

HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use FESILTY safely and effectively. See full prescribing information for FESILTY.

FESILTY (fibrinogen, human - chmt), lyophilized powder for reconstitution, for intravenous use

Initial U.S. Approval: 2025

INDICATIONS AND USAGE

FESILTY is a human blood coagulation factor indicated for the treatment of acute bleeding episodes in pediatric and adult patients with congenital fibrinogen deficiency, including hypo- or afibrinogenemia. (1)

Limitations of Use:

FESILTY is not indicated for dysfibrinogenemia. (1)

DOSAGE AND ADMINISTRATION

Intravenous use after reconstitution only.

- Calculate the dose in mg fibrinogen per kg of BW for each patient individually. The target plasma fibrinogen level is 100 mg/dL for minor bleeding and 150 mg/dL for major bleeding. (2.1)

When plasma fibrinogen level is known:

Patient Age	Calculation for Recommended Dose (mg/kg BW)
Adults and pediatric patients \geq 6 years of age	[Target fibrinogen level (mg/dL) – Measured fibrinogen level (mg/dL)] / 1.8 (mg/dL per mg/kg BW)
Pediatric patients < 6 years of age	[Target fibrinogen level (mg/dL) – Measured fibrinogen level (mg/dL)] / 1.6 (mg/dL per mg/kg BW)

When plasma fibrinogen level is not known:

Dose: 70 mg/kg BW for patients of all ages

Frequency and duration of dosing:

- Monitor fibrinogen levels. Individualize the frequency and duration of dosing based on the extent of bleeding, plasma fibrinogen level, and the clinical condition of the patient.
- Infuse FESILTY using an infusion pump at an infusion rate not to exceed 5 mL/min. Initial infusion rates are: (2.3)

Patient Age	Initial Infusion Rate
Adults and pediatric patients \geq 6 years of age	5 mL/min
Pediatric patients 4 to < 6 years of age	1.0 mL/min
Pediatric patients 2 to \leq 4 years of age	0.75 mL/min
Pediatric patients 28 days to < 2 years of age	0.30 mL/min
Newborns (0 to 27 days)	0.10 mL/min

DOSAGE FORMS AND STRENGTHS

FESILTY is a sterile, lyophilized, white in color powder for solution for intravenous injection. FESILTY is provided as one single-dose glass vial containing nominally 1 gram of human fibrinogen and one 50 mL glass vial of Sterile Water for Injection, USP. The actual amount of fibrinogen in milligrams fibrinogen per vial is printed on the vial label and carton. (3)

CONTRAINDICATIONS

Severe hypersensitivity reactions, including anaphylaxis, to FESILTY or its components (arginine hydrochloride, polysorbate 80, sodium citrate dihydrate, trehalose dihydrate) (4)

WARNINGS AND PRECAUTIONS

- Hypersensitivity reactions have occurred in patients receiving FESILTY. Should symptoms occur, discontinue FESILTY and administer appropriate treatment. (5.1)
- Thrombotic events have been reported in patients receiving FESILTY. Weigh the benefits of administration versus the risks of thrombosis. (5.2)
- FESILTY is made from pooled human plasma and may carry the risk of transmitting infectious agents. All infections thought to be transmitted by FESILTY should be reported to Grifols at 1-800-520-2807, (5.3)

ADVERSE REACTIONS

The most common adverse reactions (incidence $>$ 2%) were pain in extremity, back pain, hypersensitivity reactions, pyrexia, thrombosis, fibrin D dimer increased, headache, and vomiting. (6.1)

To report SUSPECTED ADVERSE REACTIONS, contact Grifols Therapeutics LLC at 1-800-520-2807 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

See 17 for PATIENT COUNSELING INFORMATION.

Revised: 12/2025

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1 **FULL PRESCRIBING INFORMATION**

2 **1 INDICATIONS AND USAGE**

3 FESILTY is indicated for the treatment of acute bleeding episodes in pediatric and adult patients
4 with congenital fibrinogen deficiency, including hypo- or afibrinogenemia.

