

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

- Therapeutic Anticoagulation with Heparin in Critically Ill Patients with Covid-19
- Effect of Intensive Blood-Pressure Control in Older Patients with Hypertension
- Circinate Syphilitic Lesions: 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

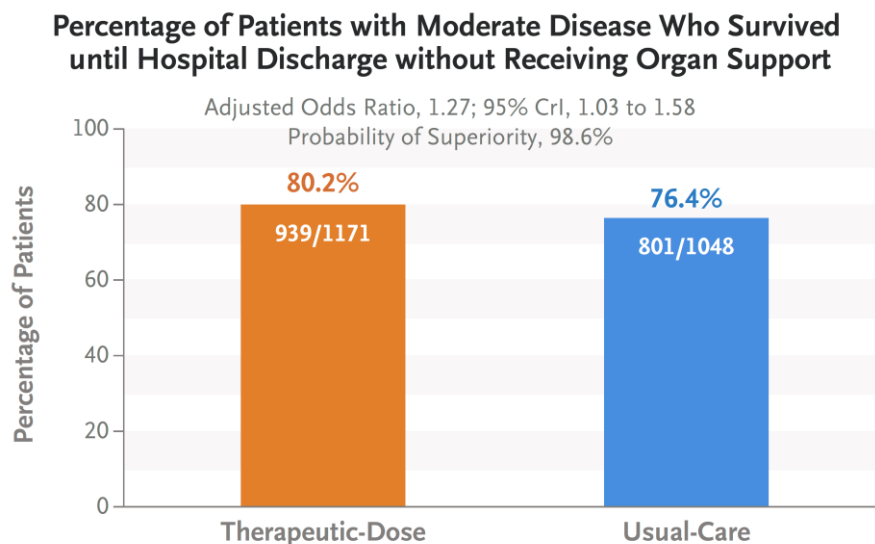
Therapeutic Anticoagulation with Heparin in Critically Ill Patients with Covid-19

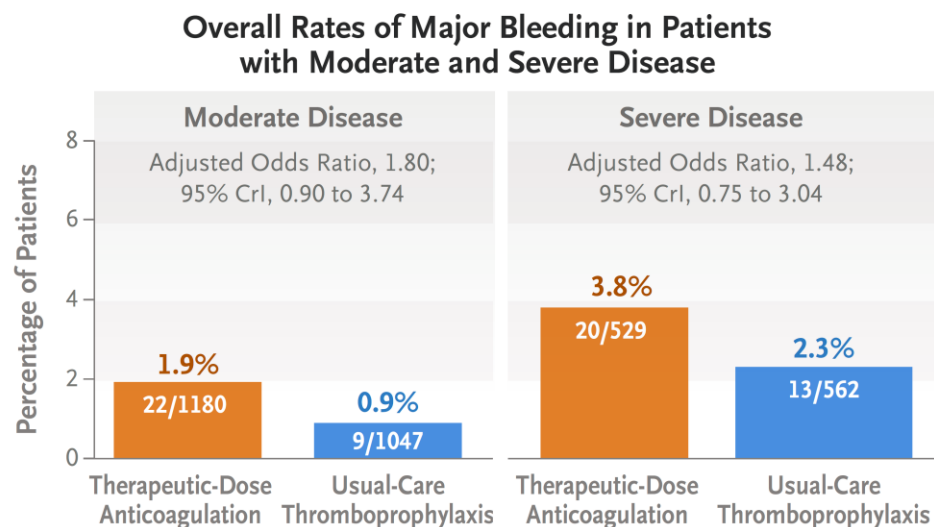
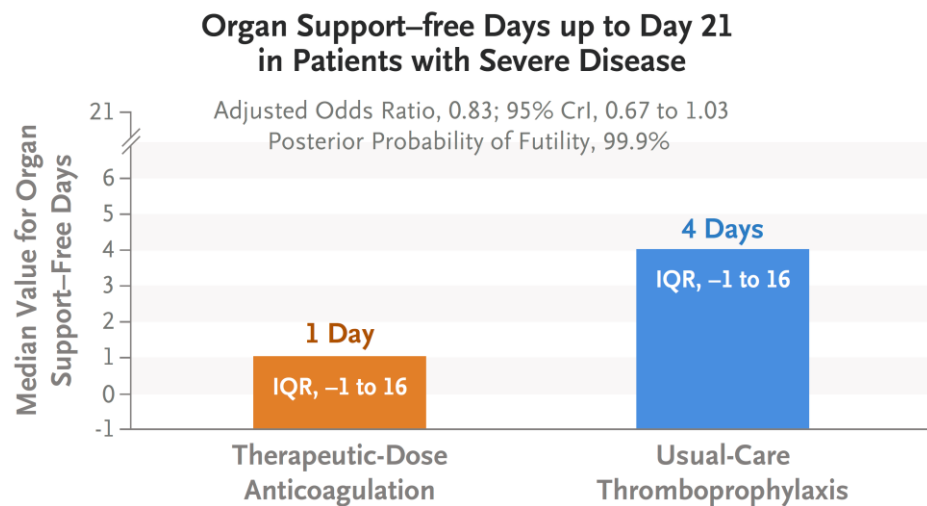
Thrombosis and inflammation may contribute to morbidity and mortality among patients with coronavirus disease 2019 (Covid-19). We hypothesized that therapeutic-dose anticoagulation would improve outcomes in critically ill patients with Covid-19.

