

2 | **RAPTIVA[®]**
3 | **[efalizumab]**

4 | **For injection, subcutaneous**

5 | **DESCRIPTION**

6 | RAPTIVA[®] (efalizumab) is an immunosuppressive recombinant
7 | humanized IgG1 kappa isotype monoclonal antibody that binds to human
8 | CD11a (1). Efalizumab has a molecular weight of approximately
9 | 150 kilodaltons and is produced in a Chinese hamster ovary mammalian
10 | cell expression system in a nutrient medium containing the antibiotic
11 | gentamicin. Gentamicin is not detectable in the final product.

12 | RAPTIVA is supplied as a sterile, white to off-white, lyophilized powder
13 | in single-use glass vials for subcutaneous (SC) injection. Reconstitution
14 | of the single-use vial with 1.3 mL of the supplied sterile water for
15 | injection (non-USP) yields approximately 1.5 mL of solution to deliver
16 | 125 mg per 1.25 mL (100 mg/mL) of RAPTIVA. The sterile water for
17 | injection supplied does not comply with USP requirement for pH. After
18 | reconstitution, RAPTIVA is a clear to pale yellow solution with a pH of
19 | approximately 6.2. Each single-use vial of RAPTIVA contains 150 mg
20 | of efalizumab, 123.2 mg of sucrose, 6.8 mg of L-histidine hydrochloride
21 | monohydrate, 4.3 mg of L-histidine and 3 mg of polysorbate 20 and is
22 | designed to deliver 125 mg of efalizumab in 1.25 mL.

23 | **CLINICAL PHARMACOLOGY**

24 | **Mechanism of Action**

25 | RAPTIVA binds to CD11a, the α subunit of leukocyte function antigen-1
26 | (LFA-1), which is expressed on all leukocytes, and decreases cell surface
27 | expression of CD11a. RAPTIVA inhibits the binding of LFA-1 to
28 | intercellular adhesion molecule-1 (ICAM-1), thereby inhibiting the
29 | adhesion of leukocytes to other cell types. Interaction between LFA-1 and
30 | ICAM-1 contributes to the initiation and maintenance of multiple
31 | processes, including activation of T lymphocytes, adhesion of

32 T lymphocytes to endothelial cells, and migration of T lymphocytes to
33 sites of inflammation including psoriatic skin. Lymphocyte activation and
34 trafficking to skin play a role in the pathophysiology of chronic plaque
35 psoriasis. In psoriatic skin, ICAM-1 cell surface expression is upregulated
36 on endothelium and keratinocytes. CD11a is also expressed on the surface
37 of B lymphocytes, monocytes, neutrophils, natural killer cells, and other
38 leukocytes. Therefore, the potential exists for RAPTIVA to affect the
39 activation, adhesion, migration, and numbers of cells other than
40 T lymphocytes.

41 **Pharmacokinetics**

42 In patients with moderate to severe plaque psoriasis, following an initial
43 SC RAPTIVA dose of 0.7 mg/kg followed by 11 weekly SC doses of
44 1 mg/kg/wk, serum concentrations reached a steady-state at 4 weeks with
45 a mean trough concentration of approximately 9 µg/mL (n=26). After the
46 last dose, the mean peak concentration was approximately 12 µg/mL
47 (n=25). Mean steady-state clearance was 24 mL/kg/day (range=
48 5–76 mL/kg/day, n=25). Mean time to eliminate RAPTIVA after the last
49 steady-state dose was 25 days (range=13–35 days, n=17). The mean
50 estimated RAPTIVA SC bioavailability was 50%. In a population
51 pharmacokinetic analysis of 1088 patients, body weight was found to be
52 the most significant covariate affecting RAPTIVA clearance. In patients
53 receiving weekly SC doses of 1 mg/kg, RAPTIVA exposure was similar
54 across body weight quartiles. RAPTIVA clearance was not significantly
55 affected by gender or race. The pharmacokinetics of RAPTIVA in
56 pediatric patients have not been studied. The effects of renal or hepatic
57 impairment on the pharmacokinetics of RAPTIVA have not been studied.

58 **Pharmacodynamics**

59 At a dose of 1 mg/kg/wk SC, RAPTIVA reduced expression of CD11a on
60 circulating T lymphocytes to approximately 15–25% of pre-dose values
61 and reduced free CD11a binding sites to a mean of ≤5% of pre-dose
62 values. These pharmacodynamic effects were seen 1–2 days after the first
63 dose, and were maintained between weekly 1 mg/kg SC doses. Following

64 discontinuation of RAPTIVA, CD11a expression returned to a mean of
65 74% of baseline at 5 weeks and stayed at comparable levels at 8 and
66 13 weeks. Following discontinuation of RAPTIVA, free CD11a binding
67 sites returned to a mean of 86% of baseline at 8 weeks and stayed at
68 comparable levels at 13 weeks. No assessments of CD11a expression or
69 free CD11a binding sites were made after 13 weeks.

70 In clinical trials, RAPTIVA treatment resulted in a mean increase (relative
71 to baseline) in white blood cell (WBC) count of 34%, a doubling of mean
72 lymphocyte counts and an increase in eosinophil counts of 29% due to
73 decreased leukocyte adhesion to blood vessel walls and decreased
74 trafficking from the vascular compartment to tissues. At Day 56 of
75 1 mg/kg/wk RAPTIVA treatment, 32% (213/676) of patients had a shift in
76 total WBC from low or normal baseline value to above normal, 46%
77 (324/701) had a shift to above normal absolute lymphocyte counts, and
78 5% (35/675) had a shift to above normal eosinophil counts. Following
79 discontinuation of RAPTIVA treatment, the abnormal elevated
80 lymphocyte counts took approximately 8 weeks to normalize among
81 patients who had above normal lymphocyte counts. Plasma samples
82 collected after first administration of 0.3 mg/kg IV RAPTIVA indicate
83 that at 2 hours TNF- α and IL-6 plasma levels were elevated 9- and
84 90-fold, respectively, compared with baseline. Plasma samples collected
85 after first administration of 0.7 mg/kg SC RAPTIVA indicate that at
86 2 days, IL-6 levels were elevated (10 pg/mL as compared with 5 pg/mL
87 at baseline), whereas TNF- α was not detectable. In RAPTIVA-treated
88 patients the mean levels of C reactive protein increased from baseline by
89 67% and the mean levels of fibrinogen increased by 15%.

90 **CLINICAL STUDIES**

91 RAPTIVA was evaluated in four randomized, double-blind,
92 placebo-controlled studies in adults with chronic (>6 months), stable,
93 plaque psoriasis, who had a minimum body surface area involvement of
94 10% and who were candidates for, or had previously received systemic
95 therapy or phototherapy. In these studies 54–70% of patients had

96 previously received systemic therapy or phototherapy (PUVA) for
97 psoriasis. Patients with clinically significant flares and patients with
98 guttate, erythrodermic, or pustular psoriasis as the sole form of psoriasis
99 were excluded from the studies. Patients were randomized to receive
100 doses of 1 mg/kg or 2 mg/kg of RAPTIVA or placebo administered once a
101 week for 12 weeks. Patients randomized to RAPTIVA received 0.7 mg/kg
102 as the first dose prior to receiving the full assigned dose in subsequent
103 weeks. During the studies, patients could receive concomitant low
104 potency topical steroids. No other concomitant psoriasis therapies were
105 allowed during treatment or the follow-up period.

