Patterns of Duvelisib-Induced Lymphocytosis in Patients With Relapsed/Refractory Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma Including Those With High-Risk Factors Treated in the DUO Trial

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BACKGROUND
- Lymphocytosis is a defining feature of chronic lymphocytic leukemia (CLL) and a recognized effect of treatment with Bruton’s tyrosine kinase (BTK) and phosphoinositide 3-kinase (PI3K)-δ/γ inhibitors, including ibrutinib (PI3K-δ inhibitor) and idelalisib (PI3K-δ inhibitor).
- Duvelisib (DUV) is a first-in-class oral dual PI3K-δ/γ inhibitor approved by the US Food and Drug Administration for the treatment of patients with relapsed/refractory (R/R) CLL or small lymphocytic lymphoma (SLL) after ≥ 2 prior therapies.

METHODS
- Study Design: DUO Trial
- Objective: Herein, we aimed to characterize the clinical profile and kinetics associated with DUV-related lymphocytosis in patients with R/R CLL/SLL, including the influence of patients with a solid tumor microenvironment who received DUV vs BR in the DUO trial.

RESULTS
- DUV significantly improved median time to onset of lymphocytosis (1.1 weeks [range, 0.9-69.3 weeks]) and median time to resolution of lymphocytosis (12.6 weeks [range, 1.1-63.0 weeks]) in patients with R/R CLL/SLL.
- Approximately one-third of patients (DUV, 31%; OFA, 33%) had del(17p) and/or del(11q), which may account for the lower time to PR in these patients.
- Grade 4 cytopenia(s) were observed in 16% of patients receiving DUV compared with 25% receiving OFA.

CONCLUSIONS
- Duvelisib monotherapy induced rapid lymphocytosis that occurred within 1 week of treatment.
- Lymphocytosis was transient and resolved after approximately 14 weeks.

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REFERENCES

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