

INTRODUCTION

The long term goal of asthma treatment is to achieve good control of patients' symptoms as well as the prevention of future adverse outcomes, including exacerbations, a rapid decline in lung function and side-effects of treatment¹. To improve adherence to therapy and reduce future exacerbations, a shared decision approach between patients and healthcare providers is essential in the management of their asthma. Regular contact with health care professional may also improve adherence to asthma therapy.

OBJECTIVES

To assess the impact of close monitoring of severe asthmatics by the RANP during the COVID-19 pandemic.

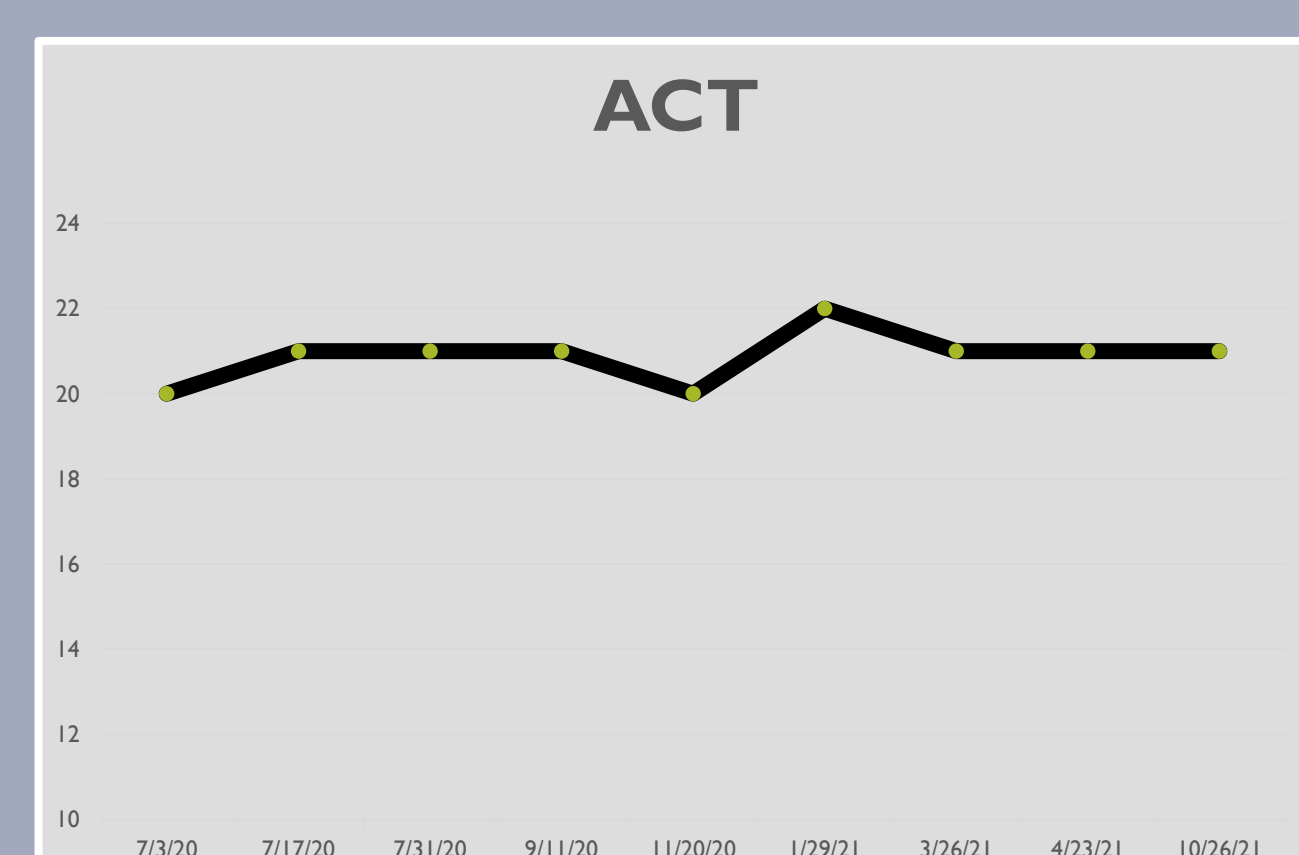
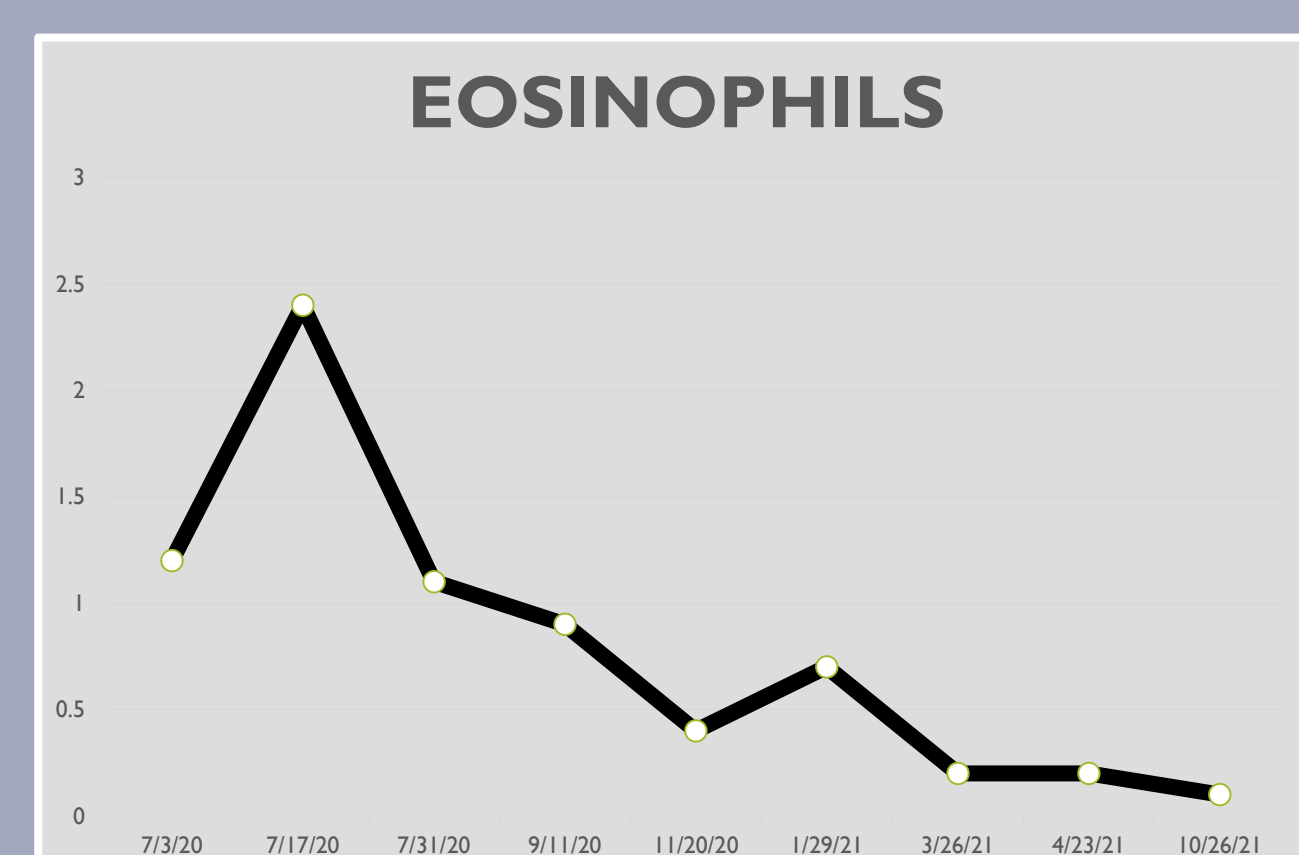
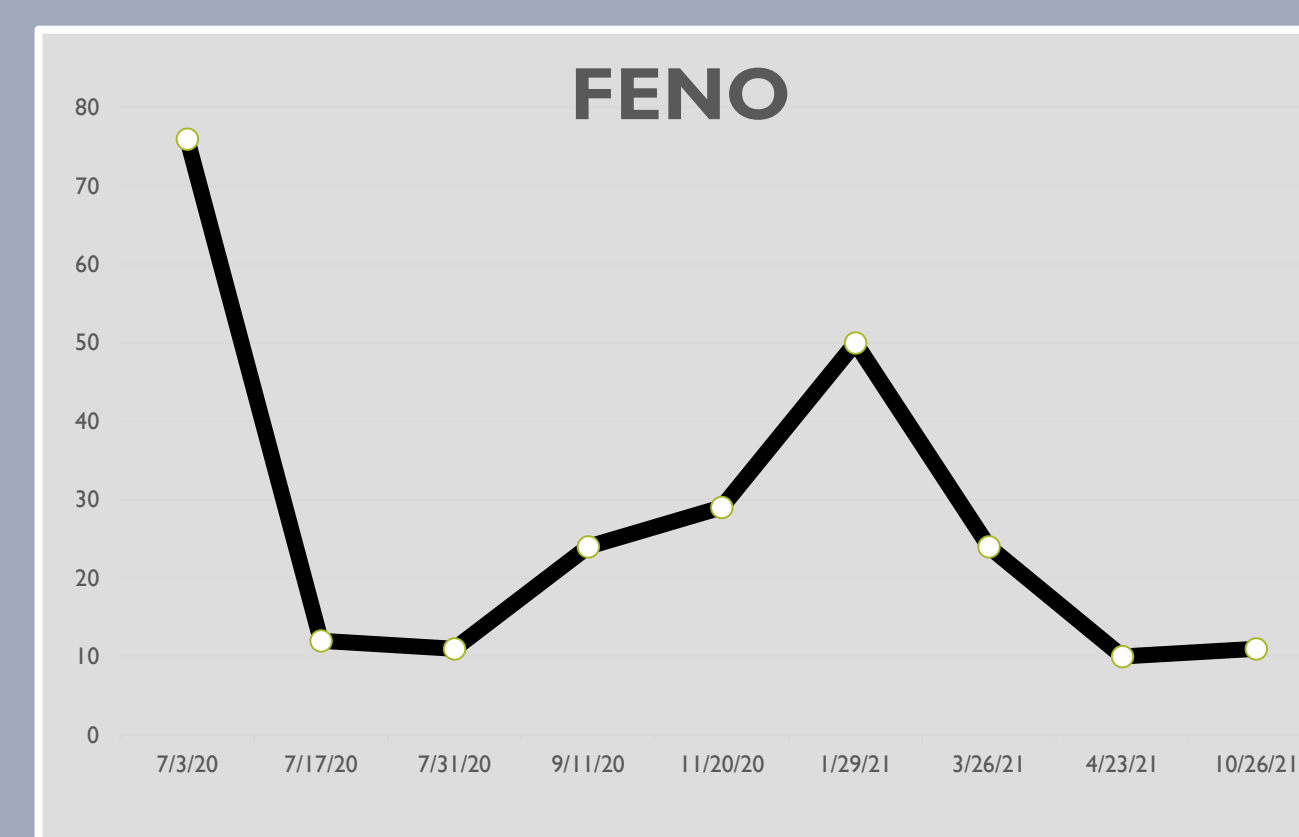
METHODS

