

HIGHLIGHTS OF PRESCRIBING INFORMATION

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

**BEXSERO (Meningococcal Group B Vaccine)
suspension for intramuscular injection
Initial U.S. Approval: 2015**

RECENT MAJOR CHANGES

Warnings and Precautions, Altered Immunocompetence (5.5) 5/2018

INDICATIONS AND USAGE

BEXSERO is a vaccine indicated for active immunization to prevent invasive disease caused by *Neisseria meningitidis* serogroup B. BEXSERO is approved for use in individuals 10 through 25 years of age. (1)

Approval of BEXSERO is based on demonstration of immune response, as measured by serum bactericidal activity against three serogroup B strains representative of prevalent strains in the United States. The effectiveness of BEXSERO against diverse serogroup B strains has not been confirmed. (1)

DOSAGE AND ADMINISTRATION

For intramuscular use only. (2)

Administer 2 doses (0.5-mL each) of BEXSERO at least 1 month apart. (2.1)

DOSAGE FORMS AND STRENGTHS

Suspension for intramuscular injection in 0.5-mL single-dose prefilled syringes. (3)

CONTRAINDICATIONS

Hypersensitivity, including severe allergic reaction, to any component of the vaccine, or after a previous dose of BEXSERO. (4)

WARNINGS AND PRECAUTIONS

The tip caps of the prefilled syringes contain natural rubber latex which may cause allergic reactions in latex-sensitive individuals. (5.3)

ADVERSE REACTIONS

The most common solicited adverse reactions observed in clinical trials were pain at the injection site (≥83%), myalgia (≥48%), erythema (≥45%), fatigue (≥35%), headache (≥33%), induration (≥28%), nausea (≥18%), and arthralgia (≥13%). (6.1)

To report SUSPECTED ADVERSE REACTIONS, contact GlaxoSmithKline at 1-888-825-5249 or VAERS at 1-800-822-7967 or <http://www.vaers.hhs.gov>.

USE IN SPECIFIC POPULATIONS

- **Pregnancy:** BEXSERO should be used during pregnancy only if clearly needed. Pregnancy registry available for BEXSERO. Register women who receive BEXSERO while pregnant in the pregnancy registry by calling 1-877-413-4759. (8.1)

See 17 for PATIENT COUNSELING INFORMATION.

Revised: 5/2018

FULL PRESCRIBING INFORMATION: CONTENTS*

1 INDICATIONS AND USAGE
2 DOSAGE AND ADMINISTRATION
 2.1 Dose and Schedule
 2.2 Administration
 2.3 Use of BEXSERO with other Meningococcal Group B Vaccines
3 DOSAGE FORMS AND STRENGTHS
4 CONTRAINDICATIONS
5 WARNINGS AND PRECAUTIONS
 5.1 Preventing and Managing Allergic Reactions
 5.2 Syncope
 5.3 Latex
 5.4 Limitation of Vaccine Effectiveness
 5.5 Altered Immunocompetence
6 ADVERSE REACTIONS
 6.1 Clinical Trials Experience
 6.2 Additional Pre-licensure Safety Experience
 6.3 Postmarketing Experience
7 DRUG INTERACTIONS
8 USE IN SPECIFIC POPULATIONS
 8.1 Pregnancy
 8.3 Nursing Mothers
 8.4 Pediatric Use
 8.5 Geriatric Use
11 DESCRIPTION
12 CLINICAL PHARMACOLOGY
 12.1 Mechanism of Action
13 NONCLINICAL TOXICOLOGY
14 CLINICAL STUDIES
 14.1 Immunogenicity
15 REFERENCES
16 HOW SUPPLIED/STORAGE AND HANDLING
 16.1 How Supplied
 16.2 Storage and Handling
17 PATIENT COUNSELING INFORMATION
*Sections or subsections omitted from the full prescribing information are not listed.

1 FULL PRESCRIBING INFORMATION

2 1 INDICATIONS AND USAGE

3 BEXSERO is a vaccine indicated for active immunization to prevent invasive disease caused by
4 *Neisseria meningitidis* serogroup B. BEXSERO is approved for use in individuals 10 through 25
5 years of age.

6 Approval of BEXSERO is based on demonstration of immune response, as measured by serum
7 bactericidal activity against three serogroup B strains representative of prevalent strains in the
8 United States. The effectiveness of BEXSERO against diverse serogroup B strains has not been
9 confirmed.

