TOP 10 INFECTIOUS DISEASES ARTICLE IN 2023

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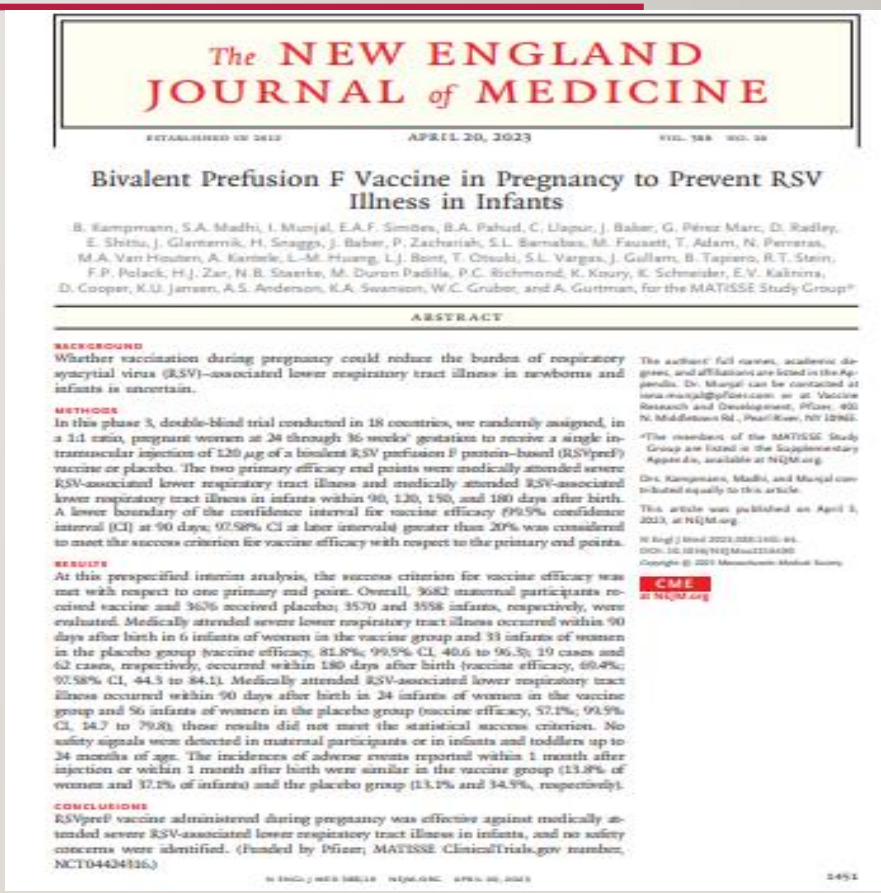
In 2023 at least 10 practice changing studies on prevention and treatment of a broad range of infectious diseases has been published.

These research projects have been lead to advancement of clinical medical practice of infectious diseases specially in immunocopmpriomised cancer patient.

Due to change of practice of infectious diseases in recent years we preferred to have a brief presentation of 10 top infectious diseases article in 2023.

BIVALENT PREFUSION F VACCINE IN PREGNANCY TO PREVENT RSV ILLNESS IN INFANTS

- A 3, double-blind trial conducted in 18 countries, pregnant women at 24 through 36 weeks' gestation to receive a ***single intramuscular injection of 120 µg of a bivalent RSV prefusion F protein–based (RSVpreF)*** vaccine or placebo.
- The two primary efficacy end points were medically attended severe RSV-associated lower respiratory tract illness and medically attended RSV-associated lower respiratory tract illness in infants within ***90, 120, 150, and 180*** days after birth.
- Efficacy of a ***bivalent prefusion-stabilized F glycoprotein RSV vaccine*** was evaluated in pregnant women (to prevent disease in their infants) and in older adults, which lead to which led to ***FDA approval*** of, and ***Advisory Committee on Immunization Practices recommendations*** for, these vaccines.



The NEW ENGLAND JOURNAL of MEDICINE

APRIL 20, 2023

Bivalent Prefusion F Vaccine in Pregnancy to Prevent RSV Illness in Infants

ABSTRACT

BACKGROUND

Whether vaccination during pregnancy could reduce the burden of respiratory syncytial virus (RSV)–associated lower respiratory tract illness in newborns and infants is uncertain.

METHODS

In this phase 3, double-blind trial conducted in 18 countries, we randomly assigned, in a 1:1 ratio, pregnant women at 24 through 36 weeks' gestation to receive a single intramuscular injection of 120 µg of a bivalent RSV prefusion F protein–based (RSVpreF) vaccine or placebo. The two primary efficacy end points were medically attended severe RSV-associated lower respiratory tract illness and medically attended RSV-associated lower respiratory tract illness in infants within 90, 120, 150, and 180 days after birth. A lower boundary of the confidence interval for vaccine efficacy (99.5% confidence interval [CI] at 90 days; 97.58% CI at later intervals) greater than 20% was considered to meet the success criterion for vaccine efficacy with respect to the primary end points.