5 Limitations of Use:

6 FESILTY is not indicated for dysfibrinogenemia.

7 **2 DOSAGE AND ADMINISTRATION**

8 **2.1 Dose**

9 **For intravenous use after reconstitution only**

10 The target plasma fibrinogen level is 100 mg/dL for minor bleeding and 150 mg/dL for major
11 bleeding.

12 The actual amount of fibrinogen in milligrams per vial of FESILTY is printed on the vial label
13 and carton.

14 *FESILTY dose when baseline fibrinogen level is known*

15 The dose for each patient must be individually calculated taking into consideration age, the
16 location and extent of bleeding, the plasma level of fibrinogen (mg/dL), and the clinical condition
17 of the patient.

18 Calculate the recommended dose in milligrams fibrinogen per kilogram BW according to the age
19 of the patient:

- 20 • Adults and pediatric patients \geq 6 years of age

$$21 \quad \text{Dose (mg/kg BW)} = \frac{\text{Target fibrinogen level (mg/dL)} - \text{Measured fibrinogen level (mg/dL)}}{22 \quad \quad \quad 1.8 \text{ (mg/dL per mg/kg BW)}}$$

- 24 • Pediatric patients $<$ 6 years of age

$$25 \quad \text{Dose (mg/kg BW)} = \frac{\text{Target fibrinogen level (mg/dL)} - \text{Measured fibrinogen level (mg/dL)}}{26 \quad \quad \quad 1.6 \text{ (mg/dL per mg/kg BW)}}$$

29 Monitor plasma fibrinogen level and repeat the dose if the plasma fibrinogen level drops below
30 the target level until hemostasis is achieved.

31 Individualize the frequency and duration of dosing based on the extent of bleeding, plasma
32 fibrinogen level, and the clinical condition of the patient.

33 *FESILTY dose when baseline fibrinogen level is not known*

34 The recommended dose when the baseline fibrinogen is not known is 70 mg/kg BW for patients
35 of all ages.

36 Monitor plasma fibrinogen level and repeat the dose as needed to maintain the target fibrinogen
37 level.

38 Individualize the frequency and duration of dosing based on the extent of bleeding, plasma
39 fibrinogen level, and the clinical condition of the patient.

40 **2.2 Preparation and Reconstitution**

41 FESILTY is a white powder. Upon reconstitution with sterile water, the solution is almost
42 colorless and clear to slightly opalescent.

43 The following procedures are provided as a guide for the preparation and reconstitution of
44 FESILTY.

45 Preparation

46 Inspect the carton kit before opening. Discard the kit if the package is damaged or if the seal on
47 the carton shows signs of tampering.

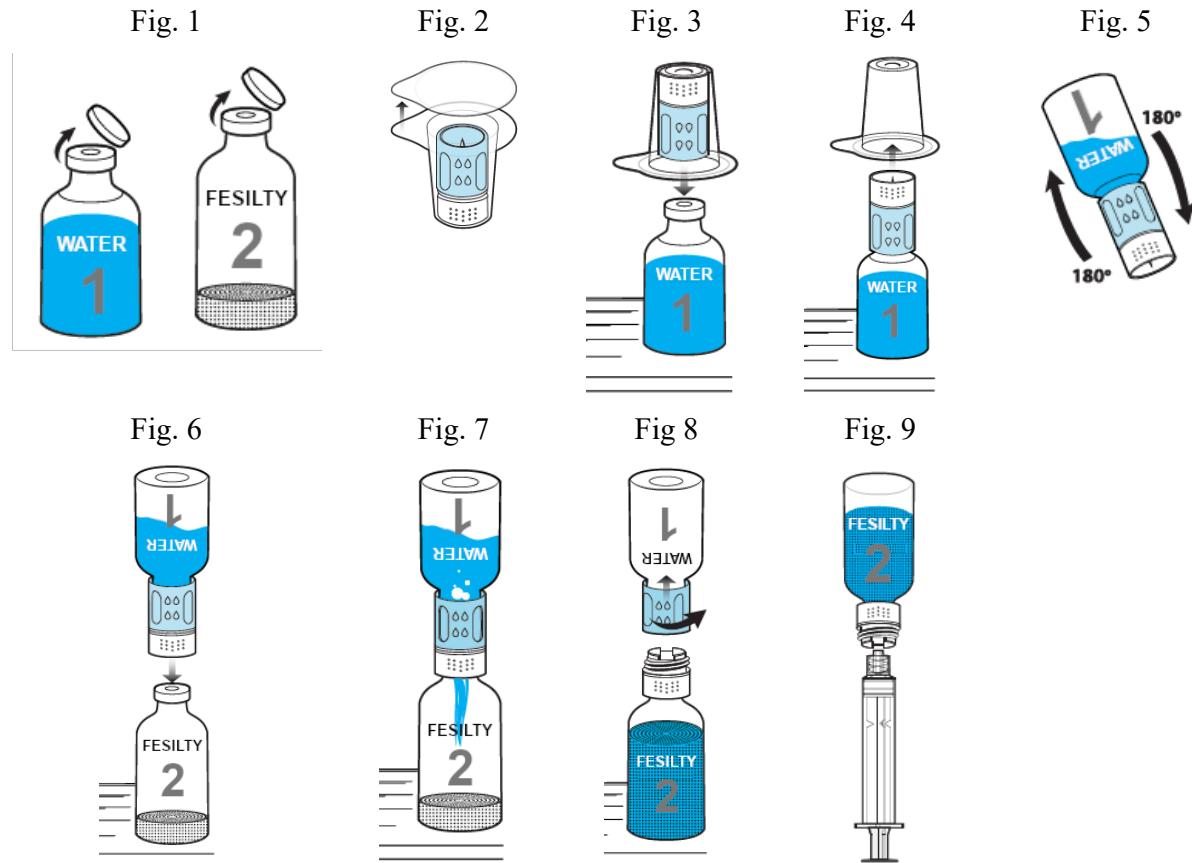
48 Do not use FESILTY after the expiration date printed on the vial label and carton.

