

Anti-Inhibitor-Coagulant Complex Steam Treated

COMPOSITION AND PROPERTIES

FEIBA TIM 4 contains an anti-inhibitor-coagulant complex with standardised FEIB-activity! (Factor Eight Inhibitor Bypassing Activity);

mg of protein contains 0.7 to 2.5 units FEIBA. FEIBA TIM 4 also contains 670 actors II, IX, and X mainly in non-activated form as well as activated factor VII; each activated factor VII; each antique, ff YIII C. Agi is present in a concentration of up to 0.1 U/1 U FEIBA. The preparation contains only traces of factors of the kallikrein-knin system, if any at all. FEIBA TIM 4 is prepared from pooled human

All plasma units are exclusively obtained from licensed plasmapheresis centers in Central Europe and the United States of America.

For the manufacture of FEIBA TIM 4 only plasma units are used which were ALT-tested and were non-reactive in tests for HB_s-antigen and HIV-antibodies.

bodies.

To further reduce the potential risk of viral transmission the product is steam treated under product-specific conditions (at 60°C for 10 hours, at 80°C for 1 hour) during production.

FEIBA TIM 4 is indicated for therapy and prophylaxis of haemorrhage and to cover surgical interventions in:

Haemophilia A patients with F VIII inhibitor
 Haemophilia B patients with F IX inhibitor

FEIBA 7fM 4 was also used in combination with Factor VIII concentrate for a continual long term therapy to achieve a complete and permanent elimination of the F VIII inhibitor so as to allow for regular treatment with F VIII concentrate as in patients without Inhibitor (BRACKMANN et al., 1981).

patients without inhibitor (BHACKMANN et al., 1981). In addition, the successful use of FEIBA TIM 4 was described in a few non-haemophiliacs with acquired inhibitors to factors VIII, 3, and XII as well as in a patient with von Willebrand's disease with an inhibitor. For guidelines for treatment of patients with inhibitors see table 1.

with inhibitors see table 1. Since a single dose of FEIBA TIM 4 contains considerably less F VIII coagulant antigen than Factor VIII concentrate, FEIBA TIM 4 is the treatment of choice in high responder patients, even if the current inhibitor titre is low.

CONTRAINDICATIONS

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In the following situations FEIBA TIM 4 should only be used if — for example owing to a very high inhibitor titre — no response to treatment with the appropriate coagulation factor concentrate can be expected.

Disseminated Intravascular Coagulation (DIC):

Hisseminated intravascular obaquication (pro-Laboratory and/or clinical symptoms which are clearly indicative of DIC Laboratory, histological and/or clinical signs of liver damage; due to the delayed clearance of activated coagulation factors such patients are at an increased risk of developing DIC.

Myocardial Infarction, Acute Thrombosis and/or Embolism:

emonism:
In patients with a tentative or definite diagnosis of coronary heart disease as well as in patients with acute thrombosis and/or embolism the use of FEIBA TIM 4 is only indicated in life-threatening bleeding events.

SIDE EFFECTS

In rare cases allergic reactions such as lever, urticarial rashes, nausea and retching as well as other more or less severe anaphylactoid reactions have been observed after administration of FEIBA TIM-4.

TIM 4. Severe allergic and anaphylactoid reactions may necessitate the interruption of substitution treatment. Mild reactions can be managed with antihistamines; severe reactions require immediate intervention. In patients with a history of hypersensitivity reactions to plasma derivatives the prophylactic administration of antihistamines may be indicated.

be indicated.
After administration of high doses (single doses of more than 100 units FEIBA par leg of bodyweight, and daily doses of more than 200 units par leg low, and daily doses of more than 200 units par leg low, and daily doses of more than 200 units par leg low, and the properties of the pro

The state of the art suggests that it cannot be precluded with certainty that both known or unknown viruses, which may occur in plasma, are transmitted through factor concentrates. Clinical safety studies have shown no case of hepatitis B or NANB.

The product is safe with respect to transmission of HIV (HTLV-III/LAV).

It is recommended not to use antifibrinolytics such as epsilon-aminocaproic acid in combination with FEIBA TIM 4 treatment (see PRECAUTIONS).