106 Patients were evaluated using the Psoriasis Area and Severity Index
107 (PASI) during the study. The PASI is a composite score that takes into
108 consideration both the fraction of body surface area affected and the
109 nature and severity of the psoriatic changes within the affected regions
110 (erythema, infiltration/plaque thickness, and desquamation). Both
111 treatment groups in all four studies had baseline median PASI scores
112 of 17. Both treatment groups across all four studies had baseline median
113 body surface area involvement ranging between 22–28%. Compared with
114 placebo, more patients randomized to RAPTIVA had at least a 75%
115 reduction from baseline PASI score (PASI-75) 1 week after the 12-week
116 treatment period (Table 1). RAPTIVA 2 mg/kg was not superior to
117 RAPTIVA 1 mg/kg.

Table 1
 Proportion of Patients with $\geq 75\%$ Improvement
 in PASI after 12 Weeks of Treatment (PASI-75)

	Placebo	RAPTIVA 1 mg/kg/wk	Difference (95%CI)
Study 1	4% n=187	27% ^a n=369	22% (16%, 29%)
Study 2	2% n=170	39% ^a n=162	37% (28%, 46%)
Study 3	5% n=122	22% ^a n=232	17% (9%, 27%)
Study 4	3% n=236	24% ^a n=450	21% (15%, 27%)

^a $p < 0.001$ for comparison of RAPTIVA group with placebo group using Fisher's exact test within each study.

118

119 All three components of the PASI (plaque induration, scaling, and
 120 erythema) contributed comparably to the improvement in PASI. Other
 121 clinical responses evaluated (Table 2) included the proportion of patients
 122 who achieved minimal or clear status by a static Physician Global
 123 Assessment (sPGA) and the proportion of patients with a reduction in
 124 PASI of at least 50% from baseline (PASI-50) 1 week following the
 125 12-week treatment period. The sPGA is a 6 category scale ranging from
 126 "very severe" to "clear" indicating the physician's overall assessment of
 127 the psoriasis severity focusing on plaque, scaling and erythema.
 128 Treatment success of minimal or clear consisted of none or slight
 129 elevation in plaque, none or minimal white color in scaling, and up to
 130 moderate definite red coloration in erythema. Across all four studies, the
 131 percentage of patients with baseline sPGA classifications of moderate was
 132 48–56%, severe 33–43%, and 3–6% were classified as very severe.

Table 2
Percentage of Patients Responding after 12 Weeks of Treatment

Outcome Measurement	Study	Placebo	RAPTIVA 1 mg/kg/wk	Difference ^a (95% CI)
sPGA: Minimal or Clear	1	3%	26%	23% (16, 30)
	2	3%	32%	29% (21, 39)
	3	3%	19%	16% (8, 25)
	4	4%	20%	16% (11, 22)
>50% improvement in PASI (PASI-50)	1	14%	59%	45% (37, 53)
	2	15%	61%	46% (37, 56)
	3	16%	52%	36% (26, 47)
	4	14%	52%	38% (31, 45)

The number of patients in each study and treatment group is the same as listed in Table 1.

^a p < 0.001 for comparison of RAPTIVA group to placebo group using Fisher's exact test for all comparisons between groups.

133

134 In Study 1, 12% of RAPTIVA-treated patients achieved a PASI-50 at
135 Week 4 compared with 5% for placebo. The median time to PASI-50
136 among PASI-75 achievers was approximately 6 weeks. Similar results
137 were observed in Studies 2, 3, and 4.

138 In Study 3, sustained response to extended RAPTIVA treatment was
139 evaluated. RAPTIVA-treated patients who achieved a PASI-75 response
140 at Week 12 were re-randomized to receive RAPTIVA or placebo for a
141 second contiguous 12-week treatment period. Sixty-one of 79 patients
142 (77%) re-randomized to a second 12-week treatment period with
143 RAPTIVA maintained PASI-75 response compared with 8 of 40 patients
144 (20%) re-randomized to placebo. Sustained responses to RAPTIVA have
145 also been observed in uncontrolled, open-label extension treatment trials
146 when patients received RAPTIVA without interruption for 24 weeks.

147 In Study 2, response to intermittent RAPTIVA treatment was evaluated
148 among patients who achieved PASI-75 response with 12 weeks of
149 RAPTIVA treatment and were followed off-treatment until relapse of
150 psoriasis (50% loss of treatment response). In patients who resumed
151 RAPTIVA treatment upon relapse of psoriasis, 31% (17/55) re-established
152 a PASI-75 response (compared with the initial baseline). After 12 weeks

153 of treatment, the median duration of a PASI-75 response after RAPTIVA
154 discontinuation was between 1 and 2 months.

155 The safety and efficacy of RAPTIVA therapy beyond 1 year have not been
156 established.

157 **INDICATIONS AND USAGE**

158 RAPTIVA[®] (efalizumab) is indicated for the treatment of adult patients
159 (18 years or older) with chronic moderate to severe plaque psoriasis who
160 are candidates for systemic therapy or phototherapy.

161 **CONTRAINDICATIONS**

162 RAPTIVA should not be administered to patients with known
163 hypersensitivity to RAPTIVA or any of its components.

164 **WARNINGS**

165 **Serious Infections**

166 RAPTIVA is an immunosuppressive agent and has the potential to
167 increase the risk of infection and reactivate latent, chronic infections.
168 RAPTIVA should not be administered to patients with clinically important
169 infections. Caution should be exercised when considering the use of
170 RAPTIVA in patients with a chronic infection or history of recurrent
171 infections. If a patient develops a serious infection, RAPTIVA should be
172 discontinued. New infections developing during RAPTIVA treatment
173 should be monitored. During the first 12 weeks of controlled trials,
174 serious infections occurred in 7 of 1620 (0.4 %) RAPTIVA-treated
175 patients compared with 1 of 715 (0.1%) placebo-treated patients
176 (see **ADVERSE REACTIONS, Infections**). Serious infections requiring
177 hospitalization included cellulitis, pneumonia, abscess, sepsis, bronchitis,
178 gastroenteritis, aseptic meningitis, Legionnaire's disease, and vertebral
179 osteomyelitis (note some patients had more than one infection).
180 Postmarketing reports of serious infections include necrotizing fasciitis
181 and tuberculous pneumonia. Bacterial sepsis with seeding of distant sites,
182 severe pneumonia with neutropenia (ANC 60/mm³), and worsening of

183 infection (e.g. cellulitis, pneumonia) despite antimicrobial treatment have
184 been observed.

185 **Malignancies**

186 RAPTIVA is an immunosuppressive agent. Many immunosuppressive
187 agents have the potential to increase the risk of malignancy. The role of
188 RAPTIVA in the development of malignancies is not known. Caution
189 should be exercised when considering the use of RAPTIVA in patients at
190 high risk for malignancy or with a history of malignancy. If a patient
191 develops a malignancy, RAPTIVA should be discontinued
192 (see **ADVERSE REACTIONS, Malignancy**).

193 **Immune-Mediated Thrombocytopenia**

194 Platelet counts at or below 52,000 cells per μL were observed in 8 (0.3%)
195 RAPTIVA-treated patients during clinical trials compared with none
196 among the placebo-treated patients (see **ADVERSE REACTIONS,**
197 **Thrombocytopenia**). Five of the 8 patients received a course of systemic
198 steroids for thrombocytopenia. Thrombocytopenia resolved in the
199 7 patients receiving adequate follow-up (1 patient was lost to follow-up).
200 Reports of severe thrombocytopenia have also been received
201 postmarketing. Physicians should follow patients closely for signs and
202 symptoms of thrombocytopenia. Assessment of platelet counts is
203 recommended during treatment with RAPTIVA (see **PRECAUTIONS,**
204 **Laboratory Tests**) and RAPTIVA should be discontinued if
205 thrombocytopenia develops.

206 **Immune-Mediated Hemolytic Anemia**

207 Reports of hemolytic anemia, some serious, diagnosed 4-6 months after
208 the start of RAPTIVA treatment have been received. RAPTIVA should be
209 discontinued if hemolytic anemia occurs.