49 If stored refrigerated, allow the unopened vials of Sterile Water for Injection, USP (vial number
50 1) and product (FESILTY, vial number 2) to come to room temperature.

51 Use aseptic technique (clean and sanitized) and a flat surface during reconstitution of FESILTY.

52 Reconstitution with nextaro® v, 20/20 5 µm transfer system

- 53 1. Remove the caps from the water vial and the product vial in order to expose the central
54 portions of the stoppers (Fig. 1). Cleanse each vial stopper with an alcohol swab and allow
55 surface to dry.
- 56 2. Completely remove the paper seal of the transfer system blister package (Fig. 2). To maintain
57 sterility, keep the transfer device in the clear blister package. Do not touch the spike.
- 58 3. Place the water vial on an even surface. Place the blue part of the transfer system within the
59 blister straight onto the upright water vial (Fig. 3) until it snaps into place. Do not twist the
60 transfer system.
- 61 4. Remove the clear part of the blister package from the transfer system. Now the white part of
62 the transfer system is visible (Fig. 4).
- 63 5. Place the product vial on an even surface.
- 64 6. Turn the combination of transfer system and water vial upside down (Fig. 5). Push the spike
65 of the white end of the transfer system straight down through the product vial stopper (Fig. 6)
66 until it snaps into place. The vacuum present in the product vial causes the water to flow into
67 the product vial (Fig. 7). Wait until water transfer is complete.
- 68 7. Gently sway the unit consisting of the transfer system, product and water vial, to dissolve the
69 powder. Do not shake the unit, to avoid foaming. The powder should be dissolved completely
70 within approximately 3 minutes. Discard the product if the powder is not fully dissolved
71 within 30 minutes. After reconstitution the solution should be clear or slightly opalescent.
- 72 8. Afterwards unscrew the blue part of the transfer system together with the empty water vial
73 counterclockwise (Fig. 8). Discard the water vial with the blue part of the transfer system
74 attached. The luer-lock connector is now visible. To maintain sterility do not touch the luer-
75 lock connector.
- 76 9. The solution is ready for use. Keep the solution at room temperature and use within 4 hours
77 after dissolving. Do not use solutions that are cloudy or contain visible particles.



