Physician connect

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Dear Doctor,

Greetings from Micro Labs Limited. We are happy to bring you 'Physician connect' which contains latest and interesting news in the field of Medicine

This issue contains

- Tofacitinib in Patients Hospitalized with Covid-19 Pneumonia: Results from STOP-COVID Trial
- Effect of 7 vs 14 Days of Antibiotic Therapy on Resolution of Symptoms Among Afebrile Men With UTI
- An Icteric Tongue: A Case Report

Should you require any specific article or medical information, please feel free to contact us at medicalservices@microlabs.in

Looking forward to your valuable feedback

Best Regards,

Medical Team, Micro Labs Limited

Tofacitinib in Patients Hospitalized with Covid-19 Pneumonia: Results from STOP-COVID Trial

The efficacy and safety of tofacitinib, a Janus kinase inhibitor, in patients who are hospitalized with coronavirus disease 2019 (Covid-19) pneumonia are unclear. In the Study of Tofacitinib in Hospitalized Patients with Covid-19 Pneumonia (STOP-COVID), tofacitinib was evaluated in patients with Covid-19 pneumonia. Subjects were randomly assigned, in a 1:1 ratio, hospitalized adults with Covid-19 pneumonia to receive either tofacitinib at a dose of 10 mg or placebo twice daily for up to 14 days or until hospital discharge. The primary outcome was the occurrence of death or respiratory failure through day 28 as assessed with the use of an eight-level ordinal scale (with scores ranging from 1 to 8 and higher scores indicating a worse condition). All-cause mortality and safety were also assessed.