210 **Psoriasis Worsening and Variants**

211 Worsening of psoriasis can occur during or after discontinuation of
212 RAPTIVA. During clinical studies, 19 of 2589 (0.7%) of

213 RAPTIVA-treated patients had serious worsening of psoriasis during
214 treatment (n=5) or worsening past baseline after discontinuation of
215 RAPTIVA (n=14) (see **ADVERSE REACTIONS, Adverse Events of**
216 **Psoriasis**). In some patients these events took the form of psoriatic
217 erythroderma, pustular psoriasis, or development of new plaque lesions.
218 Some patients required hospitalization and alternative antipsoriatic therapy
219 to manage the psoriasis worsening. Patients, including those not
220 responding to RAPTIVA treatment, should be closely observed following
221 discontinuation of RAPTIVA, and appropriate psoriasis treatment
222 instituted as necessary.

223 **PRECAUTIONS**

224 **Arthritis Events**

225 Infrequent new onset or recurrent severe arthritis events, including
226 psoriatic arthritis events, have been reported in clinical trials and
227 postmarketing. These arthritis events began while on treatment or
228 following discontinuation of RAPTIVA and were uncommonly associated
229 with flare of psoriasis in some cases. Patients improved after
230 discontinuation of RAPTIVA with or without anti-arthritis therapy. The
231 etiology of these arthritis events is unknown and a causal relationship to
232 RAPTIVA therapy is unclear.

233 **Immunosuppression**

234 The safety and efficacy of RAPTIVA in combination with other
235 immunosuppressive agents or phototherapy have not been evaluated.
236 Patients receiving other immunosuppressive agents should not receive
237 concurrent therapy with RAPTIVA because of the possibility of increased
238 risk of infections and malignancies.

239 **Immunizations**

240 The safety and efficacy of vaccines, administered to patients being treated
241 with RAPTIVA have not been studied. In a small clinical study with IV
242 administered RAPTIVA, a single dose of 0.3 mg/kg given before primary
243 immunization with a neoantigen decreased the secondary immune

244 response, and a dose of 1 mg/kg almost completely ablated it. A dose of
245 0.3 mg/kg IV has comparable pharmacodynamic effects to the
246 recommended dose of 1 mg/kg SC. In chimpanzees exposed to RAPTIVA
247 at ≥ 10 times the clinical exposure level (based on mean peak plasma
248 levels) antibody responses were decreased following immunization with
249 tetanus toxoid compared with untreated control animals. Acellular, live
250 and live-attenuated vaccines should not be administered during
251 RAPTIVA treatment.

252 **First Dose Reactions**

253 First dose reactions including headache, fever, nausea, and vomiting are
254 associated with RAPTIVA treatment and are dose-level related in
255 incidence and severity (see **ADVERSE REACTIONS**). Therefore, a
256 conditioning dose of 0.7 mg/kg is recommended to reduce the incidence
257 and severity of reactions associated with initial dosing (see **DOSAGE**
258 **AND ADMINISTRATION**). Cases of aseptic meningitis resulting in
259 hospitalization have been observed in association with initial dosing (see
260 **ADVERSE REACTIONS, Inflammatory/Immune-Mediated**
261 **Reactions**).

262 **Information for Patients**

263 Patients should be informed that their physician may monitor platelet
264 counts during therapy. Patients should be advised to seek immediate
265 medical attention if they develop any of the signs and symptoms
266 associated with: severe thrombocytopenia (such as easy bleeding from the
267 gums, bruising or petechiae) or with severe hemolytic anemia (such as
268 weakness, orthostatic light-headedness, hemoglobinuria or jaundice), or
269 with worsening of psoriasis or arthritis. Patients should also be informed
270 that RAPTIVA is an immunosuppressant, and could increase their chances
271 of developing an infection or a malignancy. Patients should be advised to
272 promptly call the prescribing doctor's office if they develop any new signs
273 of, or receive a new diagnosis of infection or malignancy while
274 undergoing treatment with RAPTIVA.

275 Female patients should also be advised to notify their physicians if they
276 become pregnant while taking RAPTIVA (or within 6 weeks of
277 discontinuing RAPTIVA) and be advised of the existence of and
278 encouraged to enroll in the RAPTIVA Pregnancy Registry by calling
279 1-877-RAPTIVA (1-877-727-8482) to enroll into the Registry.

280 If a patient or caregiver is to administer RAPTIVA, he/she should be
281 instructed regarding injection techniques and how to measure the correct
282 dose to ensure proper administration of RAPTIVA. Patients should be
283 also referred to the RAPTIVA Patient Package Insert. In addition, patients
284 should have available materials for and be instructed in the proper disposal
285 of needles and syringes to comply with state and local laws. Patients
286 should also be cautioned against reuse of syringes and needles.

287 **Laboratory Tests**

288 Assessment of platelet counts is recommended upon initiating and
289 periodically while receiving RAPTIVA treatment. It is recommended that
290 assessments be more frequent when initiating therapy (e.g., monthly) and
291 may decrease in frequency with continued treatment (e.g., every
292 3 months). Severe thrombocytopenia has been observed (see
293 **WARNINGS, Immune-Mediated Thrombocytopenia**).

294 **Drug Interactions**

295 No formal drug interaction studies have been performed with RAPTIVA.
296 RAPTIVA should not be used with other immunosuppressive drugs (see
297 **PRECAUTIONS, Immunosuppression**).

298 Acellular, live and live-attenuated vaccines should not be administered
299 during RAPTIVA treatment (see **PRECAUTIONS, Immunizations**).

300 **Drug/Laboratory Test Interactions**

301 Increases in lymphocyte counts related to the pharmacologic mechanism
302 of action are frequently observed during RAPTIVA treatment (see
303 **CLINICAL PHARMACOLOGY, Pharmacodynamics**).

304 **Carcinogenesis, Mutagenesis, Impairment of Fertility**

305 Long-term animal studies have not been conducted to evaluate the
306 carcinogenic potential of RAPTIVA.

307 Subcutaneous injections of male and female mice with an anti-mouse
308 CD11a antibody at up to 30 times the equivalent of the 1 mg/kg clinical
309 dose of RAPTIVA had no adverse effects on mating, fertility, or
310 reproduction parameters. The clinical significance of this observation is
311 uncertain.

312 Genotoxicity studies were not conducted.

313 **Pregnancy (Category C)**

314 Animal reproduction studies have not been conducted with RAPTIVA.
315 It is also not known whether RAPTIVA can cause fetal harm when
316 administered to a pregnant woman or can affect reproduction capacity.
317 RAPTIVA should be given to a pregnant woman only if clearly needed.

318 In a developmental toxicity study conducted in mice using an anti-mouse
319 CD11a antibody at up to 30 times the equivalent of the recommended
320 clinical dose of RAPTIVA, no evidence of maternal toxicity,
321 embryotoxicity, or teratogenicity was observed when administered during
322 organogenesis. No adverse effects on behavioral, reproductive, or growth
323 parameters were observed in offspring of female mice subcutaneously
324 treated with an anti-mouse CD11a antibody during gestation and lactation
325 using doses 3- to 30-times the equivalent of the recommended clinical
326 dose of RAPTIVA. At 11 weeks of age, the offspring of these females
327 exhibited a significant reduction in their ability to mount an antibody
328 response, which showed evidence of partial reversibility by 25 weeks of
329 age. Animal studies, however, are not always predictive of human
330 response, and there are no adequate and well-controlled studies in
331 pregnant women.

332 Since the effects of RAPTIVA on pregnant women and fetal development,
333 including immune system development are not known, healthcare

334 providers are encouraged to enroll patients who become pregnant while
335 taking RAPTIVA (or within 6 weeks of discontinuing RAPTIVA) in the
336 RAPTIVA Pregnancy Registry by calling 1-877-RAPTIVA (1-877-727-
337 8482).

