with exacerbations defined as asthma related hospital, accident and emergency or out-of-hours attendance, GP consultations for lower respiratory tract infection and/or use of acute oral steroids (where asthma related includes all events with a lower respiratory Read code). All patients had 2 years of data: 1 year before and 1 year post therapy switch.

Results Out of a total of 365 patients, 334 had complete data for the analysis. 80 of these received a lower dose of BDP/FOR while 254 received an equivalent dose. In the year immediately before their therapy review, 69.5% (n=232) of patients had no exacerbations, compared to 76.9% (n=257) of patients following the review (p=0.075 Wilcoxon signed ranks). Prior to review, 20.4% of patients had 1 exacerbation compared with 12.0% of patients after the change, while 10.2% of patients had >1 exacerbation compared with 11.1% of patients following the review.

Conclusion These data suggest an increase in the number of patients not suffering from exacerbations and no deterioration in the number of exacerbations following the alteration in therapy. This indicates that BDP/FOR can be a valid therapy change in real-world patients on existing FDC ICS/LABA therapy.

P3 OXIDATIVE DISTRESS AND ANTIOXIDANTS IN SEVERE ASTHMA

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Background The role played by oxidative stress (OS) burden and antioxidant (AO) defences in severe asthma (SA) have been inconsistent.

Aims To compare levels of OS markers and AO between subtypes of SA, mild asthma (MA) and control (N).

Methods A longitudinal case control study (2009–2010) included 15 N, 15 corticosteroid naïve MA, 10 SA not dependent on oral corticosteroids (OCS), 10 SA dependent on OCS (NOCS) and 10 type-1 brittle asthma (BA). Subjects taking vitamin supplementation were excluded. Serum AO – vitamin A (vit-A) and E (vit-E), copper(Cu), selenium(s) and zinc (Zn) were measured at first visit. Exhaled breath condensate (EBC) nitrate and 8-isoprostane(iSo), Fractional exhaled Nitric Oxide (FeNO) were measured on 3 visits 3 weeks apart as markers of OS. OS and AO markers were correlated with asthma-severity.

Results Sixty subjects were recruited (16 males, age 19–57 yrs). 8-iSo was not detectable in all of our samples. Significant correlations (p<0.05) between AO and OS markers are given in the table below

Abstract P3 Table 1

	Vit A	Vit E	Cu	Se	Zn
FEV1	–0.268	–0.436	–0.367	NS	NS
FeNO	0.286	NS	NS	NS	NS
EBC nitrate	0.369	NS	NS	NS	NS

NS- not significant.

Between group analyses revealed correlation of FeNO with increasing asthma-severity, but EBC nitrate did not differ significantly amongst the 5 groups. Vit-A was significantly higher in OCS group, and vit-E was significantly higher in the OCS, NOCS and BA groups as compared to N. There was no significant difference between the 5 groups in Cu, Zn or Se levels. Regression analysis identified age, height, and vit-E as best predictors of FEV1.

Conclusion This study indicates paradoxically increased levels of some of the AO in severe asthmatics. We hypothesise that the mechanics by which AO counteracts the OS in severe asthmatics could be impaired rather than AO deficiency. This needs to be researched further in larger studies.

P4 OMALIZUMAB: A NATIONAL REVIEW OF PRACTISE ACROSS THE UNITED KINGDOM

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A varied approach to the initiation, assessment and delivery of Omalizumab across the United Kingdom has been observed. To analyse the disparity in practize a questionnaire was disseminated to centres administering Omalizumab. Completed questionnaires n=43 (32.5% paediatric/67.5% adult). Questions asked were specific to the initiation, assessment and delivery of Omalizumab, the results identified a wide disparity in practize.

Adherence assessment prior to Omalizumab initiation was completed by all centres; however there was a varied approach of each centre in their assessment. 90.6% assessed prescription records, 74.4% questioned patients regarding medication adherence, 32.5% measured prednisolone levels and 4.6% utilised a validated questionnaire (4.6%) Longitudinally 48.8% continue to monitor adherence every 0–6 months, 27.9% every 6–12 months whilst 11.6% do not cheque adherence long term. Centres were diverse in their period of recommended observation post first dose. 4.6% advocate a 0–60 minute observation, 25.5% 1–2hrs, 39.5%, 2–3 hrs and 23.3% >4hrs, subsequent dose administration also varied across centre 37.2% advocated a 0–30min observation, 25.5% a 30–60min period and 11.6% 2–3hrs (11.6%). Paediatric centres advocated a longer observation period post injection. Across centres there is a huge inconsistency in weight observation 46.5% of centres weigh patients each visit, 27.9% 1–3 monthly and 16.2% 3–6 monthly. Dose of Omalizumab is only altered specific to weight fluctuation by 60.4% of which a higher percentage is practised in paediatric compared to adult centres (71.4%/55.1%). Out of dosing range prescribing is undertaken by 57.1% (paediatric) 29% (adult). Use of adrenaline auto injectors were not advocated by 60.4% of the centres, of the remaining 39.5% who advocate adrenaline auto injectors only 47% of this population have specific guidance relating to length of time to keep the injector available.

Results of this audit provide evidence for the requirement for national evidence based guidelines, to procure a standardised collaborative approach regarding the use of Omalizumab for patients with severe persistent allergic asthma, with this in situ best practise can be delivered throughout the United Kingdom.

P5 INTRODUCING BRONCHIAL THERMOPLASTY TREATMENT INTO A SEVERE ASTHMA CLINICAL SERVICE

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Introduction and Objectives Bronchial thermoplasty involves the delivery of radio frequency energy to the airways during flexible bronchoscopy, and possibly exerts its effect by reduction of airway smooth muscle mass (1). Clinical trials of bronchial thermoplasty have shown benefits in the treatment of patients with moderate or severe asthma. We describe our experience of introducing bronchial thermoplasty into a severe asthma clinical service.

Methods Funding was obtained from the Greater Glasgow and Clyde NHS Health Board to evaluate bronchial thermoplasty in the treatment of ten patients with moderate to severe asthma. Patients were assessed at the Difficult Asthma Clinic and selected for the procedure using criteria similar to those employed in clinical trials of bronchial thermoplasty. Patients on all forms of asthma medication were eligible for treatment including omalizumab and oral

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