

Background

- Adults with secondary acute myeloid leukemia (sAML) face a significant treatment burden with prolonged time in hospital impacting their quality of life¹⁻³
- The European LeukemiaNet 2022 guidelines recommend⁴
 - For patients with sAML who are eligible for intensive chemotherapy (IC), fixed-duration IC (1-4 treatment cycles) with CPX-351, a dual-drug liposomal encapsulation of daunorubicin and cytarabine in a synergistic 1:5 molar ratio⁴⁻⁶
 - For patients with sAML who are unsuitable for IC, continuous treatment with venetoclax plus azacitidine (VEN-AZA), a combination of a B-cell lymphoma-2 (BCL-2) inhibitor and hypomethylating agent, respectively⁴
- Due to their differing treatment schedules, CPX-351 and VEN-AZA have contrasting short- and long-term burdens on patients and healthcare systems
 - A recent study reported that overall survival and percentage of days at home were numerically higher with conventional 7+3 chemotherapy (despite longer initial hospital length stay) vs VEN-AZA in US patients³
- However, the long-term time spent at home with CPX-351 vs VEN-AZA in a non-US healthcare setting remains unexplored^{3,7}

Objective

- To compare the time patients with sAML spent at home within their front-line (1L) treatment with CPX-351 or VEN-AZA in routine clinical practice in England

Methods

- This retrospective population-based cohort study included adults (≥18 years) with sAML (therapy-related AML or AML with prior myelodysplasia/chronic myelomonocytic leukemia) who received 1L CPX-351 or 1L VEN-AZA in a real-world setting in England between October 01, 2018, and April 30, 2023
- Patient records were sourced from the Cancer Analysis System database via the National Cancer Registration and Analysis Service
- Time at home, defined as the percentage of days without any record of interaction with the secondary healthcare system, was analyzed monthly from 1L treatment initiation until earliest of death, censoring, or second-line treatment
 - Accident and emergency data were unavailable for this time period
- Hematopoietic cell transplantation (HCT) was considered part of 1L treatment
- To adjust for confounding factors, results were stratified by age, HCT status, and presence of comorbidities

Results

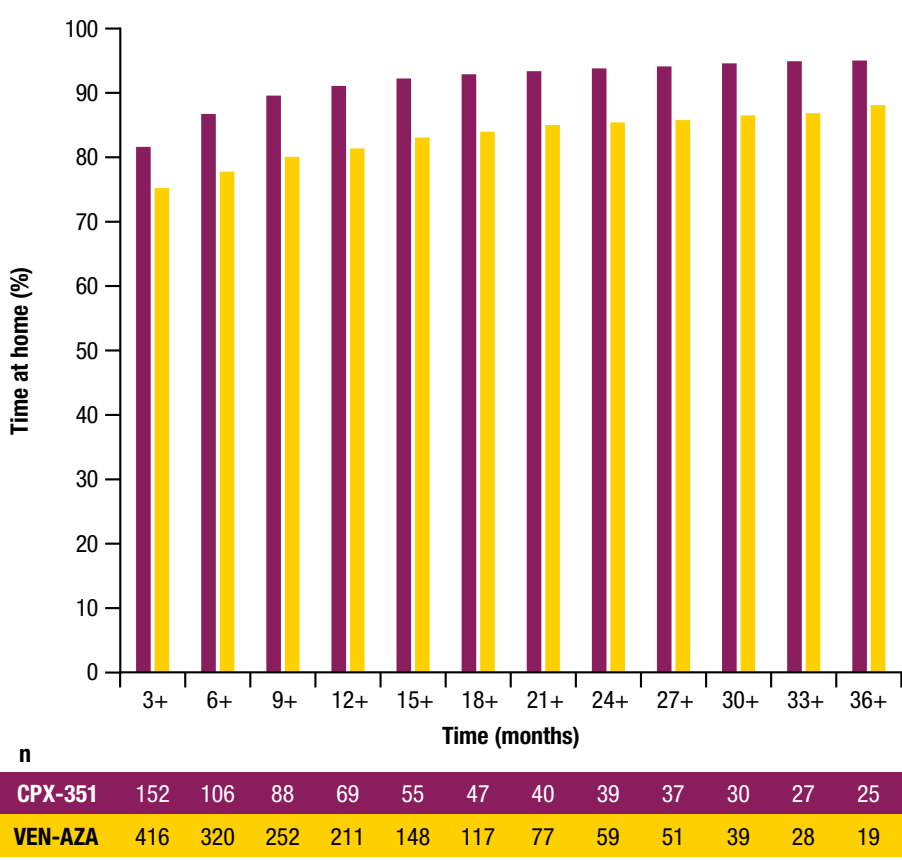
- This analysis included 278 patients treated with CPX-351 (median age: 64 years) and 592 patients treated with VEN-AZA (median age: 74 years)
- Overall, the HCT rate in patients treated with CPX-351 vs VEN-AZA was 38% (107/278) vs 5% (29/592)
- Among patients treated with CPX-351 vs VEN-AZA, 23 (8%) vs 86 (15%) patients received azacitidine for prior malignancy
- Median follow-up time from AML diagnosis was 10.9 months for CPX-351 and 8.8 months for VEN-AZA

