PROFILNINE - factor ix complex GRIFOLS USA, LLC

\_\_\_\_\_

Factor IX Complex Profilnine®

#### **DESCRIPTION**

Profilnine<sup>®</sup>, Factor IX Complex, is a solvent/detergent treated, nanofiltered, sterile, lyophilized concentrate of coagulation factors IX, II, X, and low levels of factor VII. The factor II content is not more than (NMT) 150 units\* per 100 factor IX units, the factor X content is NMT 100 units per 100 factor IX units, and the factor VII content is NMT 35 units per 100 factor IX units. Profilnine does not contain heparin and contains no preservatives. Profilnine contains few, if any, activated factors based on results from the non-activated partial thromboplastin time (NAPTT) test<sup>1,2</sup>.

Profilnine is intended for intravenous administration only. Each vial is a single-dose container and is labeled with the factor IX potency expressed in International Units.

Profilnine is prepared from pooled human plasma and purified by diethylaminoethyl (DEAE) cellulose adsorption. The risk of transmission of infective agents by Profilnine has been substantially reduced by donor selection procedures and virus screening of individual donations and plasma pools by serological and nucleic acid testing. In addition, virus elimination steps such as nanofiltration<sup>3</sup> and solvent/detergent (trinbutyl phosphate) treatment<sup>4</sup> have been incorporated into the Profilnine manufacturing process. Additional removal of some viruses occurs during the DEAE cellulose product purification step.

The ability of the manufacturing process to eliminate virus from Profilnine was evaluated in the laboratory by intentionally adding virus to product just prior to the elimination step and monitoring virus removal. Table 1 shows the amounts of virus that can be removed by solvent/detergent treatment, nanofiltration, and purification by DEAE chromatography when vesicular stomatitis virus (VSV), human immunodeficiency virus-1 and 2 (HIV-1, HIV-2), parvovirus, West Nile virus (WNV), bovine viral diarrhea virus (BVDV), hepatitis A virus (HAV), and pseudorabies virus (PRV) were evaluated in these virus spiking studies. The results indicate that the solvent/detergent treatment step inactivates enveloped viruses and the nanofiltration step removes both enveloped and non-enveloped viruses.

Table 1: Virus Reduction

|         |         |                          | Virus Reduction (log10) |                   |                |  |  |
|---------|---------|--------------------------|-------------------------|-------------------|----------------|--|--|
| Virus   | Virus   | Model                    |                         |                   |                |  |  |
| V 40    | Туре    | For:                     | 1st DEAE Chromatography | Solvent-Detergent | Nanofiltration |  |  |
| Sindbis | Env     | Hepatitis C              | 1.4                     | ≥ 5.3             | NT             |  |  |
| VSV     | Env     | Robust enveloped viruses | NT                      | ≥ 4.9             | NT             |  |  |
| HIV-1   | Env     | HIV-1                    | NT                      | ≥ 12.2            | ≥ 6.2          |  |  |
| HIV-2   | Env     | HIV-2                    | NT                      | ≥ 6.0             | NT             |  |  |
| WNV     | Env     | WNV                      | NT                      | NT                | ≥ 6.6          |  |  |
| BVDV    | Env     | Hepatitis C              | NT                      | NT                | ≥ 4.9          |  |  |
| Parvo*  | Non-Env | Parvovirus B19           | NT                      | NT                | ≥ 6.1          |  |  |
| HAV     | Non-Env | HAV                      | NT                      | NT                | ≥ 5.8          |  |  |
| PRV     | Env     | Hepatitis B              | NT                      | NT                | ≥ 5.3          |  |  |

<sup>\*</sup> Porcine, NT=Not tested, Env=Enveloped

#### **CLINICAL PHARMACOLOGY**

Profilnine is a mixture of the vitamin K-dependent clotting factors IX, II, X, and low levels of VII. The administration of Profilnine temporarily increases the plasma levels of factor IX, thus enabling a temporary correction of the factor deficiency.

A clinical study that evaluated twelve subjects with hemophilia B indicated that, following administration of Profilnine, the factor IX in vivo half-life was  $24.68 \pm 8.29$  hours and recovery was  $1.15 \pm 0.16$  units/dL per unit infused per kg body weight.

Administration of Factor IX Complex can result in higher than normal levels of factor II due to the significantly longer half-life of factor II<sup>5</sup>.

#### INDICATIONS AND USAGE

Profilnine, Factor IX Complex, is indicated for the prevention and control of bleeding in patients with factor IX deficiency (hemophilia B). Profilnine contains non-therapeutic levels of factor VII and is not indicated for use in the treatment of factor VII deficiency.

#### **CONTRAINDICATIONS**

None known.

#### **WARNINGS**

#### Transmissible Infectious Agents

Because Profilnine is made from human blood, it may carry a risk of transmitting infectious agents, e.g., viruses, the variant Creutzfeldt-Jakob disease (vCJD) agent and, theoretically, the Creutzfeldt-Jakob disease (CJD) agent.

#### **Inhibitors**

<sup>\*</sup> Unit refers to International Unit in the labeling of Profilnine.

Patients can develop neutralizing antibodies (inhibitors) after treatment with Profilnine. Monitor patients for inhibitors, which should be quantified in Bethesda Units (BU) using appropriate laboratory testing.

#### Hypersensitivity

Hypersensitivity, including anaphylaxis, has been reported. Inform patients of the early symptoms and signs of hypersensitivity reaction, including hives, generalized urticaria, angioedema, chest tightness, dyspnea, wheezing, faintness, hypotension, tachycardia, and anaphylaxis.