RESULTS

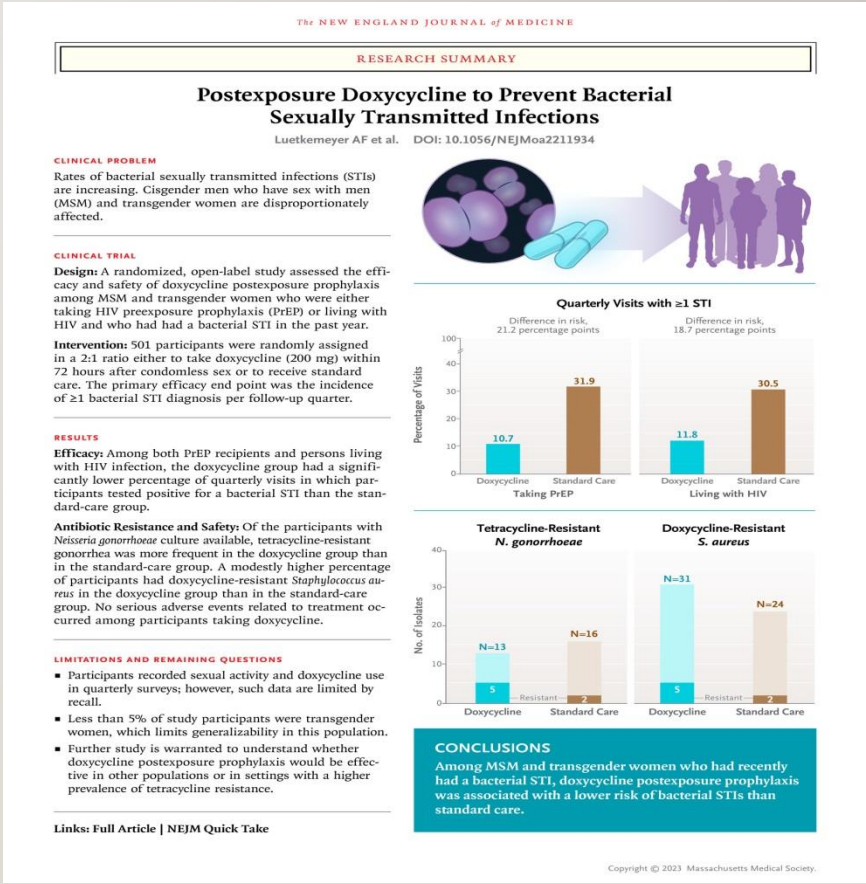
At this prespecified interim analysis, the success criterion for vaccine efficacy was met with respect to one primary end point. Overall, 3682 maternal participants received vaccine and 3676 received placebo; 3570 and 3558 infants, respectively, were evaluated. Medically attended severe lower respiratory tract illness occurred within 90 days after birth in 6 infants of women in the vaccine group and 33 infants of women in the placebo group (vaccine efficacy, 81.8%; 99.5% CI, 40.6 to 96.3); 19 cases and 62 cases, respectively, occurred within 180 days after birth (vaccine efficacy, 69.4%; 97.58% CI, 44.3 to 84.1). Medically attended RSV-associated lower respiratory tract illness occurred within 90 days after birth in 24 infants of women in the vaccine group and 56 infants of women in the placebo group (vaccine efficacy, 57.1%; 99.5% CI, 14.7 to 79.8); these results did not meet the statistical success criterion. No safety signals were detected in maternal participants or in infants and toddlers up to 24 months of age. The incidences of adverse events reported within 1 month after injection or within 1 month after birth were similar in the vaccine group (13.8% of women and 37.1% of infants) and the placebo group (13.1% and 34.9%, respectively).

CONCLUSIONS

RSVpreF vaccine administered during pregnancy was effective against medically attended severe RSV-associated lower respiratory tract illness in infants, and no safety concerns were identified. (Funded by Pfizer; MATISSE ClinicalTrials.gov number, NCT04424316.)

POSTEXPOSURE PROPHYLAXIS WITH DOXYCYCLINE LOWERED INCIDENCE OF BACTERIAL SEXUALLY TRANSMITTED INFECTIONS

- This trial demonstrating that ***postexposure prophylaxis with doxycycline*** prevents bacterial ***sexually transmitted infections (STIs)*** , With the rising incidence of bacterial sexually transmitted infections in many countries.
- In all, 501 participants (327 [PrEP group] and 174 [PLWH group]) were randomized to a ***single 200-mg dose of DOXY PEP*** or standard of care (SOC) without DOXY.
- They found that ***postexposure doxycycline significantly reduced bacterial STI incidence in at-risk MSM and transgender women*** who were on PrEP or were living with HIV



The NEW ENGLAND JOURNAL of MEDICINE

RESEARCH SUMMARY

Postexposure Doxycycline to Prevent Bacterial Sexually Transmitted Infections

Luetkemeyer AF et al. DOI: 10.1056/NEJMoa2211934

CLINICAL PROBLEM

Rates of bacterial sexually transmitted infections (STIs) are increasing. Cisgender men who have sex with men (MSM) and transgender women are disproportionately affected.

CLINICAL TRIAL

Design: A randomized, open-label study assessed the efficacy and safety of doxycycline postexposure prophylaxis among MSM and transgender women who were either taking HIV preexposure prophylaxis (PrEP) or living with HIV and who had had a bacterial STI in the past year.

Intervention: 501 participants were randomly assigned in a 2:1 ratio either to take doxycycline (200 mg) within 72 hours after condomless sex or to receive standard care. The primary efficacy end point was the incidence of ≥1 bacterial STI diagnosis per follow-up quarter.

RESULTS

Efficacy: Among both PrEP recipients and persons living with HIV infection, the doxycycline group had a significantly lower percentage of quarterly visits in which participants tested positive for a bacterial STI than the standard-care group.

Antibiotic Resistance and Safety: Of the participants with *Neisseria gonorrhoeae* culture available, tetracycline-resistant gonorrhea was more frequent in the doxycycline group than in the standard-care group. A modestly higher percentage of participants had doxycycline-resistant *Staphylococcus aureus* in the doxycycline group than in the standard-care group. No serious adverse events related to treatment occurred among participants taking doxycycline.