10 **2 DOSAGE AND ADMINISTRATION**

11 For intramuscular use only.

12 **2.1 Dose and Schedule**

13 Administer 2 doses (0.5-mL each) of BEXSERO at least 1 month apart.

14 **2.2 Administration**

15 Shake the syringe immediately before use to form a homogeneous suspension. Do not use the
16 vaccine if it cannot be resuspended. Parenteral drug products should be inspected visually for
17 particulate matter and discoloration prior to administration, whenever solution and container
18 permit. Do not use if particulate matter or discoloration is found.

19 Administer BEXSERO as a 0.5-mL intramuscular injection into the deltoid muscle of the upper
20 arm.

21 **2.3 Use of BEXSERO with other Meningococcal Group B Vaccines**

22 Sufficient data are not available on the safety and effectiveness of using BEXSERO and other
23 meningococcal group B vaccines interchangeably to complete the vaccination series.

24 **3 DOSAGE FORMS AND STRENGTHS**

25 BEXSERO is a suspension for intramuscular injection in 0.5-mL single-dose prefilled syringes.

26 **4 CONTRAINDICATIONS**

27 Hypersensitivity, including severe allergic reaction, to any component of the vaccine, or after a
28 previous dose of BEXSERO [*see Description (11)*].

29 **5 WARNINGS AND PRECAUTIONS**

30 **5.1 Preventing and Managing Allergic Reactions**

31 Appropriate observation and medical treatment should always be readily available in case of an
32 anaphylactic event following the administration of the vaccine.

33 **5.2 Syncope**

34 Syncope (fainting) can occur in association with administration of BEXSERO. Ensure
35 procedures are in place to avoid injury from falling associated with syncope.

36 **5.3 Latex**

37 The tip caps of the prefilled syringes contain natural rubber latex which may cause allergic
38 reactions in latex-sensitive individuals.

39 **5.4 Limitation of Vaccine Effectiveness**

40 BEXSERO may not protect all vaccine recipients. BEXSERO may not provide protection
41 against all meningococcal serogroup B strains [see *Clinical Pharmacology (12.1)*].

42 **5.5 Altered Immunocompetence**

43 Some individuals with altered immunocompetence may have reduced immune responses to
44 BEXSERO.

45 Complement Deficiency

46 Persons with certain complement deficiencies and persons receiving treatment that inhibits
47 terminal complement activation (for example, eculizumab) are at increased risk for invasive
48 disease caused by *N. meningitidis* serogroup B even if they develop antibodies following
49 vaccination with BEXSERO. [See *Clinical Pharmacology (12.1)*.]

50 **6 ADVERSE REACTIONS**

51 The most common solicited adverse reactions observed in clinical trials were pain at the injection
52 site ($\geq 83\%$), myalgia ($\geq 48\%$), erythema ($\geq 45\%$), fatigue ($\geq 35\%$), headache ($\geq 33\%$), induration
53 ($\geq 28\%$), nausea ($\geq 18\%$), and arthralgia ($\geq 13\%$).

54 **6.1 Clinical Trials Experience**

55 Because clinical trials are conducted under widely varying conditions, adverse reaction rates
56 observed in clinical trials of a vaccine cannot be directly compared with rates in the clinical trials
57 of another vaccine and may not reflect the rates observed in practice.

58 In 4 clinical trials, 3,058 individuals aged 10 through 25 years received at least one dose of
59 BEXSERO, 1,436 participants received only BEXSERO, 2,089 received only placebo or a
60 control vaccine, and 1,622 participants received a mixed regimen (placebo or control vaccine and
61 BEXSERO).

62 In a randomized controlled study¹ conducted in U.S. and Poland, 120 participants aged 10
63 through 25 years received at least 1 dose of BEXSERO, including 112 participants who received
64 2 doses of BEXSERO 2 months apart; 97 participants received saline placebo followed by
65 MENVEO [Meningococcal (Groups A, C, Y, and W-135) Oligosaccharide Diphtheria CRM₁₉₇
66 Conjugate Vaccine]. Across groups, median age was 13 years, males comprised 49%, and 60%
67 were white; 34% were Hispanic, 4% were black, <1% were Asian, and 2% were other.