#### **Thrombosis**

The use of factor IX complex concentrates has been associated with the development of thromboembolic complications. Patients at increased risk for thrombosis include those undergoing surgery, post surgery, with known liver disease, and with signs of fibrinolysis, thrombosis, or disseminated intravascular coagulation (DIC)<sup>5</sup>. When administering Profilnine to these high-risk patients, monitor for early signs of consumptive coagulopathy with appropriate laboratory testing. Only administer Profilnine to patients when the benefits outweigh the risks.

#### **PRECAUTIONS**

Vasomotor reactions may result from overly rapid administration. Do not exceed the recommended infusion rate of 10 mL/min.

#### Information for Patients

Advise patients to report to their physician any decrease in effectiveness of Factor IX treatment, as this can indicate development of inhibitors.

Hypersensitivity, including anaphylaxis, has been reported for factor IX complex concentrate products. Inform patients of the early symptoms and signs of hypersensitivity reaction, including hives, rash, swelling, chest tightness, shortness of breath, wheezing, faintness, decrease in blood pressure, and rapid heartbeat. Advise patients to discontinue use of the product and contact their physician and/or seek immediate emergency care if these symptoms occur.

#### Pregnancy Category C

Animal reproduction studies have not been conducted with Profilnine. It is also not known whether Profilnine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Only give Profilnine to a pregnant woman if clearly indicated.

#### Pediatric Use

Safety and effectiveness in pediatric patients have not been established.

#### **Natural Rubber Latex Sensitivity**

Certain components used in the packaging of this product contain natural rubber latex. In patients with sensitivity to natural rubber latex, use Profilnine only if needed.

#### **ADVERSE REACTIONS**

Adverse reactions with Profilnine may include headache, fever, chills, flushing, nausea, vomiting, tingling, lethargy, urticaria, and manifestations of allergic reactions.

The following adverse reactions have been identified during post-approval use of Profilnine: hypersensitivity reactions including shortness of breath, diaphoresis, and hypotension, as well as thrombosis including pulmonary embolism and deep vein thrombosis, disseminated intravascular coagulation, and inhibitor development. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

To report SUSPECTED ADVERSE REACTIONS, contact Grifols at 1-888-GRIFOLS (1-888-474-3657) or FDA at 1-800-FDA-1088 or <a href="https://www.fda.gov/medwatch">www.fda.gov/medwatch</a>.

#### DOSAGE AND ADMINISTRATION

#### Dose

Each vial of Profilnine is labeled with total units expressed as International Units (IU). According to the WHO International Standard, one unit approximates the activity in one mL of normal plasma.

A 1% increase in factor IX (0.01 units) per unit administered per kg body weight can be expected<sup>1</sup>. The amount of Profilnine required to establish hemostasis will vary with each patient and circumstance. Use the following formula and example as guides in determining the number of units to be administered:

| Body weight (in kg) | Х | Desired increase in Plasma<br>Factor IX (Percent) | Х | 1 Units/kg | = | Number of Factor IX Units Required |
|---------------------|---|---|---|------------|---|------------------------------------|
| Example:            |   |   |   |            |   |                                    |
| 50 kg               | Χ | 25 (% increase)                                   | Χ | 1 Units/kg | = | 1,250 Units of factor IX           |

Due to variability among patients and their clinical condition, monitor the factor IX level of each patient frequently during replacement therapy.

Table 2 below provides treatment guidelines for hemorrhagic events and surgery in patients with factor IX deficiency.

#### **Table 2: Treatment Guidelines**

| Type of Bleeding or Surgical<br>Procedure | Factor IX Level Required, % of Normal (Dose)  | Frequency of Doses | Duration of Therapy (Days) |
|---|---|--------------------|----------------------------|
| Minor to Moderate Hemorrhages             | · · ·   | Every 16-24 hrs    | Minor: 1-2 days            |
|   | has been achieved.  |                    | Moderate: 2-7 days         |
| Major Hemorrhages                         | 30-50% (30-50 IU FIX/kg).   | Every 16-24 hrs    | 3-10 days                  |
|   | Following this treatment period, maintain FIX levels at 20% (20 IU FIX/kg) until healing has been achieved. |                    |                            |
| Surgery                                   | Prior to surgery,<br>30-50% (30-50 IU FIX/kg).  | Every 16-24 hrs    | 7-10 days                  |
|   | For dental extractions, bring FIX levels to 50% immediately prior to the procedure.                         |                    |                            |
|   | Maintain FIX levels at 30-50% (30-50 IU FIX/kg) until healing ha been achieved.                             | s                  |                            |

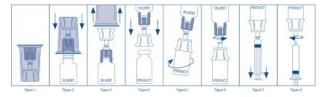
Dosing requirements and frequency of dosing are calculated on the basis of an initial response of 1% FIX increase achieved per IU of FIX infused per kg body weight and an average half-life for FIX of 24 hours. If dosing studies reveal that a particular patient exhibits a lower response, monitor blood levels and adjust the dose accordingly.

#### Reconstitution

#### Use Aseptic Technique

- 1. Ensure that concentrate (Profilnine) and diluent (Sterile Water for Injection, USP) are at room temperature (but not above 37° C) before reconstitution.
- 2. Remove the plastic flip off cap from the diluent vial.
- 3. Gently swab the exposed stopper surface with a cleansing agent such as alcohol. Avoid leaving any excess cleansing agent on the stopper.
- 4. Open the Mix2Vial® package by peeling away the lid (Figure 1). Leave the Mix2Vial in the clear outer packaging.
- 5. Place the diluent vial upright on an even surface, hold the vial tightly, and pick up the Mix2Vial in its clear outer packaging. While holding the diluent vial securely, push the **blue** end of the Mix2Vial vertically down through the diluent vial stopper (Figure 2).
- 6. While holding onto the diluent vial, carefully remove the clear outer packaging from the Mix2Vial set, ensuring the Mix2Vial remains attached to the diluent vial (Figure 3).
- 7. Place the product vial upright on an even surface, invert the diluent vial with the Mix2Vial attached.
- 8. While holding the product vial securely on a flat surface, push the **clear** end of the Mix2Vial set **vertically** down through the product vial stopper (Figure 4). The diluent will automatically transfer out of its vial into the product vial.

