2 PAXIL®

3 (paroxetine hydrochloride)

4 Tablets and Oral Suspension

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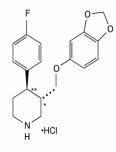
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Suicidality and Antidepressant Drugs

7 Antidepressants increased the risk compared to placebo of suicidal thinking and 8 behavior (suicidality) in children, adolescents, and young adults in short-term studies of 9 major depressive disorder (MDD) and other psychiatric disorders. Anyone considering the 10 use of PAXIL or any other antidepressant in a child, adolescent, or young adult must 11 balance this risk with the clinical need. Short-term studies did not show an increase in the 12 risk of suicidality with antidepressants compared to placebo in adults beyond age 24; there 13 was a reduction in risk with antidepressants compared to placebo in adults aged 65 and 14 older. Depression and certain other psychiatric disorders are themselves associated with 15 increases in the risk of suicide. Patients of all ages who are started on antidepressant 16 therapy should be monitored appropriately and observed closely for clinical worsening, 17 suicidality, or unusual changes in behavior. Families and caregivers should be advised of 18 the need for close observation and communication with the prescriber. PAXIL is not 19 approved for use in pediatric patients. (See WARNINGS: Clinical Worsening and Suicide) 20 **Risk, PRECAUTIONS: Information for Patients, and PRECAUTIONS: Pediatric Use.**)

21 **DESCRIPTION**

- 22 PAXIL (paroxetine hydrochloride) is an orally administered psychotropic drug. It is the
- 23 hydrochloride salt of a phenylpiperidine compound identified chemically as (-)-trans-4R-(4'-
- 24 fluorophenyl)-3S-[(3',4'-methylenedioxyphenoxy) methyl] piperidine hydrochloride hemihydrate
- and has the empirical formula of $C_{19}H_{20}FNO_3 \bullet HCl \bullet 1/2H_2O$. The molecular weight is 374.8
- 26 (329.4 as free base). The structural formula of paroxetine hydrochloride is:



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- 28 Paroxetine hydrochloride is an odorless, off-white powder, having a melting point range of
- 29 120° to 138°C and a solubility of 5.4 mg/mL in water.
- 30 **Tablets:** Each film-coated tablet contains paroxetine hydrochloride equivalent to paroxetine as
- 31 follows: 10 mg-yellow (scored); 20 mg-pink (scored); 30 mg-blue, 40 mg-green. Inactive
- 32 ingredients consist of dibasic calcium phosphate dihydrate, hypromellose, magnesium stearate,
- 33 polyethylene glycols, polysorbate 80, sodium starch glycolate, titanium dioxide, and 1 or more of

the following: D&C Red No. 30, D&C Yellow No. 10, FD&C Blue No. 2, FD&C Yellow No. 6.

35 Suspension for Oral Administration: Each 5 mL of orange-colored, orange-flavored liquid

- 36 contains paroxetine hydrochloride equivalent to paroxetine, 10 mg. Inactive ingredients consist
- 37 of polacrilin potassium, microcrystalline cellulose, propylene glycol, glycerin, sorbitol, methyl
- 38 paraben, propyl paraben, sodium citrate dihydrate, citric acid anhydrate, sodium saccharin,
- 39 flavorings, FD&C Yellow No. 6, and simethicone emulsion, USP.

40 CLINICAL PHARMACOLOGY

- 41 **Pharmacodynamics:** The efficacy of paroxetine in the treatment of major depressive
- 42 disorder, social anxiety disorder, obsessive compulsive disorder (OCD), panic disorder (PD),
- 43 generalized anxiety disorder (GAD), and posttraumatic stress disorder (PTSD) is presumed to be
- 44 linked to potentiation of serotonergic activity in the central nervous system resulting from
- 45 inhibition of neuronal reuptake of serotonin (5-hydroxy-tryptamine, 5-HT). Studies at clinically
- 46 relevant doses in humans have demonstrated that paroxetine blocks the uptake of serotonin into
- 47 human platelets. In vitro studies in animals also suggest that paroxetine is a potent and highly
- 48 selective inhibitor of neuronal serotonin reuptake and has only very weak effects on
- 49 norepinephrine and dopamine neuronal reuptake. In vitro radioligand binding studies indicate
- 50 that paroxetine has little affinity for muscarinic, alpha₁-, alpha₂-, beta-adrenergic-, dopamine
- 51 (D₂)-, 5-HT₁-, 5-HT₂-, and histamine (H₁)-receptors; antagonism of muscarinic, histaminergic,
- 52 and alpha₁-adrenergic receptors has been associated with various anticholinergic, sedative, and
- 53 cardiovascular effects for other psychotropic drugs.
- 54 Because the relative potencies of paroxetine's major metabolites are at most 1/50 of the parent 55 compound, they are essentially inactive.
- 56 **Pharmacokinetics:** Paroxetine hydrochloride is completely absorbed after oral dosing of a
- 57 solution of the hydrochloride salt. The mean elimination half-life is approximately 21 hours
- 58 (CV 32%) after oral dosing of 30 mg tablets of PAXIL daily for 30 days. Paroxetine is
- 59 extensively metabolized and the metabolites are considered to be inactive. Nonlinearity in
- 60 pharmacokinetics is observed with increasing doses. Paroxetine metabolism is mediated in part
- by CYP2D6, and the metabolites are primarily excreted in the urine and to some extent in the
- 62 feces. Pharmacokinetic behavior of paroxetine has not been evaluated in subjects who are

63 deficient in CYP2D6 (poor metabolizers).

Absorption and Distribution: Paroxetine is equally bioavailable from the oral suspension
 and tablet.

- 66 Paroxetine hydrochloride is completely absorbed after oral dosing of a solution of the
- hydrochloride salt. In a study in which normal male subjects (n = 15) received 30 mg tablets
- 68 daily for 30 days, steady-state paroxetine concentrations were achieved by approximately
- 69 10 days for most subjects, although it may take substantially longer in an occasional patient. At
- 5.2 hr. steady state, mean values of C_{max} , T_{max} , C_{min} , and $T_{1/2}$ were 61.7 ng/mL (CV 45%), 5.2 hr.
- 71 (CV 10%), 30.7 ng/mL (CV 67%), and 21.0 hours (CV 32%), respectively. The steady-state C_{max}
- 72 and C_{min} values were about 6 and 14 times what would be predicted from single-dose studies.

- 73 Steady-state drug exposure based on AUC_{0-24} was about 8 times greater than would have been
- 74 predicted from single-dose data in these subjects. The excess accumulation is a consequence of
- the fact that 1 of the enzymes that metabolizes paroxetine is readily saturable.
- 76 The effects of food on the bioavailability of paroxetine were studied in subjects administered
- a single dose with and without food. AUC was only slightly increased (6%) when drug was
- administered with food but the C_{max} was 29% greater, while the time to reach peak plasma
- concentration decreased from 6.4 hours post-dosing to 4.9 hours.
- Paroxetine distributes throughout the body, including the CNS, with only 1% remaining in theplasma.
- Approximately 95% and 93% of paroxetine is bound to plasma protein at 100 ng/mL and
- 400 ng/mL, respectively. Under clinical conditions, paroxetine concentrations would normally be
 less than 400 ng/mL. Paroxetine does not alter the in vitro protein binding of phenytoin or
 warfarin.
- Metabolism and Excretion: The mean elimination half-life is approximately 21 hours
 (CV 32%) after oral dosing of 30 mg tablets daily for 30 days of PAXIL. In steady-state dose
 proportionality studies involving elderly and nonelderly patients, at doses of 20 mg to 40 mg
- daily for the elderly and 20 mg to 50 mg daily for the nonelderly, some nonlinearity was
- 90 observed in both populations, again reflecting a saturable metabolic pathway. In comparison to
- 91 C_{min} values after 20 mg daily, values after 40 mg daily were only about 2 to 3 times greater than
- 92 doubled.
- 93 Paroxetine is extensively metabolized after oral administration. The principal metabolites are
- 94 polar and conjugated products of oxidation and methylation, which are readily cleared.
- 95 Conjugates with glucuronic acid and sulfate predominate, and major metabolites have been
- 96 isolated and identified. Data indicate that the metabolites have no more than 1/50 the potency of
- 97 the parent compound at inhibiting serotonin uptake. The metabolism of paroxetine is
- 98 accomplished in part by CYP2D6. Saturation of this enzyme at clinical doses appears to account
- 99 for the nonlinearity of paroxetine kinetics with increasing dose and increasing duration of
- 100 treatment. The role of this enzyme in paroxetine metabolism also suggests potential drug-drug
- 101 interactions (see PRECAUTIONS).
- 102 Approximately 64% of a 30-mg oral solution dose of paroxetine was excreted in the urine
- 103 with 2% as the parent compound and 62% as metabolites over a 10-day post-dosing period.
- 104 About 36% was excreted in the feces (probably via the bile), mostly as metabolites and less than
- 105 1% as the parent compound over the 10-day post-dosing period.
- 106 Other Clinical Pharmacology Information: *Specific Populations: Renal and Liver*
- 107 **Disease:** Increased plasma concentrations of paroxetine occur in subjects with renal and hepatic
- 108 impairment. The mean plasma concentrations in patients with creatinine clearance below
- 109 30 mL/min. were approximately 4 times greater than seen in normal volunteers. Patients with
- 110 creatinine clearance of 30 to 60 mL/min. and patients with hepatic functional impairment had
- 111 about a 2-fold increase in plasma concentrations (AUC, C_{max}).
- 112 The initial dosage should therefore be reduced in patients with severe renal or hepatic

- 113 impairment, and upward titration, if necessary, should be at increased intervals (see DOSAGE
- 114 AND ADMINISTRATION).
- 115 *Elderly Patients:* In a multiple-dose study in the elderly at daily paroxetine doses of 20,
- 116 30, and 40 mg, C_{min} concentrations were about 70% to 80% greater than the respective C_{min}
- 117 concentrations in nonelderly subjects. Therefore the initial dosage in the elderly should be
- 118 reduced (see DOSAGE AND ADMINISTRATION).
- 119 **Drug-Drug Interactions:** In vitro drug interaction studies reveal that paroxetine inhibits
- 120 CYP2D6. Clinical drug interaction studies have been performed with substrates of CYP2D6 and
- 121 show that paroxetine can inhibit the metabolism of drugs metabolized by CYP2D6 including
- 122 desipramine, risperidone, and atomoxetine (see PRECAUTIONS—Drug Interactions).

123 Clinical Trials

- 124 **Major Depressive Disorder:** The efficacy of PAXIL as a treatment for major depressive
- 125 disorder has been established in 6 placebo-controlled studies of patients with major depressive
- 126 disorder (aged 18 to 73). In these studies, PAXIL was shown to be significantly more effective
- 127 than placebo in treating major depressive disorder by at least 2 of the following measures:
- 128 Hamilton Depression Rating Scale (HDRS), the Hamilton depressed mood item, and the Clinical
- 129 Global Impression (CGI)-Severity of Illness. PAXIL was significantly better than placebo in
- 130 improvement of the HDRS sub-factor scores, including the depressed mood item, sleep
- 131 disturbance factor, and anxiety factor.
- 132 A study of outpatients with major depressive disorder who had responded to PAXIL (HDRS
- total score <8) during an initial 8-week open-treatment phase and were then randomized to
- 134 continuation on PAXIL or placebo for 1 year demonstrated a significantly lower relapse rate for
- 135 patients taking PAXIL (15%) compared to those on placebo (39%). Effectiveness was similar for
- 136 male and female patients.
- 137 **Obsessive Compulsive Disorder:** The effectiveness of PAXIL in the treatment of obsessive
- 138 compulsive disorder (OCD) was demonstrated in two 12-week multicenter placebo-controlled
- 139 studies of adult outpatients (Studies 1 and 2). Patients in all studies had moderate to severe OCD
- 140 (DSM-IIIR) with mean baseline ratings on the Yale Brown Obsessive Compulsive Scale
- 141 (YBOCS) total score ranging from 23 to 26. Study 1, a dose-range finding study where patients
- 142 were treated with fixed doses of 20, 40, or 60 mg of paroxetine/day demonstrated that daily
- 143 doses of paroxetine 40 and 60 mg are effective in the treatment of OCD. Patients receiving doses
- 144 of 40 and 60 mg paroxetine experienced a mean reduction of approximately 6 and 7 points,
- respectively, on the YBOCS total score which was significantly greater than the approximate 4-
- point reduction at 20 mg and a 3-point reduction in the placebo-treated patients. Study 2 was a
- 147 flexible-dose study comparing paroxetine (20 to 60 mg daily) with clomipramine (25 to 250 mg
- 148 daily). In this study, patients receiving paroxetine experienced a mean reduction of
- approximately 7 points on the YBOCS total score, which was significantly greater than the mean
- 150 reduction of approximately 4 points in placebo-treated patients.
- 151 The following table provides the outcome classification by treatment group on Global

Outcome Classification (%) on CGI-Global Improvement Item for Completers in Study 1						
Outcome ClassificationPlacebo (n = 74)PAXIL 20 mg (n = 75)PAXIL 40 mg 						
Worse	14%	7%	7%	3%		
No Change	44%	35%	22%	19%		
Minimally Improved	24%	33%	29%	34%		
Much Improved	11%	18%	22%	24%		
Very Much Improved	7%	7%	20%	20%		

152 Improvement items of the Clinical Global Impression (CGI) scale for Study 1.

153

154

155 Subgroup analyses did not indicate that there were any differences in treatment outcomes as a 156 function of age or gender.

157 The long-term maintenance effects of PAXIL in OCD were demonstrated in a long-term

158 extension to Study 1. Patients who were responders on paroxetine during the 3-month

double-blind phase and a 6-month extension on open-label paroxetine (20 to 60 mg/day) were

160 randomized to either paroxetine or placebo in a 6-month double-blind relapse prevention phase.