Table 1. Baseline Patient and Disease Characteristics

	CPX-351 (n=278)	VEN-AZA (n=592)
Age at AML diagnosis		
Mean (SD)	62 (9)	73 (7)
Median (Q1, Q3)	64 (58, 69)	74 (69, 77)
Age categories at diagnosis, n (%)		
<60 years	80 (29)	26 (4)
≥60 years	198 (71)	566 (96)
Sex, n (%)		
Female	104 (37)	213 (36)
Male	174 (63)	379 (64)
Ethnicity, n (%)		
White	245 (88)	537 (91)
Asian	17 (6)	25 (4)
Other*	16 (6)	30 (5)
AML subtype, n (%)		
t-AML	141 (51)	275 (46)
AML with prior MDS or CMML diagnosis	137 (49)	317 (54)

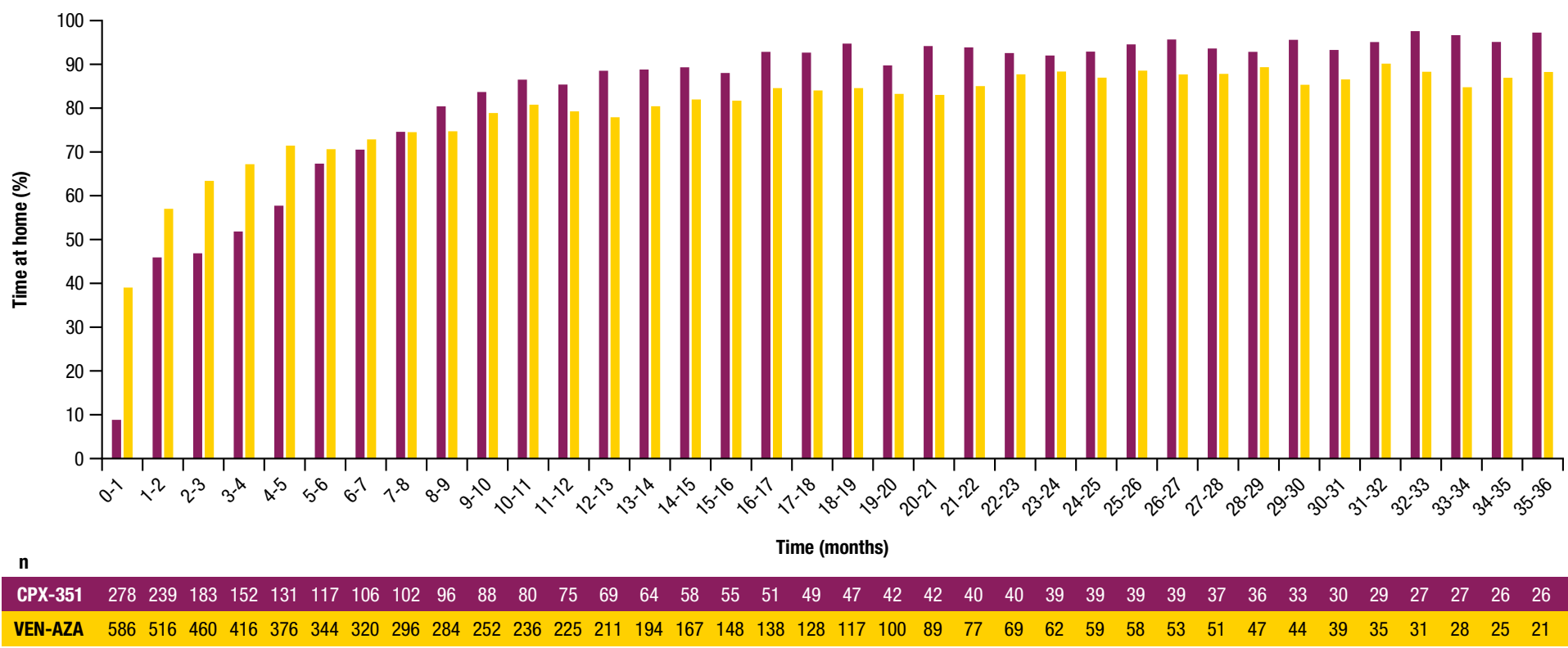
*Other ethnicity groups were Mixed, Black, and Chinese/Other.
AML, acute myeloid leukemia; CMML, chronic myelomonocytic leukemia; MDS, myelodysplasia; Q1, quartile 1; Q3, quartile 3; SD, standard deviation; t-AML, therapy-related acute myeloid leukemia; VEN-AZA, venetoclax plus azacitidine.