If unit FEIBA is defined as that amount of factor VIII inhibitor bypassing activity which shortens the activated partial stromboplastin time (APTT) for high filtre F VIII inhibitor plasma to 50% of the buffer value (blank).

DOSAGE AND ADMINISTRATION

As a general guideline a dose of 50 to 100 units of FEIBA per kg bodyweight is recommended, however, not exceeding a daily dose of 200 U/kg bw.

bw.

Dosage is independent of the patient's inhibitor tire. Since the response to treatment may differ from patient to patient the dosage recomment or patient to dosage recomment may differ from patient to patient the dosage recomment may be used to the dosage recomment of the dosage recomment of the dosage recomment of the dosage recomment of the dosage recommend to the dosage recommend the dosage recommendation of th

Spontaneous Bleeding Joint, Muscle and Soft Tissue Haemorrhage

Joint, Muscle and Soft Tissue Haemorrhage
For minor to moderate bleedings a dos of 50 — 75
U/kg bw. is recommended at 12-hour intervals.
Treatment should be continued until clear signs of
clinical improvement appear, such as relied of pain,
reduction of swelling or mobilisation of the joint-For major muscle and soft tissue haemorrhage, such as retroperitoneal bleeding, doses of 100 U/kg bw. at 12-hour intervals are recommended.

A dose of 50 U/kg bw. is recommended to be given at 5-hour intervals under careful monitoring of the patient (visible bleeding sibt repeated measurements of the patients' haematocraft, Again, if haematocraft, Again, if haematocraft of 80 U/kg bw. taking care host becaused to 100 U/kg bw. taking care host becaused to 100 U/kg bw. taking care host becaused to 100 U/kg bw. taking care host becaused the maximum daily dose of 200 U/kg bw.

Other Severe Haemorrhages

Other Severe Haemorrhages such as CNS bleedings have been effectively treated with doses of 100 L/kg bw. at 12-hour intervals. In individual cases FEIBA TIM 4 may be given at intervals of 6 hours until clear clinical improvement is achieved. (Do not exceed the maximum daily dose!)

3. Prophylactic Treatment

For dosage recommendations for prophylactic treatment see table 2.

resultant see 1994: 2.

Reconstitution of Concentrate
PEIDA TIMA is 10 be sterred in typichilised conditions and should confly be reconstituted immediate before application. The solution must then be used as promptly as practicable, however, within a maximum of 1 hour. Entered viats must not be a supported to the control of the condition of the

oused. Warm the unopened bottle containing the solvent to room temperature (max, 37°C). Remove the caps from the concentrate and solvent bottles (fig. 4) and disinfect the rubber stoppers of both bottles.

stoppers of both bottles.

The enclosed transfer needle (double-ended needle) is protected by 2 plastic caps sealed by a weld mark. Break the weld (fig. 8) by twisting and remove one cap. Insert the exposed needle into the rubber stopper of the solvent bottle (fig. C).

neede taking care not to found the exposed for the concentrate bottle, and insert the free end of the double-ended needed in a percentage to approximately half the needed needed



Remove the protective covering from the enclosed filter needle by turning the cap and fit the needle onto a startle disposable syringe. Draw the solution into the syringe (fig. G).

into the syvinge (fig. G).

Disconnect the filter needle from the syvinge and slowly inject the solution introvenously with the solution of the syvinge of the solution of the syvinge of the solution of the syvinge of

required for emergencies, or rubbar particles out from the stopper danger of microembolism

If clinical signs of intravascular coagulation occur, which include changes in blood pressure, pulse



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rate, respiratory distress, chest pain and cough, the infusion should be stooped promply and the patient monitore of the IDE by appropriate laboratory tasts, Laboratory indications of DIC are decreased fibringen, decreased plateful count, and/or presence of fibrin/fibringen degradation products (FDP). Other ridications of DIC include significantly prolonged thrombin time, prothrombin time, or APTT.