68 In a second randomized controlled study² conducted in Chile, all subjects (N = 1,622) aged 11
69 through 17 years received at least 1 dose of BEXSERO. This study included a subset of 810
70 subjects who received 2 doses of BEXSERO 1 or 2 months apart. A control group of 128
71 subjects received at least 1 dose of placebo containing aluminum hydroxide. A subgroup of 128
72 subjects received 2 doses of BEXSERO 6 months apart. In this study, median age was 14 years,
73 males comprised 44%, and 99% were Hispanic.

74 In a third randomized controlled study³ conducted in the United Kingdom (U.K.), 974 university
75 students aged 18 through 24 years received at least 1 dose of BEXSERO, including 932 subjects
76 who received 2 doses of BEXSERO 1 month apart. Comparator groups received 1 dose of
77 MENVEO followed by 1 dose of placebo containing aluminum hydroxide (n = 956) or 2 doses
78 of IXIARO (Japanese Encephalitis Vaccine, Inactivated, Adsorbed) (n = 947). Across groups,
79 median age was 20 years, males comprised 46%, and 88% were white, 5% were Asian, 2% were
80 black, <1% were Hispanic, and 4% were other.

81 In an uncontrolled study⁴ conducted in Canada and Australia, 342 participants aged 11 through
82 17 years received at least 1 dose of BEXSERO, including 338 participants who received 2 doses
83 of BEXSERO 1 month apart. The median age was 13 years, males comprised 55%, and 80%
84 were white, 10% were Asian, 4% were Native American/Alaskan, and 4% were other.

85 Local and systemic reactogenicity data were solicited from all participants in the studies
86 conducted in Chile, U.S./Poland, Canada/Australia, and in a subset of participants in the U.K.
87 study. Reports of unsolicited adverse events occurring within the first 7 days after each
88 vaccination were collected in all studies. In the U.S./Poland study, reports of unsolicited adverse
89 events were collected up to 1 month after the second vaccination.

90 Reports of all serious adverse events, medically attended adverse events, and adverse events
91 leading to premature withdrawal were collected throughout the study period for the studies
92 conducted in Chile (12 months), U.K. (12 months), U.S./Poland (8 months), and
93 Canada/Australia (2 months).

94 Solicited Adverse Reactions

95 The reported rates of local and systemic reactions among participants aged 10 through 25 years
96 following each dose of BEXSERO administered 2 months apart or control in the U.S./Polish
97 study¹ are presented in Table 1 and Table 2.

98 **Table 1. Percentage of U.S. and Polish Participants Aged 10 through 25 Years Reporting**
 99 **Local Solicited Adverse Reactions^a within 7 Days after BEXSERO or Control, by Dose**

Local Adverse Reaction	Dose 1 BEXSERO n = 110-114	Dose 1 Placebo (Saline) n = 94-96	Dose 2^b BEXSERO n = 107-109	Dose 2^b MENVEO n = 90-92
Pain - Any	90	27	83	43
Pain - Mild	27	20	18	26
Pain - Moderate	44	5	37	9
Pain - Severe	20	2	29	8
Erythema - Any	50	13	45	26
Erythema - 1-25 mm	41	11	36	13
Erythema - >25-50 mm	6	1	5	6
Erythema - >50-100 mm	3	0	5	4
Erythema - >100 mm	0	0	0	2
Induration - Any	32	10	28	23
Induration - 1-25 mm	24	9	22	16
Induration - >25-50 mm	7	0	4	0
Induration - >50-100 mm	1	1	2	4
Induration - >100 mm	0	0	0	2

100 Clinicaltrials.gov Identifier NCT01272180.

101 ^a Erythema and induration: Any (≥ 1 mm). Pain: Mild (transient with no limitation in normal
 102 daily activity); Moderate (some limitation in normal daily activity); Severe (unable to perform
 103 normal daily activity).

104 ^b Administered 2 months after Dose 1.

