THE PROPORTION OF PATIENTS ACHIEVING LOW BIOMARKER LEVELS WITH TEZEPELUMAB TREATMENT IN THE PHASE 3 NAVIGATOR STUDY

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10.1136/thorax-2023-BTSabstracts.415

Introduction and Objectives Tezepelumab reduces both blood eosinophil counts (BECs) and fractional exhaled nitric oxide (FeNO) levels versus placebo in patients with severe, uncontrolled asthma. The proportion of patients achieving low type 2 biomarker levels with tezepelumab treatment has not been previously evaluated. To assess the proportion of patients who achieved biomarker levels below those associated with an increased risk of asthma-related morbidity (BEC <150 cells/µL or <300 cells/µL; FeNO <25 ppb or <50 ppb) with tezepelumab versus placebo in the phase 3 NAVIGATOR study (NCT03347279).

Methods NAVIGATOR was a multicentre, randomized, double-blind, placebo-controlled study. Patients (12–80 years old) received tezepelumab 210 mg or placebo subcutaneously every 4 weeks for up to 52 weeks. BECs and FeNO levels were compared at baseline and week 52.

Results Overall, 528 and 531 patients received tezepelumab and placebo, respectively. At week 52, a greater proportion of tezepelumab recipients achieved BEC <150 cells/µL and <300 cells/µL, and FeNO levels <25 ppb and <50 ppb versus placebo recipients (figure 1).

Conclusion At week 52, most tezepelumab recipients in NAVIGATOR had maintained or reduced their biomarker levels to below those associated with an increased risk of asthma-related morbidity.

Please refer to page A295 for declarations of interest related to this abstract.

‘My way’ – Innovative pathways in asthma management

DIAGNOSIS TO TREATMENT: A UK COST-OF-ILLNESS STUDY OF THE ASTHMA CARE PATHWAY AND ITS IMPACT ON HEALTH, ENVIRONMENT AND SOCIETY

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10.1136/thorax-2023-BTSabstracts.416

Background Previous research has reported the possible economic and environmental impact of inhaler switching policies. However, there remains a lack of awareness of the entire asthma pathway from diagnosis to treatment and its ramifications on health, environment and society in the UK.

Aims We aim to understand the extent to which the asthma pathway has a wider impact in the UK through a comprehensive cost-of-illness model. From this, we can view the long-term consequences of poor asthma control and we can assess

Abstract M26 Figure 1 Number and percentage of patients with A) BECs <150 cells/µL, B) FeNO < 25 pb, C) BECs < 300 cells/µL and D) FeNO < 50 ppb baseline versus week 52

Data are presented as N (%). Percentages were calculated using the number of patients with data for BEC and FeNO levels at baseline and week 52. Baseline was defined as the last non-missing measurement recorded before randomization in NAVIGATOR. BEC, blood eosinophil count; FeNO, fractional exhaled nitric oxide; Q4W, every 4 weeks.
severe asthma centres. Only 80% of centres have capacity for rapid access – a key lesson from this analysis due to low response-rate.

Results show good national practice in alignment with guidance as recommended by the Accelerated Access Collaborative- Rapid uptake, Asthma biologics.1 However, some disparity exists in areas including access to dedicated pre-biologic counselling, initiation of biologic within <4 weeks, transfer onto homecare and variation in follow up. We propose that a national collaborative approach to ensure prompt, equitable access to care in this cohort is promoted.

REFERENCE
1. Asthma biologics toolkit – Oxford Academic Health Science Network (oxfordahsn.org) [Accessed 29/06/2023]

M29 IMPROVING ACCESS TO BIOLOGIC TREATMENTS FOR PATIENTS WITH SEVERE ASTHMA: DELIVERING AN 12 MONTH ACCELERATED ACCESS COLLABORATIVE PROJECT

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10.1136/thorax-2023-BTSabstracts.418

Introduction
Approximately 5.4 million people currently receive asthma treatment with an estimated 200,000 people having severe asthma.1 Despite taking maximal ‘conventional medication’ this patient group remain symptomatic. This has a significant impact and burden on the health economy.

Aims and Objectives
We implemented an enhanced severe asthma pathway in November 2021, aiming to optimise primary care referrals through training/education and increasing hospital and multidisciplinary team (MDT) clinic capacity.

Methods
We targeted GP practices in Stoke-on-Trent and Staffordshire ICB with high bronchodilator use and >2 courses of Prednisolone in the last 12 months. A nurse educator ran the SPECTRA tool to identify poorly controlled asthma and delivered bespoke educational sessions and offered 1:1 support.

Results
By November 2022, 564 patients across 28 GP practices had been reviewed for asthma biologics eligibility, of whom 125 were referred to secondary care (22.2%) with 87 patients starting biologics (69.6%).