Laboratory Tests and Clinical Efficacy Ex vivo lests to control efficacy such as APTT, whole blood clotting time (WEGT), and thromb-elastogramme (TeG) need not correlate with clinical improvement. For this reson, attempts at normalising these values by increasing the dose of FEIBA TIM A may not be successful and and strongly discouraged because of the potential lossed of proteinight CE by overlossage. clinical improvement. For this reason, attempts at commissing times values by increasing the dose of strongly discouraged because of the potential nazard of producing DLO by overdosage.

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SHELF LIFE AND STORAGE

SHELF LIFE AND STORAGE
Two years when stored between +2°C and +8°C. Within the indicated shelf life period the product may be stored for 6 morths at room temperature may therefore be taken along when travelling or during holidays. The dates between which the product is not stored at refrigerator temperature should be noted on the package.

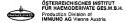
should be noted on the package. FEIBA TIM 4 must not be used beyond the expiry date indicated. Store out of the reach of children.

Table 1: Guidelines for Treatment of Patients with Inhibitors

Inhibitor titre	Response to F VIII treatment	Minor to moderate	Severe to life-threatening
(BU*/ml)		bleeding	bleeding, surgery
< 5	low responder	F VIII or FEIBA TIM 4	F VIII or FEIBA TIM 4
	high responder	FEIBA TIM 4	FEIBA TIM 4
5 10	low responder	F VIII or FEIBA TIM 4	FEIBA TIM 4
	high responder	FEIBA TIM 4	FEIBA TIM 4
>10	high responder	FEIBA TIM 4	FEIBA TIM 4

Table 2: Prophylactic Treatment

	Factor VIII	FEIBA	Dosage interval	Duration of treatment
Stage I	75 – 100 U/kg	40 - 60 U/kg	twice a day	until reduction of F VIII inhibitor titre to approx. 1 BU*/ml (= 0.5 Old Oxford Units/ml**)
Stage II	75-100 U/kg		twice a day	until no inhibitor is detectable
Stage III	75-100 U/kg	- 	once or twice a day	until normal F VIII half life and in vivo recovery are obtained



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KASPER C, EVINIG N. P.: Experience with the behieved assay and other methods of Inhibitor detection, in MARIANG A, RUSSIO M. A, MANDELLY E, feds: J. Achiesed Profesondan Complex Concentrions. Plagge, New York 1982, pp. 17 — 20 ABACKLANAN H. N. The assament of Inhibitor assigns a local visit of concentrates and activated profesondan consistence on Concentrates. In MARIANG Q, RUSSIO M. A, MANDELLY F, lead; Activated Profesondan Complex Concentrates. Psagge, New York 1982, pp. 194 — 203.



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COMPOSITION AND PROPERTIES

FEIBA TIM 4 contains an anti-inhibitor-coagulant complex with standardised FEIB-activity¹ (Factor Eight Inhibitor Bypassing Activity);

1 mg of protein contains 0.7 to 2.5 units FEIBA. FIBA TIM 4 also contains 6.7 oz 5 mils FeibA. TIM 4 also contains factors II, IX, and X mainly in non-activated form as well as activated factor VIII cator VIII coaquiant antigen (F VIIII C: Ag) is present in a concentration of up to 0.1 U/1 U FEIBA. The preparation contains only takes a factors of the kallikrein-xinin system, if any at all. FEIBA TIM 4 is prepared from pooled human plasma.

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For the manufacture of FEIBA TIM 4 only plasma units are used which were ALT-tested and were non-reactive in tests for HB₉-antigen and HIV-antibodies.

bodies.

To further reduce the potential risk of viral transmission the product is steam treated under product-specific conditions (at 60°C for 10 hours, at 80°C for 1 hour) during production.

In HIV spiked samples of FEIBA TIM 4 this treatment inactivated at least 10° IVIU/ml² in 3 hours.

FEIBA TIM 4 is indicated for therapy and prophylaxis of haemorrhage and to cover surgical interventions in:

Haemophilia A patients with F VIII inhibitor
 Haemophilia B patients with F IX inhibitor

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CONTRAINDICATIONS

In the following situations FEIBA TIM 4 should only be used if — for example owing to a very high inhibitor titre — no response to treatment with the appropriate coagulation factor concentrate can be expected.