105
106

Table 2. Percentage of U.S. and Polish Participants Aged 10 through 25 Years Reporting Systemic Adverse Reactions^a within 7 Days after BEXSERO or Control, by Dose

Systemic Adverse Reaction	Dose 1 BEXSERO n = 110-114	Dose 1 Placebo (Saline) n = 94-96	Dose 2^b BEXSERO n = 107-109	Dose 2^b MENVEO n = 90-92
Fatigue - Any	37	22	35	20
Fatigue - Mild	19	17	18	11
Fatigue - Moderate	14	5	10	7
Fatigue - Severe	4	0	6	2
Nausea - Any	19	4	18	4
Nausea - Mild	12	3	10	3
Nausea - Moderate	4	1	5	1
Nausea - Severe	4	0	4	0
Myalgia - Any	49	26	48	25
Myalgia - Mild	21	20	16	14
Myalgia - Moderate	16	5	19	7
Myalgia - Severe	12	1	13	4
Arthralgia - Any	13	4	16	4
Arthralgia - Mild	9	3	8	2
Arthralgia - Moderate	3	1	6	2
Arthralgia - Severe	2	0	2	0
Headache - Any	33	20	34	23
Headache - Mild	19	15	21	8
Headache - Moderate	9	4	6	12
Headache - Severe	4	1	6	3
Fever - $\geq 38^{\circ}\text{C}$	1	1	5	0
Fever - $38.0\text{-}38.9^{\circ}\text{C}$	1	1	4	0

Systemic Adverse Reaction	Dose 1 BEXSERO n = 110-114	Dose 1 Placebo (Saline) n = 94-96	Dose 2^b BEXSERO n = 107-109	Dose 2^b MENVEO n = 90-92
Fever - 39.0-39.9°C	0	0	1	0
Fever - ≥40°C	0	0	0	0

107 Clinicaltrials.gov Identifier NCT01272180.

108 ^a Systemic reactions: Mild (transient with no limitation in normal daily activity); Moderate
109 (some limitation in normal daily activity); Severe (unable to perform normal daily activity).

110 ^b Administered 2 months after Dose 1.

111 Solicited adverse reaction rates were similar among participants aged 11 through 24 years who
112 received BEXSERO in the other 3 clinical studies,^{2,3,4} except for severe myalgia which was
113 reported by 3% to 7% of subjects. Severe pain was reported by 8% of university students in the
114 U.K.³

115 **Non-serious Adverse Events**

116 In the 3 controlled studies^{1,2,3} (BEXSERO n = 2,221, control n = 2,204), non-serious unsolicited
117 adverse events that occurred within 7 days of any dose were reported by 439 (20%) participants
118 receiving BEXSERO and 197 (9%) control recipients. Unsolicited adverse events that were
119 reported among at least 2% of participants and were more frequently reported in participants
120 receiving BEXSERO than in control recipients were injection site pain, headache, injection site
121 induration unresolved within 7 days, and nasopharyngitis.

122 **Serious Adverse Events**

123 Overall, in clinical studies, among 3,058 participants aged 10 through 25 years who received at
124 least 1 dose of BEXSERO, 66 (2.1%) participants reported serious adverse events at any time
125 during the study. In the 3 controlled studies^{1,2,3} (BEXSERO n = 2,716, control n = 2,078), serious
126 adverse events within 30 days after any dose were reported in 23 (0.8%) participants receiving
127 BEXSERO and 10 (0.5%) control recipients.

128 **6.2 Additional Pre-licensure Safety Experience**

129 In response to outbreaks of serogroup B meningococcal disease at 2 universities in the U.S.,
130 BEXSERO was administered as a 2-dose series at least 1 month apart. Information on serious
131 adverse events was collected for a period of 30 days after each dose from 15,351 individuals
132 aged 16 through 65 years who received at least 1 dose. Overall 50 individuals (0.3%) reported
133 serious adverse events, including one event considered related to vaccination, a case of
134 anaphylaxis within 30 minutes following vaccination.

135 **6.3 Postmarketing Experience**

136 Adverse event reports received for BEXSERO marketed outside the U.S. are listed below.
137 Because these events are reported voluntarily from a population of uncertain size, it is not always
138 possible to estimate reliably their frequency, or to establish a causal relationship to vaccination.
139 This list includes serious events or events which have suspected causal association to
140 BEXSERO.

141 General Disorders and Administration Site Conditions

142 Injection site reactions (including extensive swelling of the vaccinated limb, blisters at or around
143 the injection site, and injection site nodule which may persist for more than 1 month).

