



# Antithrombin III Immuno

**Class:** *Manufactured blood product (anticoagulant), derived from human plasma*

**OTHER NAMES:** Antithrombin III, ATIII  
**Company:** *Baxter*

ROUTES	INTRAVENOUS			OTHER		
	DIRECT IV	IV Infusion	Continuous Infusion	SC	IM	OTHER
Acceptable Routes*	Yes	Yes	No	No	No	N/A

**\* Professionals performing these restricted activities have received authorization from their regulatory college and have the knowledge and skill to perform the skill competently.**

**DESCRIPTION OF PRODUCT:**

- A sterile, purified, lyophilized concentrate of human plasma-derived antithrombin III.
- Viral reduction steps include cryoprecipitation, adsorption, heat treatment, precipitation, and filtration.
- Each vial contains the labeled amount of antithrombin III in international units (IU) per vial.
- Available in 1000 IU single-use vial size only.
- Does not contain any preservatives.
- **Latex-free**

**AVAILABILITY:**

- Supplied by CBS
- Contact your local laboratory/transfusion service regarding stock availability on site.

**INDICATIONS FOR USE:**

- Prophylaxis and treatment of thrombotic and thromboembolic disorders in patients with hereditary antithrombin III deficiency (antithrombin III activity below 70% of normal).
- Antithrombin III acts as a physiological inhibitor of blood coagulation, particularly by inhibition of thrombin and activated factor X, but also of factors Ixa, XIa, XIIa and plasmin.

**CONTRAINDICATIONS:**

- History of anaphylactic or severe systemic reaction of any of the component of the product.

**WARNINGS:**

- The anticoagulant effect of heparin is enhanced by concurrent treatment with antithrombin III.
- In patients with hemorrhagic diathesis, the combined use of antithrombin III and heparin will increase the risk of bleeding.

**DOSE (Refer to Product Insert):**

- Dependent on cause and extent of antithrombin III deficiency.

## ADMINISTRATION:

**Ensure patient consent has been obtained prior to requesting blood product from lab/transfusion service where possible.**

**Pre-Infusion:** Ensure recent patient weight is on file and pertinent labs are available. Perform the appropriate pre-transfusion checks per protocol.

**Access:** Antithrombin III Immuno can be given via CVC, PICC, Port-a-Cath®, or peripheral IV line.

### Reconstitution Supplies:

- Vial of Antithrombin III Immuno lyophilized powder
  - Vial of Sterile Water for Injection (diluent)
  - Double-ended transfer needle (pink case)
  - Filter needle (white case)
- } Contained in box

### Administration Supplies:

- **For direct IV administration:**
  - Sterile plastic Luer lock syringe (large enough to contain dose)
- For IV infusion:
  - IV administration set
  - IV pump

**Reconstitution:** Reconstitute just prior to administration. Refer to reconstitution steps:  
<http://www.albertahealthservices.ca/assets/wf/LabServices/wf-lab-clin-tm-atiii-reconst-inst.pdf>

### Administration:

- Give within 30-60 minutes of reconstitution. **DO NOT** refrigerate after reconstitution.
- **DO NOT** mix with other drugs.
- **Administration rate:** Not to exceed 5 mL/min.

## POTENTIAL HAZARDS WITH PARENTERAL ADMINISTRATION:

- Potential adverse events related to a blood product transfusion range in severity from minor with no sequelae to life-threatening.
- All adverse events occurring during a transfusion should be evaluated to determine whether or not the transfusion can be safely continued/restarted.
- All adverse events suspected to be related to a product transfusion (whether during or after a transfusion) should be reported to your local transfusion service.

### Side Effects

- Flushing
- Headache
- Nausea
- Itching and redness at the venipuncture site



### Action

Slow rate of infusion

### Potential Allergic Reaction

- Stuffy nose
- Hives/severe itching
- Cough
- Chest pain
- Wheezing
- Facial swelling
- Fainting



### Action

**STOP** infusion  
**IMMEDIATELY** and contact  
physician

**NURSING IMPLICATIONS:****Patient Monitoring:**

- Vital Signs: Pre-administration, on completion of dose, and as patient condition requires.

**Patients receiving blood product transfusions must be observed closely for signs of any unexpected or untoward reactions. These reactions may occur during or after the infusion of blood or blood products. For follow up instructions to a transfusion reaction, click [here](http://www.albertahealthservices.ca/4240.asp).** (<http://www.albertahealthservices.ca/4240.asp>)

**Documentation:**

- Ensure documentation is completed as per the AHS *Transfusion of Blood Components and Products* procedure
- Assessment of patient tolerability should be documented in appropriate flow chart or clinical record (electronic or paper) as required.

**STORAGE & STABILITY OF PRODUCT:**

- Stored at 2-8°C. Do not freeze.
- Reconstituted product should be used immediately (Do NOT refrigerate after reconstitution).

**COMMENTS:**

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*For comments or questions about this document, please contact [Transfusion.SafetyTeam@albertahealthservices.ca](mailto:Transfusion.SafetyTeam@albertahealthservices.ca)*

**REFERENCES:**

ANTITHROMBIN III IMMUNO product monograph SCN 151818

**LINK to WEBSITE for PRESCRIBING INFORMATION:**

<http://www.baxter.ca/>