In an open-label, adaptive, multiplatform, randomized clinical trial, critically ill patients with severe Covid-19 were randomly assigned to a pragmatically defined regimen of either therapeutic-dose anticoagulation with heparin or pharmacologic thromboprophylaxis in accordance with local usual care. The primary outcome was organ support-free days, evaluated on an ordinal scale that combined in-hospital death (assigned a value of -1) and the number of

days free of cardiovascular or respiratory organ support up to day 21 among patients who survived to hospital discharge.

The trial was stopped when the prespecified criterion for futility was met for therapeutic-dose anticoagulation. Data on the primary outcome were available for 1098 patients (534 assigned to therapeutic-dose anticoagulation and 564 assigned to usual-care thromboprophylaxis). The median value for organ support-free days was 1 (interquartile range, -1 to 16) among the patients assigned to therapeutic-dose anticoagulation and was 4 (interquartile range, -1 to 16) among the patients assigned to usual-care thromboprophylaxis (adjusted proportional odds ratio, 0.83; 95% credible interval, 0.67 to 1.03; posterior probability of futility [defined as an odds ratio <1.2], 99.9%). The percentage of patients who survived to hospital discharge was similar in the two groups (62.7% and 64.5%, respectively; adjusted odds ratio, 0.84; 95% credible interval, 0.64 to 1.11). Major bleeding occurred in 3.8% of the patients assigned to therapeutic-dose anticoagulation and in 2.3% of those assigned to usual-care pharmacologic thromboprophylaxis.





In critically ill patients with Covid-19, an initial strategy of therapeutic-dose anticoagulation with heparin did not result in a greater probability of survival to hospital discharge or a greater number of days free of cardiovascular or respiratory organ support than did usual-care pharmacologic thromboprophylaxis.

Reference: The REMAP-CAP, ACTIV-4a, and ATTACC Investigators. N Engl J Med. 2021 Aug 26;385(9):777-789. doi: 10.1056/NEJMoa2103417. Epub 2021 Aug 4. PMID: 34351722; PMCID: PMC8362592.



Effect of Intensive Blood-Pressure Control in Older Patients with Hypertension

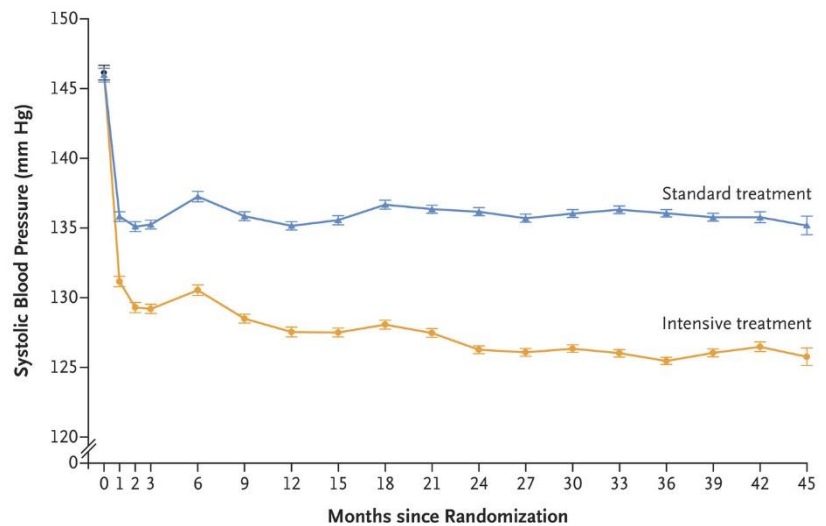
Hypertension is a common risk factor for death from cardiovascular causes worldwide. With aging of the population, determination of the treatment target for systolic blood pressure in older patients with hypertension has become a focus of research. Current guideline-based recommendations for the systolic blood-pressure target in older patients remain inconsistent. The target is less than 150 mm Hg in the American College of Physicians–American Academy of Family Physicians guideline, 130 to 139 mm Hg in the European guideline, and less than 130 mm Hg in the American College of Cardiology–American Heart Association guideline.

In this multicenter, randomized, controlled trial, we assigned Chinese patients 60 to 80 years of age with hypertension to a systolic blood-pressure target of 110 to less than 130 mm Hg (intensive treatment) or a target of 130 to less than 150 mm Hg (standard treatment). The primary outcome was a composite of stroke, acute coronary syndrome (acute myocardial infarction and hospitalization for unstable angina), acute decompensated heart failure, coronary revascularization, atrial fibrillation, or death from cardiovascular causes.

