

**Package insert for the 2009-2010 Influenza Season**

**HIGHLIGHTS OF PRESCRIBING INFORMATION**

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

**AFLURIA®**, Influenza Virus Vaccine  
Suspension for Intramuscular Injection  
2009-2010 Formula  
Initial U.S. Approval: 2007

**INDICATIONS AND USAGE**

- AFLURIA® is an inactivated influenza virus vaccine indicated for active immunization of persons ages 18 years and older against influenza disease caused by influenza virus subtypes A and type B present in the vaccine. (1)
- This indication is based on the immune response elicited by AFLURIA®; there have been no controlled clinical studies demonstrating a decrease in influenza disease after vaccination with AFLURIA®. (14)

**DOSAGE AND ADMINISTRATION**

- A single 0.5 mL dose for intramuscular injection. (2)

**DOSAGE FORMS AND STRENGTHS**

AFLURIA®, a sterile suspension for intramuscular injection, is supplied in two presentations:

- 0.5 mL preservative-free, single-dose, pre-filled syringe. (3)
- 5 mL multi-dose vial containing ten doses. Thimerosal, a mercury derivative, is added as a preservative; each 0.5 mL dose contains 24.5 micrograms (mcg) of mercury. (3)

Each 0.5 mL dose contains 15 mcg of influenza virus hemagglutinin (HA) from each of the three strains: A/Brisbane/59/2007, IVR-148 (H1N1), A/Uruguay/716/2007, NYMC X-175C (H3N2) (an A/Brisbane/10/2007-like strain), and B/Brisbane/60/2008. (3, 11)

**CONTRAINDICATIONS**

- Hypersensitivity to eggs or chicken protein, neomycin, or polymyxin, or life-threatening reaction to previous influenza vaccination. (4)

**WARNINGS AND PRECAUTIONS**

- If Guillain-Barré Syndrome (GBS) has occurred within 6 weeks of previous influenza vaccination, the decision to give AFLURIA® should be based on careful consideration of the potential benefits and risks. (5.1)
- Immunocompromised persons may have a diminished immune response to AFLURIA®. (5.2)

**ADVERSE REACTIONS**

The most common (≥ 10%) local (injection-site) adverse reactions were tenderness, pain, redness, and swelling. The most common (≥ 10%) systemic adverse reactions were headache, malaise, and muscle aches. (6)

**To report SUSPECTED ADVERSE REACTIONS, contact CSL Biotherapies at 1-888-435-8633 or VAERS at 1-800-822-7967 and www.vaers.hhs.gov.**

**DRUG INTERACTIONS**

- Do not mix with any other vaccine in the same syringe or vial. (7.1)
- Immunosuppressive therapies may diminish the immune response to AFLURIA®. (7.2)

**USE IN SPECIFIC POPULATIONS**

- Safety and effectiveness of AFLURIA® have not been established in pregnant women or nursing mothers and in the pediatric population. (8.1, 8.3, 8.4)
- Antibody responses were lower in geriatric subjects than in younger subjects. (8.5)

See 17 for PATIENT COUNSELING INFORMATION.

Revised: 06/2009

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\*Sections or subsections omitted from the full prescribing information are not listed.

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**1 FULL PRESCRIBING INFORMATION****1 INDICATIONS AND USAGE**

AFLURIA® is an inactivated influenza virus vaccine indicated for active immunization of persons ages 18 years and older against influenza disease caused by influenza virus subtypes A and type B present in the vaccine.

This indication is based on the immune response elicited by AFLURIA®; there have been no controlled clinical studies demonstrating a decrease in influenza disease after vaccination with AFLURIA® (see *Clinical Studies [14]*).

**2 DOSAGE AND ADMINISTRATION****2.1 Prior to Administration**

AFLURIA® should be inspected visually for particulate matter and discoloration prior to administration (see *Description [11]*), whenever suspension and container permit. If either of these conditions exists, the vaccine should not be administered. Any vaccine that has been frozen or is suspected of being frozen must not be used.

**2.2 Administration**

When using the preservative-free, single-dose syringe, shake the syringe thoroughly and administer the dose immediately.