  NOTE: If the Mix2Vial is connected at an angle, the vacuum may be released from the product vial and the diluent will not transfer into the product vial.
- 9. With the diluent and product vials still attached to the Mix2Vial, gently swirl the product vial to ensure the product is fully dissolved (Figure 5). Reconstitution requires less than 10 minutes. Do not shake the vial.
- 10. Disconnect the Mix2Vial into two separate pieces (Figure 6) by holding each vial adapter and twisting counterclockwise. After separating, discard the diluent vial with the **blue** end of the Mix2Vial.
- 11. Draw air into an empty, sterile syringe. Keeping the product vial upright with the **clear** end of the Mix2Vial attached, screw the disposable syringe onto the luer lock portion of the Mix2Vial device by pressing and twisting clockwise. Inject air into the product vial.
- 12. While keeping the syringe plunger depressed, invert the system upside down and draw the reconstituted product into the syringe by pulling the plunger back slowly (Figure 7).
- 13. When the reconstituted product has been transferred into the syringe, firmly hold the barrel of the syringe and the clear vial adapter (keeping the syringe plunger facing down) and unscrew the syringe from the Mix2Vial (Figure 8). Hold the syringe upright and push the plunger until no air is left in the syringe. Attach the syringe to a venipuncture set.
  - NOTE: If the same patient is to receive more than one vial of concentrate, the contents of two vials may be drawn into the same syringe through a separate unused Mix2Vial set before attaching to the venipuncture set.
- 14. After reconstitution, inspect parenteral drug products visually for particulate matter and discoloration prior to administration, whenever solution and container permit. When reconstitution procedure is strictly followed, a few small particles may occasionally remain. The Mix2Vial set will remove particles and the labeled potency will not be reduced.
- 15. Do not refrigerate after reconstitution. The reconstituted product is stable for 3 hours at room temperature; use as soon as possible within 3 hours after reconstitution.



#### Administration

#### For intravenous administration only,

- Inspect the final solution visually for particulate matter and discoloration prior to administration.
- Administer the prepared drug at room temperature within three hours after reconstitution. Prompt administration is recommended to
  avoid ill effects of any inadvertent bacterial contamination occurring during reconstitution.
- Administer by intravenous injection (plastic disposable syringe only) or infusion at a rate not exceeding 10 mL/minute.
- Discard any unused Profilnine vial contents. Discard administration equipment into the appropriate safety container after single use. Do not resterilize components. Do not reuse components.

#### **HOW SUPPLIED**

Profilnine is supplied in sterile lyophilized form in single-dose vials accompanied by a suitable volume of diluent (Sterile Water for Injection, USP), according to factor IX potency. Each vial is labeled with the factor IX potency expressed in International Units which is referenced to the WHO International Standard. Profilnine is packaged with a Mix2Vial filter transfer set for use in administration.

The product is available in several potencies, with carton and vial label color coded based upon assay as follows:

| Potency              | Carton NDC   | Assay Color Code             |  |
|----------------------|--------------|------------------------------|--|
| 500 units FIX/5 mL   | 68516-3201-1 | 500 units FIX Range - blue   |  |
| 1000 units FIX/10 mL | 68516-3202-2 | 1000 units FIX Range - red   |  |
| 1500 units FIX/10 mL | 68516-3203-2 | 1500 units FIX Range - black |  |

The diluent vial stopper contains natural rubber latex. All other components of the kit are not made with natural rubber latex.

#### **STORAGE**

Profilnine is stable for three years, up to the expiration date printed on its label, provided that the storage temperature does not exceed 25 °C (77 °F). Do not freeze.

#### Rx only

#### **REFERENCES**

- 1. Menache, D., Roberts, H.R. Summary report and recommendations of the task force members and consultants. *Thromb Diath Haemorrh* 33:645-647, 1975.
- 2. Kingdon, H.S., Lundblad, R.L., Veltkamp, J.J., Aronson, D.L. Potentially thrombogenic materials in Factor IX Concentrates. *Thromb Diath Haemorrh* 33:617-631, 1975.
- 3. Burnouf T, Radosevich M. Nanofiltration of plasma-derived biopharmaceutical products. Haemophilia: the official journal of the World Federation of Hemophilia. 2003;9:24-37.
- 4. Dichtelmüller HO, Biesert L, Fabbrizzi F, Gajardo R, Gröner A, von Hoegen I, Jorquera JI, Kempf C, Kreil TR, Pifat D, Osheroff W, Poelsler G. Robustness of solvent/detergent treatment of plasma derivatives: a data collection from Plasma Protein Therapeutics Association member companies. Transfusion 49:1931-1943, 2009.
- 5. Sorensen, B., Spahn, D.R., Innerhofer, P., Spannagl, M., Rossaint, R. Clinical review: prothrombin complex concentrates-evaluation of safety and thrombogenicity. Critical Care 15: 201-209, 2011.