- 78 10. Screw a sterile syringe (not supplied) onto the luer-lock connector of the product vial with
 79 the white part of the transfer system and invert (Fig. 9) to allow you to easily draw the
 80 dissolved drug into the syringe. Use constant force during drawing to avoid foaming. A
 81 separate filter is not necessary because the transfer system has its own integrated filter.
- 82 11. Carefully disconnect the vial with the white part of the transfer system from the syringe. A
 83 standard infusion set is recommended for intravenous injection of the solution.
- 84 12. If the dose requires more than one vial of FESILTY, reconstitute each vial using a new
 85 nextaro® v, 20/20 transfer system provided in the carton. The nextaro® v, 20/20 transfer
 86 system is for single use only.
- 87 Do not shake.
- 88 Do not mix FESILTY with other intravenous medications. Administer by a separate
 89 injection/infusion line.
- 90 FESILTY is for single use only. It contains no preservatives.
- 91 Discard unused portion.
- 92 **2.3 Administration**
- 93 Inspect visually for particulate matter and discoloration prior to administration. Do not use if the
 94 liquid is cloudy or turbid, discolored, or if it contains visible particulate matter.

95 **Infusion Rates**

96 Infuse FESILTY intravenously using an infusion pump at an infusion rate not to exceed 5
97 mL/min. The initial infusion rates are provided in Table 1. Selection of the infusion rate remains
98 principally at the discretion of the treating physician considering the exact clinical situation of the
99 patient.

100 **Table 1: Infusion Rates for FESILTY**

Patient Age	Initial Infusion Rate*
Adults and pediatric patients \geq 6 years of age	5 mL/min
Pediatric patients 4 to $<$ 6 years of age	1.0 mL/min
Pediatric patients 2 to $<$ 4 years of age	0.75 mL/min
Pediatric patients 28 days to $<$ 2 years of age	0.30 mL/min
Newborns (0 to 27 days)	0.10 mL/min

101 * Infusion rate not to exceed 5 mL/min

102 **3 DOSAGE FORMS AND STRENGTHS**

103 FESILTY is a sterile, lyophilized, white in color powder for solution for intravenous injection.
104 FESILTY is provided as one single-dose glass vial containing nominally 1 gram of human
105 fibrinogen and one 50 mL glass vial of Sterile Water for Injection, USP. The actual amount of
106 fibrinogen in milligrams of fibrinogen per vial is printed on the vial label and carton.

107 **4 CONTRAINDICATIONS**

108 FESILTY is contraindicated in patients who have severe hypersensitivity reactions, including
109 anaphylaxis, to FESILTY or its components (arginine hydrochloride, polysorbate 80, sodium
110 citrate dihydrate, trehalose dihydrate). [see *Warnings and Precautions (5.1)*]

111 **5 WARNINGS AND PRECAUTIONS**

112 **5.1 Hypersensitivity**

113 Hypersensitivity reactions have occurred to FESILTY or its components (arginine hydrochloride,
114 polysorbate 80, sodium citrate dihydrate, trehalose dihydrate). Monitor patients for signs and
115 symptoms of hypersensitivity reactions including hives, generalized urticaria, tightness of the
116 chest, wheezing, hypotension, and anaphylaxis. If symptoms occur, discontinue FESILTY
117 infusion immediately. Manage patients based on clinical practice accordingly.

118 **5.2 Thrombosis**

119 Thrombotic events have occurred in patients receiving FESILTY [see *Adverse Reactions (6)*].
120 Thrombosis may occur spontaneously in patients with congenital fibrinogen deficiency with or
121 without the use of fibrinogen replacement therapy. Weigh the benefits of FESILTY
122 administration versus the risks of thrombosis. Monitor patients receiving FESILTY for signs and
123 symptoms of thrombosis.

124 **5.3 Transmission of Infectious Agents**

125 Because FESILTY is made from pooled human plasma, it may carry a risk of transmitting
126 infectious agents, e.g., viruses, the variant Creutzfeldt-Jakob disease (vCJD) agent and,
127 theoretically, the Creutzfeldt-Jakob disease (CJD) agent. This also applies to unknown or
128 emerging viruses and other pathogens. The risk of infectious agent transmission has been reduced
129 by screening plasma donors and by including virus inactivation as well as virus and prion removal
130 steps in the manufacturing process of FESILTY[see *Description (11)*].

131 All infections suspected to have been transmitted by FESILTY should be reported by the
132 physician or other healthcare provider to Grifols at 1-800-520-2807.

133 **6 ADVERSE REACTIONS**

134 **6.1 Clinical Trials Experience**

135 Because clinical trials are conducted under widely varying conditions, adverse reaction rates
136 observed in the clinical trials of one drug cannot be directly compared to rates in the clinical trials
137 of another drug and may not reflect the rates observed in clinical practice.