144 Immune System Disorders

145 Allergic reactions (including anaphylactic reactions), rash, eye swelling.

146 Nervous System Disorders

147 Syncope, vasovagal responses to injection.

148 **7 DRUG INTERACTIONS**

149 Sufficient data are not available to establish the safety and immunogenicity of concomitant
150 administration of BEXSERO with recommended adolescent vaccines.

151 **8 USE IN SPECIFIC POPULATIONS**

152 **8.1 Pregnancy**

153 Pregnancy Category B.

154 Reproduction studies have been performed in rabbits at doses up to 15 times the human dose on
155 a body-weight basis and have revealed no evidence of impaired fertility in females or harm to the
156 fetus due to BEXSERO. There are, however, no adequate and well-controlled studies in pregnant
157 women. Because animal reproduction studies are not always predictive of human response,
158 BEXSERO should be used during pregnancy only if clearly needed.

159 Pregnancy Registry for BEXSERO

160 GlaxoSmithKline maintains a surveillance registry to collect data on pregnancy outcomes and
161 newborn health status outcomes following exposure to BEXSERO during pregnancy. Women
162 who receive BEXSERO during pregnancy should be encouraged to contact GlaxoSmithKline
163 directly or their healthcare provider should contact GlaxoSmithKline by calling 1-877-413-4759.

164 **8.3 Nursing Mothers**

165 It is not known whether BEXSERO is excreted in human milk. Because many drugs are excreted
166 in human milk, caution should be exercised when BEXSERO is administered to a nursing
167 woman.

168 **8.4 Pediatric Use**

169 Safety and effectiveness of BEXSERO have not been established in children younger than 10
170 years.

171 **8.5 Geriatric Use**

172 Safety and effectiveness of BEXSERO have not been established in adults older than 65 years.

173 **11 DESCRIPTION**

174 BEXSERO (Meningococcal Group B Vaccine) is a sterile, white, opalescent, suspension for
175 intramuscular injection. Each 0.5-mL dose of BEXSERO is formulated to contain 50 micrograms
176 each of recombinant proteins Neisserial adhesin A (NadA), Neisserial Heparin Binding Antigen
177 (NHBA), and factor H binding protein (fHbp), 25 micrograms of Outer Membrane Vesicles
178 (OMV), 1.5 mg aluminum hydroxide (0.519 mg of Al³⁺), 3.125 mg sodium chloride, 0.776 mg
179 histidine, and 10 mg sucrose at pH 6.4 – 6.7.

180 The NadA component is a fragment of the full-length protein derived from *N. meningitidis* strain
181 2996 (peptide 8 variant 2/3)⁵. The NHBA component is a recombinant fusion protein comprised
182 of NHBA (peptide 2)⁵ and accessory protein 953 derived from *N. meningitidis* strains NZ98/254
183 and 2996, respectively. The fHbp component is a recombinant fusion protein comprised of fHbp
184 (variant 1.1)⁵ and the accessory protein 936 derived from *N. meningitidis* strains MC58 and
185 2996, respectively. These 3 recombinant proteins are individually produced in *Escherichia coli*
186 and purified through a series of column chromatography steps. The OMV antigenic component is
187 produced by fermentation of *N. meningitidis* strain NZ98/254 (expressing outer membrane
188 protein PorA serosubtype P1.4)⁶, followed by inactivation of the bacteria by deoxycholate, which
189 also mediates vesicle formation. The antigens are adsorbed onto aluminum hydroxide.

190 Each dose contains less than 0.01 micrograms kanamycin (by calculation).

191 **12 CLINICAL PHARMACOLOGY**

192 **12.1 Mechanism of Action**

193 Protection against invasive meningococcal disease is conferred mainly by complement-mediated
194 antibody-dependent killing of *N. meningitidis*. The effectiveness of BEXSERO was assessed by
195 measuring serum bactericidal activity using human complement (hSBA).

196 NHBA, NadA, fHbp, and PorA are proteins found on the surface of meningococci and contribute
197 to the ability of the bacterium to cause disease. Vaccination with BEXSERO leads to the
198 production of antibodies directed against NHBA, NadA, fHbp, and PorA P1.4 (present in OMV).
199 The susceptibility of serogroup B meningococci to complement-mediated antibody-dependent
200 killing following vaccination with BEXSERO is dependent on both the antigenic similarity of
201 the bacterial and vaccine antigens, as well as the amount of antigen expressed on the surface of
202 the invading meningococci.

