Biologic treatment patterns and phenotyping in severe uncontrolled asthma: a multinational study

HSD14

Christine MAI, Dr (MD)[1], Andrei Horia SEFERIAN, Dr (MD)[2], Stéphane DENIAU, MSc,Eng.[3], Manuel GUZMAN MARTIN, Msc.[4], Bertrand De BUHREN, Dr (Ph)[4], Justin FRANCOIS, Msc.[4], Stéphanie PETIT, Msc.[4], Aysheh ALI, Msc.[4]

[1]AplusA Real World, Lyon, France, [2]Faculté de Médecine, Université Paris-Saclay, INSERM UMR_S999, Hôpital Bicêtre, Le Kremlin-Bicêtre, Paris, France, [3]RWE BU Director - AplusA Real World, A+A SAS, Lyon, France, [4]AplusA, Lyon, France.

INTRODUCTION

The management of severe uncontrolled asthma (SUA) has been a primary focus for healthcare providers over the past 15 years driven by the substantial morbidity, healthcare utilization and reduced quality of life associated with this condition[1].

While monoclonal antibodies that target IgE or type-2 cytokines such as interleukin-4, -5 and -13 and their receptors have shown efficacy in reducing exacerbations, improving lung function and decreasing corticosteroid dependency, they are not suitable for non-allergic and non-eosinophilic asthma.[2]

For these individuals, the recent introduction of Tezepelumab – an antibody that targets thymic stromal lymphopoietin (TSLP) marks the first biologic therapy available for this phenotype[3].

OBJECTIVE

Collection of Real-world Data on the management of SUA in different countries, trend analysis in standard SUA evaluations and biologic prescriptions

METHOD

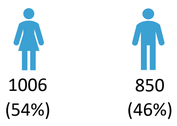
- Anonymous patient charts from biologics prescribers (general practitioners, pulmonologists or other specialists) from France, Germany, Italy, Spain, United Kingdom, Japan and Canada.
- Data collection interval : December 2024 till February 2025.
- A total of 1856 patients diagnosed with SUA.
- Analysis included comprehensive clinical, functional and biological data collection.