161 Patients randomized to paroxetine were significantly less likely to relapse than comparably

162 treated patients who were randomized to placebo.

163 **Panic Disorder:** The effectiveness of PAXIL in the treatment of panic disorder was

164 demonstrated in three 10- to 12-week multicenter, placebo-controlled studies of adult outpatients

165 (Studies 1-3). Patients in all studies had panic disorder (DSM-IIIR), with or without agoraphobia.

166 In these studies, PAXIL was shown to be significantly more effective than placebo in treating

167 panic disorder by at least 2 out of 3 measures of panic attack frequency and on the Clinical

- 168 Global Impression Severity of Illness score.
- 169 Study 1 was a 10-week dose-range finding study; patients were treated with fixed paroxetine

170 doses of 10, 20, or 40 mg/day or placebo. A significant difference from placebo was observed

171 only for the 40 mg/day group. At endpoint, 76% of patients receiving paroxetine 40 mg/day were

172 free of panic attacks, compared to 44% of placebo-treated patients.

173 Study 2 was a 12-week flexible-dose study comparing paroxetine (10 to 60 mg daily) and

174 placebo. At endpoint, 51% of paroxetine patients were free of panic attacks compared to 32% of

175 placebo-treated patients.

176 Study 3 was a 12-week flexible-dose study comparing paroxetine (10 to 60 mg daily) to

177 placebo in patients concurrently receiving standardized cognitive behavioral therapy. At

178 endpoint, 33% of the paroxetine-treated patients showed a reduction to 0 or 1 panic attacks

- 179 compared to 14% of placebo patients.
- 180 In both Studies 2 and 3, the mean paroxetine dose for completers at endpoint was

181 approximately 40 mg/day of paroxetine.

182 Long-term maintenance effects of PAXIL in panic disorder were demonstrated in an

183 extension to Study 1. Patients who were responders during the 10-week double-blind phase and

184 during a 3-month double-blind extension phase were randomized to either paroxetine (10, 20, or

185 40 mg/day) or placebo in a 3-month double-blind relapse prevention phase. Patients randomized

186 to paroxetine were significantly less likely to relapse than comparably treated patients who were

187 randomized to placebo.

- 188 Subgroup analyses did not indicate that there were any differences in treatment outcomes as a189 function of age or gender.
- 190 Social Anxiety Disorder: The effectiveness of PAXIL in the treatment of social anxiety
- 191 disorder was demonstrated in three 12-week, multicenter, placebo-controlled studies (Studies 1,
- 192 2, and 3) of adult outpatients with social anxiety disorder (DSM-IV). In these studies, the
- 193 effectiveness of PAXIL compared to placebo was evaluated on the basis of (1) the proportion of
- responders, as defined by a Clinical Global Impression (CGI) Improvement score of 1 (very
- 195 much improved) or 2 (much improved), and (2) change from baseline in the Liebowitz Social
- 196 Anxiety Scale (LSAS).
- 197 Studies 1 and 2 were flexible-dose studies comparing paroxetine (20 to 50 mg daily) and
- 198 placebo. Paroxetine demonstrated statistically significant superiority over placebo on both the
- 199 CGI Improvement responder criterion and the Liebowitz Social Anxiety Scale (LSAS). In
- 200 Study 1, for patients who completed to week 12, 69% of paroxetine-treated patients compared to
- 201 29% of placebo-treated patients were CGI Improvement responders. In Study 2, CGI
- 202 Improvement responders were 77% and 42% for the paroxetine- and placebo-treated patients,
- 203 respectively.
- Study 3 was a 12-week study comparing fixed paroxetine doses of 20, 40, or 60 mg/day with placebo. Paroxetine 20 mg was demonstrated to be significantly superior to placebo on both the
- 206 LSAS Total Score and the CGI Improvement responder criterion; there were trends for
- superiority over placebo for the 40 mg and 60 mg/day dose groups. There was no indication in
 this study of any additional benefit for doses higher than 20 mg/day.
- Subgroup analyses generally did not indicate differences in treatment outcomes as a functionof age, race, or gender.
- 211 **Generalized Anxiety Disorder:** The effectiveness of PAXIL in the treatment of Generalized
- 212 Anxiety Disorder (GAD) was demonstrated in two 8-week, multicenter, placebo-controlled
- studies (Studies 1 and 2) of adult outpatients with Generalized Anxiety Disorder (DSM-IV).
- 214 Study 1 was an 8-week study comparing fixed paroxetine doses of 20 mg or 40 mg/day with
- 215 placebo. Doses of 20 mg or 40 mg of PAXIL were both demonstrated to be significantly superior
- to placebo on the Hamilton Rating Scale for Anxiety (HAM-A) total score. There was not
- sufficient evidence in this study to suggest a greater benefit for the 40 mg/day dose compared tothe 20 mg/day dose.
- 219 Study 2 was a flexible-dose study comparing paroxetine (20 mg to 50 mg daily) and placebo.
- 220 PAXIL demonstrated statistically significant superiority over placebo on the Hamilton Rating
- 221 Scale for Anxiety (HAM-A) total score. A third study, also flexible-dose comparing paroxetine
- 222 (20 mg to 50 mg daily), did not demonstrate statistically significant superiority of PAXIL over
- 223 placebo on the Hamilton Rating Scale for Anxiety (HAM-A) total score, the primary outcome.

224 Subgroup analyses did not indicate differences in treatment outcomes as a function of race or 225 gender. There were insufficient elderly patients to conduct subgroup analyses on the basis of age.

In a longer-term trial, 566 patients meeting DSM-IV criteria for Generalized Anxiety

227 Disorder, who had responded during a single-blind, 8-week acute treatment phase with 20 to

228 50 mg/day of PAXIL, were randomized to continuation of PAXIL at their same dose, or to

229 placebo, for up to 24 weeks of observation for relapse. Response during the single-blind phase

230 was defined by having a decrease of ≥ 2 points compared to baseline on the CGI-Severity of

11 Illness scale, to a score of ≤ 3 . Relapse during the double-blind phase was defined as an increase 12 of ≥ 2 points compared to baseline on the CGI-Severity of Illness scale to a score of ≥ 4 , or

withdrawal due to lack of efficacy. Patients receiving continued PAXIL experienced a

significantly lower relapse rate over the subsequent 24 weeks compared to those receiving

235 placebo.

236 **Posttraumatic Stress Disorder:** The effectiveness of PAXIL in the treatment of

237 Posttraumatic Stress Disorder (PTSD) was demonstrated in two 12-week, multicenter, placebo-

controlled studies (Studies 1 and 2) of adult outpatients who met DSM-IV criteria for PTSD. The

239 mean duration of PTSD symptoms for the 2 studies combined was 13 years (ranging from .1 year

to 57 years). The percentage of patients with secondary major depressive disorder or non-PTSD

anxiety disorders in the combined 2 studies was 41% (356 out of 858 patients) and 40% (345 out

of 858 patients), respectively. Study outcome was assessed by (i) the Clinician-Administered

243 PTSD Scale Part 2 (CAPS-2) score and (ii) the Clinical Global Impression-Global Improvement

Scale (CGI-I). The CAPS-2 is a multi-item instrument that measures 3 aspects of PTSD with the

following symptom clusters: Reexperiencing/intrusion, avoidance/numbing and hyperarousal.

The 2 primary outcomes for each trial were (i) change from baseline to endpoint on the CAPS-2 total score (17 items), and (ii) proportion of responders on the CGI-I, where responders were

248 defined as patients having a score of 1 (very much improved) or 2 (much improved).

249 Study 1 was a 12-week study comparing fixed paroxetine doses of 20 mg or 40 mg/day to

250 placebo. Doses of 20 mg and 40 mg of PAXIL were demonstrated to be significantly superior to 251 placebo on change from baseline for the CAPS-2 total score and on proportion of responders on

251 placebo on change from baseline for the CAPS-2 total score and on proportion of responders on 252 the CGI-I. There was not sufficient evidence in this study to suggest a greater benefit for the

40 mg/day dose compared to the 20 mg/day dose.

Study 2 was a 12-week flexible-dose study comparing paroxetine (20 to 50 mg daily) to placebo. PAXIL was demonstrated to be significantly superior to placebo on change from baseline for the CAPS-2 total score and on proportion of responders on the CGI-I.

A third study, also a flexible-dose study comparing paroxetine (20 to 50 mg daily) to placebo, demonstrated PAXIL to be significantly superior to placebo on change from baseline for CAPS-2 total score, but not on proportion of responders on the CGI-I.

260 The majority of patients in these trials were women (68% women: 377 out of 551 subjects in

261 Study 1 and 66% women: 202 out of 303 subjects in Study 2). Subgroup analyses did not

262 indicate differences in treatment outcomes as a function of gender. There were an insufficient

263 number of patients who were 65 years and older or were non-Caucasian to conduct subgroup

analyses on the basis of age or race, respectively.

265 INDICATIONS AND USAGE

266 Major Depressive Disorder: PAXIL is indicated for the treatment of major depressive267 disorder.

268 The efficacy of PAXIL in the treatment of a major depressive episode was established in 269 6-week controlled trials of outpatients whose diagnoses corresponded most closely to the 270 DSM-III category of major depressive disorder (see CLINICAL PHARMACOLOGY-Clinical 271 Trials). A major depressive episode implies a prominent and relatively persistent depressed or 272 dysphoric mood that usually interferes with daily functioning (nearly every day for at least 273 2 weeks); it should include at least 4 of the following 8 symptoms: Change in appetite, change in 274 sleep, psychomotor agitation or retardation, loss of interest in usual activities or decrease in 275 sexual drive, increased fatigue, feelings of guilt or worthlessness, slowed thinking or impaired 276 concentration, and a suicide attempt or suicidal ideation. 277 The effects of PAXIL in hospitalized depressed patients have not been adequately studied. 278 The efficacy of PAXIL in maintaining a response in major depressive disorder for up to 1 year 279 was demonstrated in a placebo-controlled trial (see CLINICAL PHARMACOLOGY-Clinical 280 Trials). Nevertheless, the physician who elects to use PAXIL for extended periods should 281 periodically re-evaluate the long-term usefulness of the drug for the individual patient. 282 Obsessive Compulsive Disorder: PAXIL is indicated for the treatment of obsessions and 283 compulsions in patients with obsessive compulsive disorder (OCD) as defined in the DSM-IV.

284 The obsessions or compulsions cause marked distress, are time-consuming, or significantly

285 interfere with social or occupational functioning.

The efficacy of PAXIL was established in two 12-week trials with obsessive compulsive
outpatients whose diagnoses corresponded most closely to the DSM-IIIR category of obsessive
compulsive disorder (see CLINICAL PHARMACOLOGY—Clinical Trials).

289 Obsessive compulsive disorder is characterized by recurrent and persistent ideas, thoughts,

impulses, or images (obsessions) that are ego-dystonic and/or repetitive, purposeful, and
 intentional behaviors (compulsions) that are recognized by the person as excessive or

292 unreasonable.

Long-term maintenance of efficacy was demonstrated in a 6-month relapse prevention trial. In
this trial, patients assigned to paroxetine showed a lower relapse rate compared to patients on
placebo (see CLINICAL PHARMACOLOGY—Clinical Trials). Nevertheless, the physician
who elects to use PAXIL for extended periods should periodically re-evaluate the long-term
usefulness of the drug for the individual patient (see DOSAGE AND ADMINISTRATION).
Panic Disorder: PAXIL is indicated for the treatment of panic disorder, with or without

agoraphobia, as defined in DSM-IV. Panic disorder is characterized by the occurrence of unexpected panic attacks and associated concern about having additional attacks, worry about the occurrence of

unexpected panic attacks and associated concern about having additional attacks, worry about
 the implications or consequences of the attacks, and/or a significant change in behavior related to

302 the attacks.

303 The efficacy of PAXIL was established in three 10- to 12-week trials in panic disorder

304 patients whose diagnoses corresponded to the DSM-IIIR category of panic disorder (see

305 CLINICAL PHARMACOLOGY—Clinical Trials).

Panic disorder (DSM-IV) is characterized by recurrent unexpected panic attacks, i.e., a
discrete period of intense fear or discomfort in which 4 (or more) of the following symptoms
develop abruptly and reach a peak within 10 minutes: (1) palpitations, pounding heart, or
accelerated heart rate; (2) sweating; (3) trembling or shaking; (4) sensations of shortness of

- breath or smothering; (5) feeling of choking; (6) chest pain or discomfort; (7) nausea or
- abdominal distress; (8) feeling dizzy, unsteady, lightheaded, or faint; (9) derealization (feelings
 of unreality) or depersonalization (being detached from oneself); (10) fear of losing control;
- 313 (11) fear of dying; (12) paresthesias (numbress or tingling sensations); (13) chills or hot flushes.
- 314 Long-term maintenance of efficacy was demonstrated in a 3-month relapse prevention trial. In
- this trial, patients with panic disorder assigned to paroxetine demonstrated a lower relapse rate
- 316 compared to patients on placebo (see CLINICAL PHARMACOLOGY—Clinical Trials).
- 317 Nevertheless, the physician who prescribes PAXIL for extended periods should periodically
- 318 re-evaluate the long-term usefulness of the drug for the individual patient.