Disseminated Intravascular Coaquiation (DIC):

- Laboratory and/or clinical symptoms which are clearly indicative of DIC.
- clearly indicative of DIC. Laboratory, histological and/or clinical signs of liver damage, due to the delayed clearance of activated coagulation factors such patients are at an increased risk of developing DIC.

Myocardial Infarction, Acute Thrombosis and/or Embolism:

In patients with a tentative or definite diagnosis of coronary heart disease as well as in patients with acute thrombosis and/or embolism the use of FEIBA TIM 4 is only indicated in life-threatening bleeding events.

In rare cases allergic reactions such as fever, urticarisi rashes, nausea and retching as well as other more or less severe anaphylactoid reactions have been observed after administration of FEIBA TIM 4.

Severe allergic and anaphylactoid reactions may necessitate the interruption of substitution treatnecessitate the interruption of substitution treat-ment. Mild reactions can be managed with antihistamines, severe reactions require immediate intervention. In patients with a history of hyper-sensitivity reactions to plasma derivatives the prophylactic administration of antihistamines may be indicated.

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After administration of high doses (single doses of more than 100 units FEBA per kg of bodyweight, and the second of the second

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Clinical safety studies have shown no case of hepatitis B or NANB.

The product is safe with respect to transmission of HIV (HTLV-III/LAV).

It is recommended not to use antilibrinolytics such as epsilon-aminocaproic acid in combination with FEIBA TIM 4 treatment (see PRECAUTIONS).

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DOSAGE AND ADMINISTRATION of a managed As a general guideline a dose of 50 to 100 units of FEIBA per kg bodyweight is recommended, however, not exceeding a daily dose of 200 U/kg bw.

Dosage is independent of the patient's inhibitor titre. Since the response to treatment may differ from patient to patient the dosage recommen-dations are only guidelines.

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Caggulation tests such as the whole blood clotting time (WBCT). The thrombelastogramme (TEC, realtue), and the APTT usually show only a million shortening and need not correlate with clinical improvement. For this reason these tests can only be used for monitoring of FEIBA TIM 4 therapy to a very limited extent.

Joint, Muscle and Soft Tissue Haemorrhage Joint, Muscle and Soft Tissue Haemornhage For minor to moderate bleedings a dose of 50 — 75 U/kg tw. is recommended at 12-hour intervals. Chincal improvement appear, such as relief of pain, reduction of swelling or mobilisation of the joint, For major muscle and soft issue haemornhage, such as retroperforeal bleeding, doses of 100 U/kg bw. at 12-hour intervals are recommended.

Mucous Membrane Sleeding

Mucous Membrane Bleeding A dose of 50 U/kg bw, is recommended to be given at 6-nour intervals under careful monitoring of the patient (visible bleeding site, repeated measurements of the patients, haematocrift, Again, if theomorrhage does not stop the dose may be increased to 100 U/kg bw, taking care not to exceed the maximum daily dose of 200 J/kg bw.

Other Severe Haemorrhages

Other Severe Naemorrhages, such as CNS bleedings have been effectively treated with doses of 100 U/kg bw. at 12-hour intervals, in Individual cases FEIBA TIM 4 may be given at intervals of 6 hours until clear clinical improvement is achieved. (Do not exceed the maximum daily dose!)

Taking care not to exceed the maximum daily dose, 50 — 100 U/kg bw. should be given at intervals of up to 6 hours.

3. Prophylactic Treatment For dosage recommendations for prophylactic treatment see table 2.

Reconstitution of Concentrate

Reconstitution of Concentrate
FEIBA TIM4 is to be stored in lyophilised condition
and should only be reconstituted immediately
before application. The solution must then be used
as promptly as practicable, however, within a
maximum of 1 hour. Entered vials must not be
reused.

- reused.

 1. Warm the unopened bottle containing the solvent to room temperature (max. 37°C).

 2. Remove the caps from the concentrate and solvent bottles (fig. A) and disinfect the rubber stoppers of both bottles.
- stoppers of both bottles.