Clinical progress of two severe asthmatic patients on Step 5 of GINA Guidelines on Omalizumab therapy was assessed over a one year period. Virtual clinics were conducted monthly and face to face clinics were conducted every 3 months. During face-to-face consultations, airway inflammation was assessed by blood eosinophils count and Exhaled Nitric Oxide (FeNO), symptoms scores were assessed using ACT score. Exacerbation history was also recorded at every face-face clinic and virtual clinics. Patients were given electronic PEFR meter and data was downloaded monthly. There was a focus on shared patient-health care provider decision making regarding asthma care on treatment decisions.

RESULTS

CASE STUDY 1 (23-yo, female)

- Good symptom control has been maintained with average ACT scores >20
- Shared decision making with the patient resulted in the successful discontinuing of inhaled LAMAs as good symptom control was achieved and maintained.
- Overall reduction in FENO levels, blood eosinophils and consistent PEFR reading were observed. The spike in FENO and blood eosinophils resulted from a trial withdrawal of additional ICS which was re-introduced to prevent future exacerbation.
- This patient had no exacerbations during this 1 year period.
- Patient experience: "My quality of life has definitely improved since my asthma has been so well controlled. I don't rely on my Ventolin like I used too and no longer feel anxious an exacerbation."

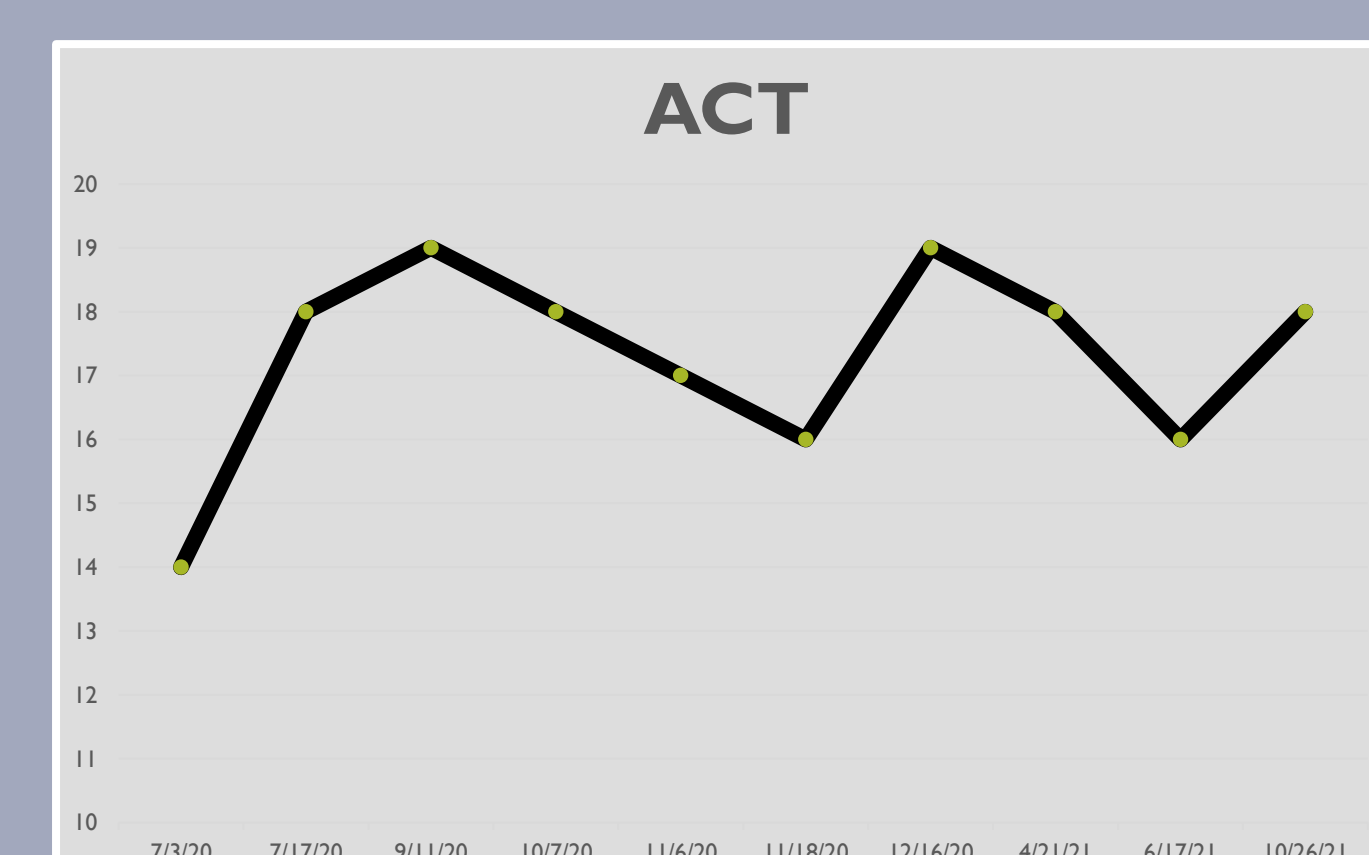
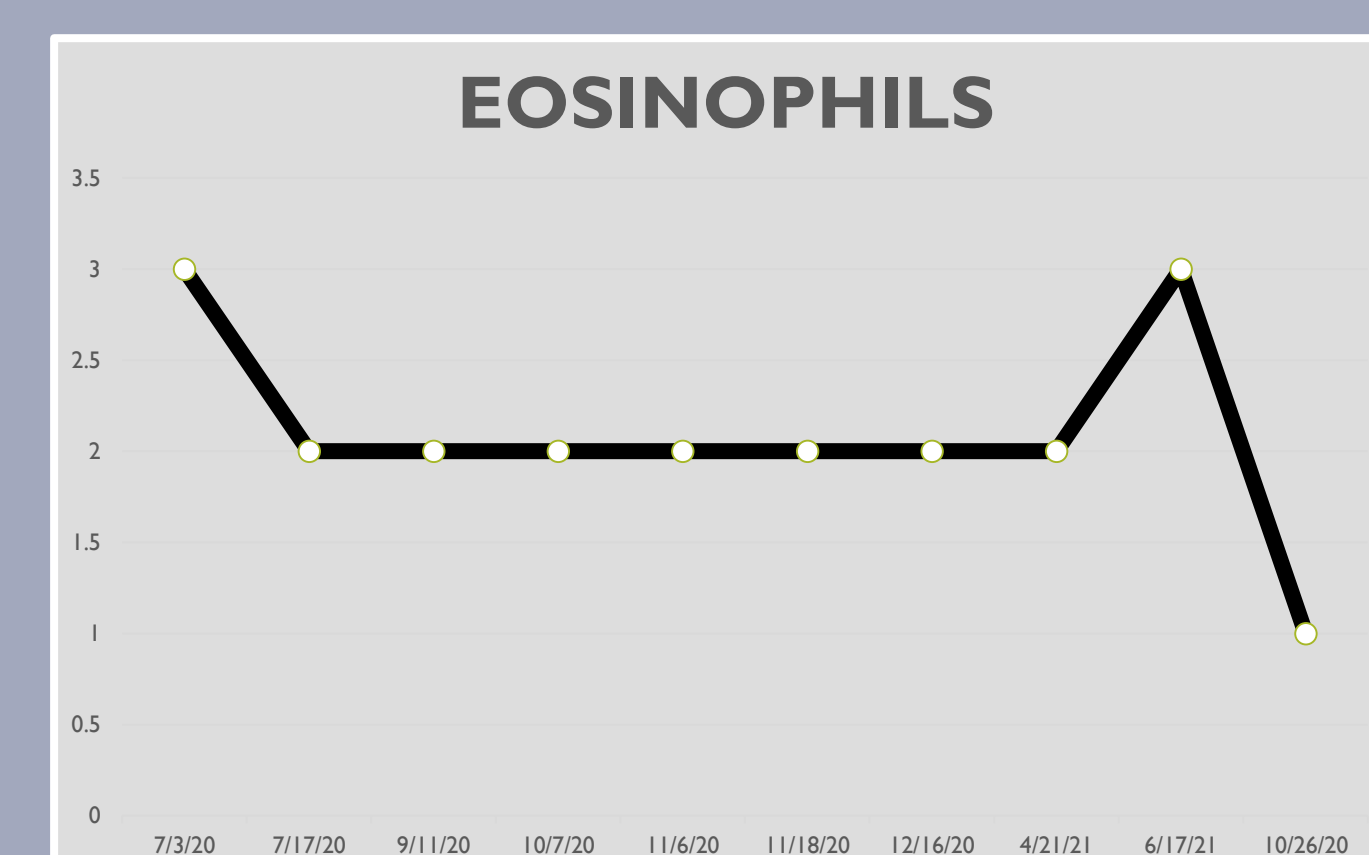
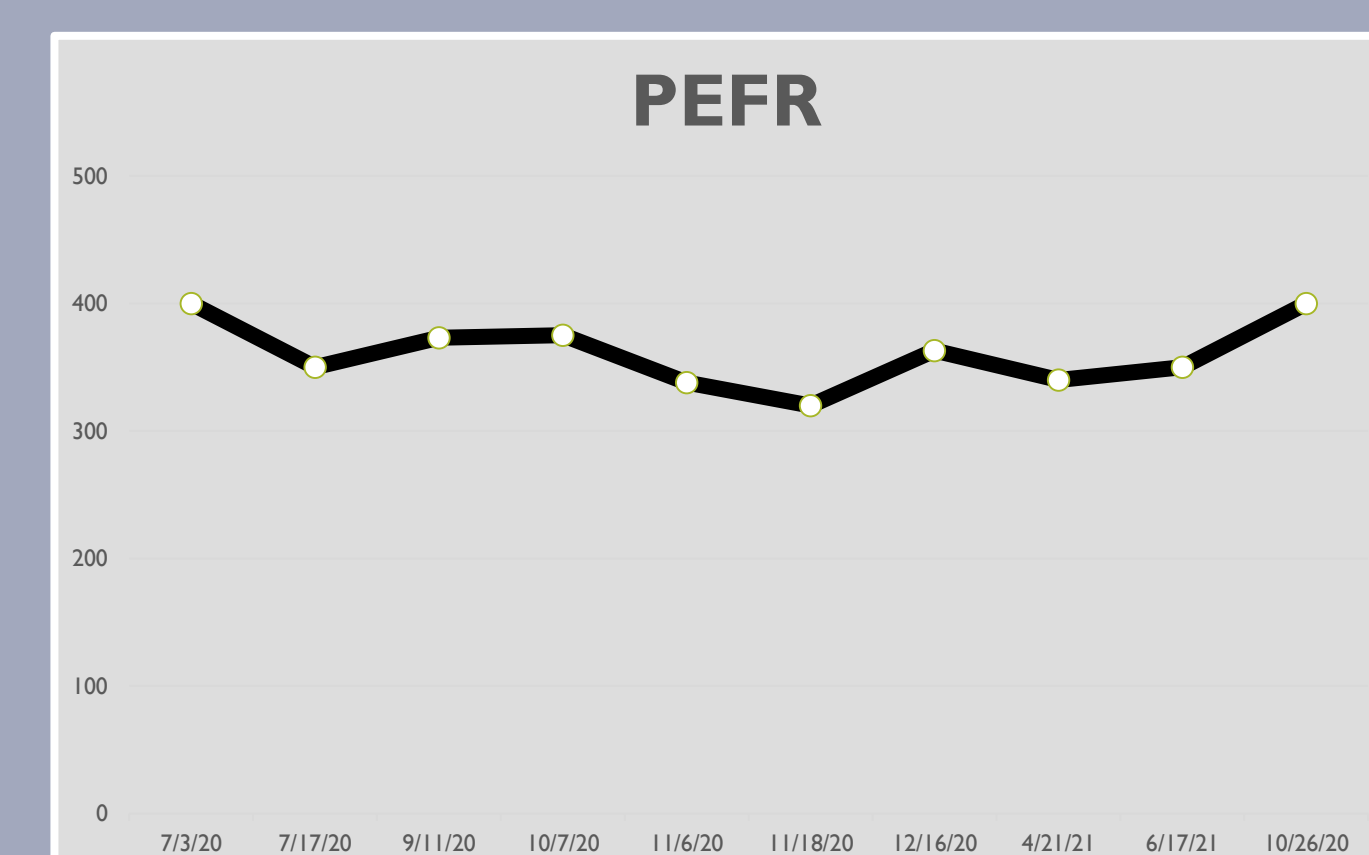
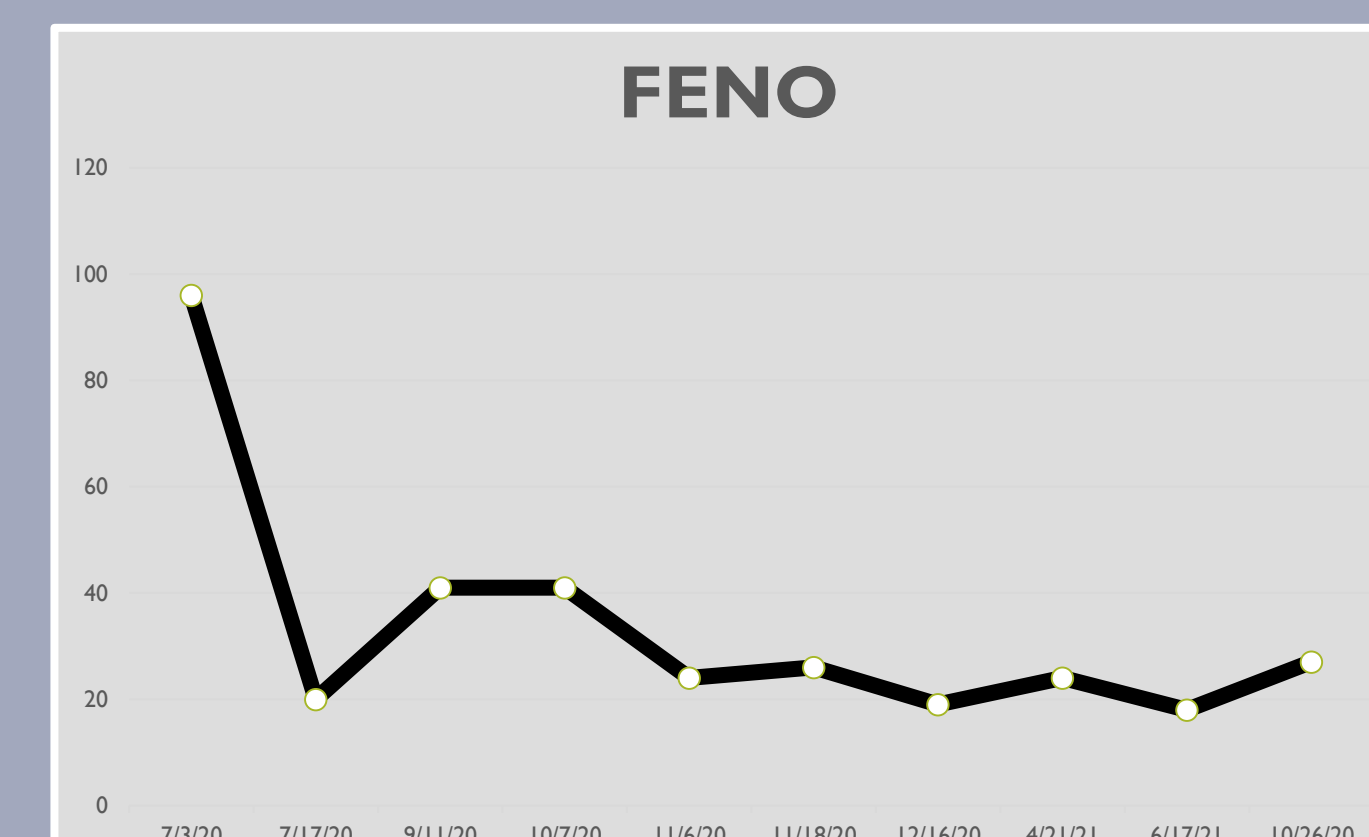