Manufactured by:

Grifols Biologicals Inc. 5555 Valley Boulevard Los Angeles, CA 90032, U.S.A. U.S. License No. 1694 DATE OF REVISION: May 2014

3040961

#### Principal Display Panel - 5 mL Vial Label

**GRIFOLS** 

NDC 68516-3204-1

Factor IX Complex Profilnine®

500 IU FIX Range

5 mL

Storage: Store at temperature not exceeding 25° C (77° F)

**Rx Only.** Single dose container for intravenous administration only.

#### Grifols Biologicals Inc.

5555 Valley Boulevard, Los Angeles, CA 90032, U.S.A.

U.S. License No. 1694



#### Principal Display Panel - 5 mL Carton Label

**GRIFOLS** 

NDC 68516-3201-1

Factor IX Complex Profilnine®

5 mL

500 IU FIX Range

For Intravenous Administration

IbiV/XI3 UI

EXP

107

### 200 IN FIX Range

Factor IX Complex Profilnine®

3040962

## **CRIFOLS**

# **GRIFOLS**

NDC 68516-3201-1

# Factor IX Complex Profilnine®

5 mL

500 IU FIX Range

For Intravenous Administration

## **GRIFOLS**

Contents: One vial Factor IX Complex, Profilnine®, one vial 5 mL Sterile Water for Injection, USP, one Mix2Vial® filter transfer set, and directions for use. Contains Factors II, IX, X, and low levels of Factor VII.

The reconstituted product contains not more than 2.5  $\mu g$  polysorbate 80 and 0.40  $\mu g$  tri (n-butyl) phosphate per IU of Factor IX.

Contains no preservatives.

Administer within three hours of reconstitution.





# **GRIFOLS**

NDC 68516-3201-1

# Factor IX Complex Profilnine®

### 5 mL

### 500 IU FIX Range

For Intravenous Administration

## **GRIFOLS**

**Warning:** This product is prepared from large pools of human plasma. Human blood and its components may transmit infectious agents. See package insert, WARNINGS AND PRECAUTIONS.

**Instructions:** The patient and physician should discuss the risks and benefits of this product. For information on dosage and directions for administration, see enclosed package insert.

**Storage:** Store at temperatures not exceeding 25 °C (77 °F). Do not freeze.

#### Rx only

Grifols Biologicals Inc. 5555 Valley Boulevard Los Angeles, CA 90032, U.S.A. U.S. License No. 1694

#### Principal Display Panel – 10 mL Vial Label

**GRIFOLS** 

NDC 68516-3205-2

Factor IX Complex

Profilnine<sup>®</sup>

1000 IU FIX Range

10 mL

Storage: Store at temperature not exceeding 25° C (77° F).

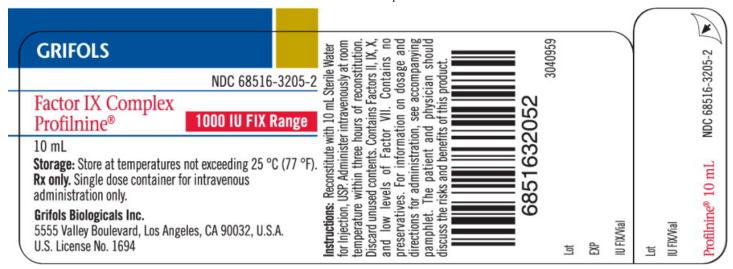
Rx Only. Single dose container for intravenous

administration only.

Grifols Biologicals Inc.

5555 Valley Boulevard, Los Angeles, CA 90032, U.S.A.

U.S. License No. 1694



#### Principal Display Panel - 10 mL Carton Label

**GRIFOLS** 

NDC 68516-3202-2

Factor IX Complex Profilnine®

10 mL

1000 IU FIX Range

For Intravenous Administration

IbiV/XI3 UI

EXb

107

### 1000 IU FIX Range

Factor IX Complex Profilnine®

3040963

## **CBIFOLS**

# **GRIFOLS**

NDC 68516-3202-2

# Factor IX Complex Profilnine®

10 mL

### 1000 IU FIX Range

For Intravenous Administration

## **GRIFOLS**

Contents: One vial Factor IX Complex, Profilnine®, one vial 10 mL Sterile Water for Injection, USP, one Mix2Vial® filter transfer set, and directions for use. Contains Factors II, IX, X, and low levels of Factor VII.

The reconstituted product contains not more than 2.5  $\mu g$  polysorbate 80 and 0.40  $\mu g$  tri (n-butyl) phosphate per IU of Factor IX.

Contains no preservatives.

Administer within three hours of reconstitution.





# **GRIFOLS**

NDC 68516-3202-2

# Factor IX Complex Profilnine®

### 10 mL

### 1000 IU FIX Range

For Intravenous Administration

## **GRIFOLS**

**Warning:** This product is prepared from large pools of human plasma. Human blood and its components may transmit infectious agents. See package insert, WARNINGS AND PRECAUTIONS.

**Instructions:** The patient and physician should discuss the risks and benefits of this product. For information on dosage and directions for administration, see enclosed package insert.

**Storage:** Store at temperatures not exceeding 25 °C (77 °F). Do not freeze.

#### Rx only

Grifols Biologicals Inc. 5555 Valley Boulevard Los Angeles, CA 90032, U.S.A. U.S. License No. 1694

### Principal Display Panel – 10 mL Vial Label

GRIFOLS

NDC 68516-3206-2

Factor IX Complex Profilnine®

1500 IU FIX Range

10 ml

Storage: Store at temperature not exceeding 25° C (77° F).

Rx Only. Single dose container for intravenous

administration only.

Grifols Biologicals Inc.

