BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: Boland, Patrick

eRA COMMONS USER NAME (credential, e.g., agency login): PATRICKBOLAND

POSITION TITLE: Assistant Professor of Medicine

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing,

include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

| INSTITUTION AND LOCATION | DEGREE | END | FIELD OF STUDY |
|--|-------------|---------|---|
| | (if | DATE | |
| | applicable) | MM/YYYY | |
| Cornell University, Ithaca, NY | BA | 05/2001 | Biology |
| Jefferson Medical College, Philadelphia, PA | MD | 06/2006 | Medicine |
| Boston University Medical Center, Boston, MA | Resident | 06/2009 | Internal Medicine Residency |
| Fox Chase Cancer Center/Temple University Hospital, Philadelphia, PA | Fellow | | Hematology/Medical Oncology Fellowship |

A. Personal Statement

I am a medical oncologist at Rutgers Cancer Institute of New Jersey (CINJ). I am a member of the Gastrointestinal Oncology team and a member of the Clinical Investigations and Precision Therapeutics (CIPT) Program at CINJ. My role on our Cancer Center Support Grant (P30CA072720) is that of co-Chair of the Human Research Oversight Committee (HROC). My major research interest relates to the development and conduct of therapeutic trials in GI malignancies, with a special interest in colorectal cancer. I have significant experience in both the design and conduct of clinical investigations, with prior engagement with investigator-initiated, small-medium consortium driven, NCI-based and also pharmaceutically sponsored trials, spanning both the Phase I and Phase II setting. In addition to those activities described in section C, I am presently working closely with MEI Pharmaceuticals in the development of a phase II study for advanced colorectal cancer, in which I will serve as the national PI. I was recently site-PI for a study of an oral irinotecan formulation, combined with a Pgp inhibitor, and thus, have significant familiarity with issues of topoisomerase inhibitor toxicity as well as dosing considerations (NCT02250157).

B. Positions, Scientific Appointments and Honors

Positions and Scientific Appointments

| 2022 - | Co-Chair, HCRN GI Clinical Trial Working Group |
|-------------|---|
| 2020 - 2021 | Observer, NCI Anorectal Task Force |
| 2019 - | Assistant Professor of Medicine, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ |
| 2019 - | Member, Rutgers CINJ Clinical Investigations and Precision Therapeutics (CIPT) Program |
| 2019 - | Member, ECOG GI Committee |
| 2019 - | Member, ECOG Colorectal Clinical Trials Working Group |
| 2017 - | Member, ACCRU GI Research Committee |
| 2017 - | Member, ALLIANCE for Clinical Trials in Oncology, GI Committee |
| 2017 - 2019 | Member, Roswell Park Scientific Review Executive Committee |
| 2015 - 2019 | Assistant Professor of Medicine, Department of Medicine, University at Buffalo, Buffalo, NY |
| 2015 - 2019 | Member, Experimental Therapeutics Group, RPCI Core Cancer Research Grant (CCSG) |
| 2014 - | Member, Colorectal Cancer Alliance Research Committee |
| 2013 - 2019 | Assistant Professor of Oncology, Department of Medicine, Roswell Park Cancer Institute, |
| | Buffalo, NY |
| 2010 - | Member, American Society of Clinical Oncology |

Honors

Junior Faculty Award for Outstanding Research, University at Buffalo, Department of Medicine Conquer Cancer Foundation of ASCO Merit Award. ASCO