Social Anxiety Disorder: PAXIL is indicated for the treatment of social anxiety disorder,

- also known as social phobia, as defined in DSM-IV (300.23). Social anxiety disorder is
- 321 characterized by a marked and persistent fear of 1 or more social or performance situations in
- which the person is exposed to unfamiliar people or to possible scrutiny by others. Exposure to
- 323 the feared situation almost invariably provokes anxiety, which may approach the intensity of a
- 324 panic attack. The feared situations are avoided or endured with intense anxiety or distress. The 325 avoidance, anxious anticipation, or distress in the feared situation(s) interferes significantly with
- 326 the person's normal routine, occupational or academic functioning, or social activities or
- 327 relationships, or there is marked distress about having the phobias. Lesser degrees of
- 328 performance anxiety or shyness generally do not require psychopharmacological treatment.
- The efficacy of PAXIL was established in three 12-week trials in adult patients with social anxiety disorder (DSM-IV). PAXIL has not been studied in children or adolescents with social
- anxiety disorder (DSW-IV). PAAIL has not been studied in clinical of adolesc
 phobia (see CLINICAL PHARMACOLOGY—Clinical Trials).
- 332 The effectiveness of PAXIL in long-term treatment of social anxiety disorder, i.e., for more
- than 12 weeks, has not been systematically evaluated in adequate and well-controlled trials.
- 334 Therefore, the physician who elects to prescribe PAXIL for extended periods should periodically
- re-evaluate the long-term usefulness of the drug for the individual patient (see DOSAGE AND
- 336 ADMINISTRATION).
- 337 Generalized Anxiety Disorder: PAXIL is indicated for the treatment of Generalized Anxiety
- 338 Disorder (GAD), as defined in DSM-IV. Anxiety or tension associated with the stress of
- everyday life usually does not require treatment with an anxiolytic.
- 340 The efficacy of PAXIL in the treatment of GAD was established in two 8-week
- 341 placebo-controlled trials in adults with GAD. PAXIL has not been studied in children or
- 342 adolescents with Generalized Anxiety Disorder (see CLINICAL PHARMACOLOGY—Clinical

Trials).

344 Generalized Anxiety Disorder (DSM-IV) is characterized by excessive anxiety and worry

345 (apprehensive expectation) that is persistent for at least 6 months and which the person finds

346 difficult to control. It must be associated with at least 3 of the following 6 symptoms:

- 347 Restlessness or feeling keyed up or on edge, being easily fatigued, difficulty concentrating or
- 348 mind going blank, irritability, muscle tension, sleep disturbance.

349 The efficacy of PAXIL in maintaining a response in patients with Generalized Anxiety

350 Disorder, who responded during an 8-week acute treatment phase while taking PAXIL and were

then observed for relapse during a period of up to 24 weeks, was demonstrated in a placebo-

352 controlled trial (see CLINICAL PHARMACOLOGY—Clinical Trials). Nevertheless, the

353 physician who elects to use PAXIL for extended periods should periodically re-evaluate the

long-term usefulness of the drug for the individual patient (see DOSAGE AND

355 ADMINISTRATION).

356 **Posttraumatic Stress Disorder:** PAXIL is indicated for the treatment of Posttraumatic
 357 Stress Disorder (PTSD).

The efficacy of PAXIL in the treatment of PTSD was established in two 12-week placebocontrolled trials in adults with PTSD (DSM-IV) (see CLINICAL PHARMACOLOGY—Clinical Trials).

361 PTSD, as defined by DSM-IV, requires exposure to a traumatic event that involved actual or 362 threatened death or serious injury, or threat to the physical integrity of self or others, and a 363 response that involves intense fear, helplessness, or horror. Symptoms that occur as a result of 364 exposure to the traumatic event include reexperiencing of the event in the form of intrusive 365 thoughts, flashbacks, or dreams, and intense psychological distress and physiological reactivity 366 on exposure to cues to the event; avoidance of situations reminiscent of the traumatic event, 367 inability to recall details of the event, and/or numbing of general responsiveness manifested as 368 diminished interest in significant activities, estrangement from others, restricted range of affect, 369 or sense of foreshortened future; and symptoms of autonomic arousal including hypervigilance, 370 exaggerated startle response, sleep disturbance, impaired concentration, and irritability or 371 outbursts of anger. A PTSD diagnosis requires that the symptoms are present for at least a month 372 and that they cause clinically significant distress or impairment in social, occupational, or other

373 important areas of functioning.

The efficacy of PAXIL in longer-term treatment of PTSD, i.e., for more than 12 weeks, has

not been systematically evaluated in placebo-controlled trials. Therefore, the physician who

376 elects to prescribe PAXIL for extended periods should periodically re-evaluate the long-term

377 usefulness of the drug for the individual patient (see DOSAGE AND ADMINISTRATION).

378 CONTRAINDICATIONS

379 Concomitant use in patients taking either monoamine oxidase inhibitors (MAOIs) or 380 thioridazine is contraindicated (see WARNINGS and PRECAUTIONS).

381 Concomitant use in patients taking pimozide is contraindicated (see PRECAUTIONS).

382 PAXIL is contraindicated in patients with a hypersensitivity to paroxetine or any of the383 inactive ingredients in PAXIL.

384 WARNINGS

385 Clinical Worsening and Suicide Risk: Patients with major depressive disorder (MDD), 386 both adult and pediatric, may experience worsening of their depression and/or the emergence of 387 suicidal ideation and behavior (suicidality) or unusual changes in behavior, whether or not they 388 are taking antidepressant medications, and this risk may persist until significant remission 389 occurs. Suicide is a known risk of depression and certain other psychiatric disorders, and these 390 disorders themselves are the strongest predictors of suicide. There has been a long-standing 391 concern, however, that antidepressants may have a role in inducing worsening of depression and 392 the emergence of suicidality in certain patients during the early phases of treatment. Pooled 393 analyses of short-term placebo-controlled trials of antidepressant drugs (SSRIs and others) showed that these drugs increase the risk of suicidal thinking and behavior (suicidality) in 394 395 children, adolescents, and young adults (ages 18-24) with major depressive disorder (MDD) and 396 other psychiatric disorders. Short-term studies did not show an increase in the risk of suicidality 397 with antidepressants compared to placebo in adults beyond age 24; there was a reduction with 398 antidepressants compared to placebo in adults aged 65 and older. 399 The pooled analyses of placebo-controlled trials in children and adolescents with MDD, 400 obsessive compulsive disorder (OCD), or other psychiatric disorders included a total of 24 short-401 term trials of 9 antidepressant drugs in over 4,400 patients. The pooled analyses of placebo-402 controlled trials in adults with MDD or other psychiatric disorders included a total of 295 short-

- 403 term trials (median duration of 2 months) of 11 antidepressant drugs in over 77,000 patients.
- 404 There was considerable variation in risk of suicidality among drugs, but a tendency toward an
- 405 increase in the younger patients for almost all drugs studied. There were differences in absolute
- 406 risk of suicidality across the different indications, with the highest incidence in MDD. The risk
- 407 differences (drug vs placebo), however, were relatively stable within age strata and across
- 408 indications. These risk differences (drug-placebo difference in the number of cases of suicidality
- 409 (per 1,000 patients treated) are provided in Table 1.
- 410
- 411 **Table 1**

	Drug-Placebo Difference in Number of Cases					
Age Range	of Suicidality per 1,000 Patients Treated					
Increases Comp	pared to Placebo					
<18	14 additional cases					
18-24	5 additional cases					
Decreases Com	Decreases Compared to Placebo					
25-64	1 fewer case					
≥65	6 fewer cases					

412

413

No suicides occurred in any of the pediatric trials. There were suicides in the adult trials, but 414 the number was not sufficient to reach any conclusion about drug effect on suicide.

415 It is unknown whether the suicidality risk extends to longer-term use, i.e., beyond several

416 months. However, there is substantial evidence from placebo-controlled maintenance trials in 417 adults with depression that the use of antidepressants can delay the recurrence of depression.

418 All patients being treated with antidepressants for any indication should be monitored 419 appropriately and observed closely for clinical worsening, suicidality, and unusual changes 420 in behavior, especially during the initial few months of a course of drug therapy, or at times

421 of dose changes, either increases or decreases.

422 The following symptoms, anxiety, agitation, panic attacks, insomnia, irritability, hostility, 423 aggressiveness, impulsivity, akathisia (psychomotor restlessness), hypomania, and mania, have 424 been reported in adult and pediatric patients being treated with antidepressants for major 425 depressive disorder as well as for other indications, both psychiatric and nonpsychiatric. 426 Although a causal link between the emergence of such symptoms and either the worsening of depression and/or the emergence of suicidal impulses has not been established, there is concern 427 428 that such symptoms may represent precursors to emerging suicidality.

429 Consideration should be given to changing the therapeutic regimen, including possibly 430 discontinuing the medication, in patients whose depression is persistently worse, or who are 431 experiencing emergent suicidality or symptoms that might be precursors to worsening depression 432 or suicidality, especially if these symptoms are severe, abrupt in onset, or were not part of the 433 patient's presenting symptoms.

434 Families and caregivers of patients being treated with antidepressants for major 435 depressive disorder or other indications, both psychiatric and nonpsychiatric, should be

436 alerted about the need to monitor patients for the emergence of agitation, irritability,

437 unusual changes in behavior, and the other symptoms described above, as well as the

438 emergence of suicidality, and to report such symptoms immediately to healthcare

439 providers. Such monitoring should include daily observation by families and caregivers.

440 Prescriptions for PAXIL should be written for the smallest quantity of tablets consistent with

441 good patient management, in order to reduce the risk of overdose.

442 Screening Patients for Bipolar Disorder: A major depressive episode may be the initial 443 presentation of bipolar disorder. It is generally believed (though not established in controlled

444 trials) that treating such an episode with an antidepressant alone may increase the likelihood of

445 precipitation of a mixed/manic episode in patients at risk for bipolar disorder. Whether any of the

- 446 symptoms described above represent such a conversion is unknown. However, prior to initiating
- 447 treatment with an antidepressant, patients with depressive symptoms should be adequately
- 448 screened to determine if they are at risk for bipolar disorder; such screening should include a
- 449 detailed psychiatric history, including a family history of suicide, bipolar disorder, and
- 450 depression. It should be noted that PAXIL is not approved for use in treating bipolar depression.

451 Potential for Interaction With Monoamine Oxidase Inhibitors: In patients receiving

452 another serotonin reuptake inhibitor drug in combination with a monoamine oxidase

- 453 inhibitor (MAOI), there have been reports of serious, sometimes fatal, reactions including
- 454 hyperthermia, rigidity, myoclonus, autonomic instability with possible rapid fluctuations of
- 455 vital signs, and mental status changes that include extreme agitation progressing to
- 456 delirium and coma. These reactions have also been reported in patients who have recently
- 457 discontinued that drug and have been started on an MAOI. Some cases presented with
- 458 features resembling neuroleptic malignant syndrome. While there are no human data
- 459 showing such an interaction with PAXIL, limited animal data on the effects of combined
- 460 use of paroxetine and MAOIs suggest that these drugs may act synergistically to elevate
- 461 **blood pressure and evoke behavioral excitation. Therefore, it is recommended that PAXIL**
- 462 not be used in combination with an MAOI, or within 14 days of discontinuing treatment
- with an MAOI. At least 2 weeks should be allowed after stopping PAXIL before starting an
 MAOI.
- 465 **Serotonin Syndrome: The development of a potentially life-threatening serotonin**
- 466 syndrome may occur with SNRIs and SSRIs, including PAXIL, particularly with
- 467 concomitant use of serotonergic drugs (including triptans) and with drugs which impair
- 468 metabolism of serotonin (including MAOIs). Serotonin syndrome symptoms may include
- 469 mental status changes (e.g., agitation, hallucinations, coma), autonomic instability (e.g.,
- 470 tachycardia, labile blood pressure, hyperthermia), neuromuscular aberrations (e.g.,
- 471 hyperreflexia, incoordination) and/or gastrointestinal symptoms (e.g., nausea, vomiting,
- 472 **diarrhea**).
- 473 The concomitant use of PAXIL with MAOIs intended to treat depression is
- 474 contraindicated (see CONTRAINDICATIONS and WARNINGS—Potential for
- 475 Interaction With Monoamine Oxidase Inhibitors).
- 476 If concomitant treatment with PAXIL with a 5-hydroxytryptamine receptor agonist
- 477 (triptan) is clinically warranted, careful observation of the patient is advised, particularly
- 478 during treatment initiation and dose increases (see PRECAUTIONS—Drug Interactions).
- The concomitant use of PAXIL with serotonin precursors (such as tryptophan) is not
 recommended (see PRECAUTIONS—Drug Interactions).
- 481 **Potential Interaction With Thioridazine: Thioridazine administration alone produces**
- 482 prolongation of the QTc interval, which is associated with serious ventricular arrhythmias,
- 483 such as torsade de pointes-type arrhythmias, and sudden death. This effect appears to be
 484 dose related.
- 485 An in vivo study suggests that drugs which inhibit CYP2D6, such as paroxetine, will
- 486 elevate plasma levels of thioridazine. Therefore, it is recommended that paroxetine not be
- 487 used in combination with thioridazine (see CONTRAINDICATIONS and
- 488 **PRECAUTIONS**).
- 489 Usage in Pregnancy: Teratogenic Effects: Epidemiological studies have shown that
- 490 infants born to women who had first trimester paroxetine exposure had an increased risk of
- 491 cardiovascular malformations, primarily ventricular and atrial septal defects (VSDs and ASDs).
- 492 In general, septal defects range from those that are symptomatic and may require surgery to those