LIMITATIONS AND REMAINING QUESTIONS

- Participants recorded sexual activity and doxycycline use in quarterly surveys; however, such data are limited by recall.
- Less than 5% of study participants were transgender women, which limits generalizability in this population.
- Further study is warranted to understand whether doxycycline postexposure prophylaxis would be effective in other populations or in settings with a higher prevalence of tetracycline resistance.

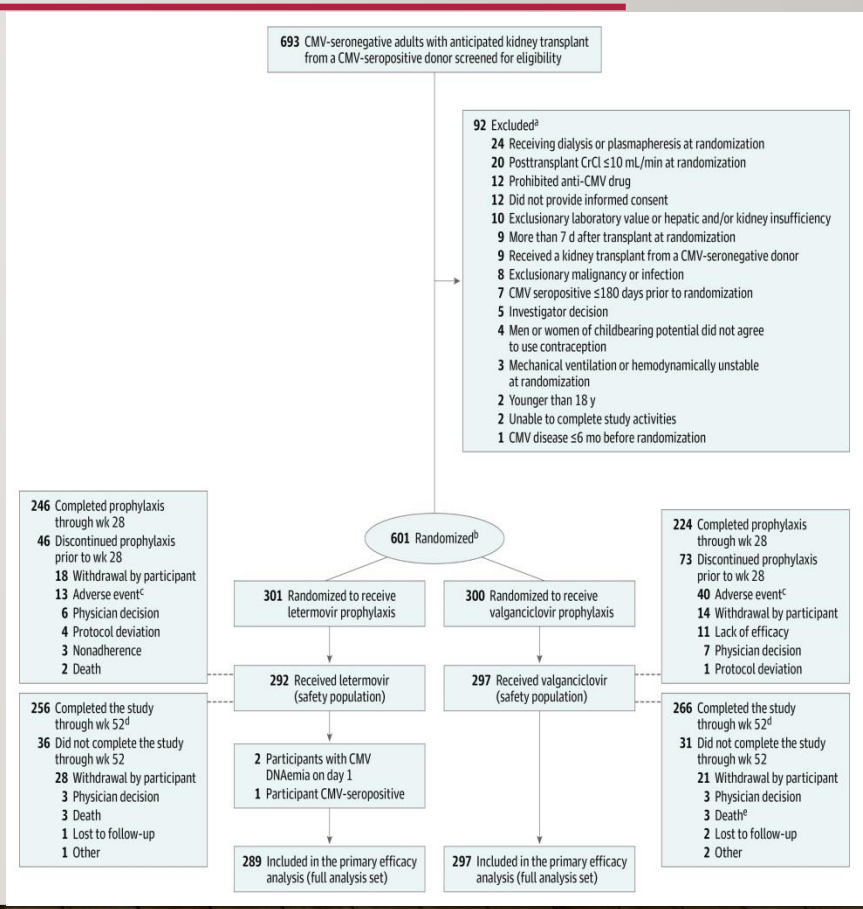
Links: Full Article | NEJM Quick Take

CONCLUSIONS

Among MSM and transgender women who had recently had a bacterial STI, doxycycline postexposure prophylaxis was associated with a lower risk of bacterial STIs than standard care.

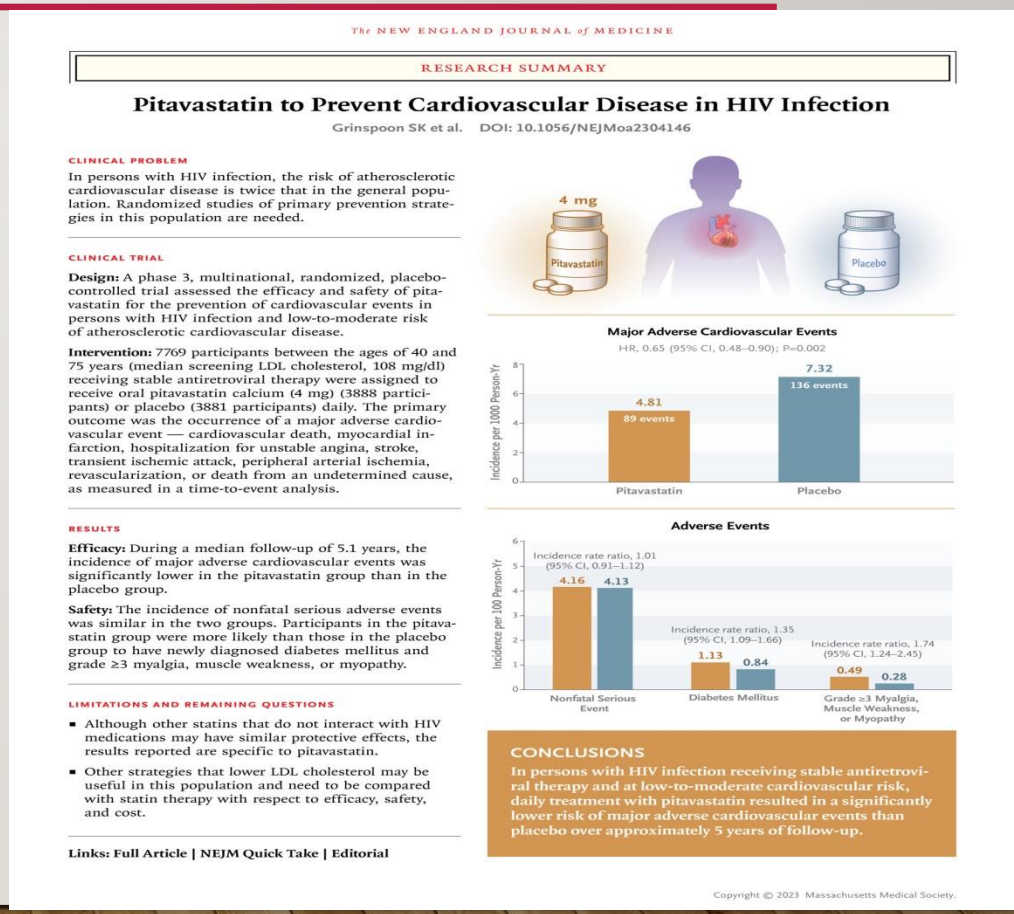
LETERMOVIR VS VALGANCICLOVIR FOR PROPHYLAXIS OF CYTOMEGALOVIRUS IN HIGH-RISK KIDNEY TRANSPLANT RECIPIENTS