C. Contribution to Science

- 1. Novel therapeutic strategies for the treatment of advanced GI malignancies: As a clinical investigator of my primary focus surrounds the use of novel therapeutic approaches for gastrointestinal cancers. I currently serve as PI or Co-I on multiple studies. Further, I have developed and carried through multiple interventional studies. The first was being a multi-center investigator initiatied trial (IIT) examining the novel oral combination of capecitabine and nintedanib in metastatic colorectal cancer. Stemming from an NCCN grant, this demonstrated improved outcomes over historic controls, with full publication upcoming (NCT02393755). A second study which was supported by a grant from Merck, consisted of a multi-center IIT testing the comination of pembrolizumab and cetuximab in metastatic colorectal cancer (NCT02713373). This study was heavier on correlatives with serial biopsies and testing performed in conjunction with the Roswell Park flow cytometry and pathology core. More recently, I secured funding for and developed a study of TAS-102, irinotecan and bevacizumab in second-line metastatic colorectal cancer, through an NCCN grant (NCT04109924). I transitioned from overall PI to site PI following my change in institutes in 2019Beyond investigator initiated trials, I have been a key team member of numerous multi-institutional clinical trial efforts. I served as a key contributor to the Keynote-164 study, which confirmed the activity of the PD-1 inhibitor, pembrolizumab, in MSI-H colorectal cancer. Similar notable contributions relate to the ReDOS study, which established a clear recommended dose modification when using regorafenib, and the Phase I/II NALIRIFOX study, where this regimen is now being tested in phase III studies of first-line pancreatic cancer.
 - a. Fountzilas C, Bajor DL, Mukherjee S, Saltzman J, Witkiewicz AK, Maguire O, Minderman H, Nambiar R, Rosenheck HR, Knudsen ES, Muhitch JB, Abrams SI, Wang C, Hutson AD, Attwood K, Hicks KA, Jurcevic JA, Kalinski P, Iyer R, **Boland PM**. Phase Ib/II Study of Cetuximab plus Pembrolizumab in Patients with Advanced RAS Wild-Type Colorectal Cancer. Clin Cancer Res. 2021 Dec 15;27(24):6726-6736. PubMed PMID: 34645646.
 - b. Wainberg ZA, Bekaii-Saab T, **Boland PM**, Dayyani F, Macarulla T, Mody K, Belanger B, Maxwell F, Moore Y, Thiagalingam A, Wang T, Zhang B, Dean A. First-line liposomal irinotecan with oxaliplatin, 5-fluorouracil and leucovorin (NALIRIFOX) in pancreatic ductal adenocarcinoma: A phase I/II study. Eur J Cancer. 2021 Jul:151:14-24. PubMed PMID: 33957442.
 - c. Le DT, Kim TW, Van Cutsem E, Geva R, Jäger D, Hara H, Burge M, O'Neil B, Kavan P, Yoshino T, Guimbaud R, Taniguchi H, Elez E, Al-Batran SE, **Boland PM**, Crocenzi T, Atreya CE, Cui Y, Dai T, Marinello P, Diaz LA Jr, André T. Phase II Open-Label Study of Pembrolizumab in Treatment-Refractory, Microsatellite Instability-High/Mismatch Repair-Deficient Metastatic Colorectal Cancer: KEYNOTE-164. J Clin Oncol. 2020 Jan 1;38(1):11-19. PubMed Central PMCID: PMC7031958.
 - d. Bekaii-Saab TS, Ou FS, Ahn DH, **Boland PM**, Ciombor KK, Heying EN, Dockter TJ, Jacobs NL, Pasche BC, Cleary JM, Meyers JP, Desnoyers RJ, McCune JS, Pedersen K, Barzi A, Chiorean EG, Sloan J, Lacouture ME, Lenz HJ, Grothey A. Regorafenib dose-optimisation in patients with refractory metastatic colorectal cancer (ReDOS): a randomised, multicentre, open-label, phase 2 study. Lancet Oncol. 2019 Aug;20(8):1070-1082. PubMed Central PMCID: PMC9187307.
- 2. Understanding Patient Outcomes Based Upon Molecular Features and Patterns of Care: As a clinical investigator, I have also pursued multiple studies evaluating patient outcomes, as it related to patterns of care or molecular analyses, both as the principal investigator/ lead author and as a key contributing member. We have looked at various databases as part of these efforts, most notably the National Cancer Database (NCDB). In one important study, we evaluated the outcomes of patients with rectal cancer who achieved a pathologic complete response, establishing that pre-operative clinical factors (T-stage, N-stage, tumor size) did not impact outcomes, but suggesting that adjuvant therapy use was associated with a survival improvement. We also assessed impact of tumor-sidedness in one of the largest studies of colorectal cancer to date, utilizing the NCDB and incorporating available molecular markers. Previous efforts also included assessment of molecular markers within the database of a large commercial tumor sequencing company, CARIS, describing relevant tumor-associated alteration within anal squamous cell carcinomas.

- a. Narayanan S, Gabriel E, Attwood K, **Boland P**, Nurkin S. Association of Clinicopathologic and Molecular Markers on Stage-specific Survival of Right Versus Left Colon Cancer. Clin Colorectal Cancer. 2018 Dec;17(4):e671-e678. PubMed PMID: 30108021.
- b. Shahab D, Gabriel E, Attwood K, Ma WW, Francescutti V, Nurkin S, **Boland PM**. Adjuvant Chemotherapy Is Associated With Improved Overall Survival in Locally Advanced Rectal Cancer After Achievement of a Pathologic Complete Response to Chemoradiation. Clin Colorectal Cancer. 2017 Dec;16(4):300-307. PubMed PMID: 28420585.
- c. Smaglo BG, Tesfaye A, Halfdanarson TR, Meyer JE, Wang J, Gatalica Z, Reddy S, Arguello D, **Boland PM**. Comprehensive multiplatform biomarker analysis of 199 anal squamous cell carcinomas. Oncotarget. 2015 Dec 22;6(41):43594-604. PubMed Central PMCID: PMC4791253.

Complete List of Published Work in My Bibliography: https://www.ncbi.nlm.nih.gov/myncbi/1VmKVCzuEpYAe/bibliography/public/