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| **Clinical outcomes in a 12-18 year old cystic fibrosis cohort following commencement of Elexacaftor/Tezacaftor/Ivacaftor: a retrospective, single-centre audit** |
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| **Introduction/Aim:** Cystic Fibrosis (CF) is a genetic disorder with multi system comorbidities that is traditionally associated with poor lung function, poor nutrition, frequent hospitalisations and increased mortality. In April 2022, a cystic fibrosis modulator treatment called Elexacaftor/Tezacaftor/Ivacaftor (Trikafta®) was approved by the PBS for patients 12 years or over with CF who have a single F508 del mutation. The aim of this study is to describe 12 months clinical outcomes in our paediatric cohort.**Methods:** This is a retrospective, single-centre audit of those 12 years or older who commenced Trikafta and completed regular pulmonary function testing for a period of 12 months at the Women’s and Children’s Hospital in Adelaide. Outcomes include pulmonary function (predicted FVC and predicted FEV1), anthropomorphic data (height, weight and BMI) and clinical data (number of hospitalisations for pulmonary exacerbations, sputum microbiology profile and liver function results). **Results:** 39 patients commenced Trikafta and had completed regular pulmonary function testing throughout the study period. The average age at initiation was 15.12 years. 16 patients (41%) were F508del homozygous and 23 (59%) were F508del heterozygous. The mean predicted FEV1 at baseline was 90.82%. There was an increase in the percent predicted FEV1 at 3, 6, 9 and 12 months from baseline of 3.21%, 4.57%, 4.63% and 4.28% respectively. The mean BMI at baseline was 20.55kg/m2. There was an increase in the mean BMI at 3, 6, 9 and 12 months from baseline of 0.72, 1.18, 0.54 and 1.16 respectively. Mean number of hospitalisations per person in the 12 months before and after commencement of Trikafta were 1.05 (range 0-4) and 0.44 (range 0-2) respectively. Further data to be presented.**Conclusion:** Our preliminary results indicate that patients have demonstrated an improvement in lung function, BMI and number of hospitalisations since commencing Trikafta. **Grant Support:** Nil |