

Supplementary Table S2: List of 22 practice changing Randomized Control Trials from 6/2020-7/2021 focusing on infections in older adults

Reference	Outcome/Result	Sample Size	Median Age
1. Molina, J., Montero-Mateos, E., et al. (2021). Seven-versus 14-day course of antibiotics for the treatment of bloodstream infections by Enterobacteriales: a randomized, controlled trial. <i>Clinical Microbiology and Infection</i> .	No significant differences were observed between groups including mortality, relapse of eBSI, relapse of fever, superinfections, or drug-related adverse events.	248	65 years
2. von Dach, E., Albrich, W. C., Brunel, A. S., Prendki, V., Cuvelier, C., Flury, D., ... & Huttner, A. (2020). Effect of C-reactive protein-guided antibiotic treatment duration, 7-day treatment, or 14-day treatment on 30-day clinical failure rate in patients with uncomplicated gram-negative bacteremia: a randomized clinical trial. <i>Jama</i> , 323(21), 2160-2169.	7-day was non-inferior to 14 days of antibiotics for uncomplicated gram-negative bacteremia	504	79 years
3. Gariani, K., Pham, T. T., Kressmann, B., Jornayvaz, F. R., Gastaldi, G., Stafylakis, D., ... & Uçkay, L. (2021). Three Weeks Versus Six Weeks of Antibiotic Therapy for Diabetic Foot Osteomyelitis: A Prospective, Randomized, Noninferiority Pilot Trial. <i>Clinical Infectious Diseases</i> , 73(7), e1539-e1545.	3 weeks comparable to 6 weeks antibiotic therapy after debridement for diabetic foot osteomyelitis	93	65
4. Bernard, L., Arvieux, C., Brunschweiler, B et al. (2021). Antibiotic therapy for 6 or 12 weeks for prosthetic joint infection. <i>New England Journal of Medicine</i> , 384(21), 1991-2001.	Persistent infection occurred in 18.1% of the 6-week group and 9.4% of the 12-week group.	404	69 years
5. Baden, L. R., El Sahly, H. M. et al. (2021). Efficacy and safety of the mRNA-1273 SARS-CoV-2 vaccine. <i>New England Journal of Medicine</i> , 384(5), 403-416.	The mRNA-1273 vaccine showed 94.1% efficacy at preventing Covid-19 illness, including severe disease.	30,420	51.4 years
6. Gharbi, M., Drysdale, J. H., et al. (2019). Antibiotic management of urinary tract infection in elderly patients in primary care and its association with bloodstream infections and all cause mortality:	No or deferred antibiotics were associated with increase in bloodstream infection and all cause mortality compared with immediate antibiotics.	312,896	>65years

population based cohort study. <i>BMJ</i> , 364.			
7. Drekonja, D. M., Trautner, B., et al. (2021). Effect of 7 vs 14 days of antibiotic therapy on resolution of symptoms among afebrile men with urinary tract infection: a randomized clinical trial. <i>JAMA</i> , 326(4), 324-331.	7 days non-inferior to 14 days for male UTI	272	69 years
8. Dinh, A., Ropers, J., Duran, C., et al. (2021). Discontinuing β -lactam treatment after 3 days for patients with community-acquired pneumonia in non-critical care wards (PTC): a double-blind, randomised, placebo-controlled, non-inferiority trial. <i>The Lancet</i> , 397(10280), 1195-1203.	3 days non-inferior to 8 days for CAP	303	73 years
9. CODA Collaborative. (2020). A randomized trial comparing antibiotics with appendectomy for appendicitis. <i>New England Journal of Medicine</i> , 383(20), 1907-1919	Antibiotics were noninferior to appendectomy for appendicitis	1552	38 years
10. Johnson, S. W., Brown, S. V., & Priest, D. H. (2020). Effectiveness of oral vancomycin for prevention of healthcare facility-onset <i>Clostridioides difficile</i> infection in targeted patients during systemic antibiotic exposure. <i>Clinical Infectious Diseases</i> , 71(5), 1133-1139.	Oral vancomycin prophylaxis reduces <i>C. difficile</i> recurrence	100	>70 years
11. Group, T. R. C. (2020). Dexamethasone in hospitalized patients with Covid-19—preliminary report. <i>The New England journal of medicine</i> .	In patients hospitalized with Covid-19, the use of dexamethasone resulted in lower 28-day mortality among those who were receiving either invasive mechanical ventilation or oxygen	4425	>65 years
12. Spinner, C. D., Gottlieb, R. L., et al. (2020). Effect of remdesivir vs standard care on clinical status at 11 days in patients with moderate COVID-19: a randomized clinical trial. <i>JAMA</i> , 324(11), 1048-1057.	Among patients with moderate COVID-19 patients randomized to a 5-day course of remdesivir had a statistically significant difference in clinical status compared with standard care, but not those who received 10 days of remdesivir	596	57 years
13. Kalil, A. C., Patterson, T. F., et al. (2021). Baricitinib plus remdesivir for hospitalized adults with Covid-19.	Baricitinib plus remdesivir was superior to remdesivir alone in reducing recovery time and	1033	55.4 years