5555 Valley Boulevard, Los Angeles, CA 90032, U.S.A.

U.S. License No. 1694

#### Discard unused contents. Contains Factors II, IX, X, and low levels of Factor VII. Contains no preservatives. For information on dosage and **GRIFOLS** for Injection, USP. Administer intravenously at room temperature within three hours of reconstitution. directions for administration, see accompanying pamphlet. The patient and physician should discuss the risks and benefits of this product. Reconstitute with 10 mL Sterile Water NDC 68516-3206-2 NDC 68516-3206-2 Factor IX Complex Profilnine® 1500 IU FIX Range 10 mL Storage: Store at temperatures not exceeding 25 °C (77 °F). Profilnine® 10 mL Rx only. Single dose container for intravenous administration only. Grifols Biologicals Inc. IU FIX/Vial 5555 Valley Boulevard, Los Angeles, CA 90032, U.S.A. EX U.S. License No. 1694

#### Principal Display Panel - 10 mL Carton Label

**GRIFOLS** 

NDC 68516-3203-2

Factor IX Complex Profilnine®

10 mL

1500 IU FIX Range

For Intravenous Administration

IU FIX/Vial

EXP

707

### 1200 IN FIX Range

Factor IX Complex Profilnine®

3040964

# **CBIFOLS**

# **GRIFOLS**

NDC 68516-3203-2

# Factor IX Complex Profilnine®

10 mL

1500 IU FIX Range

For Intravenous Administration

## **GRIFOLS**

Contents: One vial Factor IX Complex, Profilnine®, one vial 10 mL Sterile Water for Injection, USP, one Mix2Vial® filter transfer set, and directions for use. Contains Factors II, IX, X, and low levels of Factor VII.

The reconstituted product contains not more than 2.5  $\mu g$  polysorbate 80 and 0.40  $\mu g$  tri (n-butyl) phosphate per IU of Factor IX.

Contains no preservatives.

Administer within three hours of reconstitution.





# **GRIFOLS**

NDC 68516-3203-2

# Factor IX Complex Profilnine®

### 10 mL

### 1500 IU FIX Range

For Intravenous Administration

## **GRIFOLS**

Warning: This product is prepared from large pools of human plasma. Human blood and its components may transmit infectious agents. See package insert, WARNINGS AND PRECAUTIONS.

**Instructions:** The patient and physician should discuss the risks and benefits of this product. For information on dosage and directions for administration, see enclosed package insert.

Storage: Store at temperatures not exceeding 25 °C (77 °F). Do not freeze.

#### Rx only

Grifols Biologicals Inc. 5555 Valley Boulevard Los Angeles, CA 90032, U.S.A. U.S. License No. 1694

#### Principal Display Panel - Vial Label

NDC 63323-185-05 18505

#### STERILE WATER

FOR INJECTION, USP

FOR DRUG DILUENT USE ONLY

Rx only

5 mL Single Dose Vial

NDC 63323-185-05

18505

**STERILE** 

FOR INJECTION, USP FOR DRUG DILUENT USE ONLY

Rx only

5 m L Single Dose Vial

Preservative Free

Discard unused portion WARNING: Do not

administer intravenously unless rendered



Principal Display Panel - Vial Label

NDC 63323-185-10 918510

STERILE WATER

FOR INJECTION, USP

FOR DRUG DILUENT USE ONLY

Rx only

10 mL Single Dose Vial

NDC 63323-185-10 918510

**STERILE WATER** FOR INJECTION, USP

FOR DRUG DILUENT USE ONLY

Rx only

10 mL Single Dose Vial

o not administer ntravenously

Strength

**PROFILNINE** factor ix complex kit **Product Information** Product Type Item Code (Source) NDC:68516-3201 **Packaging** # Item Code Package Description **Multilevel Packaging** 1 NDC:68516-3201-1 1 KIT in 1 CARTON None **QUANTITY OF PARTS** Part # Package Quantity **Total Product Quantity** Part 1 1 VIAL 5 mL Part 2 1 VIAL, SINGLE-DOSE 5 mL Part 1 of 2 **PROFILNINE** factor ix complex injection, powder, lyophilized, for solution **Product Information** NDC:68516-3204 Item Code (Source) INTRAVENOUS **DEA Schedule** Route of Administration Active Ingredient/Active Moiety Basis of Strength Ingredient Name Strength 500 [iU] in 5 mL factor ix complex (factor ix complex) factor ix complex

