Unlocking Success in the Industry-Sponsored Trial Portfolio: The Impact of a Solid Tumor Research Science Liaison Position

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Background

In 2023, the University of North Carolina Lineberger Comprehensive Cancer Center (LCCC) established the Research Science Liaison (RSL) position to enhance clinical trial portfolios by increasing engagement with industry-sponsored clinical trials. The RSL position was designed for PhD-level professionals with the expertise to strategically navigate the clinical trial landscape. Two RSLs were hired and divided their efforts across solid tumors and hematological malignancies. RSLs serve as key points of contact for industry partners, facilitating the exchange of medical and scientific information relevant to LCCC's clinical and translational research priorities. The primary responsibilities of RSLs include meeting with medical science liaisons (MSLs) and other industry representatives to learn about potential industry opportunities, presenting relevant trials to disease group leaders, and facilitating trial review and feasibility assessments. Please see accompanying poster for additional information on the RSL position

Goals

To evaluate the impact of the RSL position for the solid tumor disease groups, data from 2023-2024 was collected and compared to baseline data from 2022.

Solutions & Methods

RSLs systematically tracked the outcomes of all studies considered at LCCC including the stage at which studies were declined. Key metrics were examined for 10 solid tumor disease groups: number of industry trials selected, disease group participation in industry trials, the number of unique industry trials that were accrued to, and the number of total patients who enrolled to an industry trial.

Because each disease group is unique, we reviewed data according to individual portfolio and also combined data across our ten "solid tumor" disease groups: Breast, GI, GU, Gyn, Head & Neck, Lung, Melanoma, Neuro-oncology, Phase 1 and Radiation Oncology.

RSLs also tracked how studies (for all types of oncology and from all sources) progressed through the consideration and feasibility process, and how the composition of trials considered compared to trials ultimately opened for accrual.

Outcomes

Recognizing that success with industry trials varied by disease group, we considered each group's industry accruals individually, using 2022 (post-COVID and great resignation, pre-RSLs) as the baseline year.

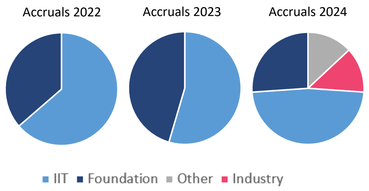

Figure 1: An example of increased industry accruals from a disease group that traditionally opened fewer industry trials.

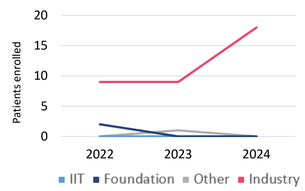

Figure 2: An example of increased industry accruals from a disease group with a history of strong participation in industry trials.

Broader impact was assessed by combining data across all ten solid tumor disease groups, again, compared to 2022. Implementation of the RSL position correlated with increases in all metrics considered.

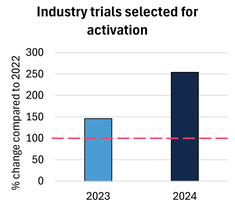

Figure 3: An industry trial was considered "selected for activation" if UNC was site selected after feasibility, the disease group decided to open the study, and the Activation team issued a "Start of Work" email.

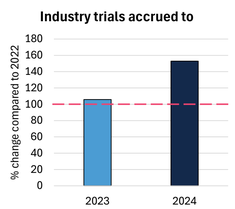

Figure 4: An industry trial was considered "accrued to" if at least one subject was enrolled. The number of distinct industry trials that enrolled patients grew by 53%.

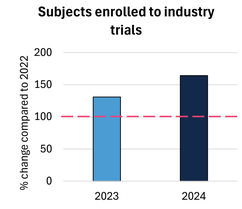

Figure 5: The number of industry trial accruals increased by 64% from 2022 to 2024. We expected this to be one of the most lagging indicators of RSL impact.

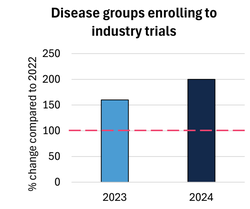

Figure 6: The number of solid tumor disease groups that enrolled patients to an industry trial doubled between 2022 and 2024, with all groups opening and enrolling to at least one industry trial.

Because RSLs now represent a central point of origin for all trials considered, regardless of their source, we used our data to examine the types of studies considered, and the outcomes of those studies, particularly compared to the final portfolio of studies opened to accrual.

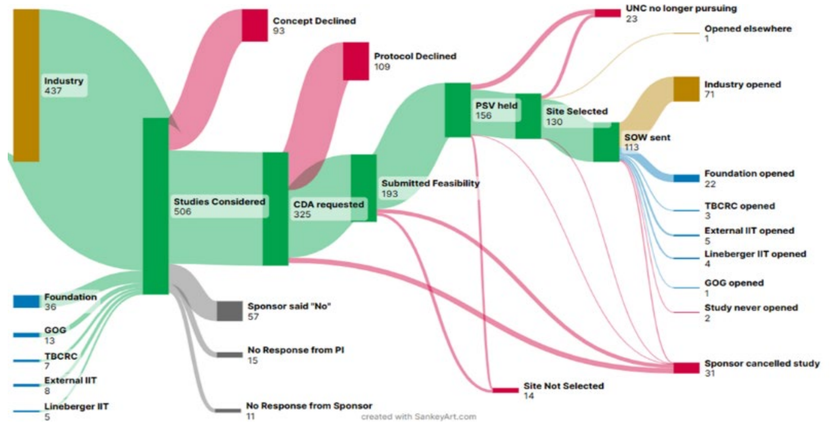

Figure 7: This Sankey plot includes all ten solid tumor disease groups, as well as data from the hematology (Leukemia, Lymphoma, and Multiple Myeloma) and Cellular Therapeutics groups. We found that investigators remain selective when considering industry trials during feasibility: industry opportunities were over-represented in trials considered (84%) compared to trials opened (59%).

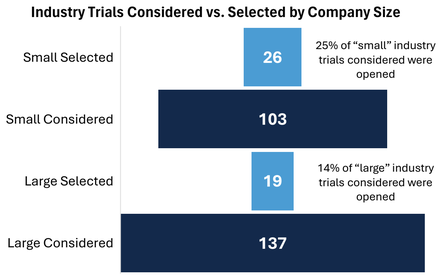

Figure 8: Trials from large sponsors (>500 employees) comprised a greater percentage of industry trials considered compared to trials from small sponsors (57% vs 43%) but made up a smaller portion of industry trials selected for activation (42% vs 58%).

Lessons Learned

The timelines for trial selection and activation mean that most measurable outcomes of RSL impact are lagging indicators. Thus, we were not surprised to see that changes in accrual and trial selection were not drastic in 2023. Additionally, while the observed changes in industry trial selection and accrual align with the period in which RSLs were hired and gained experience, these trends cannot be solely attributed to the RSL position.

Future Directions

We anticipate that the impact of RSLs will grow as they strengthen and expand relationships with MSLs and LCCC investigators. Thus, we will continue to track key metrics into 2025 and beyond. In the future, RSLs will build on established industry relationships by identifying industry-based funding strategies for LCCC investigators.

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