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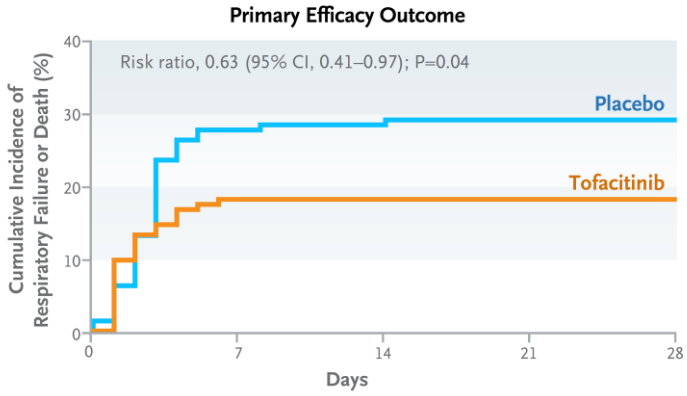
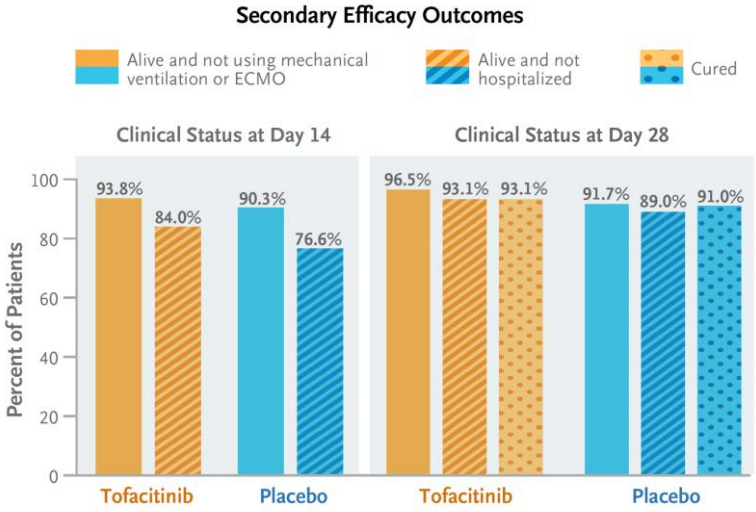
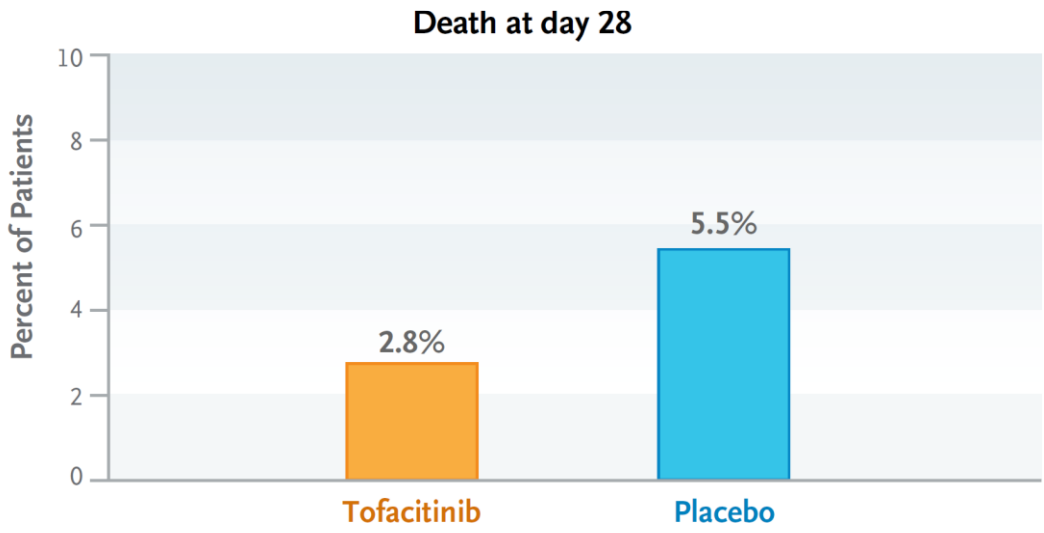
A total of 289 patients underwent randomization at 15 sites in Brazil. Overall, 89.3% of the patients received glucocorticoids during hospitalization. The cumulative incidence of death or respiratory failure through day 28 was 18.1% in the tofacitinib group and 29.0% in the placebo group (risk ratio, 0.63; 95% confidence interval [CI], 0.41 to 0.97; P=0.04). Death from any cause through day 28 occurred in 2.8% of the patients in the tofacitinib group and in 5.5% of those in the placebo group (hazard ratio, 0.49; 95% CI, 0.15 to 1.63). The proportional odds of having a worse score on the eight-level ordinal scale with tofacitinib, as compared with placebo, was 0.60 (95% CI, 0.36 to 1.00) at day 14 and 0.54 (95% CI, 0.27 to 1.06) at day 28. Serious adverse events occurred in 20 patients (14.1%) in the tofacitinib group and in 17 (12.0%) in the placebo group.







Among patients hospitalized with Covid-19 pneumonia, tofacitinib led to a lower risk of death or respiratory failure through day 28 than placebo

Guimarães PO, et al. N Engl J Med. 2021 Jul 29;385(5):406-415. doi: 10.1056/NEJMoa2101643.

Effect of 7 vs 14 Days of Antibiotic Therapy on Resolution of Symptoms Among Afebrile Men With UTI

