

## P0020 Respiratory syncytial virus (RSV) disease in hospitalised adults in Europe: a retrospective patient chart review

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**Background:** Despite growing awareness of RSV disease causing severe lower respiratory complications in at-risk and elderly adults, knowledge of the overall disease burden in this population is limited. This analysis aimed to investigate the burden of RSV in hospitalised adults in Europe.

**Materials/methods:** A retrospective review of 399 patient charts across European countries (France, n=118; UK, n=118; Germany, n=94; Austria, n=49; Switzerland, n=20) was conducted, collecting data for hospitalised adults ≥18 years with test-confirmed RSV diagnosis. Each hospital physician submitted up to three randomly-selected patient cases over the previous two northern hemisphere RSV seasons via an online survey. RSV patients were categorised into four mutually exclusive groups based on primary condition and/or age; immunocompromised (Group A, n=103), underlying chronic lung disease (UCLD; Group B, n=126), elderly ≥65 years (Group C, n=101) and other adults <65 years (Group D, n=69).

**Results:** Baseline characteristics for Groups A–D, were respectively: median age 67/70/73/50 years; male 60/59/53/49%, and current or former smokers 67/90/76/72%. Mean Hospital Length of Stay (LoS) was similar across groups (11.9–14.4 days).

Overall, intensive care unit admission was 29%, and invasive mechanical ventilation usage was 6%. Ribavirin was used in 18% of patients overall and significantly more often in immunocompromised patients (29%; p=0.001). 60% of patients were treated with antibiotics. Other treatments included supplemental oxygen (73%), bronchodilators (54%), and corticosteroids (48%). 34% of patients overall experienced a complication during hospitalisation with higher incidence in UCLD (42%), immunocompromised (36%) and elderly patients (43%) than other adult patients (13%). Interstitial lung disease and congestive heart failure were most predictive of longer LoS (Figure). Following hospital discharge, 68% of patients required skilled nursing at home or a long-term care facility for the first time.

**Conclusions:** The data indicate that burden of RSV disease in hospitalised European adults is substantial, particularly in high-risk sub-populations. Burden of RSV disease is also associated with mortality and significant resource utilisation, including intensive care unit admission and long-term care.