When using the multi-dose vial, shake the vial thoroughly before withdrawing each dose, and administer the dose immediately. Between uses, store the vial at 2–8°C (36–46°F) (see *How Supplied/Storage and Handling [16]*). Once the stopper has been pierced, the vial must be discarded within 28 days.

AFLURIA® should be administered as a single 0.5 mL intramuscular injection, preferably in the deltoid muscle of the upper arm.

**3 DOSAGE FORMS AND STRENGTHS**

AFLURIA® is a sterile suspension for intramuscular injection. Each 0.5 mL dose contains 15 micrograms (mcg) of influenza virus hemagglutinin (HA) from each of the three influenza virus strains included in the vaccine (see *Description [11]*).

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42 AFLURIA® is supplied in two presentations:  
43

- 44 • 0.5 mL preservative-free, single-dose, pre-filled syringe.
- 45 • 5 mL multi-dose vial containing ten doses. Thimerosal, a mercury derivative, is  
46 added as a preservative; each 0.5 mL dose contains 24.5 mcg of mercury.  
47

#### 48 **4 CONTRAINDICATIONS**

49 AFLURIA® is contraindicated in individuals with known hypersensitivity to eggs or chicken  
50 protein, neomycin, or polymyxin, or in anyone who has had a life-threatening reaction to  
51 previous influenza vaccination.  
52  
53

#### 54 **5 WARNINGS AND PRECAUTIONS**

##### 55 **5.1 Guillain-Barré Syndrome (GBS)**

56 If GBS has occurred within 6 weeks of previous influenza vaccination, the decision to give  
57 AFLURIA® should be based on careful consideration of the potential benefits and risks.  
58

##### 59 **5.2 Altered Immunocompetence**

60 If AFLURIA® is administered to immunocompromised persons, including those receiving  
61 immunosuppressive therapy, the immune response may be diminished.  
62

##### 63 **5.3 Preventing and Managing Allergic Reactions**

64 Appropriate medical treatment and supervision must be available to manage possible  
65 anaphylactic reactions following administration of the vaccine.  
66

##### 67 **5.4 Limitations of Vaccine Effectiveness**

68 Vaccination with AFLURIA® may not protect all individuals.  
69

#### 70 **6 ADVERSE REACTIONS**

##### 71 **6.1 Overall Adverse Reactions**

72 Serious allergic reactions, including anaphylactic shock, have been observed during  
73 postmarketing surveillance in individuals receiving AFLURIA®.  
74

75 The most common local (injection-site) adverse reactions observed in clinical studies with  
76 AFLURIA® were tenderness, pain, redness, and swelling. The most common systemic adverse  
77 reactions observed were headache, malaise, and muscle aches.  
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**84 6.2 Safety Experience from Clinical Studies**

85 Because clinical studies are conducted under widely varying conditions, adverse reaction rates  
86 observed in the clinical studies of a vaccine cannot be directly compared to rates in the clinical  
87 studies of another vaccine and may not reflect the rates observed in clinical practice.

88  
89 Clinical safety data for AFLURIA® have been obtained in two clinical studies (*see Clinical  
90 Studies [14]*).

91  
92 A US study (Study 1) included 1,357 subjects for safety analysis, ages 18 to less than 65 years,  
93 randomized to receive AFLURIA® (1,089 subjects) or placebo (268 subjects) (*see Clinical  
94 Studies [14] for study demographics*). There were no deaths or serious adverse events reported  
95 in this study.

96  
97 A UK study (Study 2) included 275 subjects, ages 65 years and older, randomized to receive  
98 preservative-free AFLURIA® (206 subjects) or a European-licensed trivalent inactivated  
99 influenza vaccine as an active control (69 subjects) (*see Clinical Studies [14]*). There were no  
100 deaths or serious adverse events reported in this study.

101  
102 The safety assessment was identical for the two studies. Local (injection-site) and systemic  
103 adverse events were solicited by completion of a symptom diary card for 5 days post-  
104 vaccination (Table 1). Unsolicited local and systemic adverse events were collected for 21 days  
105 post-vaccination (Table 2). These unsolicited adverse events were reported either  
106 spontaneously or when subjects were questioned about any changes in their health post-  
107 vaccination. All adverse events are presented regardless of any treatment causality assigned by  
108 study investigators.