338 **Nursing Mothers**

339 It is not known whether RAPTIVA is excreted in human milk. An
340 anti-mouse CD11a antibody was detected in milk samples of lactating
341 mice exposed to anti-mouse CD11a antibody and the offspring of the
342 exposed females exhibited significant reduction in antibody responses
343 (see **PRECAUTIONS, Pregnancy**). Since maternal immunoglobulins
344 are known to be present in the milk of lactating mothers, and animal data
345 suggest the potential for adverse effects in nursing infants from
346 RAPTIVA, a decision should be made whether to discontinue nursing
347 while taking the drug or to discontinue the use of the drug, taking into
348 account the importance of the drug to the mother.

349 **Pediatric Use**

350 The safety and efficacy of RAPTIVA in pediatric patients have not been
351 studied.

352 **Geriatric Use**

353 Of the 1620 patients who received RAPTIVA in controlled trials,
354 128 were ≥ 65 years of age, and 2 were ≥ 75 years of age. Although no
355 differences in safety or efficacy were observed between older and younger
356 patients, the number of patients aged 65 and over is not sufficient to
357 determine whether they respond differently from younger patients.
358 Because the incidence of infections is higher in the elderly population, in
359 general, caution should be used in treating the elderly.

360 **ADVERSE REACTIONS**

361 The most serious adverse reactions observed during treatment with
362 RAPTIVA were serious infections, malignancies, thrombocytopenia,

363 hemolytic anemia, arthritis events, and psoriasis worsening and variants
364 (see **WARNINGS**).

365 The most common adverse reactions associated with RAPTIVA were a
366 first dose reaction complex that included headache, chills; fever, nausea,
367 and myalgia within two days following the first two injections. These
368 reactions are dose-level related in incidence and severity and were largely
369 mild to moderate in severity when a conditioning dose of 0.7 mg/kg was
370 used as the first dose. In placebo-controlled trials, 29% of patients treated
371 with RAPTIVA 1 mg/kg developed one or more of these symptoms
372 following the first dose compared with 15% of patients receiving placebo.
373 After the third dose, 4% and 3% of patients receiving RAPTIVA 1 mg/kg
374 and placebo, respectively, experienced these symptoms. Less than 1% of
375 patients discontinued RAPTIVA treatment because of these adverse
376 events.

377 Other adverse events resulting in discontinuation of RAPTIVA treatment
378 were psoriasis (0.6%), pain (0.4%), arthritis (0.4%), and arthralgia (0.3%).

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

383 The data described below reflect RAPTIVA exposure for 2762 adult
384 psoriasis patients (age range 18 to 75 years), including 2400 patients
385 exposed for three months, 904 for six months, and 218 exposed for one
386 year or more, in all controlled and uncontrolled studies. The median age
387 of patients receiving RAPTIVA was 44 years, with 189 patients above the
388 age of 65; 67% were men, and 89% were Caucasian. These data include
389 patients treated at doses higher than the recommended dose of 1 mg/kg
390 weekly.

391 Controlled clinical trials provide the most informative basis for estimating
392 the frequency of RAPTIVA-related adverse drug reactions. Table 3

393 enumerates the adverse events occurring during controlled periods of the
394 clinical trials where the frequency of the adverse events is at least 2%
395 greater in the RAPTIVA-treated group than the placebo group.

Table 3
Adverse Events in Placebo Controlled Study Periods
Reported at a $\geq 2\%$ Higher Rate in the 1 mg/kg/wk
RAPTIVA Treatment than Placebo Groups

	Placebo (n=715)	RAPTIVA 1 mg/kg/wk (n=1213)
Headache	159 (22%)	391 (32%)
Infection ^a	188 (26%)	350 (29%)
Chills	32 (4%)	154 (13%)
Nausea	51 (7%)	128 (11%)
Pain	38 (5%)	122 (10%)
Myalgia	35 (5%)	102 (8%)
Flu Syndrome	29 (4%)	83 (7%)
Fever	24 (3%)	80 (7%)
Back pain	14 (2%)	50 (4%)
Acne	4 (1%)	45 (4%)

^a Includes diagnosed infections and other non-specific infections. Most common non-specific infection was upper respiratory infection.

396
397 Adverse events occurring at a rate between 1 and 2% greater in the
398 RAPTIVA group compared with placebo were arthralgia, asthenia,
399 peripheral edema, and psoriasis.

400 The following serious adverse reactions were observed in
401 RAPTIVA-treated patients.

402 **Infections**

403 In the first 12 weeks of placebo-controlled studies, the proportion of
404 patients with serious infection was 0.4% (7/1620) in the RAPTIVA-treated
405 group (5 of these were hospitalized, 0.3%) and 0.1% (1/715) in the
406 placebo group (see **WARNINGS, Serious Infections**). In the complete

407 safety data from both controlled and uncontrolled studies, the overall
408 incidence of hospitalization for infections was 1.6 per 100 patient-years
409 for RAPTIVA-treated patients compared with 1.2 per 100 patient-years for
410 placebo-treated patients. Including both controlled, uncontrolled, and
411 follow-up study treatment periods there were 27 serious infections in
412 2475 RAPTIVA-treated patients. These infections included cellulitis,
413 pneumonia, abscess, sepsis, sinusitis, bronchitis, gastroenteritis, aseptic
414 meningitis, Legionnaire's disease, septic arthritis, and vertebral
415 osteomyelitis. In controlled trials, the overall rate of infections in
416 RAPTIVA-treated patients was 3% higher than in placebo-treated patients
417 (Table 3).

418 **Malignancies**

419 Among the 2762 psoriasis patients who received RAPTIVA at any dose
420 (median duration 8 months), 31 patients were diagnosed with
421 37 malignancies (see **WARNINGS, Malignancies**). The overall
422 incidence of malignancies of any kind was 1.8 per 100 patient-years for
423 RAPTIVA-treated patients compared with 1.6 per 100 patient-years for
424 placebo-treated patients. Malignancies observed in the RAPTIVA-treated
425 patients included non-melanoma skin cancer, non-cutaneous solid tumors,
426 Hodgkin's lymphoma and non-Hodgkin's lymphoma, and malignant
427 melanoma. The incidence of non-cutaneous solid tumors (8 in
428 1790 patient-years) and malignant melanoma were within the range
429 expected for the general population.

430 The majority of the malignancies were non-melanoma skin cancers;
431 26 cases (13 basal, 13 squamous) in 20 patients (0.7% of 2762
432 RAPTIVA-treated patients). The incidence was comparable for
433 RAPTIVA-treated and placebo-treated patients. However, the size of the
434 placebo group and duration of follow-up were limited and a difference in
435 rates of non-melanoma skin cancers cannot be excluded.

436 **Immune-Mediated Thrombocytopenia**

437 In the combined safety database of 2762 RAPTIVA-treated patients, there
438 were eight occurrences (0.3%) of thrombocytopenia of <52,000 cells per
439 μ L reported (see **WARNINGS, Immune-Mediated Thrombocytopenia**).
440 Three of the eight patients were hospitalized for thrombocytopenia,
441 including one patient with heavy uterine bleeding; all cases were
442 consistent with an immune mediated thrombocytopenia. Antiplatelet
443 antibody was evaluated in one patient and was found to be positive. Each
444 case resulted in discontinuation of RAPTIVA. Based on available platelet
445 count measurements, the onset of platelet decline was between 8 and
446 12 weeks after the first dose of RAPTIVA in 5 of the patients. Onset was
447 more delayed in 3 patients, occurring as late as one year in 1 patient. In
448 these cases, the platelet count nadirs occurred between 12 and 72 weeks
449 after the first dose of RAPTIVA.

