



Prophylaxis for Hospitalized and Non-Hospitalized Medical Patients



What it covers

- Who should receive an intervention and what that intervention should be
- Interventions considered include blood thinning medications of different types and mechanical compression (e.g., pneumatic compression devices or graduated compression stockings).



Why it matters

- Medical inpatients, long-term care residents, persons with minor injuries, and long-distance travelers are at increased risk of VTE, which can be fatal (20-25% of all VTE instances occur in these groups).
- It is important to ensure that at-risk patients receive the appropriate measures to prevent VTE without excess bleeding side effects.
- The guidelines recommend the best approaches for preventing VTE in these populations while minimizing unnecessary or over-treatment.



Who it affects

- Medical inpatients (including those in intensive care units), long-term care residents, persons with minor injuries, and long-distance travelers (>4 hours by air)
- Health care providers working in hospitals



What are the highlights

- For patients who are hospitalized, risk assessment for VTE and bleeding help inform a decision on effective prophylactic measures.
- In medical inpatients at high bleeding risk who require prophylaxis, mechanical prophylaxis is preferred over blood-thinning medications.
- In medical inpatients at high VTE risk but acceptable bleeding risk, blood thinning medication is preferred over mechanical prophylaxis.
- In medical inpatients, when medication is used to prevent VTE, low-molecular-weight heparin is preferred over unfractionated heparin because it is only administered once a day and has fewer complications.
- In medical inpatients, when a medication is used to prevent VTE, low-molecular-weight heparin during the hospital stay is preferred over a direct oral anticoagulant administered in hospital or after discharge.
- The use of combined modalities in medical inpatients (e.g., compression devices plus a blood thinner) is not necessary.
- Long-distance air travelers who do not have an elevated risk of thrombosis do not need to wear compression socks or take a blood thinner like aspirin to prevent thrombosis. Air travelers at substantially increased risk may benefit from graduated compression stockings or low-molecular-weight heparin.

Total number of panel recommendations: 21

REFERENCE

Schünemann, H. J., Cushman, M., Burnett, A. E., Kahn, S. R., Beyer-Westendorf, J., Spencer, F. A., Rezende, S. M., Zakai, N. A., Bauer, K. A., Dentali, F., Lansing, J., Balduzzi, S., Darzi, A., Morgano, G. P., Neumann, I., Nieuwlaat, R., Yepes-Nuñez, J. J., Zhang, Y., & Wiercioch, W. [American Society of Hematology 2018 guidelines for management of venous thromboembolism: prophylaxis for hospitalized and nonhospitalized medical patients](#). *Blood Advances*. 2018; 2:3198-3225

For more information on the ASH Clinical Practice Guidelines on Venous Thromboembolism, [visit www.hematology.org/VTEguidelines](http://www.hematology.org/VTEguidelines)

ASH guidelines are reviewed annually by expert work groups convened by ASH. Resources derived from guidelines that require updating are removed from the ASH website.

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