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110 **Table 1: Proportion of Subjects With Solicited Local or Systemic Adverse Events\* Within**  
 111 **5 Days After Administration of AFLURIA® or Placebo, Irrespective of Causality†**  
 112

Solicited Adverse event	Study 1 Subjects ≥ 18 to < 65 years		Study 2 Subjects ≥ 65 years
	AFLURIA®‡ n=1089	Placebo§ n=268	AFLURIA® n=206
<b>Local</b>			
Tenderness¶	60%	18%	34%
Pain¶	40%	9%	9%
Redness	16%	8%	23%
Swelling	9%	1%	11%
Bruising	5%	1%	4%
<b>Systemic</b>			
Headache	26%	26%	15%
Malaise	20%	19%	10%
Muscle aches	13%	9%	14%
Nausea	6%	9%	3%
Chills/ Shivering	3%	2%	7%
Fever ≥ 37.7°C (99.86°F)	1%	1%	1%
Vomiting	1%	1%	0%

113 \* In Study 1, 87% of solicited local and systemic adverse events were mild, 12% were moderate, and 1% were severe. In  
 114 Study 2, 76.5% were mild, 20.5% were moderate, and 3% were severe. In both studies, most solicited local and systemic  
 115 adverse events lasted no longer than 2 days.

116 † Values rounded to the nearest whole percent.

117 ‡ Includes subjects who received either the single-dose (preservative-free) or multi-dose formulation of AFLURIA®.

118 § Thimerosal-containing placebo.

119 ¶ Tenderness defined as pain on touching.

120 ¶ Pain defined as spontaneously painful without touch.

121

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122 **Table 2: Adverse Events\* Reported Spontaneously by ≥ 1% of Subjects Within 21 Days**  
 123 **After Administration of AFLURIA® or Placebo, Irrespective of Causality†**  
 124

Adverse Event	Study 1 Subjects ≥ 18 to < 65 years		Study 2 Subjects ≥ 65 years
	AFLURIA®‡ n=1089	Placebo§ n=268	AFLURIA® n=206
Headache	8%	6%	8%
Nasal Congestion	1%	1%	7%
Cough	1%	0.4%	5%
Rhinorrhea	1%	1%	5%
Pharyngolaryngeal Pain	3%	1%	5%
Reactogenicity Event	3%	3%	0%
Diarrhea	2%	3%	1%
Back Pain	2%	0.4%	2%
Upper Respiratory Tract Infection	2%	1%	0.5%
Viral Infection	0.4%	1%	0%
Lower Respiratory Tract Infection	0%	0%	1%
Myalgia	1%	1%	1%
Muscle Spasms	0.4%	1%	0%

125 \* In Study 1, 63% of unsolicited adverse events were mild, 35% were moderate, and 2% were severe. In Study 2, 47% were  
 126 mild, 51% were moderate, and 3% were severe. In both studies, most unsolicited adverse events lasted no longer than 5 days.  
 127 † Values greater than 0.5% rounded to the nearest whole percent.  
 128 ‡ Includes subjects who received either the single-dose (preservative-free) or multi-dose formulation of AFLURIA®.  
 129 § Thimerosal-containing placebo.

130  
 131 **6.3 Postmarketing Experience**

132 Because postmarketing reporting of adverse reactions is voluntary and from a population of  
 133 uncertain size, it is not always possible to reliably estimate their frequency or establish a causal  
 134 relationship to vaccine exposure. The adverse reactions described have been included in this  
 135 section because they: 1) represent reactions that are known to occur following immunizations  
 136 generally or influenza immunizations specifically; 2) are potentially serious; or 3) have been  
 137 reported frequently. The following adverse reactions also include those identified during  
 138 postapproval use of AFLURIA® outside the US since 1985.