450 **Immune-Mediated Hemolytic Anemia**

451 Two reports of hemolytic anemia were observed in clinical trials.
452 Additional cases were reported in the postmarketing setting. The anemia
453 was diagnosed 4-6 ~~weeks~~ months after the start of RAPTIVA and in two
454 serious cases the hemoglobin level decreased to 6 and 7 g/dl. RAPTIVA
455 treatment was discontinued, erythrocyte transfusions and other therapies
456 were administered (see **WARNINGS, Immune-Mediated Hemolytic**
457 **Anemia**).

458 **Adverse Events of Psoriasis**

459 In the combined safety database from all studies, serious psoriasis adverse
460 events occurred in 19 RAPTIVA-treated patients (0.7%) including
461 hospitalization in 17 patients (see **WARNINGS, Psoriasis**
462 **Worsening/Variants**). Most of these events (14/19) occurred after
463 discontinuation of study drug and occurred in both patients responding and
464 not responding to RAPTIVA treatment. Serious adverse events of
465 psoriasis included pustular, erythrodermic, and guttate subtypes. During
466 the first 12 weeks of treatment within placebo-controlled studies, the rate
467 of psoriasis adverse events (serious and non-serious) was 3.2% (52/1620)

468 in the RAPTIVA-treated patients and 1.4% (10/715) in the placebo-treated
469 patients.

470 **Arthritis Events**

471 Infrequent new onset or recurrent severe arthritis events, including
472 psoriatic arthritis events, have been reported in clinical trials and
473 postmarketing. ~~In the placebo-controlled portions of clinical studies, the~~
474 ~~incidence of severe arthritis-related adverse events in the RAPTIVA~~
475 ~~treated group was 0.6% (see **PRECAUTIONS, Arthritis Events**).~~

476 **Hypersensitivity Reactions**

477 Symptoms associated with a hypersensitivity reaction (e.g., dyspnea,
478 asthma, urticaria, angioedema, maculopapular rash) were evaluated by
479 treatment group. In the first 12 weeks of the controlled clinical studies,
480 the proportion of patients reporting at least one hypersensitivity reaction
481 was 8% (95/1213) in the 1 mg/kg/wk group and 7% (49/715) patients in
482 the placebo group. Urticaria was observed in 1% of patients (16/1213)
483 receiving RAPTIVA and 0.4% of patients (3/715) receiving placebo
484 during the initial 12-week treatment period. Other observed adverse
485 events in patients receiving RAPTIVA that may be indicative of
486 hypersensitivity included: laryngospasm, angioedema, erythema
487 multiforme, asthma, and allergic drug eruption. One patient was
488 hospitalized with a serum sickness-like reaction.

489 **Inflammatory/Immune-Mediated Reactions**

490 In the entire RAPTIVA clinical development program of 2762
491 RAPTIVA-treated patients, inflammatory, potentially immune-mediated
492 adverse events resulting in hospitalization included inflammatory arthritis
493 (12 cases, 0.4% of patients) and interstitial pneumonitis (2 cases). One
494 case each of the following serious adverse reactions was observed:
495 transverse myelitis, bronchiolitis obliterans, aseptic meningitis, idiopathic
496 hepatitis, sialadenitis, and sensorineural hearing loss. Myositis,
497 eosinophilic pneumonitis, resolving after discontinuation of RAPTIVA
498 ~~has~~have been reported postmarketing.

499 **Postmarketing Experience**

500 In postmarketing experience, other reported adverse events included toxic
501 epidermal necrolysis and photosensitivity reactions.

502 **Laboratory Values**

503 In RAPTIVA-treated patients, a mean elevation in alkaline phosphatase
504 (5 Units/L) was observed; 4% of RAPTIVA-treated patients experienced a
505 shift to above normal values compared with 0.6% of placebo-treated
506 patients. The clinical significance of this change is unknown. Higher
507 numbers of RAPTIVA-treated patients experienced elevations above
508 normal in two or more liver function tests than placebo (3.1% vs. 1.5%).

509 Other laboratory adverse reactions that were observed included
510 thrombocytopenia, (see **WARNINGS**, and **ADVERSE REACTIONS**,
511 **Immune-Mediated Thrombocytopenia**), lymphocytosis (40%)
512 (including three cases of transient atypical lymphocytosis), and
513 leukocytosis (26%).

514 **Immunogenicity**

515 In patients evaluated for antibodies to RAPTIVA after RAPTIVA
516 treatment ended, predominantly low-titer antibodies to RAPTIVA or other
517 protein components of the RAPTIVA drug product were detected in
518 6.3% (67/1063) of patients. The long-term immunogenicity of RAPTIVA
519 is unknown.

520 The data reflect the percentage of patients whose test results were
521 considered positive for antibodies to RAPTIVA in the ELISA assay, and
522 are highly dependent on the sensitivity and specificity of the assay.
523 Additionally, the observed incidence of antibody positivity in an assay
524 may be influenced by several factors including sample handling, timing of
525 sample collection, concomitant medications, and underlying disease. For
526 these reasons, comparison of the incidence of antibodies to RAPTIVA
527 with the incidence of antibodies to other products may be misleading.

528 **OVERDOSAGE**

529 Doses up to 4 mg/kg/wk SC for 10 weeks following a conditioning
530 (0.7 mg/kg) first dose have been administered without an observed
531 increase in acute toxicity. The maximum administered single dose was
532 10 mg/kg IV. This was administered to one patient, who subsequently
533 was admitted to the hospital for severe vomiting. In case of overdose, it is
534 recommended that the patient be monitored for 24–48 hours for any acute
535 signs or symptoms of adverse reactions or effects and appropriate
536 treatment instituted.

537 **DOSAGE AND ADMINISTRATION**

538 The recommended dose of RAPTIVA[®] (efalizumab) is a single
539 0.7 mg/kg SC conditioning dose followed by weekly SC doses of
540 1 mg/kg (maximum single dose not to exceed a total of 200 mg).

541 RAPTIVA is intended for use under the guidance and supervision of a
542 physician. If it is determined to be appropriate, patients may self-inject
543 RAPTIVA after proper training in the preparation and injection
544 technique and with medical follow-up.

545 **Preparation for Administration**

546 RAPTIVA should be administered using the sterile, disposable syringe
547 and needles provided (see **HOW SUPPLIED** section). Remove the cap
548 from the pre-filled syringe containing sterile water for injection
549 (non-USP) and attach the needle to the syringe. Remove the plastic cap
550 protecting the rubber stopper of the RAPTIVA vial and wipe the top of
551 the rubber stopper with one of the provided alcohol swabs. After
552 cleaning with the alcohol swab, do not touch the top of the vial. To
553 prepare the RAPTIVA solution, using the provided pre-filled diluent
554 syringe slowly inject the 1.3 mL of sterile water for injection (non-USP)
555 into the RAPTIVA vial. Swirl the vial with a GENTLE rotary motion to
556 dissolve the product. DO NOT SHAKE. Shaking will cause foaming of
557 the RAPTIVA solution. Generally, dissolution of RAPTIVA takes less
558 than 5 minutes. RAPTIVA is provided as a single-use vial and contains

559 no antibacterial preservatives. Reconstitute immediately before use and
560 use only once. If the reconstituted RAPTIVA is not used immediately,
561 store the RAPTIVA vial at room temperature and use within 8 hours. The
562 reconstituted solution should be clear to pale yellow and free of
563 particulates.

564 **Administration**

565 Parenteral drug products should be inspected visually for particulate
566 matter and discoloration prior to subcutaneous administration. If
567 particulates or discolorations are noted, the product should not be used.

568 Insert the needle into the vial containing the RAPTIVA solution, invert the
569 vial, and keeping the needle below the level of the liquid, withdraw the
570 dose to be given into the syringe. Replace the needle on the syringe with a
571 new needle.