- that are asymptomatic and may resolve spontaneously. If a patient becomes pregnant while
- taking paroxetine, she should be advised of the potential harm to the fetus. Unless the benefits of
- 495 paroxetine to the mother justify continuing treatment, consideration should be given to either
- 496 discontinuing paroxetine therapy or switching to another antidepressant (see PRECAUTIONS—
- 497 Discontinuation of Treatment with PAXIL). For women who intend to become pregnant or are in
- 498 their first trimester of pregnancy, paroxetine should only be initiated after consideration of the499 other available treatment options.
- A study based on Swedish national registry data evaluated infants of 6,896 women exposed to antidepressants in early pregnancy (5,123 women exposed to SSRIs; including 815 for paroxetine). Infants exposed to paroxetine in early pregnancy had an increased risk of
- 503 cardiovascular malformations (primarily VSDs and ASDs) compared to the entire registry
- 504 population (OR 1.8; 95% confidence interval 1.1-2.8). The rate of cardiovascular malformations
- following early pregnancy paroxetine exposure was 2% vs. 1% in the entire registry population.
- 506 Among the same paroxetine exposed infants, an examination of the data showed no increase in
- 507 the overall risk for congenital malformations.
- 508 A separate retrospective cohort study using US United Healthcare data evaluated 5,956 infants 509 of mothers dispensed paroxetine or other antidepressants during the first trimester (n = 815 for 510 paroxetine). This study showed a trend towards an increased risk for cardiovascular
- 511 malformations for paroxetine compared to other antidepressants (OR 1.5; 95% confidence
- 512 interval 0.8-2.9). The prevalence of cardiovascular malformations following first trimester
- 513 dispensing was 1.5% for paroxetine vs. 1% for other antidepressants. Nine out of 12 infants with
- 514 cardiovascular malformations whose mothers were dispensed paroxetine in the first trimester had
- 515 VSDs. This study also suggested an increased risk of overall major congenital malformations
- 516 (inclusive of the cardiovascular defects) for paroxetine compared to other antidepressants (OR
- 517 1.8; 95% confidence interval 1.2-2.8). The prevalence of all congenital malformations following
- 518 first trimester exposure was 4% for paroxetine vs. 2% for other antidepressants.
- 519 Animal Findings: Reproduction studies were performed at doses up to 50 mg/kg/day in rats 520 and 6 mg/kg/day in rabbits administered during organogenesis. These doses are approximately 8 (rat) and 2 (rabbit) times the MRHD on an mg/m^2 basis. These studies have revealed no 521 522 evidence of teratogenic effects. However, in rats, there was an increase in pup deaths during the 523 first 4 days of lactation when dosing occurred during the last trimester of gestation and continued 524 throughout lactation. This effect occurred at a dose of 1 mg/kg/day or approximately one-sixth of the MRHD on an mg/m^2 basis. The no-effect dose for rat pup mortality was not determined. The 525 526 cause of these deaths is not known.
- 527 *Nonteratogenic Effects:* Neonates exposed to PAXIL and other SSRIs or serotonin and
- 528 norepinephrine reuptake inhibitors (SNRIs), late in the third trimester have developed
- 529 complications requiring prolonged hospitalization, respiratory support, and tube feeding. Such
- 530 complications can arise immediately upon delivery. Reported clinical findings have included
- respiratory distress, cyanosis, apnea, seizures, temperature instability, feeding difficulty,
- 532 vomiting, hypoglycemia, hypotonia, hypertonia, hyperreflexia, tremor, jitteriness, irritability, and

533 constant crying. These features are consistent with either a direct toxic effect of SSRIs and

534 SNRIs or, possibly, a drug discontinuation syndrome. It should be noted that, in some cases, the

535 clinical picture is consistent with serotonin syndrome (see WARNINGS—Potential for

536 Interaction With Monoamine Oxidase Inhibitors).

537 Infants exposed to SSRIs in late pregnancy may have an increased risk for persistent 538 pulmonary hypertension of the newborn (PPHN). PPHN occurs in 1 - 2 per 1,000 live births in 539 the general population and is associated with substantial neonatal morbidity and mortality. In a 540 retrospective case-control study of 377 women whose infants were born with PPHN and 836 541 women whose infants were born healthy, the risk for developing PPHN was approximately sixfold higher for infants exposed to SSRIs after the 20th week of gestation compared to infants who 542 543 had not been exposed to antidepressants during pregnancy. There is currently no corroborative 544 evidence regarding the risk for PPHN following exposure to SSRIs in pregnancy; this is the first 545 study that has investigated the potential risk. The study did not include enough cases with 546 exposure to individual SSRIs to determine if all SSRIs posed similar levels of PPHN risk.

547 There have also been postmarketing reports of premature births in pregnant women exposed 548 to paroxetine or other SSRIs.

549 When treating a pregnant woman with paroxetine during the third trimester, the physician

should carefully consider both the potential risks and benefits of treatment (see DOSAGE AND

ADMINISTRATION). Physicians should note that in a prospective longitudinal study of 201

women with a history of major depression who were euthymic at the beginning of pregnancy,

women who discontinued antidepressant medication during pregnancy were more likely to

experience a relapse of major depression than women who continued antidepressant medication.

555 **PRECAUTIONS**

556 General: Activation of Mania/Hypomania: During premarketing testing, hypomania or
557 mania occurred in approximately 1.0% of unipolar patients treated with PAXIL compared to
558 1.1% of active-control and 0.3% of placebo-treated unipolar patients. In a subset of patients

classified as bipolar, the rate of manic episodes was 2.2% for PAXIL and 11.6% for the

560 combined active-control groups. As with all drugs effective in the treatment of major depressive 561 disorder, PAXIL should be used cautiously in patients with a history of mania.

562 **Seizures:** During premarketing testing, seizures occurred in 0.1% of patients treated with 563 PAXIL, a rate similar to that associated with other drugs effective in the treatment of major 564 depressive disorder. PAXIL should be used cautiously in patients with a history of seizures. It 565 should be discontinued in any patient who develops seizures.

566 **Discontinuation of Treatment With PAXIL:** Recent clinical trials supporting the various 567 approved indications for PAXIL employed a taper-phase regimen, rather than an abrupt 568 discontinuation of treatment. The taper-phase regimen used in GAD and PTSD clinical trials 569 involved an incremental decrease in the daily dose by 10 mg/day at weekly intervals. When a 570 daily dose of 20 mg/day was reached, patients were continued on this dose for 1 week before 571 treatment was stopped. 572 With this regimen in those studies, the following adverse events were reported at an incidence

573 of 2% or greater for PAXIL and were at least twice that reported for placebo: Abnormal dreams,

574 paresthesia, and dizziness. In the majority of patients, these events were mild to moderate and 575 were self-limiting and did not require medical intervention.

576 During marketing of PAXIL and other SSRIs and SNRIs, there have been spontaneous reports 577 of adverse events occurring, upon the discontinuation of these drugs (particularly when abrupt), 578 including the following: Dysphoric mood, irritability, agitation, dizziness, sensory disturbances 579 (e.g., paresthesias such as electric shock sensations and tinnitus), anxiety, confusion, headache, 580 lethargy, emotional lability, insomnia, and hypomania. While these events are generally self-581 limiting, there have been reports of serious discontinuation symptoms.

Patients should be monitored for these symptoms when discontinuing treatment with PAXIL.
A gradual reduction in the dose rather than abrupt cessation is recommended whenever possible.
If intolerable symptoms occur following a decrease in the dose or upon discontinuation of
treatment, then resuming the previously prescribed dose may be considered. Subsequently, the
physician may continue decreasing the dose but at a more gradual rate (see DOSAGE AND
ADMINISTRATION).

588 See also PRECAUTIONS—Pediatric Use, for adverse events reported upon discontinuation 589 of treatment with PAXIL in pediatric patients.

590 Akathisia: The use of paroxetine or other SSRIs has been associated with the development 591 of akathisia, which is characterized by an inner sense of restlessness and psychomotor agitation 592 such as an inability to sit or stand still usually associated with subjective distress. This is most 593 likely to occur within the first few weeks of treatment.

594 *Hyponatremia:* Several cases of hyponatremia have been reported. The hyponatremia
595 appeared to be reversible when PAXIL was discontinued. The majority of these occurrences
596 have been in elderly individuals, some in patients taking diuretics or who were otherwise volume
597 depleted.

598 **Abnormal Bleeding:** Published case reports have documented the occurrence of bleeding 599 episodes in patients treated with psychotropic agents that interfere with serotonin reuptake.

600 Subsequent epidemiological studies, both of the case-control and cohort design, have

601 demonstrated an association between use of psychotropic drugs that interfere with serotonin

reuptake and the occurrence of upper gastrointestinal bleeding. In 2 studies, concurrent use of a

nonsteroidal anti-inflammatory drug (NSAID) or aspirin potentiated the risk of bleeding (see

Drug Interactions). Although these studies focused on upper gastrointestinal bleeding, there is

reason to believe that bleeding at other sites may be similarly potentiated. Patients should be

606 cautioned regarding the risk of bleeding associated with the concomitant use of paroxetine with

607 NSAIDs, aspirin, or other drugs that affect coagulation.

608 **Use in Patients With Concomitant Illness:** Clinical experience with PAXIL in patients

609 with certain concomitant systemic illness is limited. Caution is advisable in using PAXIL in

610 patients with diseases or conditions that could affect metabolism or hemodynamic responses.

611 As with other SSRIs, mydriasis has been infrequently reported in premarketing studies with

612 PAXIL. A few cases of acute angle closure glaucoma associated with paroxetine therapy have been reported in the literature. As mydriasis can cause acute angle closure in patients with 613 614 narrow angle glaucoma, caution should be used when PAXIL is prescribed for patients with 615 narrow angle glaucoma. 616 PAXIL has not been evaluated or used to any appreciable extent in patients with a recent history of myocardial infarction or unstable heart disease. Patients with these diagnoses were 617 618 excluded from clinical studies during the product's premarket testing. Evaluation of 619 electrocardiograms of 682 patients who received PAXIL in double-blind, placebo-controlled 620 trials, however, did not indicate that PAXIL is associated with the development of significant 621 ECG abnormalities. Similarly, PAXIL does not cause any clinically important changes in heart 622 rate or blood pressure. 623 Increased plasma concentrations of paroxetine occur in patients with severe renal impairment 624 (creatinine clearance <30 mL/min.) or severe hepatic impairment. A lower starting dose should 625 be used in such patients (see DOSAGE AND ADMINISTRATION). 626 Information for Patients: PAXIL should not be chewed or crushed, and should be swallowed 627 whole. 628 Patients should be cautioned about the risk of serotonin syndrome with the concomitant use of 629 PAXIL and triptans, tramadol, or other serotonergic agents. 630 Prescribers or other health professionals should inform patients, their families, and their 631 caregivers about the benefits and risks associated with treatment with PAXIL and should counsel 632 them in its appropriate use. A patient Medication Guide about "Antidepressant Medicines, 633 Depression and Other Serious Mental Illnesses, and Suicidal Thoughts or Actions" is available 634 for PAXIL. The prescriber or health professional should instruct patients, their families, and their 635 caregivers to read the Medication Guide and should assist them in understanding its contents. 636 Patients should be given the opportunity to discuss the contents of the Medication Guide and to 637 obtain answers to any questions they may have. The complete text of the Medication Guide is 638 reprinted at the end of this document. 639 Patients should be advised of the following issues and asked to alert their prescriber if these 640 occur while taking PAXIL. 641 Clinical Worsening and Suicide Risk: Patients, their families, and their caregivers should 642 be encouraged to be alert to the emergence of anxiety, agitation, panic attacks, insomnia, 643 irritability, hostility, aggressiveness, impulsivity, akathisia (psychomotor restlessness), 644 hypomania, mania, other unusual changes in behavior, worsening of depression, and suicidal 645 ideation, especially early during antidepressant treatment and when the dose is adjusted up or 646 down. Families and caregivers of patients should be advised to look for the emergence of such 647 symptoms on a day-to-day basis, since changes may be abrupt. Such symptoms should be

- 648 reported to the patient's prescriber or health professional, especially if they are severe, abrupt in
- onset, or were not part of the patient's presenting symptoms. Symptoms such as these may be
- associated with an increased risk for suicidal thinking and behavior and indicate a need for very
- close monitoring and possibly changes in the medication.

652 Drugs That Interfere With Hemostasis (NSAIDs, Aspirin, Warfarin, etc.): Patients 653 should be cautioned about the concomitant use of paroxetine and NSAIDs, aspirin, or other drugs 654 that affect coagulation since the combined use of psychotropic drugs that interfere with serotonin 655 reuptake and these agents has been associated with an increased risk of bleeding.

Interference With Cognitive and Motor Performance: Any psychoactive drug may
 impair judgment, thinking, or motor skills. Although in controlled studies PAXIL has not been
 shown to impair psychomotor performance, patients should be cautioned about operating
 hazardous machinery, including automobiles, until they are reasonably certain that therapy with
 PAXIL does not affect their ability to engage in such activities.

661 **Completing Course of Therapy:** While patients may notice improvement with treatment 662 with PAXIL in 1 to 4 weeks, they should be advised to continue therapy as directed.

663 **Concomitant Medication:** Patients should be advised to inform their physician if they are 664 taking, or plan to take, any prescription or over-the-counter drugs, since there is a potential for 665 interactions.

Alcohol: Although PAXIL has not been shown to increase the impairment of mental and
 motor skills caused by alcohol, patients should be advised to avoid alcohol while taking PAXIL.

668 *Pregnancy:* Patients should be advised to notify their physician if they become pregnant or
 669 intend to become pregnant during therapy (see WARNINGS—Usage in Pregnancy: *Teratogenic* 670 and Nonteratogenic Effects).

Nursing: Patients should be advised to notify their physician if they are breast-feeding an
 infant (see PRECAUTIONS—Nursing Mothers).

673 **Laboratory Tests:** There are no specific laboratory tests recommended.

674 **Drug Interactions:** *Tryptophan:* As with other serotonin reuptake inhibitors, an interaction

between paroxetine and tryptophan may occur when they are coadministered. Adverse

676 experiences, consisting primarily of headache, nausea, sweating, and dizziness, have been

677 reported when tryptophan was administered to patients taking PAXIL. Consequently,

678 concomitant use of PAXIL with tryptophan is not recommended (see WARNINGS—Serotonin679 Syndrome).

680 *Monoamine Oxidase Inhibitors:* See CONTRAINDICATIONS and WARNINGS.

681 *Pimozide:* In a controlled study of healthy volunteers, after PAXIL was titrated to 60 mg 682 daily, co-administration of a single dose of 2 mg pimozide was associated with mean increases in 683 pimozide AUC of 151% and C_{max} of 62%, compared to pimozide administered alone. Due to the 684 narrow therapeutic index of pimozide and its known ability to prolong the QT interval,

685 concomitant use of pimozide and PAXIL is contraindicated (see CONTRAINDICATIONS).