139  
 140 **Blood and lymphatic system disorders**  
 141 Transient thrombocytopenia

142  
 143 **Immune system disorders**  
 144 Allergic reactions including anaphylactic shock and serum sickness  
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**146 Nervous system disorders**

147 Neuralgia, paresthesia, and convulsions; encephalopathy, neuritis or neuropathy, transverse  
148 myelitis, and GBS

149

**150 Vascular disorders**

151 Vasculitis with transient renal involvement

152

**153 Skin and subcutaneous tissue disorders**

154 Pruritus, urticaria, and rash

155

**156 General disorders and administration site conditions**

157 Influenza-like illness (e.g., pyrexia, chills, headache, malaise, myalgia), injection-site  
158 inflammation (e.g., pain, erythema, swelling, warmth), and induration

159

**160 6.4 Other Adverse Reactions Associated With Influenza Vaccination**

161 Anaphylaxis has been reported after administration of AFLURIA®. Although AFLURIA®  
162 contains only a limited quantity of egg protein, this protein can induce immediate  
163 hypersensitivity reactions among persons who have severe egg allergy. Allergic reactions  
164 include hives, angioedema, allergic asthma, and systemic anaphylaxis (see [Contraindications](#)  
165 [\[4\]](#)).

166

167 The 1976 swine influenza vaccine was associated with an increased frequency of GBS.  
168 Evidence for a causal relation of GBS with subsequent vaccines prepared from other influenza  
169 viruses is unclear. If influenza vaccine does pose a risk, it is probably slightly more than one  
170 additional case per 1 million persons vaccinated.

171

172 Neurological disorders temporally associated with influenza vaccination, such as  
173 encephalopathy, optic neuritis/neuropathy, partial facial paralysis, and brachial plexus  
174 neuropathy, have been reported.

175

176 Microscopic polyangiitis (vasculitis) has been reported temporally associated with influenza  
177 vaccination.

178

179

**180 7 DRUG INTERACTIONS**

181

**182 7.1 Concurrent Use With Other Vaccines**

183 There are no data to assess the concomitant administration of AFLURIA® with other vaccines.  
184 If AFLURIA® is to be given at the same time as another injectable vaccine(s), the vaccine(s)  
185 should be administered at different injection sites.

186

187 AFLURIA® should not be mixed with any other vaccine in the same syringe or vial.

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188

**7.2 Concurrent Use With Immunosuppressive Therapies**

The immunological response to AFLURIA® may be diminished in individuals receiving corticosteroid or immunosuppressive therapies.

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193

**8 USE IN SPECIFIC POPULATIONS**

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**8.1 Pregnancy**

Pregnancy Category C: Animal reproduction studies have not been conducted with AFLURIA®. It is also not known whether AFLURIA® can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. AFLURIA® should be given to a pregnant woman only if clearly needed.

201

**8.3 Nursing Mothers**

AFLURIA® has not been evaluated in nursing mothers. It is not known whether AFLURIA® is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when AFLURIA® is administered to a nursing woman.

206

**8.4 Pediatric Use**

Safety and effectiveness in the pediatric population have not been established.

209

**8.5 Geriatric Use**

In four clinical studies, 343 subjects ages 65 years and older received AFLURIA®. Hemagglutination-inhibiting (HI) antibody responses in geriatric subjects were lower after administration of AFLURIA® in comparison to younger adult subjects (*see Clinical Studies [14]*). Adverse event rates were generally similar in frequency to those reported in subjects ages 18 to less than 65 years, although some differences were observed (*see Adverse Reactions [6.2]*).

217

218

**11 DESCRIPTION**

219

AFLURIA®, Influenza Virus Vaccine for intramuscular injection, is a sterile, clear, colorless to slightly opalescent suspension with some sediment that resuspends upon shaking to form a homogeneous suspension. AFLURIA® is prepared from influenza virus propagated in the allantoic fluid of embryonated chicken eggs. Following harvest, the virus is purified in a sucrose density gradient using a continuous flow zonal centrifuge. The purified virus is inactivated with beta-propiolactone, and the virus particles are disrupted using sodium taurodeoxycholate to produce a “split virion”. The disrupted virus is further purified and suspended in a phosphate buffered isotonic solution.

