Dr. Leo's "In the Literature"

1. Opioids were no more effective than placebo at reducing acute lower back or neck pain after 6 weeks of treatment
2. RSV vaccine recommended for individuals 60 years of age or older starting this Fall
3. Everything we know so far about COVID EG.5 and BA.2.86 and fall vaccine - Not much. but brief and informative article - vaccine available in the next 2 weeks.
4. COVID-19 is associated with an increased risk of developing various autoimmune conditions and the risk could be attenuated by COVID-19 vaccination
5. When on-site consultation is unavailable, infectious diseases telemedicine consultation and antimicrobial stewardship can improve outcomes and should be considered for all patients with candidemia. In-hospital mortality decreased from 34% to 10%
6. MRSA bacteremia rates are 5x greater in pts admitted with COVID-19
7. Patients hospitalized for COVID-19 have a significantly higher CLABSI rate, particularly in the ICU setting.
8. Pooled prevalence of C-diff among pts receiving HD was 19% compared to 5% in pts without HD therapy
9. When co-administering Flu and COVID vaccines, there was no impact in immunogenicity or increase of adverse reactions compared to single vaccine administration
10. IV to PO early (after 3 days) antibiotic switch was associated with shorter LOS and fewer days on antibiotics, it occurred infrequently without increased 14-day mortality.
11. An ID-led *C. difficile* testing approval process was feasible and was associated with 50% decrease in HO-CDI from 10.2 to 4.3 events per 10K patient days.

The Lancet - 6/2023 - Opioid analgesia vs placebo for back pain	• Between Feb 29, 2016, and March 10, 2022, 347 participants were recruited (174 to the opioid group and 173 to the placebo group). 170 (49%) of 346 participants were female and 176 (51%) were male. 33 (19%) of 174 participants in the opioid group and 25 (15%) of 172 in the placebo group had discontinued from the trial by week 6, due to loss to follow-up and participant withdrawals. • 151 participants in the opioid group and 159 in the placebo group were included in the primary analysis. • Mean pain score at 6 weeks was 2·78 (SE 0·20) in the opioid group versus 2·25 (0·19) in the placebo group (adjusted mean difference 0·53, 95% CI –0·00 to 1·07, **p=0·051**).

	• 61 (35%) of 174 participants in the opioid group reported at least one adverse event versus 51 (30%) of 172 in the placebo group (p=0·30), but more people in the opioid group reported opioid-related adverse events (eg, 13 [7·5%] of 174 participants in the opioid group reported constipation *vs* six [3·5%] of 173 in the placebo group) • Opioids should not be recommended for acute non-specific low back pain or neck pain given that we found no significant difference in pain severity compared with placebo • https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(23)00404-X/fulltext
CDC - 7/2022 - RSV Vaccine	• Adults aged 60 years or older may now receive a single dose of a respiratory syncytial virus (RSV) vaccine after talking with their physician about the decision, according to recommendations by the US Centers for Disease Control and Prevention's (CDC's) Advisory Committee on Immunization Practices and backed by former Director Rochelle P. Walensky, MD, MPH • https://jamanetwork.com/journals/jama/fullarticle/2807428
Reuters - 8/19/2023 - COVID fall vaccination and variants of interest	• https://www.reuters.com/business/healthcare-pharmaceuticals/eris-ba286-do-i-need-worry-about-covid-again-2023-08-19/

Lancet - 8/2023 - Autoimmune diseases following COVID	• The study included 1,028,721 COVID-19 and 3,168,467 non-COVID individuals.
	• Compared with non-COVID controls, patients with COVID-19 presented an increased risk of developing
	  ○ pernicious anemia [adjusted Hazard Ratio (aHR): 1.72; 95% Confidence Interval (CI): 1.12–2.64];
	  ○ spondyloarthritis [aHR: 1.32 (95% CI: 1.03–1.69)];
	  ○ rheumatoid arthritis [aHR: 1.29 (95% CI: 1.09–1.54)];
	  ○ other autoimmune arthritis [aHR: 1.43 (95% CI: 1.33–1.54)];
	  ○ psoriasis [aHR: 1.42 (95% CI: 1.13–1.78)];

	○ pemphigoid [aHR: 2.39 (95% CI: 1.83–3.11)]; ○ Graves' disease [aHR: 1.30 (95% CI: 1.10–1.54)]; ○ anti-phospholipid antibody syndrome [aHR: 2.12 (95% CI: 1.47–3.05)]; ○ immune mediated thrombocytopenia [aHR: 2.1 (95% CI: 1.82–2.43)]; ○ multiple sclerosis [aHR: 2.66 (95% CI: 1.17–6.05)]; ○ vasculitis [aHR: 1.46 (95% CI: 1.04–2.04)]. • Among COVID-19 patients, completion of two doses of COVID-19 vaccine shows a decreased risk of pemphigoid, Graves' disease, anti-phospholipid antibody syndrome, immune-mediated thrombocytopenia, systemic lupus erythematosus and other autoimmune arthritis • https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(23)00331-0/fulltext
OFID - 8/1983 - Telemed consults for candidemia and impact on mortality	• A total of 265 patients were evaluated: 187 in the on-site consultation group, 49 in the telemedicine consultation group, and 29 in the non-consultation group. • Although in-hospital mortality did not differ significantly between the on-site and non-consultation groups, it was significantly lower in the telemedicine group when compared with the non-consultation group (10.2% vs 34.5%, *P* = .009). • Patients who received on-site or telemedicine consultation had significantly more antifungal therapy initiated, appropriate therapy duration, central lines removed, and echocardiography performed, as well as fewer unknown candidemia sources, vs those in the non-consultation group • https://doi.org/10.1093/ofid/ofad388
SHEA - 7/2023 - MRSA Bacteremia and COVDI-19 hospitalizations	• During the pandemic, the rate of healthcare facility–onset methicillin-resistant *Staphylococcus aureus*(MRSA) bacteremia was 5 times greater in patients admitted with coronavirus disease 2019 (COVID-19). • The presence of central lines and mechanical ventilation likely contribute to this increased rate. The number of central-line–

