|  |
| --- |
| **Comparison of hospitalised AECOPDs secondary to SARS-CoV-2 versus the other respiratory viruses** |
| Louis Chhor1,2, Martin MacDonald1,2, Stefan Saggese2, Garun Hamilton1,3 |
| *1Monash Lung, Sleep, Allergy and Immunology Monash Health, Victoria, Australia**2Department of General Medicine, Monash Health, Victoria, Australia**3School of Clinical Sciences, Monash University, Victoria, Australia* |
| **Introduction/Aim:** Viral Hospitalised AECOPD are associated with longer hospitalisation compared to non-viral exacerbations. Whilst comorbid COPD was shown to increase mortality among early reported cohorts of hospitalised SARS-CoV-2 infection, the prognosis of SARS-CoV-2 infection has since improved with vaccination, viral mutations and effective pharmacotherapies. The relative impact of SARS-CoV-2 versus other respiratory viruses in hospitalised AECOPD in the current era has not been reported in the Australian context. This study describes the clinical characteristics and outcomes of hospitalised AECOPD due to SARS-CoV-2 versus the other respiratory viruses.**Methods:** Potential AECOPD admissions between Jan 2022 – Aug 2022 were identified using discharge codes. During this period, circulating strains of SARS-CoV-2 in the local population were generally Omicron derived. Manual case record inspection was performed to confirm accurate identification of AECOPDs with positive viral testing. Subjects were divided into AECOPD due to SARS-CoV-2 and AECOPD due to other viruses. Clinical characteristics and outcomes were compared between the two populations.**Results:** 202 viral AECOPDs – 126 SARS-CoV-2 and 76 other viruses were identified. Of the SARS-CoV2 group. 13.5% were unvaccinated, 17.4% partially and 68% fully vaccinated. The SARS-CoV-2 group were older (77.2 vs 68.8, p<0.0001) with more comorbidities (1[1-2] vs 1[0-2], p=0.005) and lower candidacy for full resuscitation (25.3% vs 55.3%, p<0.001). Mortality tended to be higher among SARS-CoV2 admission (9.5% v 3%, p=0.062) but rates of ICU admission (10.3% v 13.2%, p=0.54), length of hospitalisation (4.8 [2.9 – 8.2] vs 4.6 [2.8 – 6.8], p=0.9) and readmission within 30 days (25% vs 33.7%, p=0.44) were similar.**Conclusion:** In a highly vaccinated population, those hospitalised with SARS-CoV2 appear older with more comorbidities than those admitted with other respiratory viruses. Length of hospitalisation and ICU utilisation was similar. Although not reaching statistical significance in our cohort, inpatient mortality may be higher. **Grant Support:** Nil |