- This study led the ***FDA*** to approve ***letermovir*** for prevention of ***CMV*** disease in high-risk kidney transplant recipients.
- Randomized, double-masked, double-dummy, noninferiority, phase 3 trial in adult CMV-seronegative kidney transplant recipients who received an organ from a CMV-seropositive donor at 94 participating sites.
- Participants were randomized in a 1:1 ratio to receive ***letermovir, 480 mg***, orally daily (with acyclovir) *or* ***valganciclovir, 900 mg***, orally daily (adjusted for kidney function) for ***up to 200 days*** after transplant, with matching placebos.
- Universal prophylaxis with valganciclovir is highly effective in preventing CMV disease during the early post-transplant period, but ***leukopenia is common***, resulting in discontinuation of prophylaxis or changes to the immunosuppressive regimen.
- ***Letermovir is a CMV-specific antiviral approved*** for prophylaxis after stem cell transplant.



PITAVASTATIN TO PREVENT CARDIOVASCULAR DISEASE IN HIV INFECTION

- *People with HIV (PWH)* are at higher risk for cardiovascular disease (CVD) and ASCVD risk score than those without HIV**.**
- In phase 3 trial, randomly assigned ***7769 participants with HIV infection*** with a low-to-moderate risk of cardiovascular disease who were receiving antiretroviral therapy to receive ***daily pitavastatin calcium (at a dose of 4 mg) or placebo*****.**
- **The primary outcome was the occurrence of a major adverse cardiovascular event, which was defined as a composite *of cardiovascular death, myocardial infarction, hospitalization for unstable angina, stroke, transient ischemic attack, peripheral arterial ischemia, revascularization, or death from an undetermined cause*.**
- **The incidence of a *major adverse cardiovascular event* was *4.81 per 1000* person-years in the pitavastatin group and *7.32 per 1000* person-years in the placebo group.**
- **Participants with HIV infection who received pitavastatin *had a lower risk of a major adverse cardiovascular* event than those who received placebo over a median follow-up of 5.1 years**



The NEW ENGLAND JOURNAL of MEDICINE

RESEARCH SUMMARY

Pitavastatin to Prevent Cardiovascular Disease in HIV Infection

Grinspoon SK et al. DOI: 10.1056/NEJMoa2304146

CLINICAL PROBLEM

In persons with HIV infection, the risk of atherosclerotic cardiovascular disease is twice that in the general population. Randomized studies of primary prevention strategies in this population are needed.

CLINICAL TRIAL

Design: A phase 3, multinational, randomized, placebo-controlled trial assessed the efficacy and safety of pitavastatin for the prevention of cardiovascular events in persons with HIV infection and low-to-moderate risk of atherosclerotic cardiovascular disease.

Intervention: 7769 participants between the ages of 40 and 75 years (median screening LDL cholesterol, 108 mg/dl) receiving stable antiretroviral therapy were assigned to receive oral pitavastatin calcium (4 mg) (3888 participants) or placebo (3881 participants) daily. The primary outcome was the occurrence of a major adverse cardiovascular event — cardiovascular death, myocardial infarction, hospitalization for unstable angina, stroke, transient ischemic attack, peripheral arterial ischemia, revascularization, or death from an undetermined cause, as measured in a time-to-event analysis.

RESULTS

Efficacy: During a median follow-up of 5.1 years, the incidence of major adverse cardiovascular events was significantly lower in the pitavastatin group than in the placebo group.

Safety: The incidence of nonfatal serious adverse events was similar in the two groups. Participants in the pitavastatin group were more likely than those in the placebo group to have newly diagnosed diabetes mellitus and grade ≥3 myalgia, muscle weakness, or myopathy.

LIMITATIONS AND REMAINING QUESTIONS

- Although other statins that do not interact with HIV medications may have similar protective effects, the results reported are specific to pitavastatin.
- Other strategies that lower LDL cholesterol may be useful in this population and need to be compared with statin therapy with respect to efficacy, safety, and cost.

Links: Full Article | NEJM Quick Take | Editorial

Major Adverse Cardiovascular Events

HR, 0.65 (95% CI, 0.48–0.90); P=0.002

Adverse Events

CONCLUSIONS

In persons with HIV infection receiving stable antiretroviral therapy and at low-to-moderate cardiovascular risk, daily treatment with pitavastatin resulted in a significantly lower risk of major adverse cardiovascular events than placebo over approximately 5 years of follow-up.