Inactive Ingredients Ingredient Name

sodium chloride

| 8/30/2016               |                       |                    | Factor IX ComplexProfile | nine®      |                      |                    |
|-------------------------|-----------------------|--------------------|--------------------------|------------|----------------------|--------------------|
| sodium citrate          |                       |                    |                          |            |                      |                    |
| sodium phosphate        |                       |                    |                          |            |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
| Product Characteristics |                       |                    |                          |            |                      |                    |
| Color                   |                       |                    | Score                    |            |                      |                    |
| Shape                   |                       |                    | Size                     |            |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
| Flavor                  |                       |                    | Imprint Code             |            |                      |                    |
| Contains                |                       |                    |                          |            |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
| Pookoging               |                       |                    |                          |            |                      |                    |
| Packaging               |                       |                    |                          |            |                      |                    |
| # Item Code             | Package Do            |                    |                          | 1          | level Packaging      |                    |
| <b>1</b> 68516-3204-2   | 5 mL in 1 VIA         | AL .               |                          | None       |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
| Marketing Information   |                       |                    |                          |            |                      |                    |
| Marketing Category      | Application Number or | Monograph Citation |                          | Marketing  | Start Date           | Marketing End Date |
| BLA                     | BLA102476             | •                  |                          | 07/20/1981 |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
| Part 2 of 2             |                       |                    |                          |            |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
| STERILE WATER           |                       |                    |                          |            |                      |                    |
| water injection         |                       |                    |                          |            |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
| Product Information     |                       |                    |                          |            |                      |                    |
|                         |                       |                    |                          | 1          |                      |                    |
| Item Code (Source)      | NL                    | OC:63323-185       |                          |            |                      |                    |
| Route of Administration | IN                    | TRAVENOUS          |                          | DEA S      | schedule             |                    |
|                         |                       |                    |                          |            |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
| Inactive Ingredients    |                       |                    |                          |            |                      |                    |
| Ingredient Name         |                       |                    |                          | s          | trength              |                    |
| water                   |                       |                    |                          |            |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
| Product Characteristics |                       |                    |                          |            |                      |                    |
| Color                   |                       |                    | Score                    |            |                      |                    |
| Shape                   |                       |                    | Size                     |            |                      |                    |
| Flavor                  |                       |                    | Imprint Code             |            |                      |                    |
| Contains                |                       |                    | • *****                  |            |                      |                    |
|                         |                       |                    | ı                        |            |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
| Packaging               |                       |                    |                          |            |                      |                    |
| # Item Code             | Package Descri        | ntion              |                          |            | Multilevel Packaging |                    |
|                         |                       |                    |                          |            | None Packaging       |                    |
| <b>1</b> 63323-185-05   | 5 mL in 1 VIAL, SI    | INGLE-DUSE         |                          |            | NOTIE                |                    |
|                         |                       |                    |                          |            |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
| Marketing Information   |                       |                    |                          |            |                      |                    |
| Marketing Category      | Application Number or | Monograph Citation |                          | Marketing  | Start Date           | Marketing End Date |
| BLA                     | BLA102476             |                    |                          | 07/20/1981 |                      |                    |
|                         |                       |                    |                          |            |                      |                    |
|                         |                       |                    |                          |            |                      |                    |

### Marketing Information

| Marketing Category | Application Number or Monograph Citation | Marketing Start Date | Marketing End Date |
|--------------------|--|----------------------|--------------------|
| BLA                | BLA102476                                | 07/20/1981           |                    |

| PROFILNINE factor ix complex kit      |                   |                          |                      |                 |                           |         |                    |
|---------------------------------------|-------------------|--------------------------|----------------------|-----------------|---------------------------|---------|--------------------|
|                                       |                   |                          |                      |                 |                           |         |                    |
| Product Information                   |                   | I                        |                      |                 |                           |         |                    |
| Product Type                          |                   | Item Code (Source)       |                      |                 | NDC:68516-320             | )2      |                    |
|                                       |                   |                          |                      |                 |                           |         |                    |
| Packaging                             |                   |                          |                      |                 |                           |         |                    |
| # Item Code                           |                   | Package Description      |                      |                 | Multilevel Packagi        | ng      |                    |
| 1 NDC:68516-3202-2                    |                   | 1 KIT in 1 CARTON        |                      |                 | None                      |         |                    |
| QUANTITY OF PARTS                     |                   |                          |                      |                 |                           |         |                    |
| Part # Package Quantity               |                   |                          |                      | Total Product   | Quantity                  |         |                    |
| Part 1 1 VIAL                         |                   |                          |                      | 10 mL           | •                         |         |                    |
| Part 2 1 VIAL, SINGLE-DOS             | <br>SE            |                          |                      | 10 mL           |                           |         |                    |
|                                       |                   |                          |                      |                 |                           |         |                    |
|                                       |                   |                          |                      |                 |                           |         |                    |
| Part 1 of 2                           |                   |                          |                      |                 |                           |         |                    |
| PROFILNINE                            | , ,               |                          |                      |                 |                           |         |                    |
| factor ix complex injection, p        | owder, lyophilize | d, for solution          |                      |                 |                           |         |                    |
|                                       |                   |                          |                      |                 |                           |         |                    |
| Product Information                   |                   |                          |                      |                 |                           |         |                    |
| Item Code (Source)                    |                   | NDC:68516-3205           |                      |                 |                           |         |                    |
| Route of Administration               |                   | INTRAVENOUS              |                      |                 | DEA Schedule              |         |                    |
|                                       |                   |                          |                      |                 |                           |         |                    |
|                                       |                   |                          |                      |                 |                           |         |                    |
| Active Ingredient/Active Mo           | oiety             |                          |                      |                 |                           |         |                    |
| Ingredient Name                       |                   |                          |                      | sis of Strength |                           | Streng  |                    |
| factor ix complex (factor ix complex) |                   |                          | tact                 | or ix complex   |                           | 100 [iU | J] in 1 mL         |
|                                       |                   |                          |                      |                 |                           |         |                    |
| Inactive Ingredients                  |                   |                          |                      |                 |                           |         |                    |
| Ingredient Name                       |                   |                          |                      |                 | Strength                  |         |                    |
| sodium chloride                       |                   |                          |                      |                 |                           |         |                    |
| sodium citrate sodium phosphate       |                   |                          |                      |                 |                           |         |                    |
| oddan proopriato                      |                   |                          |                      |                 |                           |         |                    |
|                                       |                   |                          |                      |                 |                           |         |                    |
| Product Characteristics               |                   |                          | ı                    |                 |                           |         |                    |
| Color                                 |                   |                          | Score                |                 |                           |         |                    |
| Shape<br>Flavor                       |                   |                          | Size<br>Imprint Code |                 |                           |         |                    |
| Contains                              |                   |                          | Imprint Code         |                 |                           |         |                    |
|                                       |                   |                          |                      |                 |                           |         |                    |
| Doelsonin -                           |                   |                          |                      |                 |                           |         |                    |
| Packaging                             |                   | <b>.</b>                 |                      |                 | M 100 1 1                 |         |                    |
| # Item Code<br>1 68516-3205-2         | 1                 | je Description           |                      |                 | Multilevel Packaging None |         |                    |
| 1 00010 0200 2                        | TO THE II         | 11 17/12                 |                      |                 | None                      |         |                    |
|                                       |                   |                          |                      |                 |                           |         |                    |
| Marketing Information                 |                   |                          |                      |                 |                           |         |                    |
| Marketing Category                    | Application Numb  | er or Monograph Citation |                      | Mar             | keting Start Date         |         | Marketing End Date |
| BLA                                   | BLA102476         |                          |                      | 07/2            | 0/1981                    |         |                    |
|                                       |                   |                          |                      |                 |                           |         |                    |
|                                       |                   |                          |                      |                 |                           |         |                    |
| Part 2 of 2                           |                   |                          |                      |                 |                           |         |                    |
| STERILE WATER                         |                   |                          |                      |                 |                           |         |                    |
| SIERILE WAIEK                         |                   |                          |                      |                 |                           |         |                    |