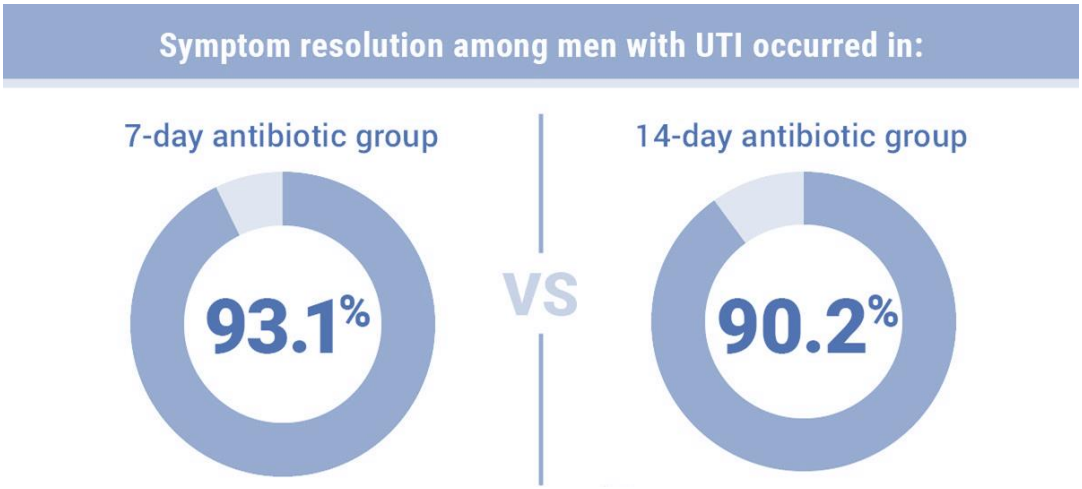
Determination of optimal treatment durations for common infectious diseases is an important strategy to preserve antibiotic effectiveness. The study was done to determine whether 7 days of treatment is noninferior to 14 days when using ciprofloxacin or trimethoprim/sulfamethoxazole to treat urinary tract infection (UTI) in afebrile men.

This was Randomized, double-blind, placebo-controlled noninferiority trial of afebrile men with presumed symptomatic UTI treated with ciprofloxacin or trimethoprim/sulfamethoxazole at 2 US Veterans Affairs medical centers (enrollment, April 2014 through December 2019; final follow-up, January 28, 2020). Of 1058 eligible men, 272 were randomized. Participants continued the antibiotic

prescribed by their treating clinician for 7 days of treatment and were randomized to receive continued antibiotic therapy (n = 136) or placebo (n = 136) for days 8 to 14 of treatment.

Main outcomes and measures: The prespecified primary outcome was resolution of UTI symptoms by 14 days after completion of active antibiotic treatment. A noninferiority margin of 10% was selected. The as-treated population (participants who took ≥26 of 28 doses and missed no more than 2 consecutive doses) was used for the primary analysis, and a secondary analysis included all patients as randomized, regardless of treatment adherence. Secondary outcomes included recurrence of UTI symptoms and/or adverse events within 28 days of stopping study medication.

Among 272 patients (median [interquartile range] age, 69 [62-73] years) who were randomized, 100% completed the trial and 254 (93.4%) were included in the primary as-treated analysis. Symptom resolution occurred in 122/131 (93.1%) participants in the 7-day group vs 111/123 (90.2%) in the 14-day group (difference, 2.9% [1-sided 97.5% CI, -5.2% to ∞]), meeting the noninferiority criterion.



In the secondary as-randomized analysis, symptom resolution occurred in 125/136 (91.9%) participants in the 7-day group vs 123/136 (90.4%) in the 14-day group (difference, 1.5% [1-sided 97.5% CI, -5.8% to ∞]) Recurrence of UTI symptoms

occurred in 13/131 (9.9%) participants in the 7-day group vs 15/123 (12.9%) in the 14-day group (difference, -3.0% [95% CI, -10.8% to 6.2%]; P = .70). Adverse events occurred in 28/136 (20.6%) participants in the 7-day group vs 33/136 (24.3%) in the 14-day group.

Among afebrile men with suspected UTI, treatment with ciprofloxacin or trimethoprim/sulfamethoxazole for 7 days was noninferior to 14 days of treatment with regard to resolution of UTI symptoms by 14 days after antibiotic therapy. The findings support the use of a 7-day course of ciprofloxacin or trimethoprim/sulfamethoxazole as an alternative to a 14-day course for treatment of afebrile men with UTI.

Source: Drekonja DM, Trautner B, Amundson C, Kuskowski M, Johnson JR. Effect of 7 vs 14 Days of Antibiotic Therapy on Resolution of Symptoms Among Afebrile Men With Urinary Tract Infection: A Randomized Clinical Trial. JAMA. 2021 Jul 27;326(4):324-331.