Figure 2. Time At Home Landmarked From Set Dates for Patients With sAML Treated With 1L CPX-351 or 1L VEN-AZA



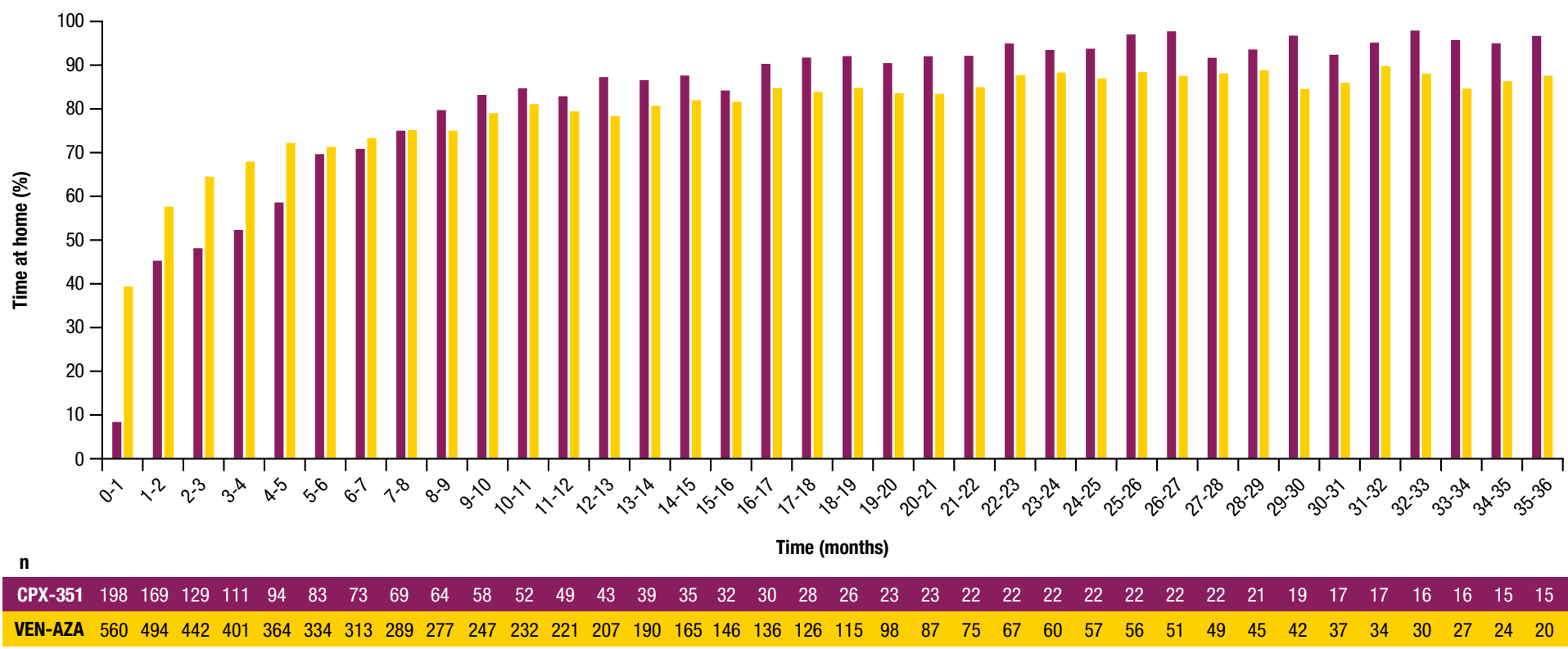
- In the total population, the overall mean percentage time at home was 70% for CPX-351 vs 69% for VEN-AZA
 - For patients who survived ≥6 months, the mean percentage time at home was 87% vs 78%, respectively

