was to describe 30-day all-cause readmission rates for patients that received ampicillin/sulbactam compared to ceftriaxone/metronidazole. The secondary objectives included hospital length of stay (LOS), 30-day all-cause mortality, *C.difficile* infection (CDI) within 3 months, and total antibiotic costs.

Results. A total of 86 patients (50 received ampicillin/sulbactam and 36 received ceftriaxone/ metronidazole) were included. Demographics were similar between groups. There was no significant difference in 30-day all-cause readmission rates (30% vs 19%, p=0.322). The ampicillin/sulbactam group, however, was found to have a significantly higher rate of 30-day all-cause mortality (12% vs 0%, p=0.038). Additionally, total duration of therapy was found to be significantly shorter in the ampicillin/sulbactam group (5 vs 7 days, p=0.002) with reduced overall cost of therapy($130 vs $235, $p<$ 0.001). No differences were observed in hospital LOS or CDI within 3 months.

Conclusion. No difference was observed in 30-day all-cause readmissions in patients receiving ampicillin/sulbactam compared to ceftriaxone/metronidazole for the treatment of aspiration pneumonia. Further analyses are recommended to evaluate the impact on 30-day all-cause mortality.

Disclosures. **All Authors**: No reported disclosures

1462. The protective effect of pneumococcal vaccination on cardiovascular disease in adults: A systematic review and meta-analysis

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Session: P-67. Respiratory Infections - Bacterial

Background. Epidemiological studies suggest a link between pneumococcal infection and an adverse cardiovascular outcome such as myocardial infarction. Therefore, studies have evaluated the protective effect of the 23-valent polysaccharide pneumococcal vaccination (PPV23), but results have varied. We conducted a meta-analysis to summarize the available evidence on the impact of PPV23 on cardiovascular disease

Methods. A literature search from January 1946 to September 2019 was conducted in Embase, Medline and Cochrane. All studies evaluating PPV23 compared to a control (placebo, no vaccine or another vaccine) for any cardiovascular events including myocardial infarction (MI), heart failure, cerebrovascular events were included. Risk ratios (RRs) were pooled using random effects models.

Results. Eighteen studies were included, with a total of 716,108 participants. Vaccination with PPV23 was associated with decreased risk of any cardiovascular event (RR: 0.91;95% CI: 0.84-0.99), and MI (RR of 0.88; 95% CI:0.79-0.98) in all age groups, with a significant effect in those 65 years and older, but not in the younger age group. Similarly, PPV23 vaccine was associated with significant risk reduction in all-cause mortality in all ages (RR: 0.78; 95%CI: 0.68-0.88), specifically in those aged 65 years and older (RR: 0.71; 95%CI: 0.60-0.84). A significant risk reduction in cerebrovascular disease was not observed following pneumococcal vaccination.

Conclusion. Polysaccharide pneumococcal vaccination decreases the risk of a cardiovascular event, specifically acute MI in the vaccinated population, particularly those 65 years of age and older. It would be highly beneficial to vaccinate the population who is at greater risk for cardiovascular diseases.

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1463. Activity of Delafloxacin against Multi-Drug-Resistant Fastidious Respiratory Pathogens from European Medical Centers (2014-2019)

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Session: P-67. Respiratory Infections - Bacterial

Background. Delafloxacin (DLX) is an anionic fluoroquinolone (FQ) that has been approved in the United States and in Europe for the treatment of acute bacterial skin and skin structure infections and was recently approved in the US for treatment of community-acquired bacterial pneumonia (CABP). In the present study, *in vitro* susceptibility (S) results for DLX and comparator agents were determined for CABP pathogens including *Streptococcus pneumoniae* (SPN), *Haemophilus influenzae* (HI), *H. parainfluenzae* (HP) and *Moraxella catarrhalis (*MC) clinical isolates from European hospitals participating in the SENTRY Program during 2014-2019.

