Methods We performed a retrospective analysis of adult patients with SEA who had received Mepolizumab and Benralizumab at our tertiary severe asthma centre. Clinical characteristics including asthma control (ACQ6), annualised exacerbation rate (AER), maintenance OCS (mOCS) requirements and T2 biomarkers were recorded at baseline and at regular intervals throughout the first year of treatment. Patients were stratified into quartiles according to their baseline FeNO and the clinical effectiveness of mepolizumab and benralizumab compared between FeNO groups.

Results 229 patients (99 mepolizumab, 130 benralizumab) were included in the analysis. Stratifying the cohort according to baseline FeNO produced quartile ranges of <26, 26–43, 44–74 and >74. With the exception of FeNO there was no difference in baseline characteristics between the FeNO groups. Both mepolizumab and benralizumab significantly improved all clinical outcome measures of interest, however, the degree of clinical response did not appear to differ between the FeNO groups (figure 1). Following initiation of anti-IL5/5R treatment, numerically large and statistically significant reductions in FeNO level was seen in only the highest FeNO quartile (Q4): baseline median FeNO 96ppb (IQR 85-136ppb), 1 year median 64.5ppb (IQR 37-107), p <0.001.

Conclusion Although FeNO is a biomarker of IL-13 biology, we highlight that high FeNO is associated with an excellent response to anti-IL5/5R therapies in a real-world setting. This calls into question the unproven notion that severe eosinophilic patients with high baseline FeNO may derive superior outcomes with dupilumab as compared to mepolizumab or benralizumab.

P104 DOES ASTHMA CONTROL CHANGE FOLLOWING TRANSITION TO HOME BENRALIZUMAB ADMINISTRATION?

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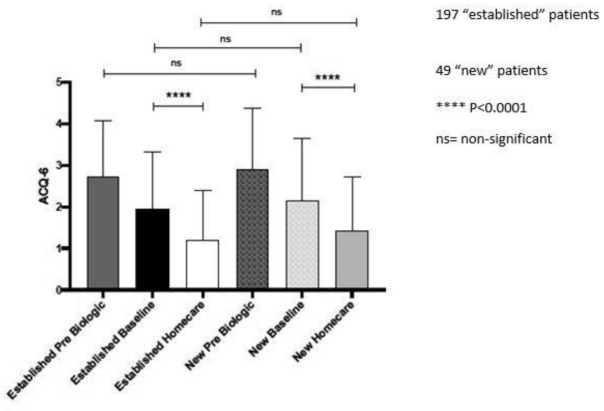
Introduction The COVID-19 pandemic necessitated the rapid transition of large numbers of patients onto homecare to facilitate on-going therapy in a cohort of patients who were 'shielding'. Alongside this, patients continued to need to be initiated on biologic therapy in spite of the pandemic. The impact of administering biologic therapy at home is largely unknown, yet crucial to optimise patient outcome and minimise steroid burden. We investigated whether there was a differential response following transition to homecare of established patients versus those newly started.

Methods Patients with severe eosinophilic asthma receiving home benralizumab were stratified according to those who had received ≥3 doses prior to COVID-19 lockdown on the 15th March 2020 ('established' patients) versus those who were initiated after this date ('new' patients). We compared the last Asthma Control Questionnaire-6 (ACQ6) measured in clinic with that collected by telephone consultation 8–12 weeks after transition to homecare. Patients were excluded if both values were not available.

Results 246 benralizumab patients were included in the analysis, of whom 49 (20%) were new. There was no significant difference in pre-biologic ACQ6, pre-homecare (baseline) ACQ6 or post-homecare ACQ6 between the new and established patient groups. Both cohorts exhibited a similar magnitude of improvement in their ACQ6 following the transition to homecare (-0.73 in the established group *vs* -0.73 in the new group, both P<0.0001) (figure 1).



Abstract P104 Figure 1 Change in ACQ6 following transition to home administration of benralizumab

Conclusions We have demonstrated that early transition to homecare in patients treated with benralizumab is not associated with worse clinical outcomes as assessed by ACQ6. The improvements in ACQ6 were seen irrespective of whether they were 'established' on therapy at time of transition or 'new'. Further research is required to understand the potential influence of lockdown and/or telephone vs face-to-face ACQ reporting.

P105 DOES ASTHMA CONTROL CHANGE WHEN PATIENTS TRANSITION TO HOME ADMINISTRATION OF MEPOLIZUMAB?

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Introduction Mepolizumab is a biologic agent targeting interleukin (IL)-5 which is currently licensed as add-on therapy for severe eosinophilic asthmatic (SEA). It is usually administered in a hospital setting but with the option of homecare being introduced in 2019, the 4-weekly subcutaneous injections can be self-administered at home. We investigated whether there was a change in asthma control following the transition to home administration and whether a differential response to treatment exists following transition to homecare before and after the onset of the COVID-19 pandemic.

Methods Patients receiving mepolizumab via home care were stratified according to those who had a planned transition to homecare prior to 1st Feb 2020 versus those who had an unplanned transition after this date necessitated by the COVID-19 pandemic. The last Asthma Control Questionnaire-6 (ACQ6) measured in clinic ('baseline') was compared with that collected by telephone consultation 6–8 weeks after transition ('homecare'). Patients were excluded if both values were not available.

Results Of 87 mepolizumab patients included in the analysis, 46 were planned transitions. There was no significant