Background

- Antibodies with two different binding sites used to engage effector cells and/or cytokines to tumors
- Blinatumomab - accelerated approval from FDA in 2014 as breakthrough therapy for B-cell acute lymphoblastic leukemia
  - 9 approved as of 2023, primarily for heme
  - Emerging evidence for solid tumor
- Highly effective
- Unique side effect profile, may be severe

Hypothesis

In cancer patients receiving bispecific antibody treatment, administration of treatment in the community setting after Cycle 1, Day 14 will not be associated with an increase in adverse effects

Design

- Retrospective chart review
- EHR data analysis
- Compare patients who receive treatment at a community site after the first two weeks with patients who receive full duration of treatment at academic/tertiary cancer center
- Agents of interest: blinatumomab, tebentafusp, teclistamab
- Adverse effects of interest:
  - Cytokine release syndrome (CRS)
  - Immune effector cell-associated neurotoxicity syndrome (ICANS)
  - Infections
  - Tumor lysis syndrome
  - Elevated liver enzymes

Data Collection & Analysis

- Patient identification
- Protocol ID
- Medication Administration Record (MAR) documentation
- Adverse effect tracking
- Nursing flowsheets
- Encounter diagnoses
- Billing codes
- Clinician notes
- Lab values
- Comparison of the following between academic/tertiary site and community site patients by protocol
  - Total number of adverse effects
  - Number of each specific type of effect
  - Number of individual patients who experienced adverse effects
  - Treatment course

Next Steps

- Finish data collection and analysis
- Draft manuscript with results
- Educational review article on bispecific antibodies and side effects for non oncology clinicians
- Case report – PET scan before and after

Disclosures

- None at this time