<i>New England Journal of Medicine</i> , 384(9), 795-807.	accelerating improvement in clinical status among patients with Covid-19, notably among those receiving high-flow oxygen or noninvasive ventilation.		
14. Cohen, M. S., Nirula, A., et al. (2021). Effect of bamlanivimab vs placebo on incidence of COVID-19 among residents and staff of skilled nursing and assisted living facilities: a randomized clinical trial. <i>JAMA</i> , 326(1), 46-55.	Bamlanivimab monotherapy compared with placebo reduced the risk of COVID-19 in residents and staff of skilled nursing and assisted living facilities.	966	53 years
15. Hermine, O., Mariette, X., et al. (2021). Effect of tocilizumab vs usual care in adults hospitalized with COVID-19 and moderate or severe pneumonia: a randomized clinical trial. <i>JAMA internal medicine</i> , 181(1), 32-40.	Tocilizumab may reduce the need for mechanical and noninvasive ventilation or death by day 14 but not mortality by day 28.	131	64 years
16. Simonovich, V. A., Burgos Pratz, L. D., et al. (2021). A randomized trial of convalescent plasma in Covid-19 severe pneumonia. <i>New England Journal of Medicine</i> , 384(7), 619-629.	No significant differences were observed in clinical status or overall mortality	228	62 years
17. Self, W. H., Semler, M. W., et al. (2020). Effect of hydroxychloroquine on clinical status at 14 days in hospitalized patients with COVID-19: a randomized clinical trial. <i>JAMA</i> , 324(21), 2165-2176.	Among adults hospitalized with respiratory illness from COVID-19, treatment with hydroxychloroquine, compared with placebo, did not significantly improve clinical status at day 14.	479	57 years
18. Murai, I. H., Fernandes, A. L., et al. (2021). Effect of a single high dose of vitamin D3 on hospital length of stay in patients with moderate to severe COVID-19: a randomized clinical trial. <i>JAMA</i> , 325(11), 1053-1060.	Among hospitalized patients with COVID-19, a single high dose of vitamin D3, compared with placebo, did not significantly reduce hospital length of stay.	240	56.2 years
19. Thomas, S., Patel, D., et al. (2021). Effect of high-dose zinc and ascorbic acid supplementation vs usual care on symptom length and reduction among ambulatory patients with SARS-CoV-2 infection: the COVID A to Z randomized clinical trial. <i>JAMA network open</i> , 4(2), e210369-e210369.	High-dose zinc gluconate, ascorbic acid, or a combination of the 2 supplements did not significantly decrease the duration of symptoms compared with standard of care in ambulatory patients diagnosed with SARS-CoV-2 infection	214	45.2 years
20. Reis, G., Silva, E. A. D. S. M., et al. (2021). Effect of early treatment with hydroxychloroquine or lopinavir and ritonavir on risk of hospitalization	Neither hydroxychloroquine nor lopinavir-ritonavir showed any significant benefit for decreasing COVID-19–	685	53 years

among patients with COVID-19: the TOGETHER randomized clinical trial. <i>JAMA network open</i> , 4(4), e216468-e216468.	associated hospitalization or other secondary clinical outcomes.		
21. Abella, B. S., Jolkovsky, E. L., et al. (2021). Efficacy and safety of hydroxychloroquine vs placebo for pre-exposure SARS-CoV-2 prophylaxis among health care workers: a randomized clinical trial. <i>JAMA internal medicine</i> , 181(2), 195-202.	No clinical benefit of hydroxychloroquine administered daily for 8 weeks as pre-exposure prophylaxis in health-care workers exposed to patients with COVID-19.	132	33 years
22. López-Medina, E., López, P., et al. (2021). Effect of ivermectin on time to resolution of symptoms among adults with mild COVID-19: a randomized clinical trial. <i>JAMA</i> , 325(14), 1426-1435.	Among adults with mild COVID-19, a 5-day course of ivermectin, compared with placebo, did not significantly improve the time to resolution of symptoms.	476	37 years