572 No other medications should be added to solutions containing RAPTIVA,
573 and RAPTIVA should not be reconstituted with other diluents.

574 Sites for injection include thigh, abdomen, buttocks, or upper arm.
575 Injection sites should be rotated.

576 Following administration, discard any unused reconstituted RAPTIVA
577 solution.

578 **Stability and Storage**

579 Do not use a vial beyond the expiration date stamped on the carton or vial
580 label. RAPTIVA (lyophilized powder) must be refrigerated at 2–8°C
581 (36–46°F). Protect the vial from exposure to light. Store in original
582 carton until time of use.

583 **HOW SUPPLIED**

584 RAPTIVA[®] (efalizumab) is supplied as a lyophilized, sterile powder to
585 deliver 125 mg of efalizumab per single-use vial.

586 Each RAPTIVA carton contains four trays. Each tray contains one
587 single-use vial designed to deliver 125 mg of efalizumab, one single-use
588 prefilled diluent syringe containing 1.3 mL sterile water for injection
589 (non-USP), two 25 gauge × 5/8 inch needles, two alcohol prep pads, a
590 package insert with an accompanying patient information insert. The
591 NDC number for the four administration dose pack carton is
592 50242-058-04.

593 **REFERENCES**

- 594 1. Werther WA, Gonzalez TN, O'Connor SJ, McCabe S, Chan B,
595 Hotaling T, et al. Humanization of an anti-lymphocyte
596 function-associated antigen (LFA)-1 monoclonal antibody and
597 reengineering of the humanized antibody for binding to rhesus
598 LFA-1. *J Immunol* 1996;157:4986–95.

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602

Patient Information
RAPTIVA (Rap-TEE-vah)
(efalizumab)
for injection, subcutaneous

603 Read the Patient Information that comes with RAPTIVA[®] (efalizumab)
604 before you start using it and each time you get a refill. There may be new
605 information. This information does not take the place of talking with your
606 healthcare provider about your medical condition or treatment. It is
607 important to remain under a healthcare provider's care while using
608 RAPTIVA. **Do not change or stop treatment without first talking with**
609 **your healthcare provider.** Talk to your healthcare provider or
610 pharmacist if you have any questions about RAPTIVA.

611 **WHAT IS THE MOST IMPORTANT INFORMATION I SHOULD**
612 **KNOW ABOUT RAPTIVA?**

613 **RAPTIVA can decrease the activity of your immune system.**

614 Therefore, people using RAPTIVA may have an increased chance of
615 getting:

- 616 • **Serious infections.** Some infections could become serious and in rare
617 cases may lead to death. If you have an infection, tell your healthcare
618 provider before you start using RAPTIVA. If you get an infection that
619 does not go away while taking RAPTIVA, tell your healthcare
620 provider right away.
- 621 • **Cancers.** Many drugs that decrease the activity of the immune
622 system can increase the risk of cancer. If you have had cancer you
623 should tell your healthcare provider before you start taking
624 RAPTIVA. The role of RAPTIVA in the development of cancer is
625 not known.
- 626 • **Low platelet counts (thrombocytopenia).** Platelets help your blood
627 clot. Low platelets give you a higher chance for bleeding. Call your
628 doctor right away if you have increased bruising or bleeding. Your
629 healthcare provider may do regular blood tests to check your platelets
630 while you are taking RAPTIVA.
- 631 • **Low blood counts (anemia).** RAPTIVA may increase the
632 breakdown of your red blood cells and cause very low blood counts.
633 Call your doctor right away if you feel weak and lightheaded, your
634 skin and eyes turn yellow in color or your urine turns red or dark.

635 • **Worsening of psoriasis.** Some patients have had severe worsening
636 or new forms of psoriasis while taking RAPTIVA or after stopping
637 RAPTIVA. Tell your healthcare provider right away if your psoriasis
638 gets worse or if you see any new rashes during or after treatment with
639 RAPTIVA.

640 • **Arthritis.** Some patients have had worsening or new arthritis while
641 taking RAPTIVA or after stopping RAPTIVA. Tell your health care
642 provider if you have severe redness, pain, swelling, or stiffness of
643 joints such as hands, knees, ankles, etc.

644 **You should not receive vaccines while using RAPTIVA.** RAPTIVA
645 may prevent a vaccine from working. Talk to your healthcare provider if
646 you need to receive a vaccine while using RAPTIVA.

647 **WHAT IS RAPTIVA?**

648 RAPTIVA is a medicine used to treat adult patients with moderate to
649 severe plaque psoriasis who can be treated with medicines that affect the
650 whole body (systemic therapy) or with phototherapy.

651 RAPTIVA is a man-made protein that is like proteins made in the body
652 called antibodies. Antibodies fight disease in the human body. RAPTIVA
653 may decrease the skin changes in the body that are the main problems of
654 moderate to severe plaque psoriasis.

655 RAPTIVA has not been studied in children under 18 years of age.

656 **WHO SHOULD NOT USE RAPTIVA?**

657 **Do not use RAPTIVA if you have ever had an allergic reaction to**
658 **RAPTIVA.**

659 **Before using RAPTIVA, tell your healthcare provider**

660 **1. about the following medical conditions:**

661 • **If you are pregnant, planning to become pregnant, or become**
662 **pregnant while using RAPTIVA.** It is not known if RAPTIVA
663 can harm your unborn baby. If you become pregnant while taking
664 RAPTIVA, notify your healthcare provider immediately. You and
665 your healthcare provider will have to decide if RAPTIVA is right

666 for you during pregnancy. If you use RAPTIVA when you are
667 pregnant, call 1-877-RAPTIVA (1-877-727-8482) to ask how you
668 can be included in the RAPTIVA Pregnancy Registry.

669 • **If you are breast feeding.** It is not known if RAPTIVA passes
670 into your milk. It may harm your baby. You will need to decide
671 whether to use RAPTIVA or breast feed, but you may not do both.

672 • **If you have any infections (see WHAT IS THE MOST**
673 **IMPORTANT INFORMATION I SHOULD KNOW ABOUT**
674 **RAPTIVA?).**

675 • **If you have immune system problems**

676 2. **about all the medicines you take, including prescription and**
677 **nonprescription medicines, vitamins, and herbal supplements.**
678 It is not known if RAPTIVA and other medicines affect each other.
679 **Especially, tell your healthcare provider if you are using:**

680 • **Other medicines or treatments for your psoriasis**

681 • **Medicines called immunosuppressives or any medicine that**
682 **affects your immune system.** Ask your healthcare provider or
683 pharmacist if you are not sure if any of your medicines are
684 immunosuppressives.

685 **HOW SHOULD I USE RAPTIVA?**

686 • RAPTIVA is an injection that you give yourself once a week.

687 • **See the end of this leaflet for instructions on how to prepare and**
688 **inject RAPTIVA (HOW DO I PREPARE AND GIVE A**
689 **RAPTIVA INJECTION?).** Ask your healthcare provider or
690 pharmacist if you have any questions about using RAPTIVA.

691 • Use RAPTIVA exactly as prescribed by your healthcare provider.
692 Your dose of RAPTIVA is based on your body weight. Tell your
693 healthcare provider if your weight changes. Do not change your dose
694 without talking to your healthcare provider. Do not stop using
695 RAPTIVA without talking to your healthcare provider.

696 • RAPTIVA is injected under the skin (subcutaneous) of your upper leg
697 (thigh), upper arm, abdomen, or buttocks once a week. Change
698 (rotate) your skin injection site with each injection.

699 • Use RAPTIVA the same day each week. If you miss your dose of
700 RAPTIVA, contact your healthcare provider to find out when to take
701 your next dose of RAPTIVA and what schedule to follow after that.