686 Serotonergic Drugs: Based on the mechanism of action of SNRIs and SSRIs, including

687 paroxetine hydrochloride, and the potential for serotonin syndrome, caution is advised when

688 PAXIL is coadministered with other drugs that may affect the serotonergic neurotransmitter

689 systems, such as triptans, linezolid (an antibiotic which is a reversible non-selective MAOI),

690 lithium, tramadol, or St. John's Wort (see WARNINGS—Serotonin Syndrome). The concomitant

691 use of PAXIL with other SSRIs, SNRIs or tryptophan is not recommended (see

- 692 PRECAUTIONS—Drug Interactions, *Tryptophan*).
- 693 *Thioridazine:* See CONTRAINDICATIONS and WARNINGS.

694 Warfarin: Preliminary data suggest that there may be a pharmacodynamic interaction (that
695 causes an increased bleeding diathesis in the face of unaltered prothrombin time) between
696 paroxetine and warfarin. Since there is little clinical experience, the concomitant administration
697 of PAXIL and warfarin should be undertaken with caution (see *Drugs That Interfere With*698 *Hemostasis*).

Triptans: There have been rare postmarketing reports of serotonin syndrome with the use of
 an SSRI and a triptan. If concomitant use of PAXIL with a triptan is clinically warranted, careful
 observation of the patient is advised, particularly during treatment initiation and dose increases
 (see WARNINGS—Serotonin Syndrome).

703 *Drugs Affecting Hepatic Metabolism:* The metabolism and pharmacokinetics of
 704 paroxetine may be affected by the induction or inhibition of drug-metabolizing enzymes.

Cimetidine: Cimetidine inhibits many cytochrome P₄₅₀ (oxidative) enzymes. In a study
where PAXIL (30 mg once daily) was dosed orally for 4 weeks, steady-state plasma
concentrations of paroxetine were increased by approximately 50% during coadministration with
oral cimetidine (300 mg three times daily) for the final week. Therefore, when these drugs are
administered concurrently, dosage adjustment of PAXIL after the 20-mg starting dose should be
guided by clinical effect. The effect of paroxetine on cimetidine's pharmacokinetics was not
studied.

712**Phenobarbital:** Phenobarbital induces many cytochrome P_{450} (oxidative) enzymes. When a713single oral 30-mg dose of PAXIL was administered at phenobarbital steady state (100 mg once714daily for 14 days), paroxetine AUC and $T_{1/2}$ were reduced (by an average of 25% and 38%,

respectively) compared to paroxetine administered alone. The effect of paroxetine on

716 phenobarbital pharmacokinetics was not studied. Since PAXIL exhibits nonlinear

pharmacokinetics, the results of this study may not address the case where the 2 drugs are both

being chronically dosed. No initial dosage adjustment of PAXIL is considered necessary when

- coadministered with phenobarbital; any subsequent adjustment should be guided by clinical
- 720 effect.

721**Phenytoin:** When a single oral 30-mg dose of PAXIL was administered at phenytoin steady722state (300 mg once daily for 14 days), paroxetine AUC and $T_{1/2}$ were reduced (by an average of

50% and 35%, respectively) compared to PAXIL administered alone. In a separate study, when a

single oral 300-mg dose of phenytoin was administered at paroxetine steady state (30 mg once

daily for 14 days), phenytoin AUC was slightly reduced (12% on average) compared to

phenytoin administered alone. Since both drugs exhibit nonlinear pharmacokinetics, the above

studies may not address the case where the 2 drugs are both being chronically dosed. No initial

dosage adjustments are considered necessary when these drugs are coadministered; any

subsequent adjustments should be guided by clinical effect (see ADVERSE REACTIONS—

730 Postmarketing Reports).

731 **Drugs Metabolized by CYP2D6:** Many drugs, including most drugs effective in the

- treatment of major depressive disorder (paroxetine, other SSRIs and many tricyclics), are
- metabolized by the cytochrome P_{450} isozyme CYP2D6. Like other agents that are metabolized by
- 734 CYP2D6, paroxetine may significantly inhibit the activity of this isozyme. In most patients
- (>90%), this CYP2D6 isozyme is saturated early during dosing with PAXIL. In 1 study, daily
- dosing of PAXIL (20 mg once daily) under steady-state conditions increased single dose
- desipramine (100 mg) C_{max} , AUC, and $T_{1/2}$ by an average of approximately 2-, 5-, and 3-fold,
- respectively. Concomitant use of paroxetine with risperidone, a CYP2D6 substrate has also been
- evaluated. In 1 study, daily dosing of paroxetine 20 mg in patients stabilized on risperidone (4 to
- 740 8 mg/day) increased mean plasma concentrations of risperidone approximately 4-fold, decreased
- 741 9-hydroxyrisperidone concentrations approximately 10%, and increased concentrations of the
- active moiety (the sum of risperidone plus 9-hydroxyrisperidone) approximately 1.4-fold. The
- reflect of paroxetine on the pharmacokinetics of atomoxetine has been evaluated when both drugs
- were at steady state. In healthy volunteers who were extensive metabolizers of CYP2D6,
- paroxetine 20 mg daily was given in combination with 20 mg atomoxetine every 12 hours. This
- resulted in increases in steady state atomoxetine AUC values that were 6- to 8-fold greater and in
- atomoxetine C_{max} values that were 3- to 4-fold greater than when atomoxetine was given alone.
- Dosage adjustment of atomoxetine may be necessary and it is recommended that atomoxetine beinitiated at a reduced dose when it is given with paroxetine.
- Concomitant use of PAXIL with other drugs metabolized by cytochrome CYP2D6 has not
 been formally studied but may require lower doses than usually prescribed for either PAXIL or
 the other drug.
- Therefore, coadministration of PAXIL with other drugs that are metabolized by this isozyme, including certain drugs effective in the treatment of major depressive disorder (e.g., nortriptyline, amitriptyline, imipramine, desipramine, and fluoxetine), phenothiazines, risperidone, and Type 1C antiarrhythmics (e.g., propafenone, flecainide, and encainide), or that inhibit this enzyme (e.g., quinidine), should be approached with caution.
- However, due to the risk of serious ventricular arrhythmias and sudden death potentially
 associated with elevated plasma levels of thioridazine, paroxetine and thioridazine should not be
 coadministered (see CONTRAINDICATIONS and WARNINGS).
- At steady state, when the CYP2D6 pathway is essentially saturated, paroxetine clearance is
 governed by alternative P₄₅₀ isozymes that, unlike CYP2D6, show no evidence of saturation (see
 PRECAUTIONS—*Tricyclic Antidepressants*).
- 764 Drugs Metabolized by Cytochrome CYP3A4: An in vivo interaction study involving 765 the coadministration under steady-state conditions of paroxetine and terfenadine, a substrate for 766 cytochrome CYP3A4, revealed no effect of paroxetine on terfenadine pharmacokinetics. In 767 addition, in vitro studies have shown ketoconazole, a potent inhibitor of CYP3A4 activity, to be 768 at least 100 times more potent than paroxetine as an inhibitor of the metabolism of several 769 substrates for this enzyme, including terfenadine, astemizole, cisapride, triazolam, and 770 cyclosporine. Based on the assumption that the relationship between paroxetine's in vitro K_i and 771 its lack of effect on terfenadine's in vivo clearance predicts its effect on other CYP3A4

- substrates, paroxetine's extent of inhibition of CYP3A4 activity is not likely to be of clinicalsignificance.
- 774 *Tricyclic Antidepressants (TCAs):* Caution is indicated in the coadministration of
 775 tricyclic antidepressants (TCAs) with PAXIL, because paroxetine may inhibit TCA metabolism.
 776 Plasma TCA concentrations may need to be monitored, and the dose of TCA may need to be
 777 reduced, if a TCA is coadministered with PAXIL (see PRECAUTIONS—*Drugs Metabolized by*
- 778 *Cytochrome CYP2D6*).
- Drugs Highly Bound to Plasma Protein: Because paroxetine is highly bound to plasma
 protein, administration of PAXIL to a patient taking another drug that is highly protein bound
 may cause increased free concentrations of the other drug, potentially resulting in adverse events.
 Conversely, adverse effects could result from displacement of paroxetine by other highly bound
 drugs.
- 784 **Drugs That Interfere With Hemostasis (NSAIDs, Aspirin, Warfarin, etc.)**:
- Serotonin release by platelets plays an important role in hemostasis. Epidemiological studies of
 the case-control and cohort design that have demonstrated an association between use of
- 787 psychotropic drugs that interfere with serotonin reuptake and the occurrence of upper
- gastrointestinal bleeding have also shown that concurrent use of an NSAID or aspirin potentiated
 the risk of bleeding. Thus, patients should be cautioned about the use of such drugs concurrently
- with paroxetine.
- Alcohol: Although PAXIL does not increase the impairment of mental and motor skills
 caused by alcohol, patients should be advised to avoid alcohol while taking PAXIL.
- *Lithium:* A multiple-dose study has shown that there is no pharmacokinetic interaction
 between PAXIL and lithium carbonate. However, due to the potential for serotonin syndrome,
 caution is advised when PAXIL is coadministered with lithium.
- Digoxin: The steady-state pharmacokinetics of paroxetine was not altered when administered
 with digoxin at steady state. Mean digoxin AUC at steady state decreased by 15% in the
 presence of paroxetine. Since there is little clinical experience, the concurrent administration of
 paroxetine and digoxin should be undertaken with caution.
- *Diazepam:* Under steady-state conditions, diazepam does not appear to affect paroxetine
 kinetics. The effects of paroxetine on diazepam were not evaluated.
- 802 *Procyclidine:* Daily oral dosing of PAXIL (30 mg once daily) increased steady-state AUC₀₋
 803 ₂₄, C_{max}, and C_{min} values of procyclidine (5 mg oral once daily) by 35%, 37%, and 67%,
- respectively, compared to procyclidine alone at steady state. If anticholinergic effects are seen,the dose of procyclidine should be reduced.
- 806 **Beta-Blockers:** In a study where propranolol (80 mg twice daily) was dosed orally for
- 807 18 days, the established steady-state plasma concentrations of propranolol were unaltered during
- 808 coadministration with PAXIL (30 mg once daily) for the final 10 days. The effects of
- 809 propranolol on paroxetine have not been evaluated (see ADVERSE REACTIONS—
- 810 Postmarketing Reports).
- 811 **Theophylline:** Reports of elevated theophylline levels associated with treatment with

- 812 PAXIL have been reported. While this interaction has not been formally studied, it is
- 813 recommended that theophylline levels be monitored when these drugs are concurrently
- 814 administered.
- 815 *Fosamprenavir/Ritonavir:* Co-administration of fosamprenavir/ritonavir with paroxetine
- 816 significantly decreased plasma levels of paroxetine. Any dose adjustment should be guided by 817 clinical effect (tolerability and efficacy).
- 818 *Electroconvulsive Therapy (ECT):* There are no clinical studies of the combined use of
 819 ECT and PAXIL.
- 820 Carcinogenesis, Mutagenesis, Impairment of Fertility: *Carcinogenesis:* Two-year
- 821 carcinogenicity studies were conducted in rodents given paroxetine in the diet at 1, 5, and
- 822 25 mg/kg/day (mice) and 1, 5, and 20 mg/kg/day (rats). These doses are up to 2.4 (mouse) and
- 823 3.9 (rat) times the maximum recommended human dose (MRHD) for major depressive disorder,
- social anxiety disorder, GAD, and PTSD on a mg/m^2 basis. Because the MRHD for major
- depressive disorder is slightly less than that for OCD (50 mg versus 60 mg), the doses used in
- these carcinogenicity studies were only 2.0 (mouse) and 3.2 (rat) times the MRHD for OCD.
- 827 There was a significantly greater number of male rats in the high-dose group with reticulum cell
- sarcomas (1/100, 0/50, 0/50, and 4/50 for control, low-, middle-, and high-dose groups,
- 829 respectively) and a significantly increased linear trend across dose groups for the occurrence of
- 830 lymphoreticular tumors in male rats. Female rats were not affected. Although there was a
- 831 dose-related increase in the number of tumors in mice, there was no drug-related increase in the
- number of mice with tumors. The relevance of these findings to humans is unknown.
- Mutagenesis: Paroxetine produced no genotoxic effects in a battery of 5 in vitro and 2 in
 vivo assays that included the following: Bacterial mutation assay, mouse lymphoma mutation
 assay, unscheduled DNA synthesis assay, and tests for cytogenetic aberrations in vivo in mouse
 bone marrow and in vitro in human lymphocytes and in a dominant lethal test in rats.
- *Impairment of Fertility:* A reduced pregnancy rate was found in reproduction studies in
 rats at a dose of paroxetine of 15 mg/kg/day, which is 2.9 times the MRHD for major depressive
 disorder, social anxiety disorder, GAD, and PTSD or 2.4 times the MRHD for OCD on a mg/m²
- basis. Irreversible lesions occurred in the reproductive tract of male rats after dosing in toxicity
- studies for 2 to 52 weeks. These lesions consisted of vacuolation of epididymal tubular
- epithelium at 50 mg/kg/day and atrophic changes in the seminiferous tubules of the testes with
- arrested spermatogenesis at 25 mg/kg/day (9.8 and 4.9 times the MRHD for major depressive
- disorder, social anxiety disorder, and GAD; 8.2 and 4.1 times the MRHD for OCD and PD on a
- $m_{\rm g}/m^2$ basis).
 - 846 **Pregnancy:** Pregnancy Category D. See WARNINGS—Usage in Pregnancy: *Teratogenic and* 847 *Nonteratogenic Effects*.
 - 848 **Labor and Delivery:** The effect of paroxetine on labor and delivery in humans is unknown.
 - 849 **Nursing Mothers:** Like many other drugs, paroxetine is secreted in human milk, and caution
 - should be exercised when PAXIL is administered to a nursing woman.
 - 851 **Pediatric Use:** Safety and effectiveness in the pediatric population have not been established

- 852 (see BOX WARNING and WARNINGS—Clinical Worsening and Suicide Risk). Three
- 853 placebo-controlled trials in 752 pediatric patients with MDD have been conducted with PAXIL,
- and the data were not sufficient to support a claim for use in pediatric patients. Anyone
- 855 considering the use of PAXIL in a child or adolescent must balance the potential risks with the
- 856 clinical need.
- 857 In placebo-controlled clinical trials conducted with pediatric patients, the following adverse 858 events were reported in at least 2% of pediatric patients treated with PAXIL and occurred at a
- rate at least twice that for pediatric patients receiving placebo: emotional lability (including self-
- harm, suicidal thoughts, attempted suicide, crying, and mood fluctuations), hostility, decreased
- 861 appetite, tremor, sweating, hyperkinesia, and agitation.
- 862 Events reported upon discontinuation of treatment with PAXIL in the pediatric clinical trials
- that included a taper phase regimen, which occurred in at least 2% of patients who received
- 864 PAXIL and which occurred at a rate at least twice that of placebo, were: emotional lability
- 865 (including suicidal ideation, suicide attempt, mood changes, and tearfulness), nervousness,
- 866 dizziness, nausea, and abdominal pain (see Discontinuation of Treatment With PAXIL).
- 867 Geriatric Use: In worldwide premarketing clinical trials with PAXIL, 17% of patients treated
- 868 with PAXIL (approximately 700) were 65 years of age or older. Pharmacokinetic studies
- 869 revealed a decreased clearance in the elderly, and a lower starting dose is recommended; there
- 870 were, however, no overall differences in the adverse event profile between elderly and younger
- 871 patients, and effectiveness was similar in younger and older patients (see CLINICAL
- 872 PHARMACOLOGY and DOSAGE AND ADMINISTRATION).

