

BACKGROUND

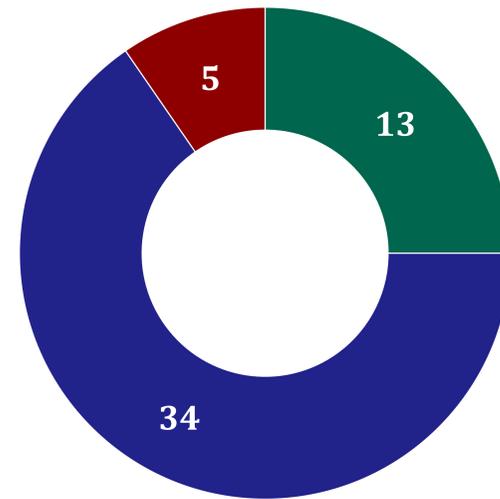
- Ibrutinib, acalabrutinib, and zanubrutinib are the current FDA-approved Bruton's Tyrosine Kinase (BTK) inhibitors used in chronic lymphocytic leukemia (CLL)
- All agents pose risks for hypertension, bleeding, atrial fibrillation, and opportunistic infections
- The objective of this study is to assess the safety outcomes of BTK inhibitors prescribed in CLL at a community teaching hospital

METHODS

- This project was granted exempt status from the institution's investigational review board
- Data collected as a retrospective chart review using the institution's electronic health record, EPIC
- Inclusion Criteria: ≥ 18 years diagnosed with CLL and have been prescribed acalabrutinib, ibrutinib, or zanubrutinib between 2022-2023
- Primary Objective: Describe the incidence of treatment-related adverse events in patients receiving BTK inhibitors for the treatment of CLL
- Secondary Objectives: Assess patient bleed risk via HAS-BLED scoring scale and evaluate patient comorbidities and concurrent medications that may affect outcomes

RESULTS

Figure 1: Eligible Patients in Study (n = 52)

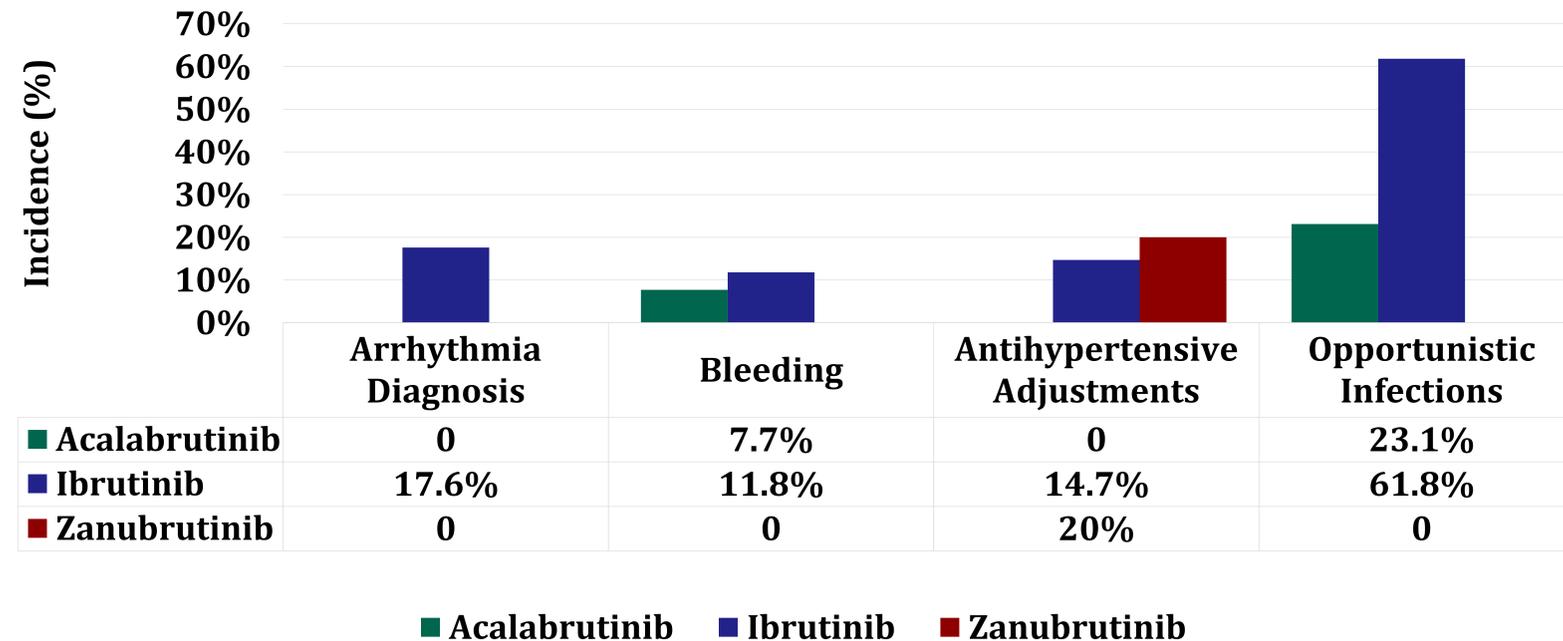


■ Acalabrutinib ■ Ibrutinib ■ Zanubrutinib

Table 1: Baseline Characteristics at BTK Inhibitor Initiation

	Average (Range)		Average (Range)
Age in Years		HAS-BLED Score (0-9)	
Acalabrutinib	72 (53-89+)	Acalabrutinib	1 (0-3)
Ibrutinib	68 (43-86)	Ibrutinib	2 (0-4)
Zanubrutinib	69 (63-89+)	Zanubrutinib	2 (0-3)
Stage (0-4)		Platelets (per mL)	
Acalabrutinib	3 (1-4)	Acalabrutinib	148 (34-355)
Ibrutinib	2 (0-4)	Ibrutinib	175 (39-291)
Zanubrutinib	2 (0-4)	Zanubrutinib	173 (97-328)

Figure 2: Incidence of Treatment-Related Adverse Events



CONCLUSION

- Ibrutinib yielded the greatest reports of adverse events and the only intervention to report incidence of arrhythmias post-initiation
- Adverse events were moderately reported for acalabrutinib while no patients required antihypertensive therapy adjustments
- Zanubrutinib yielded the lowest adverse events with no reports of bleeding or opportunistic infections
- Longer duration of treatment in patients taking ibrutinib compared to acalabrutinib and zanubrutinib may reflect greater incidence of adverse events