PFTs	FVC	FEV1	FEV1/FVC (%)
05/11/2009	106	83	82
10/11/2011	112	88	82
26/06/2012	96	77	73
05/07/2019	120	88	67
26/10/2021	121	100	84

Figures 1,2,3,4: FeNO, PEFR, Eosinophil, and ACT levels respectively from July 2020-October 2021

CASE STUDY 2 (39-yo, female)

- Good symptom control has been maintained with average ACT scores of 18, improved from 14.
- Shared decision making with the patient resulted in the successful weaning of maintenance steroid from 10mg to 5mg, with the aim of ceasing use altogether.
- Overall reduction in FENO levels, blood eosinophils and maintaining consistent PEFR readings were observed in this patient with slightly more varying levels of asthma control.
- This patient had no exacerbations during this 1-year period.
- Qualitative patient experience: "My health and day to day living has really improved with the help and support of the team and new medication"



PFTs	FVC	FEV1	FEV1/FVC (%)
18/11/2005	80	89	65
26/01/2011	98	87	92
12/02/2014	100	61	69
02/06/2017	110	91	88
01/10/2021	106	82	81

Figures 1,2,3,4: FeNO, PEFR, Eosinophil, and ACT levels respectively from July 2020-October 2021

CONCLUSION

Frequent contact with RANPs and shared decision-making with patient on their asthma management lead to improved adherence to treatment, and consequently good asthma control and reduction in exacerbations. Both patients have claimed a satisfactory patient experience in terms of understanding and managing of their asthma, with an overall improvement in quality of life.

References:

1. Global Initiative for Asthma. 2020 GINA report, global strategy for asthma management and prevention. GINA; 2019. Available from: <http://ginasthma.org/gina-reports/>
2. Brennan V, Mulvey C, Costello RW. The clinical impact of adherence to therapy in airways disease. *Breathe* 2021; 17: 210039.