|                         |                  |                       | - 1  |             |                      |                    |   |
|-------------------------|------------------|-----------------------|--|-------------|----------------------|--------------------|---|
| water injection         |                  |                       |  |             |                      |                    |   |
|                         |                  |                       |  |             |                      |                    |   |
|                         |                  |                       |  |             |                      |                    |   |
| Product Information     |                  |                       |  |             |                      |                    |   |
| Item Code (Source)      | N                | NDC:63323-185         |  |             |                      |                    |   |
| Route of Administration | 11               | NTRAVENOUS            |  | DEA Sci     | hedule               |                    |   |
|                         |                  |                       |  |             |                      |                    |   |
| Inactive Ingredients    |                  |                       |  |             |                      |                    |   |
| Ingredient Name         |                  |                       |  | C+m         | ength                |                    |   |
| water                   |                  |                       |  | Sui         | engui                |                    |   |
| Water                   |                  |                       |  |             |                      |                    |   |
|                         |                  |                       |  |             |                      |                    |   |
| Product Characteristics |                  |                       |  |             |                      |                    |   |
| Color                   |                  |                       | Score  |             |                      |                    |   |
| Shape                   |                  |                       | Size   |             |                      |                    |   |
| Flavor                  |                  |                       | Imprint Code   |             |                      |                    |   |
| Contains                |                  |                       |  |             |                      |                    |   |
|                         |                  |                       |  |             |                      |                    |   |
| Packaging               |                  |                       |  |             |                      |                    |   |
| # Item Code             | Package Descr    | ription               |  |             | Multilevel Packaging |                    |   |
| <b>1</b> 63323-185-10   | 10 mL in 1 VIAL, | SINGLE-DOSE           |  |             | None                 |                    |   |
|                         |                  |                       |  |             |                      |                    |   |
|                         |                  |                       |  |             |                      |                    |   |
| Marketing Information   |                  |                       |  |             |                      |                    |   |
| Marketing Category      |                  | or Monograph Citation | The state of the s | Marketing S | tart Date            | Marketing End Date | 1 |
| BLA                     | BLA102476        |                       |  | 07/20/1981  |                      |                    |   |
|                         |                  |                       |  |             |                      |                    |   |
|                         |                  |                       |  |             |                      |                    |   |

#### Marketing Information

**PROFILNINE** 

 Marketing Category
 Application Number or Monograph Citation
 Marketing Start Date
 Marketing End Date

 BLA
 BLA102476
 07/20/1981

| PROF                             | ILNINE           |                     |                   |                      |  |
|----------------------------------|------------------|---------------------|-------------------|----------------------|--|
| factor ix                        | complex kit      |                     |                   |                      |  |
| Product <sup>-</sup>             | ct Information   | Item Code (Source)  |                   | NDC:68516-3203       |  |
|                                  |                  |                     |                   |                      |  |
| Packag                           | jing             |                     |                   |                      |  |
| # Item 0                         | Code             | Package Description |                   | Multilevel Packaging |  |
| 1 NDC:6                          | 8516-3203-2      | 1 KIT in 1 CARTON   |                   | None                 |  |
|                                  |                  |                     |                   |                      |  |
| QUAN                             | TITY OF PARTS    |                     |                   |                      |  |
| Part #                           | Package Quantity |                     | Total Product Qua | ntity                |  |
| Part 1                           | 1 VIAL           |                     | 10 mL             |                      |  |
| Part 2 1 VIAL, SINGLE-DOSE 10 mL |                  | 10 mL               |                   |                      |  |
|                                  |                  |                     |                   |                      |  |
|                                  |                  |                     |                   |                      |  |
| Part 1                           | of 2             |                     |                   |                      |  |