138 The safety data described in this section reflects exposure to FESILTY in one clinical study
139 (Study 984). A total of 45 patients with congenital fibrinogen deficiency received at least one
140 dose of FESILTY. A total of 175 bleeding episodes were treated with a mean dose of 3.9 g [see
141 *Clinical Studies (14)*].

142 Serious adverse reactions occurred in 4 patients (9%) including portal vein thrombosis (n=1),
143 deep vein thrombosis (n=1), and pain in extremity with clinically suspected thrombosis (n=1).
144 One patient had episode of epilepsy and died due to extradural hematoma four weeks after
145 FESILTY administration.

146 Table 2 lists the most common adverse reactions that occurred in > 2% patients in Study 984.

147 **Table 2: Adverse Reactions Occurring in > 2% Patients in Study 984**

Adverse Reaction	N=45 n (%)
Pain in extremity	3 (7)
Back pain	3 (7)
Hypersensitivity reactions*	3 (7)
Pyrexia	2 (4)
Thrombosis [†]	2 (4)
Fibrin D dimer increased	2 (4)
Headache	2 (4)
Vomiting	2 (4)

148 * Hypersensitivity reactions = all patients had adverse reactions of facial swelling.
149 [†] Thrombosis includes portal vein thrombosis and deep vein thrombosis.

150 **8 USE IN SPECIFIC POPULATIONS**

151 **8.1 Pregnancy**

152 *Risk Summary*

153 No human data are available to indicate the presence or absence of a drug-associated risk. Animal
154 reproduction studies have not been conducted with FESILTY. One patient in clinical trial 984
155 reported pregnancy 11 months after receiving FESILTY. The patient withdrew from the study and
156 there were no reports of complications during the pregnancy. It is not known whether FESILTY
157 can cause fetal harm when administered to a pregnant woman or can affect fertility.

158 In the U.S. general population, the estimated background risk of major birth defects and
159 miscarriage in clinically recognized pregnancies is 2-4% and 15-20% respectively.

160 **8.2 Lactation**

161 *Risk Summary*

162 There is no information regarding the presence of FESILTY in breast milk, the effect on the
163 breast-fed infant, or the effects on milk production. The developmental and health benefits of
164 breast feeding should be considered along with the mother's clinical need for FESILTY and any
165 potential adverse effects on the breast-fed infant from FESILTY or from the underlying maternal
166 condition.

167 **8.4 Pediatric Use**

168 The safety and effectiveness of FESILTY have been established in pediatric patients with
169 congenital fibrinogen deficiency. Use of FESILTY in pediatric patients was supported by
170 evidence from one clinical study (Study 984) that enrolled 24 pediatric patients 0 to 16 years of
171 age (6 patients aged 0 to < 6 years, 18 patients aged \geq 6 years) with congenital fibrinogen
172 deficiency [see *Adverse Reactions (6)* and *Clinical Studies (14)*].

173 **8.5 Geriatric Use**

174 Clinical study of FESILTY in patients with congenital fibrinogen deficiency did not include
175 patients aged 65 years and over to provide evidence as to whether or not they respond differently
176 than younger patients.

177 **11 DESCRIPTION**

178 FESILTY (fibrinogen, human – chmt), is a purified, sterile, non-pyrogenic, lyophilized powder of
179 human fibrinogen for reconstitution for intravenous administration. Human fibrinogen is purified
180 from Source Plasma from the cryoprecipitate fraction and processed using a combination of
181 aluminum hydroxide purification, solvent/detergent (S/D) treatment, anion and cation exchange
182 chromatography, glycine precipitation, and Ultraviolet (UV)-C irradiation. FESILTY is supplied
183 in a single-dose vial containing nominally 1 gram of fibrinogen. The actual amount of fibrinogen
184 is printed on the vial label and carton in milligrams fibrinogen per vial. When reconstituted with
185 50 mL sterile water for injection, FESILTY contains approximately 20 mg/mL protein, of which
186 not less than 80% is fibrinogen monomer. Each vial of FESILTY also contains 421.3 mg arginine
187 hydrochloride, 292.2 mg sodium chloride, 73.5 mg sodium citrate dihydrate, 25.5 mg polysorbate
188 80, and 567.5 mg trehalose dihydrate. FESILTY has a pH of 6.5 to 7.5 and an osmolality of \geq 240
189 mOsmol/kg. FESILTY does not contain preservatives and is not made with natural rubber latex.