Dr. Hamid

SULBACTAM-DURLOBACTAM: A NEW WEAPON TO ATTACK ACINETOBACTER BAUMANNII

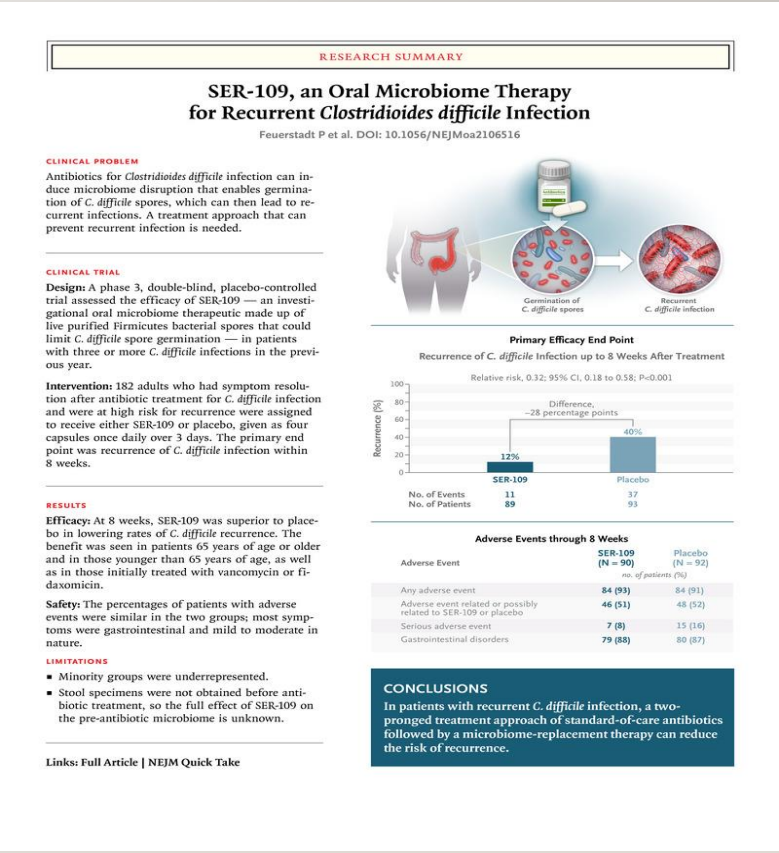
- This study has been lead to FDA approval,
- Acinetobacter baumannii Infections caused by carbapenem-resistant Acinetobacter baumannii (CRAB) ***have limited therapeutic options***.
- ***Sulbactam***, a BLI developed >40 years ago, was often combined with ampicillin,
- ***Durlobactam*** is a novel non–β-lactam BLI that is a potent inhibitor of β-lactamases found in CRAB
- In an international phase 3 trial across ***59 sites***, investigators randomized ***177 hospitalized adults*** with documented HABP/VABP due to *Acinetobacter calcoaceticus* to receive sul-dur or colistin.
- Both groups also received ***imipenem/cilastatin***.
- sulbactam–durlobactam was non-inferior to colistin, both agents given in combination with imipenem–cilastatin, for the primary endpoint of 28-day all-cause mortality
- ***Sulbactam–durlobactam*** was well tolerated and could be an effective intervention to ***reduce mortality*** from serious infections caused by **carbapenem-resistant ABC, including multidrug-resistant strains.**

Efficacy and safety of sulbactam–durlobactam versus colistin for the treatment of patients with serious infections caused by *Acinetobacter baumannii–calcoaceticus* complex: a multicentre, randomised, active-controlled, phase 3, non-inferiority clinical trial (ATTACK)

Prof Keith S Kaye, MD • Prof Andrew F Shorr, MD • Prof Richard G Wunderink, MD • Prof Bin Du, MD • Gabrielle E Poirier, BS • Khurram Rana, PharmD • et al. Show all authors

FDA-APPROVED ORAL FECAL MICROBIOTA THERAPY FOR PREVENTION OF RECURRENT C. DIFFICILE INFECTION

- Standard treatments for ***Clostridioides difficile infection (CDI),*** while highly effective for resolving the initial episode, are limited by frequent recurrence.
- ***Fecal microbiota therapy (FMT)*** after CDI treatment is recommended for patients with multiple episodes.
- In a phase 3, double-blind, randomized, placebo-controlled trial in which patients who had had three or more episodes of *C. difficile* infection received ***SER-109*** or ***placebo*** after standard-of-care antibiotic treatment.
- Among the ***281 patients screened***, 182 were enrolled. The percentage of patients with recurrence of C. difficile infection was 12% in the SER-109 group and 40% in the placebo group.
- In patients with symptom resolution of C. difficile infection after treatment with standard-of-care antibiotics, ***oral administration of SER-109 was superior to placebo in reducing the risk of recurrent infection***.



RESEARCH SUMMARY

SER-109, an Oral Microbiome Therapy for Recurrent *Clostridioides difficile* Infection

Feuerstadt P et al. DOI: 10.1056/NEJMoa2106516

CLINICAL PROBLEM

Antibiotics for *Clostridioides difficile* infection can induce microbiome disruption that enables germination of *C. difficile* spores, which can then lead to recurrent infections. A treatment approach that can prevent recurrent infection is needed.

CLINICAL TRIAL

Design: A phase 3, double-blind, placebo-controlled trial assessed the efficacy of SER-109 — an investigational oral microbiome therapeutic made up of live purified Firmicutes bacterial spores that could limit *C. difficile* spore germination — in patients with three or more *C. difficile* infections in the previous year.

Intervention: 182 adults who had symptom resolution after antibiotic treatment for *C. difficile* infection and were at high risk for recurrence were assigned to receive either SER-109 or placebo, given as four capsules once daily over 3 days. The primary end point was recurrence of *C. difficile* infection within 8 weeks.

RESULTS

Efficacy: At 8 weeks, SER-109 was superior to placebo in lowering rates of *C. difficile* recurrence. The benefit was seen in patients 65 years of age or older and in those younger than 65 years of age, as well as in those initially treated with vancomycin or fidaxomicin.

