EXPLORING THE EVOLUTION OF USTEKINUMAB IN PSORIASIS TO INFORM THE FUTURE OF DUPILUMAB IN ATOPIC DERMATITIS

Hannah Brown[1], Elizabeth Baynton[1], Georgia Giannakopoulou[1], Hamizah Hamdan[2], NurSyamira MohdNazri[2]

[1]Ipsos, London, United Kingdom, [2]Ipsos, Kuala Lumpur, Malaysia

EADV 2022 | Milan | Italy | 7-10 September 2022

E-Poster number: P0473

BACKGROUND

- Psoriasis (PsO) and atopic dermatitis (AD) are chronic inflammatory skin diseases and, although distinct conditions, are characterised by similar pathogenetic factors [1].
- The interleukin (IL)-12/23 axis is a significant pathway in the disease pathogenesis of psoriasis, which can be inhibited by first-in-class ustekinumab [2].
- Dupilumab launched in the moderate-severe AD market in 2017, introducing a new frontier of treatment to a market where topical treatments were the mainstay [3].

OBJECTIVE

To assess the evolution of biologic treatment usage across both indications to determine if any parallels can be drawn; comparing ustekinumab usage over time in PsO with dupilumab usage in AD, as a proxy for this objective.

METHOD

Study Design

- The Ipsos PsO Therapy Monitor and Ipsos AD Therapy Monitor, multi-centre online medical chart review studies of patients with PsO and AD, respectively, were conducted in Q4 (October – December) of 2010, 2014, 2018 and 2021 for PsO, and Q2 (April – June) 2020 and Q4 (October – December) 2021 for AD.
- A sample of physicians in UK, FR, DE, IT and ES practicing across hospital and private practices provided data on a sample of de-identified PsO and AD patients they personally manage.

Study Population

HCP (Healthcare Professional) inclusion criteria

- Physicians were randomly recruited from a large panel to enable geographic representativeness

Each HCP had to satisfy the following criteria:

- Be a practicing dermatologist who prescribes advanced therapy (biologic/oral targeted therapy) to their moderate-severe Psoriasis (PsO/PsA) or AD patients (Psoriasis minimum: 2 per month; AD minimum: 1 per quarter)
- See ≥7 Psoriasis (PsO/PSA) patients per month (PsO study)
- See ≥15 moderate-severe AD patients per quarter (AD study)
- Have experience in managing PsO or AD for between 3 and 30 years

Patient inclusion criteria

Charts of patients with PsO receiving ustekinumab and moderate-severe AD patients receiving dupilumab were included in this analysis.

RESULTS

Approximately 230 physicians abstracted charts for 108 (Q4 2010), 226, (Q4 2014), 212 (Q4 2018) and 138 (Q4 2021) PsO patients treated with ustekinumab and approximately 215 physicians abstracted charts for 476 (Q2 2020) and 683 (Q4 2021) moderate-severe AD patients treated with dupilumab.

Table 1. PsO physician and reported patient sample size

PsO	Q4 2010	Q4 2014	Q4 2018	Q4 2021
Sampled physicians	241	219	230	222
Reported ustekinumab patients	108	226	212	138

Source: Ipsos Global PsO Therapy Monitor (October – December of following years: 2010, 2014, 2018 and 2021, data collected online. Participating physicians were primary treaters and saw a minimum number of patients per wave). Data are © Ipsos 2022, all rights reserved.

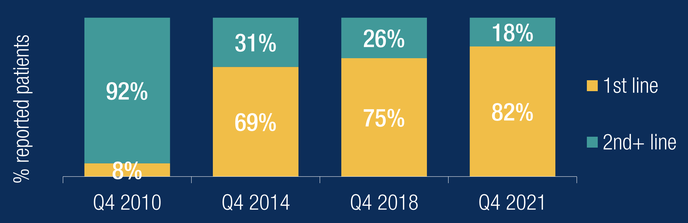
Table 2. AD physician and reported patient sample size

AD	Q2 2020	Q4 2021
Sampled physicians	215	211
Reported dupilumab patients	476	683

Source: Ipsos Global AD Therapy Monitor (April – June 2020 and October – December 2021, data collected online. Participating physicians were primary treaters and saw a minimum number of patients per wave). Data are © Ipsos 2022, all rights reserved.

In the reported PsO patient set in Q4 2010, usage of ustekinumab was focussed in the 2nd+ therapy line setting, i.e., after discontinuation of a different biologic in 1st line. However, successive data points saw usage increasingly concentrated towards 1st line (Fig 1).

Fig 1. Reported ustekinumab therapy line usage split in PsO



Source: Ipsos Global PsO Therapy Monitor (October – December of following year: 2010, 2014, 2018 and 2021, data collected online. Participating physicians were primary treaters and saw a minimum number of patients per wave). Data are © Ipsos 2022, all rights reserved.

When drawing comparisons against AD, usage of dupilumab within reported moderate-severe AD patients has increased over time (47% Q2 20, n=1019; 61% Q4 2021, n=1113), coinciding with increasing uptake within reported patients deemed to have moderate AD (sampled dermatologist interpretation) (Table 3).

Table 3. % reported dupilumab share amongst reported moderate AD patients

AD	Q2 2020	Q4 2021
Reported patients with 'moderate' AD severity (sampled physician interpretation)	696	731
% treated with dupilumab	39%	56%

Source: Ipsos Global AD Therapy Monitor (April – June 2020 and October – December 2021, data collected online. Participating physicians were primary treaters and saw a minimum number of patients per wave). Data are © Ipsos 2022, all rights reserved.

When analysing reasons why sampled dermatologists chose ustekinumab for their reported patients, 'convenient administration' is the most cited reason for every time point. In later timepoints, 'long term efficacy', 'safety profile' & 'familiarity/experience' became more prominent. 'Quality of life' is the most frequently cited reason by sampled dermatologists for using dupilumab in their reported AD patients; 'indication for AD' and 'no response to other treatments' has decreased since Q4 2021.

CONCLUSIONS

In this study cohort, ustekinumab usage in PsO progressively gravitated towards usage earlier in the treatment pathway, over time. This coincided with increasing sampled dermatologist familiarity and citation of efficacy and safety. Comparatively, dupilumab followed a similar pathway in AD, increasingly adopted in a more 'moderate' patient profile over time. It will be prudent to monitor to what extent dermatologist familiarity impacts the future treatment algorithm in the AD market, as new biologics and oral targeted options enter the fray. Further investigation using comparator cohort is warranted.

LIMITATIONS

The results reported in this study represent the perceptions of specialists participating in this study only and may vary from those of non-participating specialists.

DISCLOSURES

Authors were employees of Ipsos at the time of submission. There are no conflicts of interest to declare for any of the listed authors.

References:

[1] Lajos Kemény, Emese Varga & Zoltan Novak (2019): Advances in phototherapy for psoriasis and atopic dermatitis, Expert Review of Clinical Immunology. 2019; 15(11):1205-1214.

[2] Yeilding, N et al. Development of the IL-12/23 antagonist ustekinumab in psoriasis: past, present and future perspectives. 2011; 1222(1):30-39.

[3] de Wijs, L.E.M. et al. Effectiveness of dupilumab treatment in 95 patients with atopic dermatitis: daily practice data. 2019; 182(2):418-426.