Abstract Topic: 6. Chronic lymphocytic leukemia and related disorders - Clinical

#### EHA-7109

PROMOTING TREATMENT ADHERENCE IN SECONDARY IMMUNE DEFICIENCIES: EVALUATING THE ROLE OF SCIG PUMP SELECTION IN IMPROVING PATIENT OUTCOMES

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# **Background:**

Secondary immune deficiencies (SIDs) are an increasing concern in the medical community. Conditions under this rubric include immune deficiencies directly caused by a disease state, or they may be iatrogenic—consequent to medical treatment—such as chemotherapy administered to treat cancer. They are often treated with immunoglobulin. This study examines results from a large data set collected by a specialty pharmacy. All patients included in the study had SID and were being treated with subcutaneous immunoglobulin (SC) and/or intravenous (IV) therapy. In the study interval, some patients stayed on one route of administration (SC or IV) whereas others switched.

### Aims:

This study examines the characteristics of SID patients and investigates factors related to treatment adherence, specifically focusing on the role of subcutaneous immunoglobulin (SCIG) pump selection.

### Methods:

Data on were collected by a specialty pharmacy on 23,955 patients undergoing immunoglobulin therapy. Of these, 816 SID patients were treated subcutaneously at some point, and were included in the study. Data were collected on gender, age, frequency and date of drug delivery, pump and pump manufacturer, and whether the patient switched from SC to IV or vice versa.

## Results:

475 of 816 had records of drug deliveries for more than one year. Of these, 315 had drug deliveries of more than 2 years and 184 had records extending for more than 3 years. Adherence to their original protocols using a specific SCIG mechanical pump were 80.5%, 77.8%, and 72.3%, respectively, for patients with drug deliveries for > 1 year, > 2 years, and > 3 years.

Most patients were treated with a specific mechanical pump and underwent SC treatment exclusively (709 of 816, 86.9%), and most patients continued to be treated with the same pump throughout the study. In this group of patients there were 14,507 drug deliveries, for an average of 20.5 deliveries per patient. The average number of days between deliveries was 30.5 days. Considering the Gregorian calendar's mean month length of 30.44 days, adherence to SCIG therapy with this pump manufacturer was calculated at 99.8%.

Mean age was 49.4 years, and 62.9% were female. Mean time on therapy was 920 days.

## **Summary/Conclusion:**

Our findings demonstrate high levels of adherence and sustained treatment patterns in patients with secondary immune deficiencies (SID) using a specific SCIG mechanical pump. These results emphasize the therapy's effectiveness and potential in managing secondary immune deficiencies, highlighting its capacity to improve patient outcomes. Additional research is needed to determine if differences in adherence to initial protocols may differ by age and potentially gender.

**Keywords:** Immune deficiency, Therapy, Subcutaneous, Secondary