	associated bacteremia cases may be underestimated in patients with COVID-19 • https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/listing?q=MRSA+bacteremia+during+COVID&searchWithinIds=95EF576C9780A64242FCC544A02D3A60&fts=yes
SHEA - 7/2023 - COVID-19 and CLABSI rates	• The rate of COVID-19 CLABSI was significantly higher than non–COVID-19 CLABSI. We did not detect a difference between the non–COVID-19 CLABSI rate and the historical control. • COVID-19 CLABSIs occurred predominantly in the ICU, and the ICU COVID-19 CLABSI rate was significantly higher than the ICU non–COVID-19 CLABSI rate. A hospital-wide quality-improvement initiative reduced the rate of non–COVID-19 CLABSI but not COVID-19 CLABSI. • Patients hospitalized for COVID-19 have a significantly higher CLABSI rate, particularly in the ICU setting. • https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/listing?q=characterizing+the+relationship+between&searchWithinIds=95EF576C9780A64242FCC544A02D3A60&fts=yes
SHEA - 7/2023 – C. diff and HD patients	• in total, 2,408 titles and abstracts were identified; 240 underwent full text review. Among them, 15 studies provided data on rates of CDI among persons requiring MHD, and 8 of these also provided rates among persons not requiring MHD. • The pooled prevalence of CDI among persons requiring MHD was 19.14%, compared to 5.16% among persons not requiring MHD (odds ratio [OR], 4.35; 95% confidence interval [CI], 2.07–9.16; *P* = .47). • The linear increase in CDI over time was significant, increasing an average of 31.97% annually between 1993 and 2017 (OR, 1.32; 95% CI, 1.1–1.58; *P* < .01). The linear annual increase was similar among persons requiring and not requiring MHD (OR, 1.28; 95% CI, 1.13–1.45; *P* = .11)

	• Persons requiring MHD have a 4-fold higher risk of CDI compared to persons not requiring MHD, and rates of CDI are increasing over time in both groups • https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/listing?q=prevalence+and+trends+of+clostridiodies+difficile+infection&searchWithinIds=95EF576C9780A64242FCC544A02D3A60&fts=yes

JAMA - 9/2023 - Immunogenicity and Reactogenicity of Flu and COVID vaccine coadministration	• This study included 2 cohorts for 2 separate analyses. The reactogenicity analysis included 588 participants (of 649 questionnaire responders):
	  ○ 85 in the COVID-19 vaccine–alone group (median [IQR] age, 71 [58-74] years; 56 [66%] female);
	  ○ 357 in the influenza vaccine–alone group (median [IQR] age, 55 [40-65] years; 282 [79%] female);
	  ○ and 146 in the coadministration group (median [IQR] age, 61 [50-71] years; 81 [55%] female).
	• The immunogenicity analysis included 151 participants: 74 participants in the COVID-19 vaccine group (median [IQR] age, 67 [56-73] years; 45 [61%] female) and 77 participants in the coadministration group (median [IQR] age, 60 [49-73] years; 42 [55%] female).
	• Compared with COVID-19 vaccination alone, the risk of systemic symptoms was similar in the coadministration group (odds ratio, 0.82; 95% CI, 0.43-1.56). Geometric mean titers in the coadministration group were estimated to be 0.84 (95% CI, 0.69-1.04) times lower than in the COVID-19 vaccine–alone group
	• an influenza vaccine, or both, coadministration was not associated with substantially inferior immune response or to more frequent adverse events compared with COVID-19 vaccine administration alone, supporting the coadministration of these vaccines
	• https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2809119

CID - 4/2023 - IV to PO switch therapy among pts hospitalized with CAP	• Of 378 041 CAP patients, 21 784 (6%) were switched early, most frequently to fluoroquinolones. • Patients switched by hospital day 3 were considered early switchers • Patients switched early had fewer days on IV antibiotics, shorter duration of inpatient antibiotic treatment, shorter LOS, and lower hospitalization costs, but no significant excesses in 14-day in-hospital mortality or late ICU admission. Patients at a higher mortality risk were less likely to be switched. However, even in hospitals with relatively high switch rates, <15% of very low–risk patients were switched early • Although early switching was not associated with worse outcomes and was associated with shorter LOS and fewer days on antibiotics, it occurred infrequently. Even in hospitals with high switch rates, <15% of very low–risk patients were switched early. Our findings suggest that many more patients could be switched early without compromising outcomes • https://doi.org/10.1093/cid/ciad196
CID - 5/2023 - ID consult for appropriateness of C.diff testing	• During the study period, we evaluated *C. difficile* infections across 331 180 admission and 1 172 015 patient-days. During the intervention period, a median of 1 HO-CDI test approval request per day (range, 0–6 alerts/day) was observed; adherence by providers with obtaining approval was 85%. The HO-CDI rate was 10.2, 10.4, and 4.3 events per 10 000 patient-days for each consecutive time period, respectively. In adjusted analysis, the HO-CDI rate did not differ significantly between the 2 baseline periods ($P = .14$) but did differ between the baseline 2 period and intervention period ($P < .001$). • An ID-led *C. difficile* testing approval process was feasible and was associated with a >50% decrease in HO-CDI rates, due to enforcement of appropriate testing • https://doi.org/10.1093/cid/ciad250