190 FESILTY is prepared from pooled Source Plasma obtained from healthy volunteer donors. Each
191 plasma donation used for the manufacture of FESILTY is collected from FDA-licensed facilities.
192 Plasma donations must test negative for hepatitis B virus (HBV) surface antigen (HBsAg),
193 antibodies to human immunodeficiency virus (HIV) strains 1 and 2 (anti-HIV-1/2), and antibodies
194 to the hepatitis C virus (anti-HCV) as determined by enzyme immunoassay (EIA). In addition,
195 samples from manufacturing pools must test non-reactive for HIV RNA, HCV RNA, HBV DNA,
196 and Hepatitis A Virus (HAV) RNA, by Nucleic Acid Amplification Testing (NAT). Parvovirus
197 B19 (B19V) DNA is also tested by NAT and must not exceed 10^4 IU/mL in the manufacturing
198 pool.

199 The manufacturing process for FESILTY employs several steps to remove/inactivate adventitious
200 viruses to further increase the margins of safety. These steps include S/D treatment, UV-C
201 irradiation, and heat treatment of lyophilized fibrinogen. Virus clearance studies with a scaled-
202 down process have been performed for these steps to determine their capacity to inactivate or
203 remove both enveloped and non-enveloped viruses. The results are shown in Table 3.

204 **Table 3: Virus Reduction Factors (\log_{10}) during FESILTY Manufacturing Process for
205 Enveloped (E) and Non-enveloped (NE) Viruses**

Step	HIV* (E)	PRV† (E)	BVDV‡ (E)	HAV§ (NE)	PPV¶ (NE)
S/D# Treatment	≥ 4.51	≥ 5.39	≥ 5.21	n.d.**	n.d.**
UV-C†† Irradiation	n.d.**	1.63	1.87	2.47	4.19
Lyophilization & Dry Heat Treatment	≥ 4.86	≥ 5.36	≥ 4.29	≥ 4.34	1.09
Total Clearance	≥ 9.37	≥ 12.38	≥ 11.37	≥ 6.81	5.28

206 * HIV: Human immunodeficiency virus

207 † PRV: Porcine pseudorabies virus (varicellovirus suidalpha 1), a generic model for hepatitis B virus

208 ‡ BVDV: Bovine viral diarrhea virus 1 (pestivirus bovis), a model for hepatitis C virus (hepacivirus hominis)

209 § HAV: Hepatitis A virus (hepatovirus A)

210 ¶ PPV: Porcine parvovirus (protoparvovirus ungulate 1), a model for human parvovirus B19 (erythroparvovirus
211 primate1)

212 # S/D: Solvent/detergent

213 ** n.d.: Not determined

214 †† UV-C: Ultraviolet-C

215

216 The manufacturing process was also investigated for its capacity to reduce the infectivity of an
217 experimental agent of transmissible spongiform encephalopathy (TSE), considered a model for
218 CJD and its variant, vCJD. One chromatographic purification step has been shown to reduce TSE
219 infectivity of an experimental model agent. These studies provide reasonable assurance that low
220 levels (at least $3.27 \log_{10}$) of vCJD/CJD agent infectivity, if present in the starting material, would
221 be removed.

223 **12 CLINICAL PHARMACOLOGY**

224 **12.1 Mechanism of Action**

225 Fibrinogen (Factor I) is a soluble plasma protein that, during the coagulation process, is converted
226 to fibrin, one of the key components of the blood clot. Fibrinogen is a heterohexamer with a

227 molecular weight of 340 kDa and composed of two sets of alpha, beta, and gamma polypeptide
 228 chains.

