

Reversal for Anticoagulant-Induced Life-threatening Bleeding [4129]

This order set is intended for anticoagulant reversal in the setting of life-threatening and acute bleeding. For non-emergent reversal of warfarin (Coumadin), refer to the Non-Emergent Reversal of Warfarin (Coumadin) Anticoagulation (procedure or supratherapeutic INR without bleeding).

DISCONTINUE ANTICOAGULANT

General

Bleeding Location

Bleeding location: Bleeding location:

Laboratory

Baseline Laboratory

<input checked="" type="checkbox"/> Type and screen	STAT For 1 Occurrences
<input checked="" type="checkbox"/> CBC with platelet and differential	STAT For 1 Occurrences
<input checked="" type="checkbox"/> Prothrombin time with INR	STAT For 1 Occurrences
<input checked="" type="checkbox"/> Partial thromboplastin time, activated	STAT For 1 Occurrences

Follow-Up Laboratory

<input checked="" type="checkbox"/> CBC with platelet and differential	Every 6 hours For 24 Hours Draw lab one hour after reversal
<input checked="" type="checkbox"/> Prothrombin time with INR	Every 6 hours For 24 Hours Draw lab one hour after reversal
<input checked="" type="checkbox"/> Partial thromboplastin time, activated	Every 6 hours For 24 Hours Draw lab one hour after reversal

Medications and Additional Laboratory

Bleeding associated with use of (Single Response)

apixaban (ELIQUIS), rivaroxaban (XARELTO), edoxaban (SAVAYSA)

Medications (Single Response)

Andexanet alfa (Andexxa®) infusion (RESTRICTED) (Single Response)

Fa Inhibitor FXa Inhibitor Last Dose Timing of FXa Inhibitor Last Dose Before Andexanet alfa Initiation
<8 Hours or Unknown ?8 Hours
Apixaban ?5 mg Low dose Low dose
>5 mg or unknown High dose
Rivaroxaban ?10 mg Low dose
>10 mg or unknown High dose

High dose should also be used for patients ?7 hours since last administration of treatment dose enoxaparin ? 1 mg/kg in a patient allergic to protamine.

Low Dose Option (Single Response)

Central Line Administration

"Followed by" Linked Panel

<input type="checkbox"/> factor Xa,inactivated-zhzo (ANDEXXA) IV solution (RESTRICTED)	400 mg, intravenous, for 15 Minutes, once, For 1 Doses Do not exceed 30 mg/min for bolus rate Andexxa® is restricted to attending-level physicians. Are you an attending-level provider or ordering on behalf of one? Andexxa® is restricted to use in emergency department, intensive care unit, and operating room areas only. Do you attest that the patient is being treated in an approved care setting? Andexxa® is restricted to treatment of intracranial hemorrhage, neuraxial bleeding, and life-threatening extracranial bleeding that is not amendable to other medical and surgical interventions. Do you attest that these restrictions are met? Andexxa® is restricted to only be used to reverse rivaroxaban, apixaban, or enoxaparin (if allergic to protamine). Do you attest that these restrictions for andexanet alfa (Andexxa®) have been met?
<input type="checkbox"/> recombinant coagulation factor Xa (ANDEXXA) Low Dose 500 mg infusion (RESTRICTED)	4 mg/min, intravenous, for 120 Minutes, once, Starting H+15 Minutes, For 1 Doses Andexxa® is restricted to attending-level physicians. Are you an attending-level provider or ordering on behalf of one? Andexxa® is restricted to use in emergency department, intensive care unit, and operating room areas only. Do you attest that the patient is being treated in an approved care setting? Andexxa® is restricted to treatment of intracranial hemorrhage, neuraxial bleeding, and life-threatening extracranial bleeding that is not amendable to other medical and surgical interventions. Do you attest that these restrictions are met? Andexxa® is restricted to only be used to reverse rivaroxaban, apixaban, or enoxaparin (if allergic to protamine). Do you attest that these restrictions for andexanet alfa (Andexxa®) have been met?
<input type="checkbox"/> Peripheral Line Administration	"Followed by" Linked Panel
<input type="checkbox"/> andexanet alfa (ANDEXXA) Peripheral Line IV Bolus (RESTRICTED)	400 mg, intravenous, for 15 Minutes, once, For 1 Doses Do not exceed 30 mg/min for bolus rate. Andexxa® is restricted to attending-level physicians. Are you an attending-level provider or ordering on behalf of one? Andexxa® is restricted to use in emergency department, intensive care unit, and operating room areas only. Do you attest that the patient is being treated in an approved care setting? Andexxa® is restricted to treatment of intracranial hemorrhage, neuraxial bleeding, and life-threatening extracranial bleeding that is not amendable to other medical and surgical interventions. Do you attest that these restrictions are met? Andexxa® is restricted to only be used to reverse rivaroxaban, apixaban, or enoxaparin (if allergic to protamine). Do you attest that these restrictions for andexanet alfa (Andexxa®) have been met?