 3. The enclosed transfer needle (double-ended needle) is protected by 2 plastic caps sealed by a weld mark. Break the weld (fig. 8) by invisting and remove one cap, insert the exposed needle into the rubber stopper of the solvent bottle (fig. C).
- Solvent the solvent bottle over the concentrate bottle, and insert the free end of the doubbeended reseate to approximately said the research
 and a research to approximately said the research
 train bottle (iii). D.T. The solvent will be dream into
 the concentrate bottle which is under recursor
 recedle from the concentrate bottle (iii). E.
 Gently agins or right the concentrate bottle (iii). E.
 Gently agins or right the concentrate out
 7. Upon complete reconstitution of the concentrate
 train into the enclosed erasion needed (iii). F.
 and any foam will collapse. Remove the
 aeration needs.



Administration

Administration.

Remove the protective covering from the enclosed filter needle by turning the cap and fit the needle onto a sterile disposable syringe. Draw the solution into the syringe (fig. G).

into the syringe (ig. G).

Disconnect the filter needle from the syringe and slowly inject the solution intravenously with the enclosed disposable needle (or the infusion set with a winged adapter).

Do not exceed an injection/infusion rate of 2 units FEIBA per kg of body weight per minute. In a different reconstitution method is chosen, use an appropriate litter to prevent administration of undissolved particles (if rapid reconstitution is required for emergencies) or rubber particles cut from the stopper (danger of microembolism).

Disseminated Intravascular Coagulation (DIC) If clinical signs of intravascular coagulation occur, which include changes in blood pressure, pulse rate, respiratory distress, chest pain and cough, the infusion should be stopped promplly and the patient monitored for DIC by appropriate laboratory tests. Laboratory indications of DIC are decreased fibringen, decreased plateist count, and/or presence of fibrin/fibrinogon degradation products (FOP), Other indications of DIC includes significantly prolonged thrombin time, prothrombin time, or APTT.

Laboratory Tests and Clinical Efficacy
Ex vivo tests to control efficacy such as APTT,
whole blood clotting time (WECT), and thromb-elastogramme (TEG) need not correlate with
clinical improvement. For this reason, attempts at
normalising these values by increasing the close of
FEIGA TIM 4 may not be successful and are
represented to the control of the control of

FEIBA TIM 4 IMMUNO 250
strongly discouraged because of the potential hazard of producing DIC by overdosage.

FIGURE 100 on things 250 ml Aqua ed Inicatabilia hazard of producing DIC by overdosage.

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Antilibriotytes

I leastment with both antificrinolytics, such as epaidon-aminocarprole acid and FEIBATIM 4 is to be carried out, the interval between the administration of either product should be at teast 8 hours.

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SHELF LIFE AND STORAGE
Two years when stored between +2°C and +8°C. Within the Indicated shelf life period the product may be stored for 6 months at room temperature (max, 26°C). Without occling facilities FEIBAT TML 4 may therefore be taken along when travelling or during horidays. The dates between which the product is not acced at enfigerator temperature as the control of the control of the product of the

FEIBA TIM 4 must not be used beyond the explry date indicated.

Store out of the reach of children.

PACKS FEIBA TIM 4 IMMUNO 250

Table 1: Guidelines for Treatment of Patients with Inhibitors

Inhibitor titre (BU*/ml)	Response to F VIII treatment	Minor to moderate bleeding	Severe to life-threatening bleeding, surgery
< 5	low responder high responder	F VIII or FEIBA TIM 4 FEIBA TIM 4	F VIII or FEIBA TIM 4 FEIBA TIM 4
5-10	low responder high responder	F VIII or FEIBA TIM 4 FEIBA TIM 4	FEIBA TIM 4 FEIBA TIM 4
> 10	low responder high responder	FEIBA TIM 4	FEIBA TIM 4

Table 2: Prophylactic Treatment

	Factor VIII	FEIBA	Dosage interval	Duration of treatment
Stage I	75-100 U/kg	40 - 60 U/kg	twice a day	until reduction of FVIII inhibitor titre to approx. 1 BU*/mi (= 0.5 Old Oxford Units/mi**)
Stage it	75 – 100 U/kg		twice a day	until no inhibitor is detectable
Stage III	75-100 U/kg	- - 1	once or twice a day	until normal F VIII half life and in vivo recovery are obtained