Safety: The percentages of patients with adverse events were similar in the two groups; most symptoms were gastrointestinal and mild to moderate in nature.

LIMITATIONS

- Minority groups were underrepresented.
- Stool specimens were not obtained before antibiotic treatment, so the full effect of SER-109 on the pre-antibiotic microbiome is unknown.

Links: Full Article | NEJM Quick Take

Primary Efficacy End Point

Recurrence of *C. difficile* Infection up to 8 Weeks After Treatment

Relative risk, 0.32; 95% CI, 0.18 to 0.58; P<0.001

Adverse Events through 8 Weeks

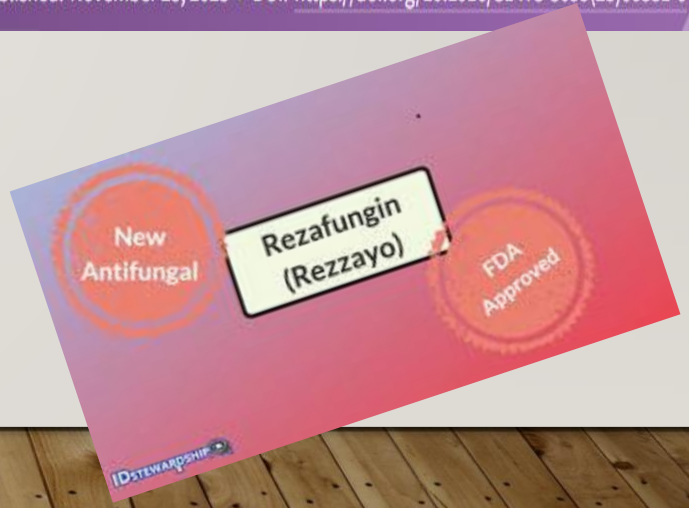
Adverse Event	SER-109 (N = 90)	Placebo (N = 92)
	no. of patients (%)	
Any adverse event	84 (93)	84 (91)
Adverse event related or possibly related to SER-109 or placebo	46 (51)	48 (52)
Serious adverse event	7 (8)	15 (16)
Gastrointestinal disorders	79 (88)	80 (87)

CONCLUSIONS

In patients with recurrent *C. difficile* infection, a two-pronged treatment approach of standard-of-care antibiotics followed by a microbiome-replacement therapy can reduce the risk of recurrence.

REZAFUNGIN FOR INVASIVE CANDIDIASIS

- Another new advance is ***Rezafungin, a once-weekly***,echinocandin for treating invasive candidiasis.
- In a prospective, double-blind, noninferiority phase 3 study assessed weekly ***IV Rezafungin*** compared with daily ***IV Caspofungin*** followed by ***optional step-down oral fluconazole*** in adult patients with candidemia or invasive candidiasis.
- Participants received treatment for a minimum of ***14 days.***
- In a phase 3 trial, ***weekly Rezafungin was noninferior to daily Caspofungin followed by optional fluconazole regarding 14-day global cure and 30-day all-cause mortality***.
- The availability of Rezafungin as a new antifungal is a valuable addition to candidaemia and invasive candidiasis treatments and may help to address the growing challenge of treatment-resistant Candida strains and species.




VaxigripTetra
DO YOU HAVE ASTHMA? YOU'RE AT RISK.
VaxigripTetra
Quadrivalent influenza vaccine


Dr. Mahshid
Talebitaher

MORE GOOD NEWS IN THE TREATMENT OF MULTIDRUG-RESISTANT PULMONARY TUBERCULOSIS

- In a spotlighted study. studies on the efficacy of an ***all-oral bedaquiline-containing regimen*** for treatment of multidrug-resistant tuberculosis.
- The incidence of ***resistant tuberculosis (TB)*** continues to rise worldwide, in part because treatment protocols are prolonged, complex, and painful, all potentially leading to medication failures
- Several small single-nation studies have found that bedaquiline-based regimens appear effective for these infections.
- In a multinational open-label trial, an ***all-oral 9-month bedaquiline-containing regimen and a 6-month bedaquiline regimen with injectable kanamycin were superior to a 9-month control injectable regimen.***

ORAL SIMNOTRELVIR FOR ADULT PATIENTS WITH MILD-TO-MODERATE COVID-19

- ***Simnotrelvir*** is ***an oral 3-chymotrypsin–like protease inhibitor*** that has been found to have in vitro activity against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and potential efficacy in a phase 1B.
- In this phase 2–3, double-blind, randomized, placebo-controlled trial, we assigned patients who had mild-to-moderate coronavirus disease 2019 (Covid-19) and onset of symptoms within the past 3 days in a 1:1 ratio to ***receive 750 mg of simnotrelvir plus 100 mg of ritonavir or placebo twice daily for 5 days***. The primary efficacy end point was the time to sustained resolution of symptoms, defined as the absence of 11 Covid-19–related symptoms for 2 consecutive days. Safety and changes in viral load were also assessed.
- ***Early administration of simnotrelvir plus ritonavir*** shortened the time to the resolution of symptoms among adult patients with Covid-19, without evident safety concerns.

