

# News from the PNOC/CBTN AT/RT Working Group

## October Updates

Dear Foundation Partners,

We are grateful for your ongoing support of the PNOC/CBTN AT/RT Working Group efforts and we hope this report is useful for you! We continue to work diligently on our shared goal to advance our pre-clinical research in parallel to developing novel clinical trials to improve outcomes of children diagnosed with embryonal tumors.

We are excited to report that the AT/RT Working Group has a total of 26 scientists and researchers in this group! This represents a global partnership, with membership from not only some of the leading medical research institutions across the U.S., but also Germany, Australia, and Canada!



The AT/RT Working Group has met 20 times since

November 2019 and the next quarterly meeting is scheduled for **December 13th, 2021**. Our meetings focus on pre-clinical presentations and clinical trials updates and we appreciate your active participation on these calls to understand the patient and family perspectives to better design our trials. For a full list of members, please check out our [notion page](#)!

## Clinical Trial News

The AT/RT Working Group is focused on launching a clinical trial for patients with initial and recurrent AT/RT tumors using a registry and tumor board approach to help patients. A small group of the members are meeting monthly to create the protocol and provide updates to the larger group during the quarterly meetings. The group hopes to submit the protocol to PNOC for review in the next few weeks.

## Preclinical News

The AT/RT Working Group is currently studying drug interactions in the laboratory in animal models to decide if they should be included in the adaptive protocol. There are monthly meetings to present the different members' research and discuss how they may be incorporated into future trials. Below are a few updates from Dr. Raabe's lab:

- We are continuing to explore the mTOR pathway as a vulnerability in AT/RT, and we are testing novel inhibitors of this pathway in our models. We are also targeting the epigenetic vulnerability of AT/RT using some new chemotherapy options in partnership with pharma.
- Dr. Jeffrey Rubens recently presented on their preliminary data for paxasilib during the last quarter meeting and will continue to work on testing these drugs.
- The Raabe lab is also partnering with several pharmaceutical companies to test their drugs in our ATRT brain tumors. We anticipate having preliminary results of these studies early in 2022.

## Driving Novel Clinical Trials

The working group has collated one of the largest AT/RT resources from CBTN and PNOC and will be further investigating these resources for our preclinical experiments.

- **Genomic Data:** Whole Genome Sequence (WGS) data have been generated from 31 subjects in CBTN. These data allow investigators to understand the differences that are occurring between normal cells and cancer cells. There are 33 additional subjects eligible for WGS data generation. Our partners at Johns Hopkins have validated known reliance on key pathways and have identified additional potential vulnerabilities. More updates soon!
- **Expression Data:** RNAseq data have been generated from 32 CBTN subjects. These data allow investigators to know what is being expressed in the tumor cells. There are 53 additional subjects that are eligible for RNAseq generation.
- **Proteomic Data:** Proteomic data have been generated for 12 CBTN subjects. These data allow investigators to understand what proteins are being expressed by the tumor cells that indicate which drug therapies would be the most effective. There are 40 additional subjects that are eligible for Proteomics and Single Cell sequencing.
- **Cell lines:** Cell lines have been generated from 11 CBTN subjects, 5 of which are shareable with researchers. The cell lines allow investigators the ability to test drugs in the lab to look for the most effective and safe drugs and combinations.
- **Research Projects:** CBTN currently has 8 Approved AT/RT Specimen Projects and 6 Approved AT/RT Data Projects, with 4 Specimen Projects and 1 Data Project from working group members
  - To learn more, please review the projects [here!](#)

### Opportunities for Partnership

Our working group is currently funded mainly by philanthropic efforts. If you are interested in supporting the efforts of the working group, you can reach out to Ryan Velasco ([velascor@email.chop.edu](mailto:velascor@email.chop.edu)) from the CBTN Project Management team, and they can connect you to us.

If you have any additional foundations that you believe might be interested in becoming a partner to this working group please let us know. Should there be anything else that we can help with, please don't hesitate to reach out. We hope you have found this information helpful and we thank you for your support!

Thanks & Regards,

Ashley Margol, Eric Raabe