203 **13 NONCLINICAL TOXICOLOGY**

204 BEXSERO has not been evaluated for carcinogenic or mutagenic potential or impairment of
205 male fertility.

206 **14 CLINICAL STUDIES**

207 The immunogenicity of BEXSERO following 2 doses was evaluated in individuals aged 11
208 through 24 years. Serum bactericidal antibodies were measured with hSBA assays using 3 strains
209 selected to measure responses to one of 3 vaccine antigens, either fHbp, NadA, or PorA P1.4,
210 prevalent among strains in the U.S. A suitable strain for assessing bactericidal activity of NHBA-
211 specific antibodies was not available. Studies assessed the proportion of subjects who achieved a
212 4-fold or greater increase in hSBA titer for each of the 3 strains, and the proportion of subjects
213 with a titer greater than or equal to the lower limit of quantitation (LLOQ) of the assay for all 3
214 strains (composite response). The LLOQ was defined as the lowest amount of the antibody in a
215 sample that can be reliably quantified. Available data showed that baseline antibody titers across
216 populations vary.

217 **14.1 Immunogenicity**

218 In a clinical trial conducted in Canada and Australia, adolescents aged 11 through 17 years
219 received 2 doses of BEXSERO 1 month apart. The hSBA responses 1 month after the second
220 dose are shown in Table 3 and Table 4.

221 **Table 3. Bactericidal Antibody Response Rates following 2 Doses of BEXSERO**
 222 **Administered 1 Month Apart to Canadian and Australian Adolescents^a \geq 4-Fold hSBA**
 223 **Response 1 Month Post Dose 2^{b,c}**

Strain (Antigen)	n	%	95% CI
H44/76 (fHbp)	298	98	95, 99
5/99 (NadA)	299	99	98, 100
NZ98/254 (PorA P1.4)	298	39	33, 44

224 NCT 01423084.

225 Abbreviations: CI = Confidence interval; hSBA = Serum bactericidal activity measured using
 226 human complement; LLOQ = Lower limit of quantitation.

227 ^a Evaluable Immunogenicity Population (aged 11 through 17 years).

228 ^b \geq 4-fold hSBA response is defined as: a post-vaccination hSBA \geq 1:16 for participants with pre-
 229 vaccination hSBA <1:4, a post-vaccination titer at least 4-fold the LLOQ for participants with
 230 pre-vaccination hSBA \geq 1:4 but < LLOQ, and a post-vaccination 4-fold rise for participants
 231 with pre-vaccination hSBA \geq LLOQ.

232 ^c LLOQ = 1:16 for H44/76; 1:16 for 5/99; 1:8 for NZ98/254.

233 **Table 4. Bactericidal Antibody Response Rates following 2 Doses of BEXSERO**
 234 **Administered 1 Month Apart to Canadian and Australian Adolescents^a - Composite hSBA**
 235 **Response^{b,c}**

Time Point	n	%	95% CI
Baseline (pre-vaccination)	299	0	
1 Month Post Dose 2	298	63	57, 68

236 NCT 01423084.

237 Abbreviations: CI = Confidence interval; hSBA = Serum bactericidal activity measured using
 238 human complement; LLOQ = Lower limit of quantitation.

239 ^a Evaluable Immunogenicity Population (aged 11 through 17 years).

240 ^b LLOQ = 1:16 for H44/76; 1:16 for 5/99; 1:8 for NZ98/254.

241 ^c Composite hSBA Response means hSBA \geq LLOQ for all 3 indicator Meningococcal B strains.

242 In a randomized, controlled clinical trial conducted in the U.K. among university students aged
 243 18 through 24 years, hSBA responses in a subset of participants who received BEXSERO were
 244 measured 1 month and 11 months after the second dose (Table 5 and Table 6).

245 **Table 5. Bactericidal Antibody Response Rates following 2 Doses of BEXSERO**
 246 **Administered 1 Month Apart to University Students in the U.K.^a \geq 4-Fold hSBA Response 1**
 247 **Month Post Dose 2^{b,c}**

Strain (Antigen)	n	%	95% CI
H44/76 (fHbp)	148	78	71, 85
5/99 (NadA)	148	94	89, 97
NZ98/254 (PorA P1.4)	147	67	58, 74

248 NCT 01214850.

249 Abbreviations: CI = Confidence interval; hSBA = Serum bactericidal activity measured using
 250 human complement; LLOQ = Lower limit of quantitation.