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230 AFLURIA® is standardized according to USPHS requirements for the 2009-2010 influenza  
231 season and is formulated to contain 45 mcg HA per 0.5 mL dose in the recommended ratio of  
232 15 mcg HA for each of the three influenza strains recommended for the 2009-2010 Northern  
233 Hemisphere influenza season: A/Brisbane/59/2007, IVR-148 (H1N1), A/Uruguay/716/2007,  
234 NYMC X-175C (H3N2) (an A/Brisbane/10/2007-like strain), and B/Brisbane/60/2008.

235  
236 The single-dose formulation is preservative-free; thimerosal, a mercury derivative, is not used in  
237 the manufacturing process for this formulation. The multi-dose formulation contains  
238 thimerosal, added as a preservative; each 0.5 mL dose contains 24.5 mcg of mercury.

239  
240 A single 0.5 mL dose of AFLURIA® contains sodium chloride (4.1 mg), monobasic sodium  
241 phosphate (80 mcg), dibasic sodium phosphate (300 mcg), monobasic potassium phosphate (20  
242 mcg), potassium chloride (20 mcg), and calcium chloride (1.5 mcg). From the manufacturing  
243 process, each dose may also contain residual amounts of sodium taurodeoxycholate ( $\leq 10$  ppm),  
244 ovalbumin ( $\leq 1$  mcg), neomycin sulfate ( $\leq 0.2$  picograms [pg]), polymyxin B ( $\leq 0.03$  pg), and  
245 beta-propiolactone ( $< 25$  nanograms).

246  
247 The rubber tip cap and plunger used for the preservative-free, single-dose syringes and the  
248 rubber stoppers used for the multi-dose vial contain no latex.

249  
250

## 251 **12 CLINICAL PHARMACOLOGY**

252

### 253 **12.1 Mechanism of Action**

254 Influenza illness and its complications follow infection with influenza viruses. Global  
255 surveillance of influenza identifies yearly antigenic variants. For example, since 1977 antigenic  
256 variants of influenza A (H1N1 and H3N2) and influenza B viruses have been in global  
257 circulation. Specific levels of HI antibody titers post-vaccination with inactivated influenza  
258 virus vaccine have not been correlated with protection from influenza virus. In some human  
259 studies, antibody titers of 1:40 or greater have been associated with protection from influenza  
260 illness in up to 50% of subjects.<sup>1,2</sup>

261

262 Antibody against one influenza virus type or subtype confers limited or no protection against  
263 another. Furthermore, antibody to one antigenic variant of influenza virus might not protect  
264 against a new antigenic variant of the same type or subtype. Frequent development of antigenic  
265 variants through antigenic drift is the virologic basis for seasonal epidemics and the reason for  
266 the usual change to one or more new strains in each year's influenza vaccine. Therefore,  
267 inactivated influenza vaccines are standardized to contain the HA of three strains (i.e., typically  
268 two type A and one type B) representing the influenza viruses likely to be circulating in the US  
269 during the upcoming winter.

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271 Annual revaccination with the current vaccine is recommended because immunity declines  
 272 during the year after vaccination and circulating strains of influenza virus change from year to  
 273 year.<sup>3</sup>

274

275

276 **13 NONCLINICAL TOXICOLOGY**

277

278 **13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility**

279 AFLURIA® has not been evaluated for carcinogenic or mutagenic potential or for impairment  
 280 of fertility.

281

282

283 **14 CLINICAL STUDIES**

284

285 Three randomized, controlled clinical studies of AFLURIA® have evaluated the immune  
 286 responses (specifically, HI antibody titers) to each virus strain in the vaccine. In these studies,  
 287 post-vaccination immunogenicity was evaluated on sera obtained 21 days after administration  
 288 of AFLURIA®. No controlled clinical studies demonstrating a decrease in influenza disease  
 289 after vaccination with AFLURIA® have been performed.