Abstract M29 Table 1

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean wait from referral to 1st appointment</td>
<td>59% 10.7 vs 21.1 weeks p=0.002</td>
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<tr>
<td>Time from 1st appointment to flup</td>
<td>45% 13.3 vs 24.4 weeks p=0.001</td>
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<tr>
<td>Time from follow up to MDT discussion</td>
<td>63% 6.7 vs 17.9 weeks p=0.004</td>
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<tr>
<td>OCS use</td>
<td>60% p&lt;0.001</td>
</tr>
<tr>
<td>SABA prescribing</td>
<td>P=0.037</td>
</tr>
<tr>
<td>Exacerbations and hospital admissions</td>
<td>P=0.001</td>
</tr>
<tr>
<td>ACQ 6 score</td>
<td>3.13 to 1.89</td>
</tr>
</tbody>
</table>

Policies which advocate inhaler switching with cost or environmental motivations.

Method
The model captured the impact of the asthma care pathway on NHS costs, greenhouse gas (GHG) emissions, patient travel costs, health-related quality of life (HRQoL), and productivity loss. Model inputs were developed by a focused literature review, and clinical expert opinion. The analysis was conducted for the period 2022–2031, with projections to future years made based on historical data, and values presented in net present monetary value. Patients were categorised as Severe, Non-severe – uncontrolled and non-severe – controlled.

Results
The total impact of asthma in the UK was estimated to be £47bn between 2022–2031, with the majority (77%) of costs attributed to the loss of asthma control (i.e., worsening or exacerbation of symptoms) on HRQoL and productivity. The environmental impact expressed in monetary terms for the same period was £1.169bn. Per patient, severe asthma had the highest NHS costs, CO₂ emissions and patient travel costs followed by uncontrolled patients. In 2022, loss of asthma control is also estimated to lead to a 22% increase in NHS costs, and 65% in GHG emissions due to higher use of secondary care and reliever inhalers.

Conclusion
Asthma control significantly impacts patient’s HRQoL, the environment and economy with severe patients having the greatest impact. Policies directed in asthma management should be patient-centered and prioritise disease control to reduce healthcare resource utilisation and environmental impact.

M28 SEVERE ASTHMA, BIOLOGICAL THERAPY, AND HOME CARE: A REVIEW OF NATIONAL PRACTICE

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Background
Availability of biological therapy for severe asthma patients has rapidly expanded over the last few years. Increased treatment options for those appropriately identified comes with the challenge to provide equitable access to care, timely treatment initiation and monitoring whilst managing increasing referral numbers.

Our aim was to explore existing practice.

Methods
An online questionnaire was disseminated among UK severe asthma centres.

Results
Geographical representation across the United Kingdom was achieved with 33 severe asthma centres completing the questionnaire (31 adult/2 paediatric). Paediatrics was excluded from this analysis due to low response-rate.

Tertiary level care was provided by 14(45.2%) centres, secondary level care by 14(45.2%) centres. There was a variation in total biologic patient numbers: 24(77.4%) centres had <500 patients and 5(16.1%) had >500 patients. The estimated spread of biologic use amongst the centres was Omalizumab (21.0%), IL5 (67.0%) and IL4/13 (9.0%).

A dedicated pre-biologic counselling clinic was offered by only 13(42%) of centres; 29(93.5%) of centres ensure a steroid weaning plan is established at start of biologic initiation.

Time to initiation from approval ranged from 18(58.1%) within 4 weeks, 13(41.9%) >4 weeks.

Homecare self-administration is undertaken by 69.1% of the total cohort and a variability in timing of homecare training was seen across centres with 11(35.4%) of centres training at dose 1, 8(25.8%) at dose 2, 5(16.1%), at dose 3 and 3 (9.7%) and 3(9.7%) at >dose 4.

Face-to-face review of biologic response was performed annually in 16(51.6%) centres, bi-annually in 5(16.2%) centres, quarterly in 1(3.2%) centre and variable in 7(22.6%) of centres. Only 80% of centres have capacity for rapid access review of the deteriorating patient.

Conclusion
Results show good national practice in alignment with guidance as recommended by the Accelerated Access Collaborative- Rapid uptake, Asthma biologics.1 However, some disparity exists in areas including access to dedicated pre-biologic counselling, initiation of biologic within <4 weeks, transfer onto homecare and variation in follow up. We propose that a national collaborative approach to ensure prompt, equitable access to care in this cohort is promoted.

REFERENCE
1. Asthma biologics toolkit – Oxford Academic Health Science Network (oxfordahsn.org) [Accessed 29/06/2023]