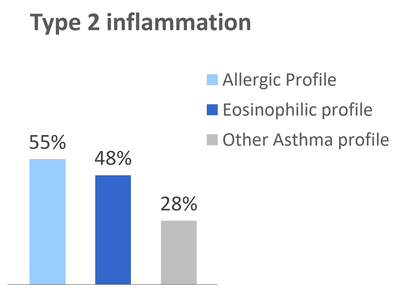
RESULTS

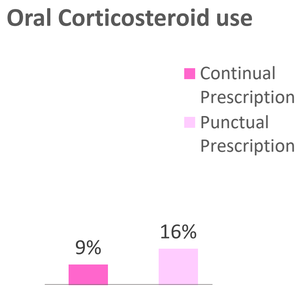
1. DEMOGRAPHIC AND CLINICAL CHARACTERISTICS OF THE PATIENTS AT BASELINE

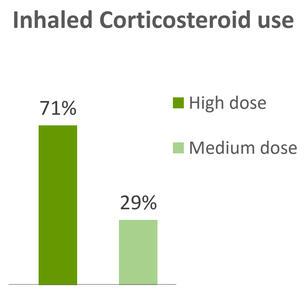
MEDIAN AGE **48 y.o**

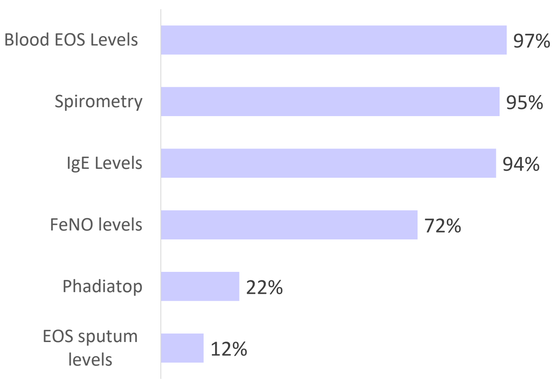
SEX

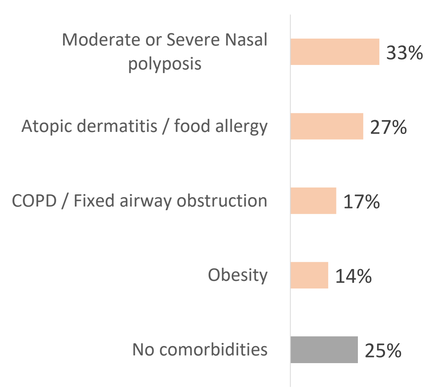




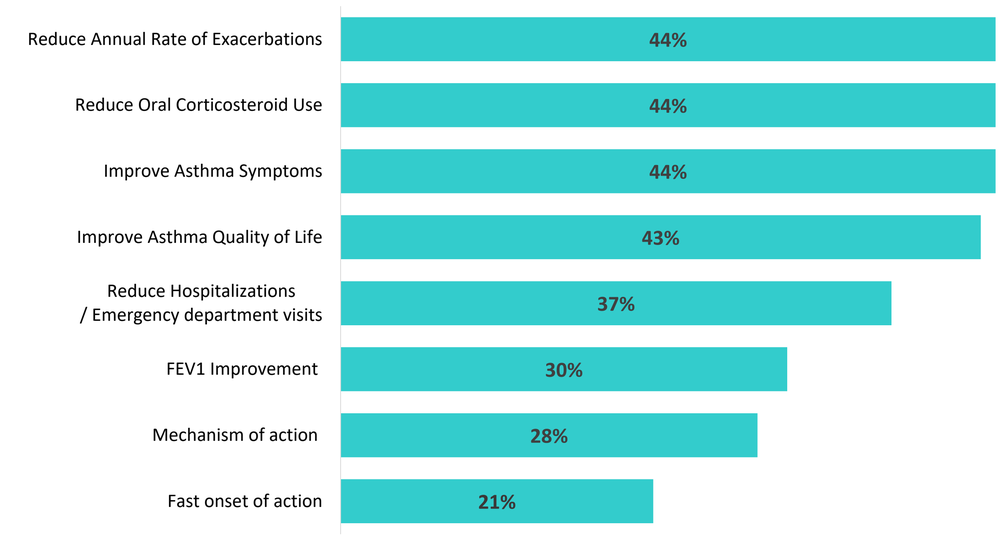




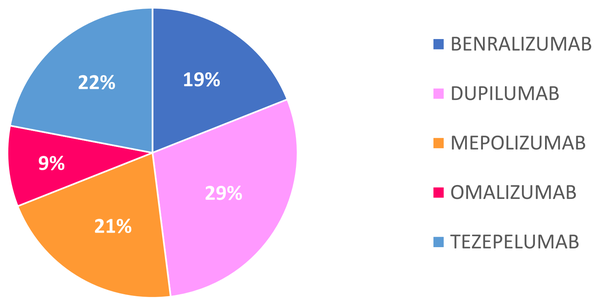




2. REASONS FOR BIOLOGICS USE



3. SEVERE UNCONTROLLED ASTHMA BIOLOGICS USED



DISCUSSION

- 68% of the patients had biologics prescribed for the 1st time, 30% were on 2nd line and 2% were on 3rd line, which is in line with expected data as clinicians tend to include more newly diagnosed patients;
- Efficacy evaluation for biologics occurred after a median period of 6 months since time of initiation – as recommended by the international guidelines;
- Typical average use for a biologic was 18.6 months before switching for lack of efficacy in 44% of the situations;
- There is still no consensus on the total duration for Biologics use in SUA, patients might be experiencing the same symptoms as at time of diagnosis with a tendency towards a weaker response on rechallenging[4].

CONCLUSIONS

EVEN WITH THE INTRODUCTION OF TEZEPELUMAB AND ITS BROAD INDICATIONS, PRECISE ASTHMA PHENOTYPING REMAINS ESSENTIAL TO GUIDE THE SELECTION OF THE MOST APPROPRIATE BIOLOGIC THERAPY FOR PATIENTS WITH SUA.

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CONTACT INFORMATION

Stéphane DENIAU s.deniau@aplusaresearch.com