



## ASH Clinical Practice Guideline on Venous Thromboembolism (VTE):

# What You Should Know

... m a ... ma ( ) a ... a  
m v ... ma a a v  
m m m ( ), a mm a a  
-v m ( ) a m a m m ( )  
a v ... a v , a a  
v m a a a m ,  
m a ... ma , a , a , a  
a a v a a

# Prophylaxis for Hospitalized and





# Optimal Management of Anticoagulation Therapy



## Who is covered?

ma a ma a m a a a a a av v  
a



## Why is it important?

a a m a  
v a  
a a v av ma  
a a a a a ma v

## Who is affected?

a av a a a a a a a a  
a ma , a , , a a a ma



## What are the highlights?

a a a a a a m a v a m  
a a a a ma a m v v ma a a  
v  
a a a a va v a  
-a a a a a m - a v ,  
a a  
a a m - a a a a a  
a a a v a a  
a a v v ma a a a a m  
a a a a

Total number of panel recommendations : 25



# Heparin-Induced Thrombocytopenia

## What is it?

Heparin-induced thrombocytopenia (HIT) is a life-threatening complication of heparin therapy. It is characterized by a decrease in platelet count (thrombocytopenia) and the presence of HIT antibodies. HIT typically occurs 5 to 14 days after the start of heparin therapy. The pathogenesis involves the formation of antibodies that bind to heparin-platelet factor complex, leading to platelet activation and aggregation. This can result in thrombotic events, such as deep vein thrombosis (DVT) and pulmonary embolism (PE). HIT is diagnosed based on clinical criteria, including a decrease in platelet count and the presence of HIT antibodies. Treatment involves discontinuation of heparin and the use of alternative anticoagulants.

## Who is affected?

HIT can affect anyone who has received heparin therapy. It is most commonly seen in patients who have received heparin for the treatment of venous thromboembolism (VTE) or acute coronary syndrome (ACS). HIT is also seen in patients who have received heparin for the treatment of atrial fibrillation (AF) or heart failure (HF).

## What are the highlights?

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Total number of panel recommendations : 32



# VTE in the Context of Pregnancy

... a , v , a am a a a , a  
a a a a a a ma a

## Who is most at risk?

... a -a a a a ma a m a m a  
a a , a a , a a v ,  
- a ( , a , ), a a a  
a m a m , v , av a a m a  
, a a a a v a a

## Who is affected?

... a m , a av v a  
av a  
a - , ma a a a , a

## What are the highlights?

... va v a a a , a v  
a m ava a a , m m  
a a m m v a m  
ma a , -m a - a a a  
ma a a m



# Treatment of Pediatric VTE

## Who is covered?

All ages

## Why is it made?

There is a paucity of data on the use of oral anticoagulants in children. The use of parenteral anticoagulants is supported by limited data. The use of direct oral anticoagulants (DOACs) is not supported by data in children. The use of DOACs is not recommended in children.

## Who is affected?

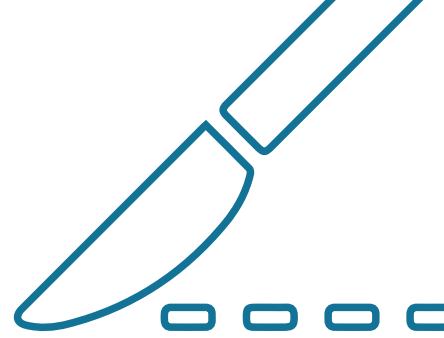
Children with VTE, including those with acute and chronic VTE, are affected. The use of anticoagulants is recommended for the treatment of VTE in children.

## What are the highlights?

For the treatment of VTE in children, the use of parenteral anticoagulants is supported by limited data. The use of DOACs is not supported by data in children. The use of DOACs is not recommended in children.

**Total number of recommendations: 30**

# Prophylaxis for Surgical Patients



venous thromboembolism (VTE) is a leading cause of death in hospitalized patients. The risk of VTE is increased in patients who are undergoing surgery, especially major surgery. The risk of VTE is also increased in patients who are immobilized, have a history of VTE, or have other risk factors.

Prophylaxis for VTE in surgical patients is essential to reduce the risk of VTE. The American Society of Hematology (ASH) has published clinical practice guidelines for the prevention of VTE in surgical patients. These guidelines provide recommendations for the use of pharmacologic and mechanical prophylaxis in surgical patients.

**Hematology:** The study of blood and blood-forming organs, and the disorders of these organs and tissues.

**Surgeon:** A medical professional who specializes in surgery, the treatment of disease by cutting into the body.

**Hospital Stay:** The period of time a patient spends in a hospital, from admission to discharge.

**Patient:** A person who is receiving medical treatment or care.

These guidelines are based on the best available evidence and are intended to help clinicians provide the highest quality of care to their patients.





# ASH Recommendations for Treatment of Deep Vein Thrombosis and Pulmonary Embolism

venous thromboembolism (VTE) is a leading cause of death and disability in the United States. The most common types of VTE are deep vein thrombosis (DVT) and pulmonary embolism (PE). The American Society of Hematology (ASH) has published clinical practice guidelines for the treatment of VTE.

The ASH guidelines recommend the use of direct oral anticoagulants (DOACs) as first-line therapy for the treatment of VTE. DOACs include apixiban, edoxaban, rivaroxaban, and dabigatran. These medications are preferred over vitamin K antagonists (VKAs) such as warfarin because they are easier to use and have fewer drug interactions.

For patients who are unable to take DOACs, VKAs remain an option. However, patients on VKAs require regular monitoring of their international normalized ratio (INR) to ensure they are receiving the correct dose. The ASH guidelines also provide recommendations for the duration of treatment for VTE, which typically ranges from 3 to 6 months, depending on the patient's risk of recurrence and bleeding.

In addition to anticoagulation, patients with VTE may also benefit from compression stockings and early ambulation. These measures can help reduce the risk of complications such as post-thrombotic syndrome and chronic venous insufficiency.

The ASH guidelines also address the management of VTE in special populations, such as pregnant women and patients with renal or liver impairment. For pregnant women, low-molecular-weight heparin (LMWH) is preferred over VKAs and DOACs. For patients with renal or liver impairment, the choice of anticoagulant depends on the severity of the impairment.