<input type="checkbox"/> recombinant coagulation factor Xa (ANDEXXA) Low Dose 480 mg Peripheral Line infusion (RESTRICTED)	<p>4 mg/min, intravenous, for 120 Minutes, once, Starting H+15 Minutes, For 1 Doses</p> <p>Andexxa® is restricted to attending-level physicians. Are you an attending-level provider or ordering on behalf of one?</p> <p>Andexxa® is restricted to use in emergency department, intensive care unit, and operating room areas only. Do you attest that the patient is being treated in an approved care setting?</p> <p>Andexxa® is restricted to treatment of intracranial hemorrhage, neuraxial bleeding, and life-threatening extracranial bleeding that is not amendable to other medical and surgical interventions. Do you attest that these restrictions are met?</p> <p>Andexxa® is restricted to only be used to reverse rivaroxaban, apixaban, or enoxaparin (if allergic to protamine). Do you attest that these restrictions for andexanet alfa (Andexxa®) have been met?</p>
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<p>() High Dose Option (Single Response)</p>	
<p>() Central Line Administration</p>	
<input type="checkbox"/> andexanet alfa (ANDEXXA) IV Bolus (RESTRICTED)	<p>"Followed by" Linked Panel</p> <p>800 mg, intravenous, for 30 Minutes, once, For 1 Doses</p> <p>Do not exceed 30 mg/min for bolus</p> <p>Andexxa® is restricted to attending-level physicians. Are you an attending-level provider or ordering on behalf of one?</p> <p>Andexxa® is restricted to use in emergency department, intensive care unit, and operating room areas only. Do you attest that the patient is being treated in an approved care setting?</p> <p>Andexxa® is restricted to treatment of intracranial hemorrhage, neuraxial bleeding, and life-threatening extracranial bleeding that is not amendable to other medical and surgical interventions. Do you attest that these restrictions are met?</p> <p>Andexxa® is restricted to only be used to reverse rivaroxaban, apixaban, or enoxaparin (if allergic to protamine). Do you attest that these restrictions for andexanet alfa (Andexxa®) have been met?</p>
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<input type="checkbox"/> recombinant coagulation factor Xa (ANDEXXA) High Dose 960 mg Central Line infusion (RESTRICTED)	<p>8 mg/min, intravenous, for 120 Minutes, once, Starting H+30 Minutes, For 1 Doses</p> <p>Andexxa® is restricted to attending-level physicians. Are you an attending-level provider or ordering on behalf of one?</p> <p>Andexxa® is restricted to use in emergency department, intensive care unit, and operating room areas only. Do you attest that the patient is being treated in an approved care setting?</p> <p>Andexxa® is restricted to treatment of intracranial hemorrhage, neuraxial bleeding, and life-threatening extracranial bleeding that is not amendable to other medical and surgical interventions. Do you attest that these restrictions are met?</p> <p>Andexxa® is restricted to only be used to reverse rivaroxaban, apixaban, or enoxaparin (if allergic to protamine). Do you attest that these restrictions for andexanet alfa (Andexxa®) have been met?</p>
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<p>() Peripheral Line Administration</p>	<p>"Followed by" Linked Panel</p>

andexanet alfa (ANDEXXA) Peripheral Line IV Bolus (RESTRICTED) 800 mg, intravenous, for 30 Minutes, once, For 1 Doses
Do not exceed 30 mg/min for bolus rate.
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recombinant coagulation factor Xa (ANDEXXA) High Dose 960 mg Peripheral Line infusion (RESTRICTED) 8 mg/min, intravenous, for 120 Minutes, once, Starting H+30 Minutes, For 1 Doses
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STAT Prothrombin complex concentrate (KCentra) IV
Avoid use in disseminated intravascular coagulopathy (DIC). May contain heparin, avoid use in heparin induced thrombocytopenia (HIT).