290

291 The US study (Study 1) was a randomized, double-blinded, placebo-controlled, multicenter  
 292 study in healthy subjects ages 18 to less than 65 years. A total of 1,357 subjects were  
 293 vaccinated (1,089 subjects with AFLURIA® and 268 with a thimerosal-containing placebo).  
 294 Subjects receiving AFLURIA® were vaccinated using either a single-dose (preservative-free) or  
 295 multi-dose (one of three lots) formulation. The evaluable efficacy population consisted of 1,341  
 296 subjects (1,077 in the AFLURIA® group and 264 in the placebo group) with complete  
 297 serological data who had not received any contraindicated medications before the post-  
 298 vaccination immunogenicity assessment. Among the evaluable efficacy population receiving  
 299 AFLURIA®, 37.5% were men and 62.5% were women. The mean age of the entire evaluable  
 300 population receiving AFLURIA® was 38 years; 73% were ages 18 to less than 50 years and  
 301 27% were ages 50 to less than 65 years. Additionally, 81% of AFLURIA® recipients were  
 302 White, 12% Black, and 6% Asian.

303

304 In Study 1, the following co-primary immunogenicity endpoints were assessed: 1) the lower  
 305 bounds of the 2-sided 95% confidence intervals (CI) for the proportion of subjects with HI  
 306 antibody titers of 1:40 or greater after vaccination, which should exceed 70% for each vaccine  
 307 antigen strain; and 2) the lower bounds of the 2-sided 95% CI for rates of seroconversion  
 308 (defined as a 4-fold increase in post-vaccination HI antibody titers from pre-vaccination titers of  
 309 1:10 or greater, or an increase in titers from less than 1:10 to 1:40 or greater), which should  
 310 exceed 40% for each vaccine antigen strain.

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312 In subjects ages 18 to less than 65 years, serum HI antibody responses to AFLURIA® met the  
 313 pre-specified co-primary endpoint criteria for all three virus strains (Table 3). Clinical lot-to-lot  
 314 consistency was demonstrated for the single-dose (preservative-free) and multi-dose  
 315 formulations of AFLURIA®, showing that these formulations elicited similar immune  
 316 responses.

317  
 318 **Table 3: Study 1 – Serum HI Antibody Responses in Subjects ≥ 18 to < 65 Years Receiving**  
 319 **AFLURIA®**

320

Treatment Arm	Number Enrolled/ Evaluable	Vaccine Strain	Seroconversion Rate* (95% CI)	HI Titer ≥ 1:40† (95% CI)
All active AFLURIA® influenza vaccine formulations‡	1089/1077	H1N1	48.7% (45.6, 51.7)	97.8% (96.7, 98.6)
		H3N2	71.5% (68.7, 74.2)	99.9% (99.5, 100.0)
		B	69.7% (66.9, 72.5)	94.2% (92.7, 95.6)
Placebo	270/264	H1N1	2.3% (0.8, 4.9)	74.6% (68.9, 79.8)
		H3N2	0.0% (N/A)	72.0% (66.1, 77.3)
		B	0.4% (< 0.1, 2.1)	47.0% (40.8, 53.2)

321 \* Seroconversion rate is defined as a 4-fold increase in post-vaccination HI antibody titer from pre-vaccination titer ≥ 1:10, or  
 322 an increase in titer from < 1:10 to ≥ 1:40. Lower bound of 95% CI for seroconversion should be > 40% for the study  
 323 population.

324 † HI titer ≥ 1:40 is defined as the proportion of subjects with a minimum post-vaccination HI antibody titer of 1:40. Lower  
 325 bound of 95% CI for HI antibody titer ≥ 1:40 should be > 70% for the study population.

326 ‡ Active formulations include aggregated results for the single-dose (preservative-free) and multi-dose formulations of  
 327 AFLURIA®.

328

329 The UK study (Study 2) was a randomized, controlled study that enrolled 275 healthy subjects  
 330 ages 65 years and older. This study compared AFLURIA® with a European-licensed trivalent  
 331 inactivated influenza vaccine as an active control. The evaluable efficacy population consisted  
 332 of 274 subjects (206 in the AFLURIA® group and 68 in the control group). Among these  
 333 subjects, 50% were men and 50% were women, with a mean age of 72 years (range: 65 to 93  
 334 years).