Of the 9624 patients screened for eligibility, 8511 were enrolled in the trial; 4243 were randomly assigned to the intensive-treatment group and 4268 to the standard-treatment group. At 1 year of follow-up, the mean systolic blood pressure was 127.5 mm Hg in the intensive-treatment group and 135.3 mm Hg in the standard-treatment group. During a median follow-up period of 3.34 years, primary-outcome events occurred in 147 patients (3.5%) in the intensive-treatment group, as compared with 196 patients (4.6%) in the standard-treatment group (hazard ratio, 0.74; 95% confidence interval [CI], 0.60 to 0.92; $P=0.007$).

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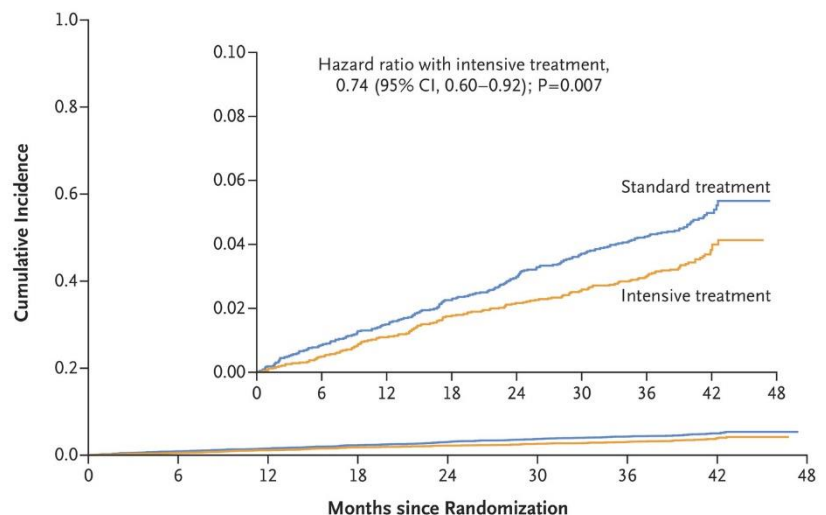


No. with Data

Standard treatment	4268	4139	4086	4092	4072	3954	3857	1885
Intensive treatment	4243	4128	4086	4049	4050	3969	3894	1850

Mean No. of Medications

Standard treatment	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Intensive treatment	1.5	1.7	1.8	1.8	1.9	1.9	1.9	1.9



No. at Risk

Standard treatment	4268	4147	4070	4000	3938	3849	3664	1200
Intensive treatment	4243	4174	4109	4039	3970	3867	3694	1234



The results for most of the individual components of the primary outcome also favored intensive treatment: the hazard ratio for stroke was 0.67 (95% CI, 0.47 to 0.97), acute coronary syndrome 0.67 (95% CI, 0.47 to 0.94), acute decompensated heart failure 0.27 (95% CI, 0.08 to 0.98), coronary revascularization 0.69 (95% CI, 0.40 to 1.18), atrial fibrillation 0.96 (95% CI, 0.55 to 1.68), and death from cardiovascular causes 0.72 (95% CI, 0.39 to 1.32). The results for safety and renal outcomes did not differ significantly between the two groups, except for the incidence of hypotension, which was higher in the intensive-treatment group. In older patients with hypertension, intensive treatment with a systolic blood-pressure target of 110 to less than 130 mm Hg resulted in a lower incidence of cardiovascular events than standard treatment with a target of 130 to less than 150 mm Hg.

Reference: Zhang et al. N Engl J Med 2021 Aug. DOI: 10.1056/NEJMoa2111437. E pub ahead of print.

Circinate Syphilitic Lesions: A Case Report

A 30-year-old man presented to the sexual health clinic with a rash on his face, hands, and feet that had appeared 1 month earlier. He had a history of human immunodeficiency virus infection; his most recent CD4+ T-cell count was 374 per cubic millimeter. He reported having had unprotected sexual intercourse 2 months earlier. A physical examination showed circinate, concentric lesions on the palms (Panel A) and soles (Panel B).



Multiple circinate lesions were also visible on the face, with areas of erosion at the oral commissures (Panel C).

Condyloma latum was present in the perianal area, and patchy alopecia was visible on the scalp. A Venereal Disease Research Laboratory (VDRL) test was positive at a titer of 1:32, which confirmed a diagnosis of syphilis. Tests for other sexually transmitted infections were



negative. The patient was treated with intramuscular benzathine penicillin. At a follow-up visit 1 month after the initiation of treatment, all the lesions had completely resolved. A repeat VDRL test showed a reduced titer of 1:8.

Source: Purushothaman S et al. N Engl J Med 2021; 385:e26 DOI: 10.1056/NEJMicm2035514



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