corticosteroids. Research is required to define the criteria for patients who would benefit from such systematic inpatient assessment and the longterm outcomes of such intervention.

P206 UTILITY OF ADHERENCE CHECKS IN PATIENTS WITH SEVERE ASTHMA ELIGIBLE FOR BIOLOGICS: A SINGLE CENTRE RETROSPECTIVE ANALYSIS

ME Oliver, S Poole, C Borg, C Connolly, ID Pavord, TSC Hinks, S Couillard. *University of Oxford, Oxford, UK*

10.1136/thorax-2021-BTSAbstracts.315

Introduction United-Kingdom guidelines require good adherence to qualify for biologics, but reports suggest 25% of patients are nonadherent at time of initiation. The extent to which collaboration with a clinical pharmacist allows better fulfilment of guideline criteria has not been established.

Methods We retrospectively analysed adherence checks done in the Oxford Special Airways Clinic (Oxford, UK) prior to initiation of biologic treatment for severe asthma between Dec 2013 and Aug 2020. Adherence to inhaled corticosteroid and maintenance oral corticosteroids (OCS) was defined as $\geq 75\%$ of prescriptions collected out of the total expected in 1 year. Other guideline criteria for biologics are ≥ 3 OCS bursts and/or $\geq 50\%$ of previous year on maintenance OCS in optimally-treated severe asthma.

Results 280 of 289 patients on biologics had a pre-biologic adherence check available. The median adherence to ICS was 100% (IQR: 83%-100%) and the median number of asthma attacks in the previous year was 3 (IQR 1-6). Overall adherence and compliance with pharmaceutical criteria for biologics was shown in 249 patients (89%).

Conclusion An adherence check by a clinical pharmacist prior to initiating a biologic for severe asthma is associated with 89% compliance to prescription guidelines, emphasising the importance of multidisciplinary work.

Please refer to page A193 for declarations of interest related to this abstract.

P207 STEROID REDUCTION WITH OMALIZUMAB IN SEVERE ALLERGIC ASTHMA

¹L Elsey, ¹A Jefferson, ²SJ Fowler, ¹L Maguire, ¹S Khurana, ¹CT Pantin. ¹Manchester University NHS Foundation Trust, Manchester, UK; ²University of Manchester, Manchester, UK

10.1136/thorax-2021-BTSAbstracts.316

Introduction Omalizumab is a subcutaneous monoclonal antibody (MAB) which is licenced in the treatment of severe persistent allergic asthma. It works by binding to IgE, preventing activation of mast cells and basophils and reducing release of inflammatory mediators. The anti-IL-5 MABs used in severe asthma have been widely researched to show their steroid reducing capabilities. According to the NICE guidelines for omalizumab, patients require at least 4 courses of prednisolone to qualify. Little research has been done into its potential for steroid reduction.

Aim To assess the impact of omalizumab therapy on maintenance steroid dose and acute corticosteroid courses.

Method A retrospective review was carried out of patients starting omalizumab after MDT approval. We investigated oral

Abstract P207 Table 1 Clinical outcomes over the first 12 months of omalizumab treatment. Significance level (p) in change versus baseline by Wilcoxon signed ranks test

	n	Baseline	n	12 mo	p
ACQ	67	3.16 (2.15–3.83)	46	2.16 (1.31–2.79)	<0.05
AQLQ	65	3.3 (2.46–4.66)	37	4.83 (3.66–5.7)	<0.05
FEV1% predicted	57	65 (52–81.5)	24	65.5 (56.75–77.5)	0.45
FeNO ppb	53	21 (13–36)	27	24 (13.5–40)	0.17
Blood eosinophils x10 ⁹ /L	66	0.24 (0.11–0.40)	25	0.2 (0.15–0.32)	0.62
Adherence% pickup	63	91 (76–100)	28	90.5 (77.5–100)	0.90

ACQ: asthma control questionnaire; AQLQ: asthma quality of life questionnaire; FeNO: fractional exhaled nitric oxide.

corticosteroid dose (OCS), asthma control, blood eosinophils, FEV1/FVC, FeNO, adherence to ICS and exacerbation frequency over the first 12 months of treatment. Data were non-normally distributed and reported as median (interquartile range), and between-group comparisons made using Mann-Whitney U test

Results 71 patients were included (36 male). 25 patients were on a maintenance oral prednisolone dose at initiation of omalizumab [median (IQR) 10 (7.5–15) mg/d]. The dose reduced by 12 months of treatment (median (IQR) 7.5 (6.25–10) (p<0.05)). Patients had minimum four exacerbations in the year preceding omalizumab initiation; over the first year of treatment this reduced to median (IQR) 0 (1). There was also a significant improvement in ACQ and AQLQ scores (see table 1).

Conclusion The original trials for omalizumab focussed on improvement in lung functions and asthma control. The introduction of anti-IL5 MABs has switched the focus to reduction in steroid exposure. The results show that patients on maintenance steroids can achieve a reduction in steroid dose and exacerbations whilst on omalizumab. Alongside this they can improve their asthma control and quality of life. Monitoring of adherence to inhaled corticosteroids has shown ongoing compliance. We previously found a 50% non-compliance rate in our omalizumab patients. We feel this shows service improvements implemented have led to improved compliance to ICS.

REFERENCE

1. NICE TA28 Omalizumab for treating severe persistent allergic asthma. April 2018. <https://www.nice.org.uk/guidance/ta278> <accessed 01/06/2021>

P208 DOES OBESITY AFFECT FRACTIONAL EXHALED NITRIC OXIDE INTERPRETATION IN DIFFICULT ASTHMA?

^{1,2}V Sharma, ^{1,2}HC Ricketts, ²A Goodfellow, ²F Steffensen, ^{1,2}DC Cowan. ¹University of Glasgow, Glasgow, UK; ²Glasgow Royal Infirmary, Glasgow, UK

10.1136/thorax-2021-BTSAbstracts.317

Introduction Obesity-associated asthma is a difficult-to-treat phenotype linked with poorer disease control, reduced quality of life and increased morbidity and mortality. This phenotype coupled with type 2 (T2)-high inflammation may respond to currently available biologic treatments. Previous studies have