229 Fibrinogen plays a fundamental role in achieving and maintaining overall hemostasis. Following
 230 coagulation activation and thrombin generation, fibrinogen is cleaved by thrombin at specific sites
 231 on the alpha and beta chains to remove fibrinopeptide A (FPA) and fibrinopeptide B (FPB). The
 232 removal of FPA and FPB exposes binding sites on the fibrinogen molecule and leads to the
 233 formation of fibrin monomers that subsequently undergo polymerization. The resulting fibrin is
 234 stabilized by activated factor XIII which forms cross links between fibrin polymers and renders
 235 the fibrin clot more resistant to fibrinolysis. Additionally, soluble fibrinogen mediates platelet
 236 aggregation by binding to the glycoprotein IIb/IIIa (GPIIb/IIIa) receptor on the platelet surface
 237 activated following blood vessel injury. This interaction acts as a bridge between platelets,
 238 facilitating their aggregation, i.e., formation of primary platelet plug. The end product of the
 239 coagulation cascade, cross-linked fibrin, stabilizes and reinforces the primary platelet plug to
 240 achieve secondary hemostasis and stop bleeding.

241 **12.2 Pharmacodynamics**

242 In a prospective, open-label, multicenter phase I clinical trial the pharmacodynamic properties for
 243 FESILTY were evaluated in 27 patients of all age groups with congenital afibrinogenemia or
 244 severe hypofibrinogenemia. The assessment was based on fibrinogen activity (FiAc) levels in
 245 plasma after a single intravenous administration of 70 mg/kg BW. Maximum clot firmness (MCF)
 246 was measured by thromboelastometry and showed a positive correlation with FiAc levels of
 247 FESILTY in patients across the age groups.

248 **12.3 Pharmacokinetics**

249 PK properties of FESILTY were investigated based on FiAc levels in plasma after a single
 250 intravenous administration of 70 mg/kg BW in patients with congenital afibrinogenemia or severe
 251 hypofibrinogenemia of all age groups.

252 **Table 4: Summary of Pharmacokinetic Parameters for FESILTY Fibrinogen Activity**
 253 **(FiAc) by Age Groups**

Parameters *	Overall N = 17	6 to < 12 years N = 1	12 to < 18 years N = 2	18 to 75 years N = 14
t _{1/2} [h]	54.8 (13.4)	63.1	57.4 (25.7)	53.8 (12.7)
C _{max} [g/L]	1.47 (0.4)	1.74	1.16 (0.5)	1.49 (0.4)
AUC _{0-∞} [g*h/L]	97.8 (39.1)	92.8	79.4 (52.1)	101 (40.1)
MRT _{0-∞} [h]	80.3 (19.3)	88.6	84.8 (39.3)	79.1 (18.1)
V _{dss} per kg [mL/kg]	62.2 (16.3)	66.8	80.8 (18.5)	59.2 (15.4)
CL per kg [mL/(h*kg)]	0.836 (0.4)	0.754	1.13 (0.7)	0.801 (0.3)
IR [mg/dL per mg/kg dose]	2.10 (0.6)	2.49	1.66 (0.7)	2.13 (0.6)

254
 255 Abbreviations: AUC_{0-∞} = area under the curve (AUC) from time 0 to infinity; C_{max} = maximum concentration; CL =
 256 clearance; IR = incremental recovery based on observations; MRT_{0-∞} = mean residence time extrapolated to infinity;
 257 N = number of patients; t_{1/2} = half-life; V_{dss} = volume of distribution at steady state.

258 Data reflects subjects in Study 984 with a minimum of five observations.

259 * Pharmacokinetic parameters are summarized as Mean (Standard Deviation).

261 A population pharmacokinetic model was developed that pooled the data collected in 27 patients
262 aged 1 to 40 years who received 70 mg/kg of FESILTY. A two-compartment model was used for
263 integrated assessments of FiAg and FiAc levels, with body weight included as a covariate to
264 describe the pharmacokinetic data. The analysis demonstrated that the median AUC_{0-239h} of FiAc
265 was lower by 27.6% in patients aged < 6 years, by 13.6% in patients aged 6 to < 12 years, and by
266 3.4% in patients aged 12 to < 18 years compared to adult patients. The median C_{max} was
267 comparable between pediatric and adult patients.

268 **14 CLINICAL STUDIES**

269 The efficacy of FESILTY was evaluated in an open-label, single arm, multicenter, study (Study
270 984; NCT 02065882) in patients with congenital hypo- or afibrinogenemia. Patients with
271 dysfibrinogenemia were excluded. The study assessed FESILTY for on-demand treatment (ODT)
272 and for on-demand prophylaxis (ODP) of bleeding events.