873 ADVERSE REACTIONS

- 874 Associated With Discontinuation of Treatment: Twenty percent (1,199/6,145) of patients
- treated with PAXIL in worldwide clinical trials in major depressive disorder and 16.1%
- 876 (84/522), 11.8% (64/542), 9.4% (44/469), 10.7% (79/735), and 11.7% (79/676) of patients
- 877 treated with PAXIL in worldwide trials in social anxiety disorder, OCD, panic disorder, GAD,
- and PTSD, respectively, discontinued treatment due to an adverse event. The most common
- 879 events ($\geq 1\%$) associated with discontinuation and considered to be drug related (i.e., those events
- associated with dropout at a rate approximately twice or greater for PAXIL compared to placebo)
- 881 included the following:
- 882

		ajor ·essive					Social	Anxiety	Gene	ralized		
	Disc	order	OCD		Panic Disorder		Disorder		Anxiety Disorder		PTSD	
	PAXIL	Placebo	PAXIL	Placebo	PAXIL	Placebo	PAXIL	Placebo	PAXIL	Placebo	PAXIL	Placebo
CNS												
Somnolence	2.3%	0.7%			1.9%	0.3%	3.4%	0.3%	2.0%	0.2%	2.8%	0.6%
Insomnia			1.7%	0%	1.3%	0.3%	3.1%	0%				—
Agitation	1.1%	0.5%										—
Tremor	1.1%	0.3%					1.7%	0%			1.0%	0.2%
Anxiety		_					1.1%	0%			_	—
Dizziness			1.5%	0%			1.9%	0%	1.0%	0.2%		
Gastroin-												
testinal												
Constipation			1.1%	0%							—	—
Nausea	3.2%	1.1%	1.9%	0%	3.2%	1.2%	4.0%	0.3%	2.0%	0.2%	2.2%	0.6%
Diarrhea	1.0%	0.3%										
Dry mouth	1.0%	0.3%										—
Vomiting	1.0%	0.3%					1.0%	0%			—	—
Flatulence							1.0%	0.3%				—
Other												
Asthenia	1.6%	0.4%	1.9%	0.4%			2.5%	0.6%	1.8%	0.2%	1.6%	0.2%
Abnormal												
ejaculation ¹	1.6%	0%	2.1%	0%			4.9%	0.6%	2.5%	0.5%	—	—
Sweating	1.0%	0.3%					1.1%	0%	1.1%	0.2%		—
Impotence ¹			1.5%	0%								—
Libido												
Decreased							1.0%	0%			—	—

883 Where numbers are not provided the incidence of the adverse events in patients treated with PAXIL was not >1% or 884 was not greater than or equal to 2 times the incidence of placebo.

885 1. Incidence corrected for gender.

886

887 **Commonly Observed Adverse Events:** *Major Depressive Disorder:* The most

888 commonly observed adverse events associated with the use of paroxetine (incidence of 5% or

greater and incidence for PAXIL at least twice that for placebo, derived from Table 2) were:

890 Asthenia, sweating, nausea, decreased appetite, somnolence, dizziness, insomnia, tremor,

891 nervousness, ejaculatory disturbance, and other male genital disorders.

892 Obsessive Compulsive Disorder: The most commonly observed adverse events
893 associated with the use of paroxetine (incidence of 5% or greater and incidence for PAXIL at
894 least twice that of placebo, derived from Table 3) were: Nausea, dry mouth, decreased appetite,
895 constipation, dizziness, somnolence, tremor, sweating, impotence, and abnormal ejaculation.

896 Panic Disorder: The most commonly observed adverse events associated with the use of
897 paroxetine (incidence of 5% or greater and incidence for PAXIL at least twice that for placebo,
898 derived from Table 3) were: Asthenia, sweating, decreased appetite, libido decreased, tremor,
899 abnormal ejaculation, female genital disorders, and impotence.

900 Social Anxiety Disorder: The most commonly observed adverse events associated with 901 the use of paroxetine (incidence of 5% or greater and incidence for PAXIL at least twice that for 902 placebo, derived from Table 3) were: Sweating, nausea, dry mouth, constipation, decreased 903 appetite, somnolence, tremor, libido decreased, yawn, abnormal ejaculation, female genital 904 disorders, and impotence.

Generalized Anxiety Disorder: The most commonly observed adverse events associated
 with the use of paroxetine (incidence of 5% or greater and incidence for PAXIL at least twice
 that for placebo, derived from Table 4) were: Asthenia, infection, constipation, decreased
 appetite, dry mouth, nausea, libido decreased, somnolence, tremor, sweating, and abnormal
 ejaculation.

910 **Posttraumatic Stress Disorder:** The most commonly observed adverse events associated 911 with the use of paroxetine (incidence of 5% or greater and incidence for PAXIL at least twice 912 that for placebo, derived from Table 4) were: Asthenia, sweating, nausea, dry mouth, diarrhea, 913 decreased appetite, somnolence, libido decreased, abnormal ejaculation, female genital disorders, 914 and impotence.

915 Incidence in Controlled Clinical Trials: The prescriber should be aware that the figures in 916 the tables following cannot be used to predict the incidence of side effects in the course of usual 917 medical practice where patient characteristics and other factors differ from those that prevailed in 918 the clinical trials. Similarly, the cited frequencies cannot be compared with figures obtained from 919 other clinical investigations involving different treatments, uses, and investigators. The cited 920 figures, however, do provide the prescribing physician with some basis for estimating the 921 relative contribution of drug and nondrug factors to the side effect incidence rate in the 922 populations studied. 923 Major Depressive Disorder: Table 2 enumerates adverse events that occurred at an 924 incidence of 1% or more among paroxetine-treated patients who participated in short-term 925 (6-week) placebo-controlled trials in which patients were dosed in a range of 20 mg to 926 50 mg/day. Reported adverse events were classified using a standard COSTART-based

927 Dictionary terminology.

928

929 **Table 2. Treatment-Emergent Adverse Experience Incidence in Placebo-Controlled**

930	Clinical Trials for Major Depressive Disorder ¹
150	Chinear I mais for major Depressive Disorder

		PAXIL	Placebo
Body System	Preferred Term	(n = 421)	(n = 421)
Body as a Whole	Headache	18%	17%
	Asthenia	15%	6%
Cardiovascular	Palpitation	3%	1%
	Vasodilation	3%	1%
Dermatologic	Sweating	11%	2%
-	Rash	2%	1%
Gastrointestinal	Nausea	26%	9%
	Dry Mouth	18%	12%
	Constipation	14%	9%
	Diarrhea	12%	8%
	Decreased Appetite	6%	2%
	Flatulence	4%	2%
	Oropharynx Disorder ²	2%	0%
	Dyspepsia	2%	1%
Musculoskeletal	Myopathy	2%	1%
	Myalgia	2%	1%
	Myasthenia	1%	0%
Nervous System	Somnolence	23%	9%
	Dizziness	13%	6%
	Insomnia	13%	6%
	Tremor	8%	2%
	Nervousness	5%	3%
	Anxiety	5%	3%
	Paresthesia	4%	2%
	Libido Decreased	3%	0%
	Drugged Feeling	2%	1%
	Confusion	1%	0%
Respiration	Yawn	4%	0%
Special Senses	Blurred Vision	4%	1%
	Taste Perversion	2%	0%
Urogenital System	Ejaculatory Disturbance ^{3,4}	13%	0%
-	Other Male Genital Disorders ^{3,5}	10%	0%
	Urinary Frequency	3%	1%
	Urination Disorder ⁶	3%	0%
	Female Genital Disorders ^{3,7}	2%	0%

931 1. Events reported by at least 1% of patients treated with PAXIL are included, except the

following events which had an incidence on placebo \geq PAXIL: Abdominal pain, agitation,

back pain, chest pain, CNS stimulation, fever, increased appetite, myoclonus, pharyngitis,

934 postural hypotension, respiratory disorder (includes mostly "cold symptoms" or "URI"),

935 trauma, and vomiting.

936 2. Includes mostly "lump in throat" and "tightness in throat."

- 937 3. Percentage corrected for gender.
- 938 4. Mostly "ejaculatory delay."
- 5. Includes "anorgasmia," "erectile difficulties," "delayed ejaculation/orgasm," and "sexual dysfunction," and "impotence."
- 941 6. Includes mostly "difficulty with micturition" and "urinary hesitancy."
- 942 7. Includes mostly "anorgasmia" and "difficulty reaching climax/orgasm."
- 943

944 **Obsessive Compulsive Disorder, Panic Disorder, and Social Anxiety Disorder:**

- Table 3 enumerates adverse events that occurred at a frequency of 2% or more among OCD
- 946 patients on PAXIL who participated in placebo-controlled trials of 12-weeks duration in which
- patients were dosed in a range of 20 mg to 60 mg/day or among patients with panic disorder on
- 948 PAXIL who participated in placebo-controlled trials of 10- to 12-weeks duration in which
- patients were dosed in a range of 10 mg to 60 mg/day or among patients with social anxiety
- 950 disorder on PAXIL who participated in placebo-controlled trials of 12-weeks duration in which
- patients were dosed in a range of 20 mg to 50 mg/day.
- 952

953 **Table 3. Treatment-Emergent Adverse Experience Incidence in Placebo-Controlled**

- 954 Clinical Trials for Obsessive Compulsive Disorder, Panic Disorder, and Social Anxiety
- 955 **Disorder**¹

		Obsessive					
		Compulsive	e	Panic		Social Anxi	ety
		Disorder	Disorder			Disorder	
		PAXIL	Placebo	PAXIL	Placebo	PAXIL	Placebo
Body System	Preferred Term	(n = 542)	(n = 265)	(n = 469)	(n = 324)	(n = 425)	(n = 339)
Body as a Whole	Asthenia	22%	14%	14%	5%	22%	14%
	Abdominal Pain	—	—	4%	3%	_	—
	Chest Pain	3%	2%	—	—	—	—
	Back Pain	_	—	3%	2%	—	—
	Chills	2%	1%	2%	1%	—	—
	Trauma	—	—	—	—	3%	1%
Cardiovascular	Vasodilation	4%	1%	_	_		—
	Palpitation	2%	0%				
Dermatologic	Sweating	9%	3%	14%	6%	9%	2%
	Rash	3%	2%				
Gastrointestinal	Nausea	23%	10%	23%	17%	25%	7%
	Dry Mouth	18%	9%	18%	11%	9%	3%
	Constipation	16%	6%	8%	5%	5%	2%
	Diarrhea	10%	10%	12%	7%	9%	6%
	Decreased						
	Appetite	9%	3%	7%	3%	8%	2%
	Dyspepsia	_		—		4%	2%
	Flatulence	_	_	—	_	4%	2%
	Increased						
	Appetite	4%	3%	2%	1%		

		Obsessive Compulsive Disorder		Panic Disorder		Social Anxiety Disorder	
	Vomiting	—			_	2%	1%
Musculoskeletal	Myalgia					4%	3%
Nervous System	Insomnia	24%	13%	18%	10%	21%	16%
	Somnolence	24%	7%	19%	11%	22%	5%
	Dizziness	12%	6%	14%	10%	11%	7%
	Tremor	11%	1%	9%	1%	9%	1%
	Nervousness	9%	8%			8%	7%
	Libido Decreased	7%	4%	9%	1%	12%	1%
	Agitation			5%	4%	3%	1%
	Anxiety			5%	4%	5%	4%
	Abnormal						
	Dreams	4%	1%				_
	Concentration						
	Impaired	3%	2%			4%	1%
	Depersonalization	3%	0%				
	Myoclonus	3%	0%	3%	2%	2%	1%
	Amnesia	2%	1%				
Respiratory System	Rhinitis		_	3%	0%		
1 7 7	Pharyngitis					4%	2%
	Yawn					5%	1%
Special Senses	Abnormal Vision	4%	2%		_	4%	1%
I	Taste Perversion	2%	0%				
Urogenital System	Abnormal						
	Ejaculation ²	23%	1%	21%	1%	28%	1%
	Dysmenorrhea		_		_	5%	4%
	Female Genital						
	Disorder ²	3%	0%	9%	1%	9%	1%
	Impotence ²	8%	1%	5%	0%	5%	1%
	Urinary					- / -	-,,,
	Frequency	3%	1%	2%	0%		_
	Urination	270	1.0	_/*	070		
	Impaired	3%	0%				_
	Urinary Tract	270	0,0				
	Infection	2%	1%	2%	1%		

956
1. Events reported by at least 2% of OCD, panic disorder, and social anxiety disorder in patients treated with PAXIL are
957
958 included, except the following events which had an incidence on placebo ≥PAXIL: [OCD]: Abdominal pain, agitation,
958 anxiety, back pain, cough increased, depression, headache, hyperkinesia, infection, paresthesia, pharyngitis, respiratory
959 disorder, rhinitis, and sinusitis. [panic disorder]: Abnormal dreams, abnormal vision, chest pain, cough increased,
960 depersonalization, depression, dysmenorrhea, dyspepsia, flu syndrome, headache, infection, myalgia, nervousness,
961 palpitation, paresthesia, pharyngitis, rash, respiratory disorder, sinusitis, taste perversion, trauma, urination impaired, and
962 vasodilation. [social anxiety disorder]: Abdominal pain, depression, headache, infection, respiratory disorder, and

963 sinusitis.