- 702 • If you take more than your regular dose of RAPTIVA, call your
703 healthcare provider right away.
- 704 • See your healthcare provider regularly while using RAPTIVA. Do not
705 miss your appointments. Your healthcare provider may do blood tests,
706 including platelet counts, before and during treatment with RAPTIVA
707 to check its affect on your body.

708 **WHAT SHOULD I AVOID WHILE USING RAPTIVA?**

709 **Unless directed by your healthcare provider, do not:**

- 710 • take other medicines called immunosuppressives.
- 711 • take treatments called phototherapy.

712 **You should not receive vaccines while using RAPTIVA.** Talk to your
713 healthcare provider if you need to receive a vaccine while taking
714 RAPTIVA (see **WHAT IS THE MOST IMPORTANT**
715 **INFORMATION I SHOULD KNOW ABOUT RAPTIVA?**).

716 **WHAT ARE THE POSSIBLE SIDE EFFECTS OF RAPTIVA?**

717 **RAPTIVA can cause serious side effects including the following**
718 (see **WHAT IS THE MOST IMPORTANT INFORMATION I**
719 **SHOULD KNOW ABOUT RAPTIVA?**):

720 **RAPTIVA can affect your immune system and might cause:**

- 721 • **Serious infections**
- 722 • **Cancers**
- 723 • **Low platelet counts (thrombocytopenia)**
- 724 • **Low blood counts (anemia)**
- 725 • **Worsening of psoriasis**
- 726 • **New or worsening arthritis**

727 **The most common side effects of RAPTIVA** include headache, chills,
728 fever, nausea, and muscle aches. These reactions usually happen within
729 the first 48 hours following RAPTIVA injection, and often decrease after
730 the first few weeks of use of RAPTIVA.

731 **Other side effects that can also happen with RAPTIVA** include back
732 pain or swelling of the arms or legs (peripheral edema). Talk to your
733 healthcare provider about any symptoms that bother you.

734 If you get any side effect that concerns you or if you get an infection, call
735 your healthcare provider.

736 These are not all the side effects of RAPTIVA. For more information, ask
737 your healthcare provider or pharmacist.

738 **HOW SHOULD I STORE RAPTIVA?**

739 • Store RAPTIVA vials in the refrigerator at 36° to 46°F (2° to 8°C)
740 until you are ready to prepare your injection. **Do not freeze or store**
741 **at room temperature.** Once RAPTIVA has been mixed with sterile
742 water, you should use it right away to inject yourself. If you are
743 unable to inject the drug after mixing, the mixture can stay at room
744 temperature for up to 8 hours. Do not use RAPTIVA that was mixed
745 more than 8 hours earlier.

746 If you are traveling, be sure to store RAPTIVA at the right
747 temperature. If you have any questions, ask your healthcare provider
748 or pharmacist.

749 • Protect RAPTIVA vials from light while stored.

750 • Throw away RAPTIVA vials that are out of date.

751 • **Keep RAPTIVA and all medicines out of the reach of children.**

752 **GENERAL INFORMATION ABOUT RAPTIVA**

753 Medicines are sometimes prescribed for conditions that are not mentioned
754 in patient information leaflets. Do not use RAPTIVA for a condition for
755 which it was not prescribed. Do not give RAPTIVA to other people, even
756 if they have the same symptoms you have. It may harm them.

757 This leaflet summarizes the most important information about RAPTIVA.

758 If you would like more information, talk with your healthcare provider.

759 You can ask your healthcare provider or pharmacist for information about

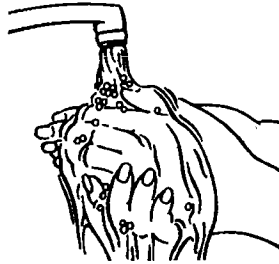
760 RAPTIVA that is written for health professionals. For more information,

761 you can also call 1-877-RAPTIVA (toll free).

762 **HOW DO I PREPARE AND GIVE A RAPTIVA INJECTION?**
763 **If your dose amount is more than 1.25 mL, you will need to use**
764 **2 RAPTIVA blister trays, and you will give yourself 2 injections of**
765 **RAPTIVA.**

766 **Setting Up the Equipment**

- 767 1. Take the RAPTIVA® (efalizumab) blister tray out of the refrigerator,
768 and place it on a flat, well-lit, clean work surface.
- 769 2. Wash your hands with soap and water before opening the blister tray.
- 770 3. Open the tray and lay out the contents. Allow the contents to come to
771 room temperature.



772

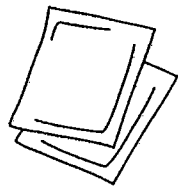
773 As shown below, the tray contains:

- 774 • One RAPTIVA vial
- 775 • One 1.3-mL prefilled syringe of sterile water
- 776 • Two 25-gauge needles
- 777 • Two alcohol prep pads

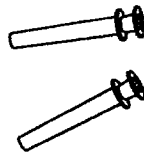
778 Contact your healthcare provider or pharmacist if you are missing any of
779 the items listed above.



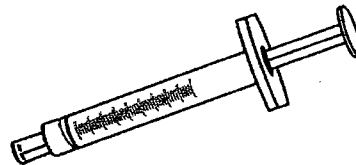
RAPTIVA
Vial



Alcohol Prep
Pads (2)



Needles (2)



Prefilled Syringe

780

- 781 4. Check the expiration (Exp.) date on the RAPTIVA vial label and
782 prefilled syringe label. If the expiration date has passed, do not use the
783 RAPTIVA vial or the prefilled syringe containing the sterile water.
784 Contact your healthcare provider.

- 785 5. Partially peel open the needle pack and place it on a clean surface. Be
786 sure to grasp the needle by the plastic cover and avoid touching the
787 end of the syringe and the needle.



788

- 789 6. Remove the plastic cap protecting the rubber stopper of the RAPTIVA
790 vial. Open one alcohol prep pad package and wipe the rubber stopper
791 with an alcohol prep pad. Do not touch the top of the vial after
792 wiping.
- 793 7. Remove the cap covering the prefilled syringe tip. Remove one of the
794 25-gauge needles from its package by grasping the needle by the
795 plastic cover and without touching the end of the needle. Carefully
796 place the capped 25-gauge needle onto the syringe tip. Twist needle to
797 secure.

798 **Mixing RAPTIVA**

- 799 1. Remove the needle cap. **Do not touch the needle.** Keep the
800 RAPTIVA vial upright on a firm surface, and slowly puncture the
801 rubber stopper with the needle. Slowly push down on the syringe
802 plunger to inject all of the 1.3 mL of sterile water onto the side wall of
803 the vial to cause less foaming. Some foaming may happen; this is
804 normal.



805

- 806 2. With the needle and syringe still in the vial stopper, gently swirl the
807 vial to mix. Wait 5 minutes for the medicine to completely dissolve.
808 To avoid excess foaming, **do not shake the vial.** The RAPTIVA
809 solution should be clear to pale yellow. **Do not use the solution if it**
810 **is discolored or cloudy or if particles (solid matter) are in the**
811 **solution.**



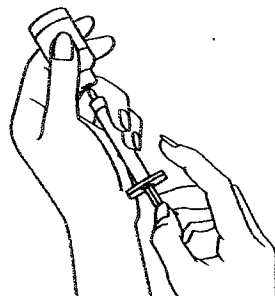
812

813 **Preparing the RAPTIVA Dose for Injection**

814 If you need more than one vial of RAPTIVA for the correct dose (dose
815 amount is greater than 1.25 mL), repeat Steps 1–7 of this section using a
816 second RAPTIVA blister tray, and divide your dose between two syringes.