factor ix complex injection, powder, lyophilized, for solution

| Product Information                                 |  |                      |           |                   |          |                     |       |                 |     |
|---|--|----------------------|-----------|-------------------|----------|---------------------|-------|-----------------|-----|
| Item Code (Source)                                  | N  | DC:68516-3206        |           |                   |          |                     |       |                 |     |
| Route of Administration                             | II                                       | INTRAVENOUS          |           |                   | DE       | DEA Schedule        |       |                 |     |
|   |  |                      |           |                   |          | <u> </u>            |       |                 |     |
| Active Ingredient/Active Moie                       | atv                                      |                      |           |                   |          |                     |       |                 |     |
| Ingredient Name                                     | ety .                                    |                      |           | Basis of Strength |          |                     | Stren | ath             |     |
| factor ix complex (factor ix complex)               |  |                      |           | factor ix complex |          |                     | 1     | U] in 1 mL      |     |
|   |  |                      |           |                   |          |                     |       |                 |     |
|   |  |                      |           |                   |          |                     |       |                 |     |
| Inactive Ingredients                                |  |                      |           |                   |          |                     |       |                 |     |
| Ingredient Name                                     |  |                      |           |                   |          | Strength            |       |                 |     |
| sodium chloride sodium citrate                      |  |                      |           |                   |          |                     |       |                 |     |
| sodium phosphate                                    |  |                      |           |                   |          |                     |       |                 |     |
| ,   |  |                      |           |                   |          | ı                   |       |                 |     |
|   |  |                      |           |                   |          |                     |       |                 |     |
| Product Characteristics                             |  |                      |           |                   |          |                     |       |                 |     |
| Color   |  |                      | Score     |                   |          |                     |       | _               |     |
| Shape   |  |                      | Size      |                   |          |                     |       | _               |     |
| Flavor  |  |                      | Imprint C | ode               |          |                     |       |                 |     |
| Contains  |  |                      |           |                   |          |                     |       |                 |     |
|   |  |                      |           |                   |          |                     |       |                 |     |
| Packaging   |  |                      |           |                   |          |                     |       |                 |     |
| # Item Code   | Package [                                | Description          |           |                   | Mι       | ultilevel Packaging |       |                 |     |
| <b>1</b> 68516-3206-2                               | 10 mL in 1 '                             | /IAL                 |           |                   | No       | ne                  |       |                 |     |
|   |  |                      |           |                   |          |                     |       |                 |     |
| NA. 1 . C 1 . C C                                   |  |                      |           |                   |          |                     |       |                 |     |
| Marketing Information                               |  |                      |           |                   |          |                     |       |                 |     |
| I I   | <b>Application Number o</b><br>BLA102476 | r Monograph Citation |           |                   | 07/20/19 | ng Start Date       |       | Marketing End D | ate |
| DLA L   | SLA 102470                               |                      |           |                   | 07/20/19 | 01                  |       |                 |     |
|   |  |                      |           |                   |          |                     |       |                 |     |
|   |  |                      |           |                   |          |                     |       |                 |     |
| Part 2 of 2   |  |                      |           |                   |          |                     |       |                 |     |
| STERILE WATER                                       |  |                      |           |                   |          |                     |       |                 |     |
| water injection                                     |  |                      |           |                   |          |                     |       |                 |     |
|   |  |                      |           |                   |          |                     |       |                 |     |
|   |  |                      |           |                   |          |                     |       |                 |     |
| Product Information                                 |  |                      |           |                   |          |                     |       |                 |     |
| Item Code (Source)                                  | N  | DC:63323-185         |           |                   |          |                     |       |                 |     |
| Route of Administration                             | 11                                       | NTRAVENOUS           |           |                   | DEA      | A Schedule          |       |                 |     |
|   |  |                      |           |                   |          |                     |       |                 |     |
| Inactive Ingredients                                |  |                      |           |                   |          |                     |       |                 |     |
| Ingredient Name                                     |  |                      |           |                   |          | Strongth            |       |                 |     |
| water   |  |                      |           |                   |          | Strength            |       |                 | I   |
|   |  |                      |           |                   |          |                     |       |                 |     |
| water   |  |                      |           |                   |          | ı                   |       |                 |     |
|   |  |                      |           |                   |          |                     |       |                 |     |
| Product Characteristics                             |  |                      |           |                   |          |                     |       |                 |     |
| Product Characteristics                             |  |                      | Score     |                   |          |                     |       | _               |     |
| Product Characteristics Color Shape                 |  |                      | Size      | -4-               |          |                     |       |                 |     |
| Product Characteristics Color Shape Flavor          |  |                      |           | ode               |          |                     |       |                 |     |
| Product Characteristics Color Shape                 |  |                      | Size      | ode               |          |                     |       |                 |     |
| Product Characteristics Color Shape Flavor          |  |                      | Size      | ode               |          |                     |       |                 |     |
| Product Characteristics Color Shape Flavor          |  |                      | Size      | ode               |          |                     |       |                 |     |
| Product Characteristics Color Shape Flavor Contains | Package Descr                            | iption               | Size      | ode               |          | Multilevel Pack     | aging |                 |     |

| Marketing Information |  |                      |                    |  |  |  |  |
|-----------------------|--|----------------------|--------------------|--|--|--|--|
| Marketing Category    | Application Number or Monograph Citation | Marketing Start Date | Marketing End Date |  |  |  |  |
| BLA                   | BLA102476                                | 07/20/1981           |                    |  |  |  |  |
|                       |  |                      |                    |  |  |  |  |
|                       |  |                      |                    |  |  |  |  |

#### Marketing Information

| Marketing Category | Application Number or Monograph Citation | Marketing Start Date | Marketing End Date |
|--------------------|--|----------------------|--------------------|
| BLA                | BLA102476                                | 07/20/1981           |                    |

### Labeler - GRIFOLS USA, LLC (048987452)

#### **Establishment**

| Name                     | Address | ID/FEI    | Operations  |
|--------------------------|---------|-----------|---|
| Grifols Biologicals Inc. |         | 092694538 | MANUFACTURE, MANUFACTURE, MANUFACTURE, MANUFACTURE, MANUFACTURE, MANUFACTURE, MANUFACTURE |

#### **Establishment**

| Name                     | Address | ID/FEI    | Operations  |  |
|--------------------------|---------|-----------|---|--|
| Grifols Biologicals Inc. |         | 121076871 | MANUFACTURE, MANUFACTURE, MANUFACTURE, MANUFACTURE, MANUFACTURE, MANUFACTURE, MANUFACTURE |  |

Revised: 07/2015 GRIFOLS USA, LLC