Figure 1. Time At Home Every Month for Patients With sAML Treated With 1L CPX-351 or 1L VEN-AZA



- During the first 3 months of treatment, patients treated with VEN-AZA vs CPX-351 had higher percentage time at home (mean: 50% [95% confidence interval; CI: 50, 51] vs 29% [95% CI: 29, 30]) but both treatments reached equipoise at ~7 months (74% vs 75%), respectively
- From months 8 to 36, a consistently higher percentage time at home was observed in patients treated with CPX-351 (range: 80% to 98%) vs VEN-AZA (range: 75% to 90%), typically ~5% to 10% higher per month (monthly difference range: +4% to +12%)

Figure 3. Time At Home Every Month for Patients With sAML Aged ≥60 Years Treated With 1L CPX-351 or 1L VEN-AZA



- When restricted to patients aged ≥60 years, the overall mean percentage time at home was 68% for CPX-351 vs 69% for VEN-AZA
 - The same overall pattern was evident with a short-term benefit for VEN-AZA vs CPX-351 (mean percentage time at home in the first 3 months: 51% vs 30%), but from months 8 to 36, higher percentage time at home was observed with CPX-351 (range: 80% to 98%) vs VEN-AZA (range: 75% to 90%), also typically ~5% to 10% higher per month (monthly difference range: +3 to +12%)
- In patients aged <60 years, the overall mean percentage time at home was 73% for CPX-351 vs 54% for VEN-AZA
- In patients aged ≥70 years, the overall mean percentage time at home was 71% for CPX-351 vs 70% for VEN-AZA

Time At Home for Patients With sAML Treated With 1L CPX-351 or 1L VEN-AZA Who Underwent HCT and Who did not Undergo HCT

- In patients who underwent HCT, the overall mean percentage time at home was 76% for CPX-351 vs 71% for VEN-AZA
- In patients who did not undergo HCT, the overall mean percentage time at home was 55% for CPX-351 vs 69% for VEN-AZA
 - The lower percentage time at home for CPX-351 is likely due to the higher proportion of patients proceeding to HCT post–CPX-351 vs post–VEN-AZA treatment (38% vs 5%), enriching the CPX-351–treated non-HCT group with non-responders

Time At Home for Patients With sAML Treated With 1L CPX-351 or 1L VEN-AZA With and Without Comorbidities

- In patients with comorbidities, the overall mean percentage time at home was 66% for CPX-351 vs 69% for VEN-AZA
- In patients without comorbidities, the overall mean percentage time at home was 74% for CPX-351 vs 68% for VEN-AZA

Conclusions

- Time at home is an important consideration for patient experience and treatment choice.¹ This large real-world analysis quantifies the acute and chronic burden on patients with sAML when treated with CPX-351 or VEN-AZA
- These data highlighted that during early months of treatment, patients with sAML treated with VEN-AZA spent more days at home vs CPX-351; however, this benefit ended at approximately 7 months, and after this, patients treated with CPX-351 consistently spent more days at home per month and overall
 - This benefit was seen regardless of age
- This aligns with previous findings that IC results in more days spent at home vs venetoclax plus hypomethylating agents, and this benefit is likely to increase with successful implementation of outpatient delivery models for IC¹⁻³
- While this analysis stratified for confounders (e.g., age, HCT, comorbidities), interpretation was limited by the small patient numbers in some subgroups (e.g., patients aged <60 years treated with VEN-AZA, low HCT rate with VEN-AZA but high HCT rate with CPX-351). Results were also not randomized or propensity-matched, with potential bias with regards to how patients were selected for either therapy
- These findings are important for informed 1L treatment decisions for sAML between patients, carers, and their healthcare team