Prothrombin complex concentrate (KCentra) IV 50 units/kg 50 Units/kg, intravenous, for 20 Minutes, once, For 1 Doses

Additional laboratory for apixaban (Eliquis)

Anti Xa Apixaban STAT, Starting S For 1 Occurrences
STAT

Anti Xa Apixaban Once, Starting H+2 Hours For 1 Occurrences
Draw 1 hour after reversal administration

Additional laboratory for rivaroxaban (Xarelto)

Anti Xa Rivaroxaban STAT, Starting S For 1 Occurrences
STAT

Anti Xa Rivaroxaban Once, Starting H+2 Hours For 1 Occurrences
Draw 1 hour after reversal administration

dabigatran (PRADAXA)

Consult to Nephrology Reason for Consult? Hemodialysis removal of dabigatran
Patient/Clinical information communicated?
Patient/clinical information communicated?

idaruCIZUmab (PRAXBIND)

Note: For Hereditary Fructose Intolerance Patients - idarucizumab contains 4 gm of sorbitol as an excipient

2.5 gram x 2 doses = 5 grams total dose delivered

idaruCIZUmab (PRAXBIND) IVPB solution - 2.5 gm x 2 doses = 5 gm total dose 2.5 g, intravenous, at 300 mL/hr, for 10 Minutes, every 10 min, For 2 Doses
Administer 2.5 grams x 2 doses for a total dose of 5 grams delivered. Administer no more than 15 minutes apart.

() heparin

Medications (Single Response)

MAX single dose of protamine IV should not exceed 50 mg

() Protamine for one-time dose of Heparin (i.e. bolus) **"And" Linked Panel**

Exposure to heparin less than 30 minutes ago, give 1 mg of protamine for every 100 units of unfractionated heparin
Exposure to heparin 30-60 minutes ago, give 0.5 mg of protamine for every 100 units of unfractionated heparin
Exposure to heparin was greater than 2 hours ago, give 0.25 mg of protamine for each 100 units of unfractionated heparin

Degree of reversal can be expressed with aPTT and/or anti-factor Xa Activity.

Use with caution in patients with a history of vasectomy, previous exposure to protamine through protamine-containing insulins or with known fish allergy.

Do NOT exceed a dose rate of 5 mg/minute. MAX Dose of protamine is 50 mg.

protamine injection intravenous, once, For 1 Doses
Do not exceed a dose administration rate of 5 mg/min.

() Protamine for prolonged exposure of Heparin (i.e. IV infusion) **"And" Linked Panel**

Use only the last 3 hours of heparin exposure prior to reversal when considering the total amount of heparin administered to the patient:

- For every 100 units of heparin patient received in last hour give 1 mg of protamine
 - For every 100 units of heparin the patient received in the 2nd hour, give 0.5 mg of protamine
 - For every 100 units of heparin the patient received in the 3rd hour, give 0.25 mg of protamine

Degree of reversal can be expressed with aPTT and/or anti-factor Xa Activity. Contact pharmacy if assistance is required in determining amount of heparin administered to the patient over time.

Use with caution in patients with a history of vasectomy, previous exposure to protamine through protamine-containing insulins or with known fish allergy.

Do NOT exceed a dose rate of 5 mg/minute. MAX Dose of protamine is 50 mg.

protamine injection intravenous, once, For 1 Doses
Do not exceed a dose administration rate of 5 mg/min

Heparin Additional Laboratory

Anti Xa, unfractionated STAT, Starting S For 1 Occurrences
STAT

Anti Xa, unfractionated Once, Starting H+2 Hours For 1 Occurrences
Draw after protamine administration

() low molecular weight heparin: enoxaparin (LOVENOX) or dalteparin (FRAGMIN)

Protamine for partial neutralization (60%) (Single Response)

Recommended dosing provided:

Last dose of LMWH was less than 8 hours - for each 1 mg of enoxaparin use 1 mg of protamine
- for each 100 units of dalteparin use 1 mg of

protamine

Last dose of LMWH was between 8 to 12 hours - for each 1 mg of enoxaparin administer 0.5 mg of protamine.
- for each 100 units of dalteparin use 0.5 mg of protamine

Last dose of LMWH was greater than 12 hours - administration of protamine is not recommended

Degree of reversal can be expressed with aPTT and/or anti-factor Xa Activity.