- 964 2. Percentage corrected for gender.
- 965

966 Generalized Anxiety Disorder and Posttraumatic Stress Disorder: Table 4

967 enumerates adverse events that occurred at a frequency of 2% or more among GAD patients on

968 PAXIL who participated in placebo-controlled trials of 8-weeks duration in which patients were

dosed in a range of 10 mg/day to 50 mg/day or among PTSD patients on PAXIL who

970 participated in placebo-controlled trials of 12-weeks duration in which patients were dosed in a

- 971 range of 20 mg/day to 50 mg/day.
- 972

973 Table 4. Treatment-Emergent Adverse Experience Incidence in Placebo-Controlled 974 Clinical Trials for Generalized Anxiety Disorder and Posttraumatic Stress Disorder¹

	or Generalized Allx	Generalized Disorder	Anxiety	Posttrauma Disorder	
		PAXIL	Placebo	PAXIL	Placebo
Body System	Preferred Term	(n = 735)	(n = 529)	(n = 676)	(n = 504)
Body as a Whole	Asthenia	14%	6%	12%	4%
	Headache	17%	14%	—	—
	Infection	6%	3%	5%	4%
	Abdominal Pain			4%	3%
	Trauma			6%	5%
Cardiovascular	Vasodilation	3%	1%	2%	1%
Dermatologic	Sweating	6%	2%	5%	1%
Gastrointestinal	Nausea	20%	5%	19%	8%
	Dry Mouth	11%	5%	10%	5%
	Constipation	10%	2%	5%	3%
	Diarrhea	9%	7%	11%	5%
	Decreased Appetite	5%	1%	6%	3%
	Vomiting	3%	2%	3%	2%
	Dyspepsia			5%	3%
Nervous System	Insomnia	11%	8%	12%	11%
	Somnolence	15%	5%	16%	5%
	Dizziness	6%	5%	6%	5%
	Tremor	5%	1%	4%	1%
	Nervousness	4%	3%	—	—
	Libido Decreased	9%	2%	5%	2%
	Abnormal Dreams			3%	2%
Respiratory	Respiratory Disorder	7%	5%	—	—
System	Sinusitis	4%	3%		
	Yawn	4%		2%	<1%
Special Senses	Abnormal Vision	2%	1%	3%	1%
Urogenital	Abnormal 2	25%	2%	13%	2%
System	Ejaculation				
	Female Genital	4%	1%	5%	1%
	Disorder ²				
	Impotence ²	4%	3%	9%	1%

975 1. Events reported by at least 2% of GAD and PTSD in patients treated with PAXIL are included, except the

following events which had an incidence on placebo ≥PAXIL [GAD]: Abdominal pain, back pain, trauma,

977 dyspepsia, myalgia, and pharyngitis. [PTSD]: Back pain, headache, anxiety, depression, nervousness, respiratory

978 disorder, pharyngitis, and sinusitis.

979 2. Percentage corrected for gender.

980

981 Dose Dependency of Adverse Events: A comparison of adverse event rates in a 982 fixed-dose study comparing 10, 20, 30, and 40 mg/day of PAXIL with placebo in the treatment 983 of major depressive disorder revealed a clear dose dependency for some of the more common 984 adverse events associated with use of PAXIL, as shown in the following table:

985

Table 5. Treatment-Emergent Adverse Experience Incidence in a Dose-Comparison Trial 986 987 in the Treatment of Major Depressive Disorder*

in the Treatment of Wajor Depressi	Placebo		PA	XIL	
Body System/Preferred Term	n = 51	10 mg n = 102	20 mg n = 104	30 mg n = 101	40 mg n = 102
Body as a Whole					
Asthenia	0.0%	2.9%	10.6%	13.9%	12.7%
Dermatology					
Sweating	2.0%	1.0%	6.7%	8.9%	11.8%
Gastrointestinal					
Constipation	5.9%	4.9%	7.7%	9.9%	12.7%
Decreased Appetite	2.0%	2.0%	5.8%	4.0%	4.9%
Diarrhea	7.8%	9.8%	19.2%	7.9%	14.7%
Dry Mouth	2.0%	10.8%	18.3%	15.8%	20.6%
Nausea	13.7%	14.7%	26.9%	34.7%	36.3%
Nervous System					
Anxiety	0.0%	2.0%	5.8%	5.9%	5.9%
Dizziness	3.9%	6.9%	6.7%	8.9%	12.7%
Nervousness	0.0%	5.9%	5.8%	4.0%	2.9%
Paresthesia	0.0%	2.9%	1.0%	5.0%	5.9%
Somnolence	7.8%	12.7%	18.3%	20.8%	21.6%
Tremor	0.0%	0.0%	7.7%	7.9%	14.7%
Special Senses					
Blurred Vision	2.0%	2.9%	2.9%	2.0%	7.8%
Urogenital System					
Abnormal Ejaculation	0.0%	5.8%	6.5%	10.6%	13.0%
Impotence	0.0%	1.9%	4.3%	6.4%	1.9%
Male Genital Disorders	0.0%	3.8%	8.7%	6.4%	3.7%

988

Rule for including adverse events in table: Incidence at least 5% for 1 of paroxetine groups 989 and \geq twice the placebo incidence for at least 1 paroxetine group.

990

991 In a fixed-dose study comparing placebo and 20, 40, and 60 mg of PAXIL in the treatment of

992 OCD, there was no clear relationship between adverse events and the dose of PAXIL to which

993 patients were assigned. No new adverse events were observed in the group treated with 60 mg of

994 PAXIL compared to any of the other treatment groups.

995 In a fixed-dose study comparing placebo and 10, 20, and 40 mg of PAXIL in the treatment of

- 996 panic disorder, there was no clear relationship between adverse events and the dose of PAXIL to
- 997 which patients were assigned, except for asthenia, dry mouth, anxiety, libido decreased, tremor,
- and abnormal ejaculation. In flexible-dose studies, no new adverse events were observed in
- patients receiving 60 mg of PAXIL compared to any of the other treatment groups.
- In a fixed-dose study comparing placebo and 20, 40, and 60 mg of PAXIL in the treatment of social anxiety disorder, for most of the adverse events, there was no clear relationship between adverse events and the dose of PAXIL to which patients were assigned.
- In a fixed-dose study comparing placebo and 20 and 40 mg of PAXIL in the treatment of
 generalized anxiety disorder, for most of the adverse events, there was no clear relationship
 between adverse events and the dose of PAXIL to which patients were assigned, except for the
 following adverse events: Asthenia, constipation, and abnormal ejaculation.
- In a fixed-dose study comparing placebo and 20 and 40 mg of PAXIL in the treatment of posttraumatic stress disorder, for most of the adverse events, there was no clear relationship between adverse events and the dose of PAXIL to which patients were assigned, except for impotence and abnormal ejaculation.
- Adaptation to Certain Adverse Events: Over a 4- to 6-week period, there was evidence
 of adaptation to some adverse events with continued therapy (e.g., nausea and dizziness), but less
 to other effects (e.g., dry mouth, somnolence, and asthenia).
- Male and Female Sexual Dysfunction With SSRIs: Although changes in sexual desire,
 sexual performance, and sexual satisfaction often occur as manifestations of a psychiatric
 disorder, they may also be a consequence of pharmacologic treatment. In particular, some
 evidence suggests that selective serotonin reuptake inhibitors (SSRIs) can cause such untoward
 sexual experiences.
- Reliable estimates of the incidence and severity of untoward experiences involving sexual
 desire, performance, and satisfaction are difficult to obtain, however, in part because patients and
 physicians may be reluctant to discuss them. Accordingly, estimates of the incidence of
 untoward sexual experience and performance cited in product labeling, are likely to
 underestimate their actual incidence.
- 1024 In placebo-controlled clinical trials involving more than 3,200 patients, the ranges for the 1025 reported incidence of sexual side effects in males and females with major depressive disorder, 1026 OCD papie disorder, cond PTSD are discribed in Table (
- 1026 OCD, panic disorder, social anxiety disorder, GAD, and PTSD are displayed in Table 6.
- 1027

1028Table 6. Incidence of Sexual Adverse Events in Controlled Clinical Trials

	PAXIL	Placebo
n (males)	1446	1042
Decreased Libido	6-15%	0-5%
Ejaculatory Disturbance	13-28%	0-2%
Impotence	2-9%	0-3%
n (females)	1822	1340
Decreased Libido	0-9%	0-2%
Orgasmic Disturbance	2-9%	0-1%

- 1029
- 1030 There are no adequate and well-controlled studies examining sexual dysfunction with
- 1031 paroxetine treatment.
- 1032Paroxetine treatment has been associated with several cases of priapism. In those cases with a1033known outcome, patients recovered without sequelae.
- 1034 While it is difficult to know the precise risk of sexual dysfunction associated with the use of 1035 SSRIs, physicians should routinely inquire about such possible side effects.
- Weight and Vital Sign Changes: Significant weight loss may be an undesirable result of
 treatment with PAXIL for some patients but, on average, patients in controlled trials had minimal
 (about 1 pound) weight loss versus smaller changes on placebo and active control. No significant
 changes in vital signs (systolic and diastolic blood pressure, pulse and temperature) were
 observed in patients treated with PAXIL in controlled clinical trials.
- 1041 *ECG Changes:* In an analysis of ECGs obtained in 682 patients treated with PAXIL and
 1042 415 patients treated with placebo in controlled clinical trials, no clinically significant changes
 1043 were seen in the ECGs of either group.
- Liver Function Tests: In placebo-controlled clinical trials, patients treated with PAXIL
 exhibited abnormal values on liver function tests at no greater rate than that seen in
 placebo-treated patients. In particular, the PAXIL-versus-placebo comparisons for alkaline
 phosphatase, SGOT, SGPT, and bilirubin revealed no differences in the percentage of patients
 with marked abnormalities.
- Hallucinations: In pooled clinical trials of immediate-release paroxetine hydrochloride,
 hallucinations were observed in 22 of 9089 patients receiving drug and 4 of 3187 patients
 receiving placebo.
- 1052 Other Events Observed During the Premarketing Evaluation of PAXIL: During its
- 1053 premarketing assessment in major depressive disorder, multiple doses of PAXIL were
- administered to 6,145 patients in phase 2 and 3 studies. The conditions and duration of exposure
- to PAXIL varied greatly and included (in overlapping categories) open and double-blind studies,
 uncontrolled and controlled studies, inpatient and outpatient studies, and fixed-dose, and titration
- 1057 studies. During premarketing clinical trials in OCD, panic disorder, social anxiety disorder,
- 1058 generalized anxiety disorder, and posttraumatic stress disorder, 542, 469, 522, 735, and 676
- 1059 patients, respectively, received multiple doses of PAXIL. Untoward events associated with this
- 1060 exposure were recorded by clinical investigators using terminology of their own choosing.
- 1061 Consequently, it is not possible to provide a meaningful estimate of the proportion of individuals
- 1062 experiencing adverse events without first grouping similar types of untoward events into a1063 smaller number of standardized event categories.
- 1064 In the tabulations that follow, reported adverse events were classified using a standard
- 1065 COSTART-based Dictionary terminology. The frequencies presented, therefore, represent the
- 1066 proportion of the 9,089 patients exposed to multiple doses of PAXIL who experienced an event
- 1067 of the type cited on at least 1 occasion while receiving PAXIL. All reported events are included
- 1068 except those already listed in Tables 2 to 4, those reported in terms so general as to be

- 1069 uninformative and those events where a drug cause was remote. It is important to emphasize that
- although the events reported occurred during treatment with paroxetine, they were not

1071 necessarily caused by it.

Events are further categorized by body system and listed in order of decreasing frequency according to the following definitions: Frequent adverse events are those occurring on 1 or more occasions in at least 1/100 patients (only those not already listed in the tabulated results from placebo-controlled trials appear in this listing); infrequent adverse events are those occurring in 1/100 to 1/1,000 patients; rare events are those occurring in fewer than 1/1,000 patients. Events of major clinical importance are also described in the PRECAUTIONS section.

Body as a Whole: Infrequent: Allergic reaction, chills, face edema, malaise, neck pain;
 rare: Adrenergic syndrome, cellulitis, moniliasis, neck rigidity, pelvic pain, peritonitis, sepsis,
 ulcer.

1081 *Cardiovascular System: Frequent:* Hypertension, tachycardia; *infrequent:* Bradycardia,
 1082 hematoma, hypotension, migraine, postural hypotension, syncope; *rare:* Angina pectoris,
 1083 arrhythmia nodal, atrial fibrillation, bundle branch block, cerebral ischemia, cerebrovascular
 1084 accident, congestive heart failure, heart block, low cardiac output, myocardial infarct, myocardial
 1085 ischemia, pallor, phlebitis, pulmonary embolus, supraventricular extrasystoles, thrombophlebitis,
 1086 thrombosis, varicose vein, vascular headache, ventricular extrasystoles.