Methods. A total of 2,835 SPN, 1,484 HI, 959 MC, and 20 HP isolates were collected from community-acquired respiratory tract infections (CARTI) during 2014-2019 from European hospitals. Sites included only 1 isolate/patient/infection episode. Isolate identifications were confirmed at JMI Laboratories. Susceptibility testing was performed according to CLSI broth microdilution methodology, and EUCAST (2020) breakpoints were applied where applicable. Other antimicrobials tested included levofloxacin (LEV) and moxifloxacin (MOX; not tested in 2015). Multidrug-resistant (MDR) SPN isolates were categorized as being nonsusceptible (NS) to amoxicillin-clavulanate, erythromycin (ERY), and tetracycline; other SPN phenotypes were ERY-NS, or penicillin (PEN)-NS. β-lactamase (BL) presence was determined for HI, HP, and MC.

Results. The activities of the 3 FQs are shown in the table. The most active agent against SPN was DLX, with the lowest $MIC_{50/90}$ values of 0.015/0.03 mg/L. DLX activities were the same when tested against the MDR or PEN-NS for SPN phenotypes. ERY-NS isolates had DLX $MIC_{50/90}$ results of 0.015/0.03 mg/L. DLX was the most active FQ against HI, HP, and MC. BL presence did not affect FQ MIC values for HI or MC; only 1 HP isolate was BL-positive.

Conclusion. DLX demonstrated potent *in vitro* antibacterial activity against SPN, HI, HP, and MC. DLX was active against MDR SPN that were NS to the agents commonly used as treatments for CABP. These data support the utility of DLX in CABP including when caused by antibiotic resistant strains.

Table 1

Organism/Phenotype (n)	Delafloxacin $MIC_{50/90}$ (mg/L)	Levofloxacin $MIC_{50/90}$ (mg/L)	Moxifloxacin $MIC_{50/90}$ (mg/L, n[a])
S. pneumoniae (2,835)	0.015/0.03	1/2	≤0.12/0.25 (2,715)
MDR (253)	0.015/0.03	1/2	≤0.12/0.25 (240)
PEN-NS (799)	0.015/0.03	1/2	≤0.12/0.25 (762)
ERY-NS (651)	0.015/0.03	1/2	≤0.12/0.25 (620)
H influenzae (1,484)	≤0.001/0.002	≤0.015/0.03	0.03/0.03 (1,400)
BL-positive (268)	≤0.001/0.002	≤0.015/0.03	0.03/0.03 (254)
H. parainfluenzae (20)	0.008/0.03	0.03/0.06	0.06/0.25 (14)
M. catarrhalis (959)	0.004/0.008	0.03/0.06	0.06/0.06 (868)
BL-positive (833)	0.004/0.008	0.06/0.06	0.06/0.06 (833)

[a]Number of isolates tested for moxifloxacin, not tested in 2015.

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1464. Adjuvant Systemic Steroid Therapy and Length of Hospital Stay in Pneumonia Patients: A Retrospective Cohort Study in a Community Hospital

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Session: P-67. Respiratory Infections - Bacterial

Background. Pneumonia is a leading cause of morbidity and mortality worldwide resulting in a substantial healthcare expenditure. Antimicrobial agents are the main treatment. Recent studies showed the benefits of steroid therapy as an adjuvant therapy for patients with pneumonia; however, the overall evidence is still controversial.

Methods. Electronic medical records of hospitalized patients (age >18) at a community hospital in a rural Maine with the discharge diagnosis of pneumonia in 2015 and 2016 were reviewed. Demographics, comorbidities, physical examination, initial laboratory, and Pneumonia Severity Index (PSI) were collected for each patient. The exposure was a systemic steroid administered by either oral or intravenous. The outcomes included length of hospital stay (LOS), inpatient mortality, and transfer to tertiary care center. Competing-risks regression was utilized to examine the association between steroid and LOS. Multivariable logistic regression analysis adjusted for propensity score was used for other outcomes.

Results. A total of 414 patients were included. 277(63%) patients received systemic steroids. Overall, steroid use was significantly associated with shorter LOS (HR 1.26, 95%CI 1.03-1.54, p=0.02) and decrease inpatient mortality (OR 0.11, 95%CI 0.03-0.45, p< 0.01). In subgroup analysis, steroid associated with shorter LOS only in patients with PSI class IV (HR 1.38, 95%CI 1.02-1.89, p=0.04) and PSI class V (HR 2.04, 95%CI 1.11-3.74, p=0.02). There was an association of steroid and shorter LOS in subgroup of COPD patients (HR 1.42, 95%CI 1.02-1.97, p=0.03).