed Therapy for Oligometastatic Prostate Cancer with Continuous or Intermittent Androgen Deprivation Therapy: Results of Two Phase II Randomized Trials from the EXTEND Study with Translational Correlatives. Genitourinary Cancers Symposium 2025.
- Chad Tang, Alexander Sherry, Hyunsoo Hwang, Giulio Francolini, Lorenzo Livi, **Phuoc Tran**, Paul Corn, Ana Aparicio, Gabriele Simontacchi, Ana Kiess, Jarey Wang, Valerie Fonteyne, Renee Bultijnck, Robert Olson, Stephen Harrow, Pierre Blanchard, Ryan Sun, David Palma, Piet Ost. World-wide oligometastatic prostate cancer (omPC) meta-analysis leveraging individual patient data (IPD) from randomized trials (WOLVERINE): an individual patient meta-analysis from the X-MET collaboration. Oral presentation in the General Session of the Genitourinary Cancers Symposium 2025.
- Daniel E Spratt, Soum Roy, Ho Yin Ho, Xin Zhao, Alex Hakansson, Ahmad Alzein, Albou Kassambara, Atallah Baydoun, Angela Y. Jia, Phuoc Tran, Mamoudou Sano, Jason Hughes, Thomas Sbarrato, Jacques Fieschi, Elai Davicioni, Gert Attard, Michael Leapman, Ashley E. Ross, Yang Liu, Edward M. Schaeffer. Risk Stratification using the Decipher 22-gene Genomic Classifier (GC) and Digital Pathology Artificial Intelligence (DPAI) in nearly 10,000 Localized Prostate Cancer Patients. Genitourinary Cancers Symposium 2025.
- Karen E. Hoffman, Sophia C. Kamran, Hyunnam Ryu, James A. Proudfoot, Elai Davicioni, Paul L. Nguyen, Theodore Karrison, Daniel E. Spratt, Jeff Michalski, Felix Y. Feng, **Phuoc T. Tran**, Shuang G. Zhao. PORTOS Gene Signature Predicts Risk of Adverse Events after Dose-Escalated vs. Lower-Dose Prostate Radiation Therapy in NRG/RTOG 0126. Genitourinary Cancers Symposium 2025.
- Matthew P. Deek, Xiaolei Shi, Noura Radwan, Caitlin Eggleston, Kaysee Baker, Zaker Rana, Matthew J. Ferris, Young Kwok, Soren M. Bentzen, Ronald Ennis, Lara Hathout, Biren Saraiya, Tina Mayer, Heather Mannuel, Arif Hussain, Matthew C. Abramowitz, Alejandro Berlin, Mark V. Mishra, **Phuoc T. Tran**, Jason K. Molitoris. Phase 2 randomized high-risk metachronous oligometastatic prostate cancer with high-risk mutations treated with metastasis directed therapy and niraparib/abiraterone acetate plus prednisone (KNIGHTS) trial. Genitourinary Cancers Symposium 2025.

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Abstracts

- Shuang Zhao, Hyunnam Monica Ryu, James A. Proudfoot, Elai Davicioni, Jeff M. Michalski, Daniel Eidelberg Spratt, Stefanie Hayoz, Jeffry Simko, Howard M. Sandler, Alan Pollack, Matthew Parliament, Ian S. Dayes, Rohann Jonathan Mark Correa, Theodore Karrison, William Adrian Hall, Daniel M. Aebersold, Felix Y Feng, Pirus Ghadjar, **Phuoc T. Tran**, Alan Dal Pra. Gene Signature Predictor of Dose-Response to Prostate Radiation: Validation of PORTOS in Phase III Trials. Oral presentation in the General Session of the Genitourinary Cancers Symposium 2025.**
** - Co-released simultaneously in Annal Oncol (PMID 39986927)
- Philip Sutura, Yang Song, Amol Shetty, Jarey Wang, Kim Van der Eecken, Alex Hakanson, Yang Seagle Liu, Adrianna A. Mendes, Xiaolei Shi, Elai Davicioni, Emmalyn Chen, Rikiya Yamashita, Timothy Showalter, Tamara Lotan, Theodore DeWeese, Ana Kiess, Daniel Song, Matthew Deek, Piet Ost, **Phuoc Tran**. Evaluating associations between genomic classifier and digital pathology based mutli-modal AI biomarkers in oligometastatic castration-sensitive prostate cancer. Genitourinary Cancers Symposium 2025.

Clinical Trial Enrollment

- 2 patients were enrolled (37/122 total) on the **TERPS** trial.

Awards/Honors

- None reported

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