Use with caution in patients with a history of vasectomy, previous exposure to protamine through protamine-containing insulins or with known fish allergy.

Do NOT exceed a dose rate of 5 mg/minute. MAX Dose of protamine is 50 mg.

() protamine injection intravenous, once, For 1 Doses
Do not exceed a dose administration rate of 5 mg/min.

Andexanet alfa (Andexxa®) infusion (RESTRICTED)
(Single Response)

Fa Inhibitor FXa Inhibitor Last Dose Timing of FXa Inhibitor Last Dose Before Andexanet alfa Initiation
<8 Hours or Unknown ?8 Hours
Apixaban ?5 mg Low dose Low dose
>5 mg or unknown High dose
Rivaroxaban ?10 mg Low dose
>10 mg or unknown High dose

High dose should also be used for patients ?7 hours since last administration of treatment dose enoxaparin ? 1 mg/kg in a patient allergic to protamine.

Low Dose Option (Single Response)

Central Line Administration

"Followed by" Linked Panel

factor Xa,inactivated-zhzo (ANDEXXA) IV solution
(RESTRICTED)

400 mg, intravenous, for 15 Minutes, once, For 1 Doses
Do not exceed 30 mg/min for bolus rate
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recombinant coagulation factor Xa (ANDEXXA) Low Dose 500 mg infusion (RESTRICTED)

4 mg/min, intravenous, for 120 Minutes, once, Starting H+15 Minutes, For 1 Doses
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Peripheral Line Administration

"Followed by" Linked Panel

andexanet alfa (ANDEXXA) Peripheral Line IV Bolus (RESTRICTED) 400 mg, intravenous, for 15 Minutes, once, For 1 Doses
 Do not exceed 30 mg/min for bolus rate.
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() High Dose Option (Single Response)

() Central Line Administration

andexanet alfa (ANDEXXA) IV Bolus (RESTRICTED) 800 mg, intravenous, for 30 Minutes, once, For 1 Doses
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"Followed by" Linked Panel

recombinant coagulation factor Xa (ANDEXXA) High Dose 960 mg Central Line infusion (RESTRICTED)

8 mg/min, intravenous, for 120 Minutes, once, Starting H+30 Minutes, For 1 Doses
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() Peripheral Line Administration

"Followed by" Linked Panel

andexanet alfa (ANDEXXA) Peripheral Line IV Bolus (RESTRICTED)

800 mg, intravenous, for 30 Minutes, once, For 1 Doses
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Additional laboratory for low-molecular weight heparin - enoxaparin (Lovenox) or dalteparin (Fragmin)

Anti Xa, low molecular weight

STAT, Starting S For 1 Occurrences
Heparin Name: Lovenox
STAT

Anti Xa, low molecular weight

Once For 1 Occurrences
Heparin Name: Lovenox
Draw after protamine administration

() warfarin (COUMADIN)

STAT Prothrombin complex concentrate (KCentra)
(Single Response)

Avoid use in disseminated intravascular coagulopathy (DIC). May contain heparin, avoid use in heparin induced thrombocytopenia (HIT).

For International Normalized Ratio (INR) between 2-3.9 (max dose 2,500 units) 25 Units/kg, intravenous, for 20 Minutes, once, For 1 Doses

For International Normalized Ratio (INR) between 4-6 (max dose 3,500 units) 35 Units/kg, intravenous, for 20 Minutes, once, For 1 Doses

For International Normalized Ratio (INR) GREATER than 6 (max dose 5,000 units) 50 Units/kg, intravenous, for 20 Minutes, once, For 1 Doses

phytonadione (vitamin K) (AQUA-Mephyton) IVPB 10 mg, intravenous, for 30 Minutes, once, For 1 Doses
Indication: Other
Please specify: Warfarin reversal for bleeding