ANALYSIS OF DOSE REDUCTION OF IBRUTINIB IN CHRONIC LYMPHOCYTIC LEUKAEMIA

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Background and Importance

Many patients who are treated with ibrutinib require dose reduction (DR) or even discontinuation of treatment due to comorbidities, drug interactions and adverse effects (AE). This DR may lead to a compromise in treatment effectiveness of chronic lymphocytic leukaemia (CLL).

Aim and Objetives

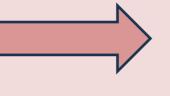
The aim is to evaluate the reasons for DR of ibrutinib and consequences on effectiveness and disease progression.

Material and Methods

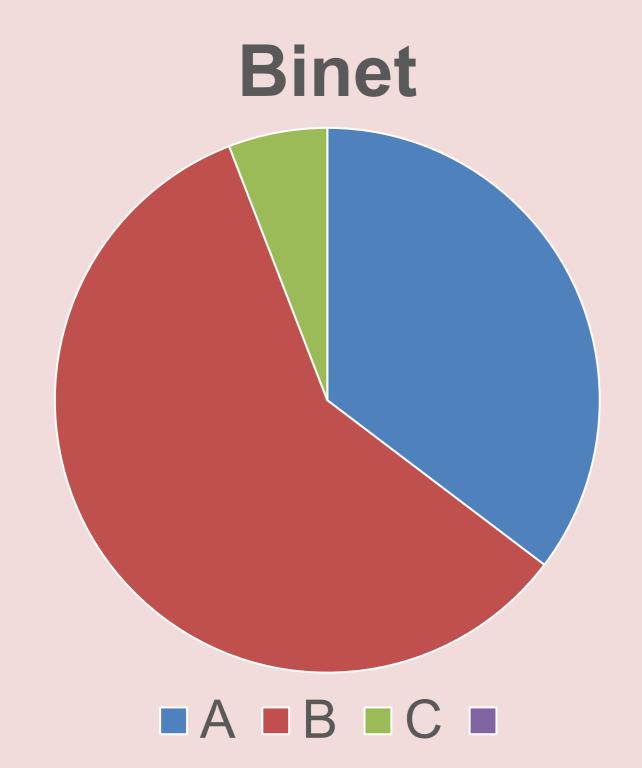
- ✓ Retrospective observational study: January-2017 to September-2024
- ✓ Data collected: sex, age, Eastern Cooperative Oncology Group (ECOG), Binet Staging System, line of therapy, reduced doses, reasons of DR, AE, treatment duration, response (complete or partial) and progression-free survival (PFS). Presence of high-risk cytogenetics, including patients with poor prognosis, were determined: deletion(17p) and TP53 mutation (del(17p)/mutTP53) and immunoglobulin heavy-chain variable region gene (IGHV).
- ✓ Data was obtained from electronic prescription with the application Prisma® and electronic health records with Diraya®.

Results

69 patients with LLC and ibrutinib



50.7% patients dose reduction



Median age: 77 (74.5-85.9) years 55% male



- Unmutated IGHV and no del(17p)/mutTP53
- Mutated IGHV and no del(17p)/mutTP53
- del(17p)/mutTP53

Duration of treatment with ibrutinib	37.5 (17.9 – 61.8) months
PFS	29.3 (20-66.5) months
Complete response	62.8%
Deaths	20%

Reasons for dose reduction

2.8% Drugs interaction 97.2% Adverse effects

- √ 42.8 % gastrointestinal
- ✓ 11.4% asthenia
- ✓ 22.8% haemorrhages
- ✓ 8.5% thrombopenia
- ✓ 11.4% arthralgia
- ✓ 5.7% cardiac events

Conclusion and Relevance

In patients requiring DR of ibrutinib, it does not influence treatment response or disease progression. However, further studies are needed to assess the possibility of optimising treatment with DR to avoid the usual EA of this drug.