Oral Simnotrelvir for Adult Patients with Mild-to-Moderate Covid-19

Bin Cao, M.D., Yeming Wang, M.D., Hongzhou Lu, M.D., Chaolin Huang, M.D., Yumei Yang, M.D., Ph.D., Lianhan Shang, M.D., Zhu Chen, M.D., Rongmeng Jiang, M.D., Yihe Liu, M.D., Ling Lin, M.D., Ping Peng, M.D., Fuxiang Wang, M.D., Fengyun Gong, M.D., Honglin Hu, M.S., Cong Cheng, M.D., Xiangyang Yao, M.D., Xianwei Ye, M.D., Hourong Zhou, M.D., Yinzhong Shen, M.D., Chenfan Liu, M.D., Chunying Wang, M.D., Zhennan Yi, M.D., Bijie Hu, M.D., Jiuyang Xu, M.D., Xiaoying Gu, Ph.D., Jingshan Shen, Ph.D., Yechun Xu, Ph.D., Leike Zhang, Ph.D., Jia Fan, M.D., Renhong Tang, Ph.D., and Chen Wang, M.D.

ABSTRACT

BACKGROUND
Simnotrelvir is an oral 3-chymotrypsin–like protease inhibitor that has been found to have in vitro activity against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and potential efficacy in a phase 1B trial.

METHODS
In this phase 2–3, double-blind, randomized, placebo-controlled trial, we assigned patients who had mild-to-moderate coronavirus disease 2019 (Covid-19) and onset of symptoms within the past 3 days in a 1:1 ratio to receive 750 mg of simnotrelvir plus 100 mg of ritonavir or placebo twice daily for 5 days. The primary efficacy end point was the time to sustained resolution of symptoms, defined as the absence of 11 Covid-19–related symptoms for 2 consecutive days. Safety and changes in viral load were also assessed.

RESULTS
A total of 1208 patients were enrolled at 35 sites in China; 603 were assigned to receive simnotrelvir and 605 to receive placebo. Among patients in the modified intention-to-treat population who received the first dose of trial drug or placebo within 72 hours after symptom onset, the time to sustained resolution of Covid-19 symptoms was significantly shorter in the simnotrelvir group than in the placebo group (180.1 hours [95% confidence interval {CI}, 162.1 to 201.6] vs. 216.0 hours [95% CI, 203.4 to 228.1]; median difference, −35.8 hours [95% CI, −60.1 to −12.4]; P=0.006 by Peto–Prentice test). On day 5, the decrease in viral load from baseline was greater in the simnotrelvir group than in the placebo group (mean difference [±SE], −1.51±0.14 $\log_{10}$ copies per milliliter; 95% CI, −1.79 to −1.24). The incidence of adverse events during treatment was higher in the simnotrelvir group than in the placebo group (29.0% vs. 21.6%). Most adverse events were mild or moderate.

CONCLUSIONS
Early administration of simnotrelvir plus ritonavir shortened the time to the resolution of symptoms among adult patients with Covid-19, without evident safety concerns. (Funded by Jiangsu Simcere Pharmaceutical; ClinicalTrials.gov number, NCT05506176.)

DIAGNOSIS AND MANAGEMENT OF DIABETES-RELATED FOOT INFECTIONS

- In a new guideline for diagnosis and management of ***diabetes-related foot infections*** *(DFI)* its incidence is increasing in parallel with the rising global prevalence of diabetes and is associated with significant ***morbidity and mortality***.
- Recommendations were recently updated by *the* ***International Working Group on the Diabetic Foot/Infectious Diseases Society of America (IWGDF/IDSA)*** to guide the management and diagnosis of DFI.

JOURNAL ARTICLE CORRECTED PROOF GUIDELINES

IWGDF/IDSA Guidelines on the Diagnosis and Treatment of Diabetes-related Foot Infections (IWGDF/IDSA 2023)

Éric Senneville, Zaina Albalawi, Suzanne A van Asten, Zulfiqarali G Abbas, Geneve Allison, Javier Aragón-Sánchez, John M Embil, Lawrence A Lavery, Majdi Alhasan, Orhan Oz ...
Show more

Author Notes

Clinical Infectious Diseases, ciad527, https://doi.org/10.1093/cid/ciad527

Published: 02 October 2023 **Article history** ▾

KEY RECOMMENDATION

- Severity and diagnosis of DFI both depend on local and systemic symptoms.
- Consider culturing tissue aseptically sampled by wound curettage or biopsy.
- If plain x-rays and probe-to-bone testing are inconclusive for suspected osteomyelitis, magnetic resonance imaging should be performed.
- Bone sampling (intraoperative or percutaneous) should be obtained for culture in osteomyelitis cases.
- Antibiotics should be avoided in the absence of signs or symptoms of infection in diabetic foot ulcers.
- For DFI involving skin and soft tissue, treatment duration is typically 1–2 weeks (up to 4 weeks if improvement is slow).

- Empiric treatment should focus on gram-positive bacteria, including *Staphylococcus aureus*.
- Empiric coverage of *Pseudomonas aeruginosa* is suggested for those living in Asia or North Africa.
- In patients with DFI-associated osteomyelitis and amputation with positive bone margins, antibiotics are suggested for 3 weeks; for those patients without amputation, 6 weeks are recommended.
- Surgical management should be considered in patients with moderate to severe DFI.
- Adjunctive therapies (e.g., G-CSF, topical antiseptics, silver, honey, bacteriophages, topical antibiotics, hyperbaric oxygen) are not recommended.

CONCLUSION

As in the past, the breathtaking advances during 2023 highlight the dynamism of the field of infectious diseases while presenting that we are likely to see continued and accelerating progress in the years to come.

فلوشیپ بیماریهای عفونت در نقص ایمنی و پیوند دانشگاه علوم پزشکی شهید بهشتی

برای اولین بار در ایران در سال ۱۳۸۹ دوره تکمیل تخصصی (فلوشیپ) "بیماریهای عفونی در بیماران مبتلا به نقص ایمنی و پیوند"

(Infectious Diseases in Immunocompromised Hosts & Transplatation fellowship)

به همت دکتر مسعود مردانی، مدیر گروه بیماریهای عفونی دانشگاه علوم پزشکی شهید بهشتی، زیر نظر این گروه و با ظرفیت پذیرش ۲ دستیار در بیمارستان طالقانی راه اندازی شد. در حال حاضر ظرفیت پذیرش دستیار این دوره به ۴ نفر افزایش یافته است.