An Icteric Tongue: A Case Report

A 12-year-old boy was brought to the hospital with a 4-day history of sore throat and a 3-day history of dark urine, abdominal pain, and pallor. On examination he was found to have jaundice, with scleral and tongue icterus (Panel A) and dark urine (Panel B).

Laboratory studies showed a hemoglobin level of 6.1 g per deciliter (reference range, 11.0 to 14.5), a lactate dehydrogenase level of 6405 U per liter (reference range, 470 to 750), and an unconjugated bilirubin level of 115 µmol per liter (6.7 mg per deciliter; reference value, <12 µmol per liter [<0.7 mg per deciliter]); a direct antiglobulin test was positive, with cold agglutinins detected. Urinalysis was positive for hemoglobin, and no granular casts or red cells were seen on microscopy.

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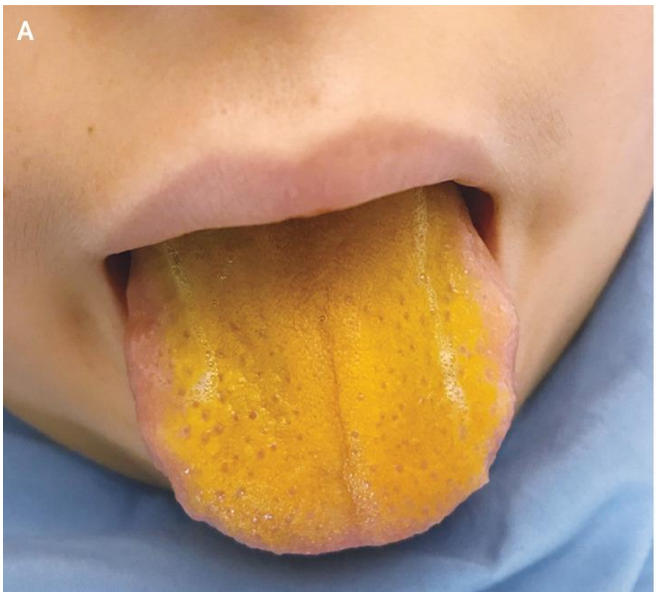

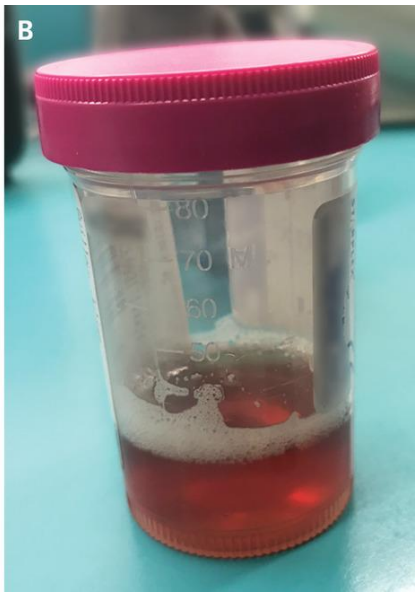

Testing for heterophile antibody was positive, as were qualitative polymerase-chain-reaction (PCR) and serologic tests for Epstein–Barr virus (EBV), with quantitative PCR showing a viral load of 36,000 IU per milliliter.

A diagnosis of cold agglutinin, EBV-induced acute hemolytic anemia was made. The patient received a total of 5 units of packed red cells, as well as treatment with high-dose intravenous methylprednisolone for 2 days, followed by oral prednisone with a tapering dose over the next 7 weeks. After discharge, he recovered well, and the tongue icterus gradually resolved as the bilirubin levels normalized.

Source: Avelar Rodriguez D, Orkin J. An Icteric Tongue. N Engl J Med. 2021 Jul 29;385(5):e16. doi: 10.1056/NEJMicm2034755. Epub 2021 Jul 24. PMID: 34297493.