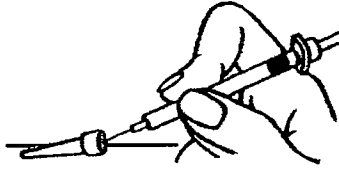
817 1. **Turn the vial upside down, keeping the needle in the vial. (The**
818 **needle will now be pointing upward.) Make sure the tip of the**
819 **needle is covered all the way by the medicine in the vial. Pull back**
820 **the syringe slightly if necessary. This will make it easier to get the**
821 **medicine into the syringe.**

822 2. Pull back on the plunger to fill the syringe. Withdraw the correct dose
823 of medicine by reading the numbers on the syringe. Remove the
824 syringe from the vial.



825

826 3. Slide the needle into the cap on a flat surface to pick up the needle cap.
827 To lower the chance of a needlestick injury, do not touch the cap until
828 it covers the needle all the way. Push the cap all the way down over
829 the needle

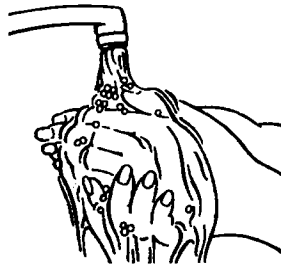


830

- 831 4. Hold the syringe upright and tap the side of the syringe to let air
832 bubbles rise to the top. Gently push in the plunger of the syringe to
833 push the air bubbles out.
- 834 5. After removing the bubbles, recheck the dose of medicine in the
835 syringe. If necessary, push the plunger again to remove any amount of
836 medicine beyond the line that indicates your dose. Make sure you
837 have the right dose as instructed by your healthcare provider. Twist
838 the capped needle off the syringe and discard it in a puncture-resistant
839 container (see **DISPOSAL OF THE SYRINGE, NEEDLES, AND**
840 **SUPPLIES**). **Never reuse a needle or syringe.**
- 841 6. Remove the other 25-gauge needle from its package by grasping **the**
842 **needle by the plastic cover and** without **touching the end of the**
843 **needle**. Carefully place the capped 25-gauge needle onto the syringe
844 tip. Twist to secure. Put the syringe down while preparing your skin
845 for injection.

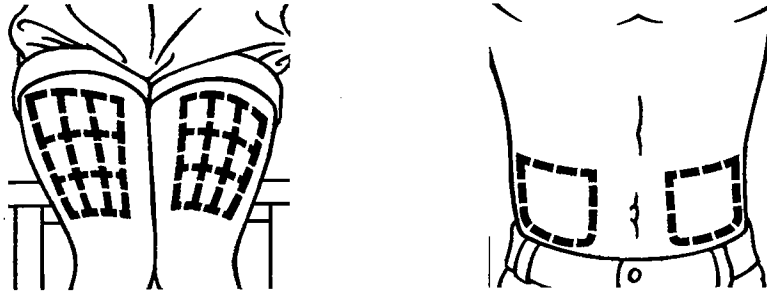
846 **Selecting and Preparing the Injection Site**

- 847 1. Wash your hands well with soap and water.



848

- 849 2. Choose an area of the body for the injection. Avoid, if possible, skin
850 involved with psoriasis. Possible injection sites include the following:
- 851 • Outer area of the upper legs (thighs)
 - 852 • Stomach area around the belly button

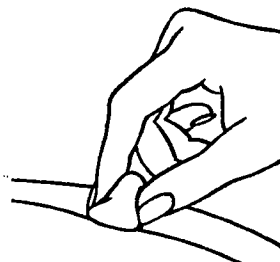


853 If someone else is giving you an injection, you can also use:

- 854 • Back of upper arms
- 855 • Buttocks



- 856 3. It is important to change (rotate) the injection site each time you take
857 RAPTIVA to lower your chances of soreness and redness at the
858 injection site. Changing the injection site will also improve absorption
859 of the medication. Repeat injections given in the same area should be
860 at least 1 inch apart. **Do not give an injection close to a vein that**
861 **you can see under the surface of your skin.**
- 862 4. Wash the skin at the site of injection with soap and water. Let it
863 air dry.
- 864 5. Cleanse the skin at the injection site with an alcohol prep pad using a
865 circular motion. Let the area air dry all the way. **Do not touch this**
866 **area again before giving the injection.**

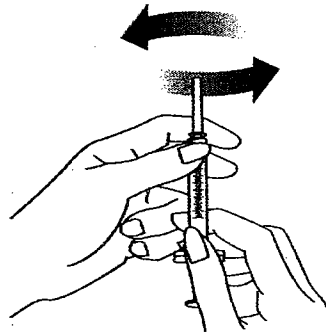


867
868

869 **Giving the RAPTIVA Injection under the Skin**

870 Your healthcare provider will teach you how to inject RAPTIVA. Do not
871 inject RAPTIVA unless you have been taught the right way to give the
872 injection.

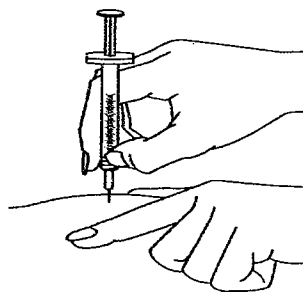
- 873 1. Hold the syringe and remove the needle cover. Twisting the needle
874 cover while pulling will help in the removal. **Do not touch the needle**
875 **or allow the needle to touch anything.**



876

- 877 2. Hold the syringe in the hand you use to inject yourself. Use your other
878 hand to pinch a patch of skin at the clean injection site. **Do not** lay the
879 syringe down or allow the needle to touch anything.

- 880 3. Hold the syringe firmly between your thumb and fingers so that you
881 have steady control. Insert the needle straight down at a 90-degree
882 angle. This is important to make sure the medicine is injected into
883 fatty tissue.

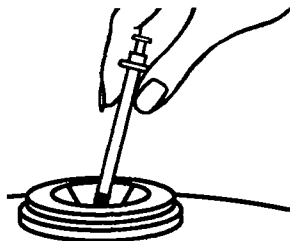


884

- 885 4. After the needle is inserted all the way into the skin, you can gently let
886 go of the pinched skin. Be sure the needle stays in your skin. Slowly
887 and smoothly push the plunger down into the syringe until it stops.

- 888 5. When all of the medicine has been injected, remove the needle and do
889 not re-cap it. Discard the used syringe with the attached needle into a
890 puncture resistant container (see **DISPOSAL OF THE SYRINGE,**
891 **NEEDLES, AND SUPPLIES**). **Never reuse a needle or syringe.**
892 Press a dry, sterile gauze (not provided) over the injection site. Do not

893 use the alcohol prep pad. A small bandage may be put over the
894 injection site.

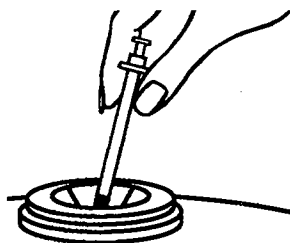


895

896 6. If your dose amount is more than 1.25 mL, you will need to give a
897 second injection. Choose the second injection site at least 1 inch from
898 the first injection site.

899 **DISPOSAL OF THE SYRINGE, NEEDLES, AND SUPPLIES**

900 1. As stated earlier, place the used syringe with the attached needle in a
901 puncture-resistant container, like a sharps container. You can buy a
902 sharps container at your local pharmacy.



903

904 2. Talk to your healthcare provider about how to properly dispose of a
905 filled container of your used syringes and needles. There may be
906 special local and state laws for disposing of used needles and syringes.
907 **Do not throw the filled container in the household trash and do**
908 **not recycle.**

909 3. The needle cap, alcohol prep pads, and other used supplies can be
910 thrown out with your regular trash.

911 4. **Always keep syringes, injection supplies, and disposal containers**
912 **out of the reach of children.**

913 5. **Do not reuse these single-use syringes or needles.**

914

915

916 **Rx Only**

917

RAPTIVA® [efalizumab]

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