335

336 The co-primary immunogenicity endpoints for the seroconversion rate and the proportion of  
 337 subjects with a minimum post-vaccination HI antibody titer of 1:40 are presented in Table 4.

338

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339 **Table 4: Study 2 – Serum HI Antibody Responses in Subjects ≥ 65 Years Receiving**  
 340 **AFLURIA®**  
 341

Number of Subjects	Vaccine Strain	Seroconversion Rate* (95% CI)	HI Titer ≥ 1:40† (95% CI)
206	H1N1	34.0% (27.5, 40.9)	85.0% (79.3, 89.5)
	H3N2	44.2% (37.3, 51.2)	99.5% (97.3, 100.0)
	B	45.6% (38.7, 52.7)	77.7% (71.4, 83.2)

342 \* Seroconversion rate is defined as a 4-fold increase in post-vaccination HI antibody titer from pre-vaccination titer ≥ 1:10, or  
 343 an increase in titer from < 1:10 to ≥ 1:40. Lower bound of 95% CI for seroconversion should be > 30% for the study  
 344 population.

345 † HI titer ≥ 1:40 is defined as the proportion of subjects with a minimum post-vaccination HI antibody titer of 1:40. Lower  
 346 bound of 95% CI for HI antibody titer ≥ 1:40 should be > 60% for the study population.

347  
 348 A second UK study (Study 3) was a randomized, controlled study that enrolled 406 healthy  
 349 subjects ages 18 years and older (stratified by age from 18 to less than 60 years and 60 years  
 350 and older). This study compared AFLURIA® with a European-licensed trivalent inactivated  
 351 influenza vaccine as an active control. In a post-hoc analysis of different age ranges, among  
 352 subjects ages 18 to less than 65 years receiving AFLURIA® (146 subjects), 47% were men and  
 353 53% were women, with a mean age of 48 years for all subjects. Among subjects ages 65 years  
 354 and older receiving AFLURIA® (60 subjects), 53% were men and 47% were women, with a  
 355 mean age of 71 years.

356  
 357 The post-hoc analysis of serum HI antibody responses showed that the lower bound of the 95%  
 358 CI for subjects with HI antibody titers of 1:40 or greater after vaccination exceeded 70% for  
 359 each strain. HI antibody responses were lower in subjects ages 65 years and older after  
 360 administration of AFLURIA®. Serum HI antibody responses to the active control were similar  
 361 to those for AFLURIA® in both age groups.

362  
 363

364 **15 REFERENCES**

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**376 16 HOW SUPPLIED/STORAGE AND HANDLING**

377

378 AFLURIA® is supplied as a 0.5 mL preservative-free, single-dose, pre-filled syringe (packaged  
379 without needles) and as a 5 mL multi-dose vial containing ten 0.5 mL doses, with thimerosal, a  
380 mercury derivative, added as a preservative; each 0.5 mL dose contains 24.5 mcg of mercury.

381

**Product Description**

Package of ten 0.5 mL preservative-free, prefilled syringes  
5 mL multi-dose vial

**NDC Number**

33332-009-01

33332-109-10

382

383 Store refrigerated at 2–8°C (36–46°F). Do not freeze. Protect from light. Do not use  
384 AFLURIA® beyond the expiration date printed on the label.

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**387 17 PATIENT COUNSELING INFORMATION**

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- 389 • Inform the patient that AFLURIA® is an inactivated vaccine that cannot cause  
390 influenza but stimulates the immune system to produce antibodies that protect against  
391 influenza. The full effect of the vaccine is generally achieved approximately 3 weeks  
392 after vaccination. Annual revaccination is recommended.
- 393 • Instruct the patient to report any severe or unusual adverse reactions to their healthcare  
394 provider.

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398 Manufactured by:

399 **CSL Limited**

400 Parkville, Victoria, 3052, Australia

401 US License No. 1764

402

403

404 Distributed by:

405 **CSL Biotherapies Inc.**

406 King of Prussia, PA 19406 USA

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409 AFLURIA is a registered trademark of CSL Limited.

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