مدیر برنامه: دکتر مسعود مردانی

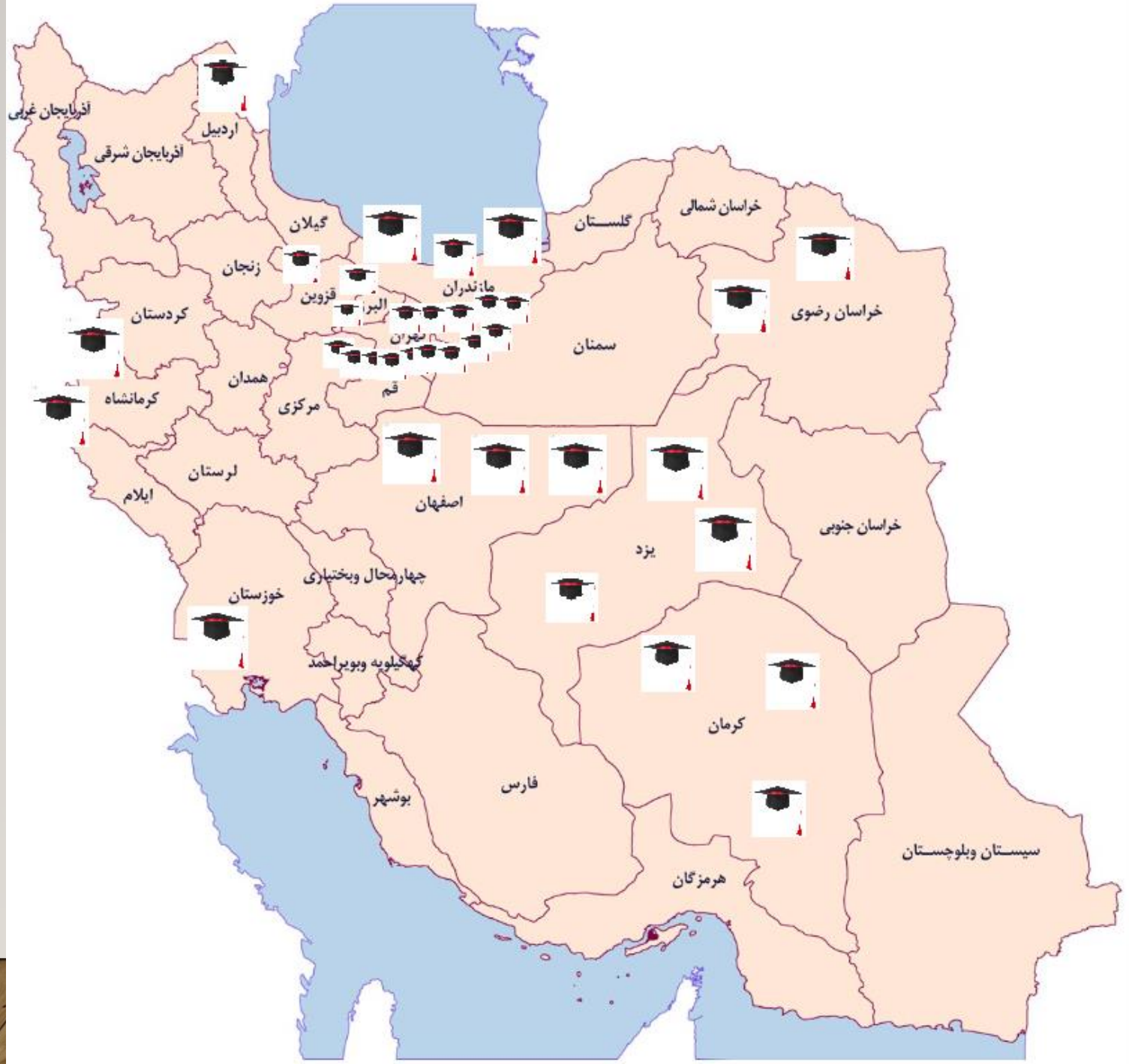
تعداد فارغ التحصیلان و دستیاران در حال تحصیل رشته فلوشیپ بیماریهای عفونت در نقص ایمنی و پیوند دانشگاه علوم پزشکی شهید بهشتی: ۳۶ نفر

طول دوره

فلوشیپ بیماریهای عفونی در بیماران مبتلا به نقص ایمنی

و پیوند ۱۸ ماه به شرح جدول ذیل است:

ردیف	نام بخش	مرکز پزشکی، آموزشی درمانی	مدت روتیش (ماه)
۱	آنکولوژی/هماتولوژی	طالقانی	۶
۲	بیماریهای عفونی	لقمان حکیم	۳
۳	روماتولوژی	لقمان حکیم	۱
۴	پیوند کبد	طالقانی	۱
۵	پیوند کلیه	لبافی نژاد	۲
۶	پیوند قلب و ریه و عفونت نقص ایمنی مادرزادی	مسیح دانشوری	۳
۷	رادیوتراپی	شهدای تجریش	۱
۸	اطفال	کودکان مفید	۱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Dear Massoud,

I hope this mail finds you well. I am pleased to inform you that I had a special rate for our Iranian colleagues for registration of the ICHS Symposium. It will be 100 Euro per person irrespective of submitting and abstract or not. Please forward this information your colleagues.

See you in Antalaya.

Best regards,

Murat

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