273 A total of 36 patients received FESILTY for 175 bleeding events. The median number of
274 FESILTY infusions per bleeding event was 1 (range: 1 to 6). The mean total perioperative dose of
275 FESILTY for 54 surgical bleeding events was 70.3 mg/kg BW for adults and 125.9 mg/kg BW
276 for pediatric patients. The mean dose for 175 bleeding events was 70.1 mg/kg for adults and 75.8
277 mg/kg for pediatric patients.

278 The demographic characteristics of the study population were as follows: The median age was 18
279 years (range: 1 to 46 years) including 3 patients aged 0 to < 6 years, 9 patients aged 6 to < 12
280 years, and 4 patients aged 12 to < 18 years. Twenty-two patients (61%) were male and 36 patients
281 (100%) were White. Thirty-four patients (94%) had congenital afibrinogenemia and two patients
282 (6%) had severe hypofibrinogenemia. Out of 175 bleeding events, 45 were traumatic, 65 were
283 spontaneous, 54 were surgical and 11 bleeds were classified as “other”. There were 60 bleeds
284 treated with ODP and 115 bleeds with ODT.

285 The main efficacy endpoint was the overall hemostatic response (OHR) based on a 4-point scale
286 assessed by the investigator as excellent, good, moderate or none. The other efficacy endpoint
287 was the mean change in maximum clot formation (MCF) at 1 hour after infusion.

288 The OHR for 175 bleeding events in 36 patients was reported as excellent in 150 bleeding events
289 (86%), good in 23 bleeding events (13%), and moderate in 2 bleeding events (1%). The mean
290 change in MCF was 10.76 mm at 1 hour after FESILTY infusion.

291 **16 HOW SUPPLIED/STORAGE AND HANDLING**

292 FESILTY is supplied in a kit containing one single-dose glass vial of human fibrinogen, one glass
293 vial of 50 mL Sterile Water for Injection, USP, and one *nextaro*[®] v, 20/20 sterile transfer system.

Carton NDC	Container NDC	Fibrinogen Content
13533-502-01	13533-503-02	approximately 1 gram

294 The actual amount of human fibrinogen in milligrams per vial is printed on the vial label and
295 carton.

- 296 • FESILTY is not made with natural rubber latex.
297 • Keep FESILTY in its original carton to protect it from light.
298 • Store between 2°C and 30°C (36°F and 86°F). Do not freeze.

- 299 • Do not use after expiration date printed on the vial label and carton.
300 • Use within 4 hours after reconstitution.
301 • Discard unused portion.

302 **17 PATIENT COUNSELING INFORMATION**

303 Discuss following with the patient and/or caregiver:

- 304 • Hypersensitivity reactions: Inform patients and/or caregiver of the early signs of
305 hypersensitivity reactions to FESILTY (including hives, generalized urticaria, tightness of the
306 chest, wheezing, hypotension, and anaphylaxis), and advise them to notify their physician
307 immediately if they experience any of these symptoms [*see Warnings and Precautions (5.1)*].
308 • Thrombosis: Inform patients and/or caregiver that blood clots with or without consequent
309 obstruction of blood flow may occur with FESILTY. Any symptoms of blood clots such as
310 unexplained chest and/or leg pain or swelling of the legs or arms, coughing up blood,
311 shortness of breath, increased rate of breathing or unexplained symptoms related to the
312 nervous system such as stroke or weakness following administration of FESILTY should be
313 reported to their physician immediately [*see Warnings and Precautions (5.2)*].
314 • Transmission of infectious agents: Inform patients and/or caregiver that because FESILTY is
315 made from pooled human plasma, it may carry a risk of transmitting infectious agents that can
316 cause disease (e.g., viruses, vCJD agent, and theoretically, the CJD agent). Explain that the
317 risk that FESILTY may transmit an infection has been reduced by screening plasma donors
318 for prior exposure, testing donated plasma, and inactivating or removing certain viruses
319 during manufacturing, patients should report any symptoms that concern them [*see*
320 *Description (11), Warnings and Precautions (5.3)*].

321 **Manufactured by:**

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323 63303 Dreieich, Germany

324 **Manufactured for:**

325 Grifols Therapeutics LLC
326 Research Triangle Park, NC 27709 USA
327 US License No. 1871