251 ^a Evaluable Immunogenicity Population (aged 18 through 24 years).

252 ^b \geq 4-fold hSBA response is defined as: a post-vaccination hSBA \geq 1:16 for participants with pre-
 253 vaccination hSBA <1:4, a post-vaccination titer at least 4-fold the LLOQ for participants with
 254 pre-vaccination hSBA \geq 1:4 but <LLOQ, and a post-vaccination 4-fold rise for participants with
 255 pre-vaccination hSBA \geq LLOQ.

256 ^c LLOQ = 1:16 for H44/76; 1:8 for 5/99; 1:16 for NZ98/254.

257 **Table 6. Bactericidal Antibody Response Rates following 2 Doses of BEXSERO**
 258 **Administered 1 Month Apart to University Students in the U.K.^a - Composite hSBA**
 259 **Response^{b,c}**

Time Point	n	%	95% CI
Baseline (pre-vaccination)	186	24	18, 30
1 Month Post Dose 2	147	88	82, 93
11 Months Post Dose 2	136	66	58, 72

260 NCT 01214850.

261 Abbreviations: CI = Confidence interval; hSBA = Serum bactericidal activity measured using
 262 human complement; LLOQ = Lower limit of quantitation.

263 ^a Evaluable Immunogenicity Population (aged 18 through 24 years).

264 ^b LLOQ = 1:16 for H44/76; 1:8 for 5/99; 1:16 for NZ98/254.

265 ^c Composite hSBA Response means hSBA \geq LLOQ for all 3 indicator Meningococcal B strains.

266 **15 REFERENCES**

267 1. NCT01272180 (V102_03).

268 2. NCT00661713 (V72P10).

269 3. NCT01214850 (V72_29).

270 4. NCT01423084 (V72_41).

271 5. Wang X, et al. *Vaccine*. 2011; 29:4739-4744.

272 6. Hosking J, et al. *Clin Vaccine Immunol.* 2007;14:1393-1399.

273 **16 HOW SUPPLIED/STORAGE AND HANDLING**

274 **16.1 How Supplied**

275 BEXSERO is supplied as a 0.5-mL suspension in a glass prefilled syringe. The tip caps of the
276 prefilled syringes contain natural rubber latex; the plungers are not made with natural rubber
277 latex.

278 Product presentations for BEXSERO are listed in Table 7 below:

279 **Table 7. Product Presentations for BEXSERO**

Presentation	Carton NDC Number	Components
Pre-filled syringe		
Carton of 1 syringe	58160-976-06	0.5-mL single-dose prefilled syringe NDC 58160-976-02
Carton of 10 syringes	58160-976-20	0.5-mL single-dose prefilled syringe NDC 58160-976-02

280 **16.2 Storage and Handling**

281 Do not freeze. Discard if the vaccine has been frozen.

282 Store refrigerated, at 36°F to 46°F (2°C to 8°C).

283 Protect from light.

284 Do not use after the expiration date.

285 **17 PATIENT COUNSELING INFORMATION**

286 Provide the Vaccine Information Statement. These are available free of charge at the Centers for
287 Disease Control and Prevention (CDC) website (<http://www.cdc.gov/vaccines>).

288 Inform patients, parents or guardians about:

- 289 • The importance of completing the immunization series.
290 • Reporting any adverse reactions to their healthcare provider.
291 • Register women who receive BEXSERO while pregnant in the pregnancy registry by calling
292 1-877-413-4759 [see *Use in Specific Populations (8.1)*].

293
294 BEXSERO and MENVEO are trademarks owned by or licensed to the GSK group of companies.

295 The other brand listed is a trademark owned by or licensed to its owner and is not owned by or
296 licensed to the GSK group of companies. The maker of this brand is not affiliated with and does
297 not endorse the GSK group of companies or its products.

298

299



300

301 Manufactured by **GSK Vaccines, Srl**

302 Bellaria-Rosia 53018, Sovicille (SI), Italy

303 U.S. License No. 1617

304

305 Distributed by **GlaxoSmithKline**

306 Research Triangle Park, NC 27709

307 © 2018 GSK group of companies or its licensor.

308 BXS:XPI

309