Digestive System: Infrequent: Bruxism, colitis, dysphagia, eructation, gastritis,
 gastroenteritis, gingivitis, glossitis, increased salivation, liver function tests abnormal, rectal
 hemorrhage, ulcerative stomatitis; *rare:* Aphthous stomatitis, bloody diarrhea, bulimia,
 cardiospasm, cholelithiasis, duodenitis, enteritis, esophagitis, fecal impactions, fecal
 incontinence, gum hemorrhage, hematemesis, hepatitis, ileitis, ileus, intestinal obstruction,
 jaundice, melena, mouth ulceration, peptic ulcer, salivary gland enlargement, sialadenitis,
 stomach ulcer, stomatitis, tongue discoloration, tongue edema, tooth caries.

1094 *Endocrine System: Rare:* Diabetes mellitus, goiter, hyperthyroidism, hypothyroidism,
1095 thyroiditis.

Hemic and Lymphatic Systems: Infrequent: Anemia, leukopenia, lymphadenopathy,
 purpura; rare: Abnormal erythrocytes, basophilia, bleeding time increased, eosinophilia,
 hypochromic anemia, iron deficiency anemia, leukocytosis, lymphedema, abnormal
 lymphocytes, lymphocytosis, microcytic anemia, monocytosis, normocytic anemia,

1100 thrombocythemia, thrombocytopenia.

1101 *Metabolic and Nutritional: Frequent:* Weight gain; *infrequent:* Edema, peripheral edema,
1102 SGOT increased, SGPT increased, thirst, weight loss; *rare:* Alkaline phosphatase increased,

- 1103 bilirubinemia, BUN increased, creatinine phosphokinase increased, dehydration, gamma
- 1104 globulins increased, gout, hypercalcemia, hypercholesteremia, hyperglycemia, hyperkalemia,
- hyperphosphatemia, hypocalcemia, hypoglycemia, hypokalemia, hyponatremia, ketosis, lactic
 dehydrogenase increased, non-protein nitrogen (NPN) increased.
- Musculoskeletal System: Frequent: Arthralgia; infrequent: Arthritis, arthrosis; rare:
 Bursitis, myositis, osteoporosis, generalized spasm, tenosynovitis, tetany.

- 1109 *Nervous System: Frequent:* Emotional lability, vertigo; *infrequent:* Abnormal thinking,
- 1110 alcohol abuse, ataxia, dystonia, dyskinesia, euphoria, hallucinations, hostility, hypertonia,
- 1111 hypesthesia, hypokinesia, incoordination, lack of emotion, libido increased, manic reaction,
- 1112 neurosis, paralysis, paranoid reaction; *rare:* Abnormal gait, akinesia, antisocial reaction, aphasia,
- 1113 choreoathetosis, circumoral paresthesias, convulsion, delirium, delusions, diplopia, drug
- 1114 dependence, dysarthria, extrapyramidal syndrome, fasciculations, grand mal convulsion,
- 1115 hyperalgesia, hysteria, manic-depressive reaction, meningitis, myelitis, neuralgia, neuropathy,
- 1116 nystagmus, peripheral neuritis, psychotic depression, psychosis, reflexes decreased, reflexes
 1117 increased, stupor, torticollis, trismus, withdrawal syndrome.
- 1118 *Respiratory System: Infrequent:* Asthma, bronchitis, dyspnea, epistaxis, hyperventilation,
 1119 pneumonia, respiratory flu; *rare:* Emphysema, hemoptysis, hiccups, lung fibrosis, pulmonary
 1120 edema, sputum increased, stridor, voice alteration.
- Skin and Appendages: Frequent: Pruritus; infrequent: Acne, alopecia, contact dermatitis,
 dry skin, ecchymosis, eczema, herpes simplex, photosensitivity, urticaria; rare: Angioedema,
 erythema nodosum, erythema multiforme, exfoliative dermatitis, fungal dermatitis, furunculosis;
 herpes zoster, hirsutism, maculopapular rash, seborrhea, skin discoloration, skin hypertrophy,
 skin ulcer, sweating decreased, vesiculobullous rash.
- 1126 Special Senses: Frequent: Tinnitus; infrequent: Abnormality of accommodation,
 1127 conjunctivitis, ear pain, eye pain, keratoconjunctivitis, mydriasis, otitis media; rare: Amblyopia,
 1128 anisocoria, blepharitis, cataract, conjunctival edema, corneal ulcer, deafness, exophthalmos, eye
 1129 hemorrhage, glaucoma, hyperacusis, night blindness, otitis externa, parosmia, photophobia,
 1130 ptosis, retinal hemorrhage, taste loss, visual field defect.
- Urogenital System: Infrequent: Amenorrhea, breast pain, cystitis, dysuria, hematuria,
 menorrhagia, nocturia, polyuria, pyuria, urinary incontinence, urinary retention, urinary urgency,
 vaginitis; *rare:* Abortion, breast atrophy, breast enlargement, endometrial disorder, epididymitis,
- 1134 female lactation, fibrocystic breast, kidney calculus, kidney pain, leukorrhea, mastitis,
- 1135 metrorrhagia, nephritis, oliguria, salpingitis, urethritis, urinary casts, uterine spasm, urolith,
- 1136 vaginal hemorrhage, vaginal moniliasis.
- **Postmarketing Reports:** Voluntary reports of adverse events in patients taking PAXIL that
- 1138 have been received since market introduction and not listed above that may have no causal
- relationship with the drug include acute pancreatitis, elevated liver function tests (the most
- 1140 severe cases were deaths due to liver necrosis, and grossly elevated transaminases associated
- 1141 with severe liver dysfunction), Guillain-Barré syndrome, toxic epidermal necrolysis, priapism,
- 1142 syndrome of inappropriate ADH secretion, symptoms suggestive of prolactinemia and
- 1143 galactorrhea, neuroleptic malignant syndrome-like events, serotonin syndrome; extrapyramidal
- 1144 symptoms which have included akathisia, bradykinesia, cogwheel rigidity, dystonia, hypertonia,
- 1145 oculogyric crisis which has been associated with concomitant use of pimozide; tremor and
- 1146 trismus; status epilepticus, acute renal failure, pulmonary hypertension, allergic alveolitis,
- 1147 anaphylaxis, eclampsia, laryngismus, optic neuritis, porphyria, ventricular fibrillation, ventricular
- 1148 tachycardia (including torsade de pointes), thrombocytopenia, hemolytic anemia, events related

- 1149 to impaired hematopoiesis (including aplastic anemia, pancytopenia, bone marrow aplasia, and
- agranulocytosis), and vasculitic syndromes (such as Henoch-Schönlein purpura). There has been
- a case report of an elevated phenytoin level after 4 weeks of PAXIL and phenytoin
- 1152 coadministration. There has been a case report of severe hypotension when PAXIL was added to
- 1153 chronic metoprolol treatment.

1154 DRUG ABUSE AND DEPENDENCE

- 1155 **Controlled Substance Class:** PAXIL is not a controlled substance.
- 1156 **Physical and Psychologic Dependence:** PAXIL has not been systematically studied in
- animals or humans for its potential for abuse, tolerance or physical dependence. While the
- 1158 clinical trials did not reveal any tendency for any drug-seeking behavior, these observations were
- 1159 not systematic and it is not possible to predict on the basis of this limited experience the extent to
- 1160 which a CNS-active drug will be misused, diverted, and/or abused once marketed. Consequently,
- 1161 patients should be evaluated carefully for history of drug abuse, and such patients should be
- 1162 observed closely for signs of misuse or abuse of PAXIL (e.g., development of tolerance,
- 1163 incrementations of dose, drug-seeking behavior).

1164 OVERDOSAGE

- 1165 **Human Experience:** Since the introduction of PAXIL in the United States, 342 spontaneous
- 1166 cases of deliberate or accidental overdosage during paroxetine treatment have been reported
- 1167 worldwide (circa 1999). These include overdoses with paroxetine alone and in combination with
- 1168 other substances. Of these, 48 cases were fatal and of the fatalities, 17 appeared to involve
- 1169 paroxetine alone. Eight fatal cases that documented the amount of paroxetine ingested were
- 1170 generally confounded by the ingestion of other drugs or alcohol or the presence of significant
- 1171 comorbid conditions. Of 145 non-fatal cases with known outcome, most recovered without
- 1172 sequelae. The largest known ingestion involved 2,000 mg of paroxetine (33 times the maximum
- 1173 recommended daily dose) in a patient who recovered.
- 1174 Commonly reported adverse events associated with paroxetine overdosage include
- 1175 somnolence, coma, nausea, tremor, tachycardia, confusion, vomiting, and dizziness. Other
- 1176 notable signs and symptoms observed with overdoses involving paroxetine (alone or with other
- 1177 substances) include mydriasis, convulsions (including status epilepticus), ventricular
- 1178 dysrhythmias (including torsade de pointes), hypertension, aggressive reactions, syncope,
- 1179 hypotension, stupor, bradycardia, dystonia, rhabdomyolysis, symptoms of hepatic dysfunction
- 1180 (including hepatic failure, hepatic necrosis, jaundice, hepatitis, and hepatic steatosis), serotonin
- 1181 syndrome, manic reactions, myoclonus, acute renal failure, and urinary retention.
- Overdosage Management: Treatment should consist of those general measures employed in
 the management of overdosage with any drugs effective in the treatment of major depressive
 disorder.
- Ensure an adequate airway, oxygenation, and ventilation. Monitor cardiac rhythm and vital
 signs. General supportive and symptomatic measures are also recommended. Induction of emesis
 is not recommended. Gastric lavage with a large-bore orogastric tube with appropriate airway

- protection, if needed, may be indicated if performed soon after ingestion, or in symptomaticpatients.
- 1190 Activated charcoal should be administered. Due to the large volume of distribution of this
- 1191 drug, forced diuresis, dialysis, hemoperfusion, and exchange transfusion are unlikely to be of
- 1192 benefit. No specific antidotes for paroxetine are known.
- 1193 A specific caution involves patients who are taking or have recently taken paroxetine who
- 1194 might ingest excessive quantities of a tricyclic antidepressant. In such a case, accumulation of the
- 1195 parent tricyclic and/or an active metabolite may increase the possibility of clinically significant
- 1196 sequelae and extend the time needed for close medical observation (see PRECAUTIONS—
- 1197 Drugs Metabolized by Cytochrome CYP2D6).
- In managing overdosage, consider the possibility of multiple drug involvement. The physician should consider contacting a poison control center for additional information on the treatment of any overdose. Telephone numbers for certified poison control centers are listed in the *Physicians'*
- 1201 Desk Reference (PDR).

1202 DOSAGE AND ADMINISTRATION

- 1203 Major Depressive Disorder: Usual Initial Dosage: PAXIL should be administered as a 1204 single daily dose with or without food, usually in the morning. The recommended initial dose is 1205 20 mg/day. Patients were dosed in a range of 20 to 50 mg/day in the clinical trials demonstrating 1206 the effectiveness of PAXIL in the treatment of major depressive disorder. As with all drugs 1207 effective in the treatment of major depressive disorder, the full effect may be delayed. Some 1208 patients not responding to a 20-mg dose may benefit from dose increases, in 10-mg/day 1209 increments, up to a maximum of 50 mg/day. Dose changes should occur at intervals of at least 1210 1 week.
- 1211 *Maintenance Therapy:* There is no body of evidence available to answer the question of 1212 how long the patient treated with PAXIL should remain on it. It is generally agreed that acute
- 1213 episodes of major depressive disorder require several months or longer of sustained
- 1214 pharmacologic therapy. Whether the dose needed to induce remission is identical to the dose 1215 needed to maintain and/or sustain euthymia is unknown.
- 1216 Systematic evaluation of the efficacy of PAXIL has shown that efficacy is maintained for 1217 periods of up to 1 year with doses that averaged about 30 mg.
- 1218 **Obsessive Compulsive Disorder:** Usual Initial Dosage: PAXIL should be administered
- 1219 as a single daily dose with or without food, usually in the morning. The recommended dose of
- 1220 PAXIL in the treatment of OCD is 40 mg daily. Patients should be started on 20 mg/day and the
- 1221 dose can be increased in 10-mg/day increments. Dose changes should occur at intervals of at
- 1222 least 1 week. Patients were dosed in a range of 20 to 60 mg/day in the clinical trials
- 1223 demonstrating the effectiveness of PAXIL in the treatment of OCD. The maximum dosage
- 1224 should not exceed 60 mg/day.
- Maintenance Therapy: Long-term maintenance of efficacy was demonstrated in a 6-month
 relapse prevention trial. In this trial, patients with OCD assigned to paroxetine demonstrated a

- 1227 lower relapse rate compared to patients on placebo (see CLINICAL PHARMACOLOGY—
- 1228 Clinical Trials). OCD is a chronic condition, and it is reasonable to consider continuation for a
- 1229 responding patient. Dosage adjustments should be made to maintain the patient on the lowest
- 1230 effective dosage, and patients should be periodically reassessed to determine the need for
- 1231 continued treatment.
- 1232 **Panic Disorder:** *Usual Initial Dosage:* PAXIL should be administered as a single daily dose
- 1233 with or without food, usually in the morning. The target dose of PAXIL in the treatment of panic
- 1234 disorder is 40 mg/day. Patients should be started on 10 mg/day. Dose changes should occur in
- 1235 10-mg/day increments and at intervals of at least 1 week. Patients were dosed in a range of 10 to
- 60 mg/day in the clinical trials demonstrating the effectiveness of PAXIL. The maximum dosageshould not exceed 60 mg/day.
- 1238 *Maintenance Therapy:* Long-term maintenance of efficacy was demonstrated in a 3-month 1239 relapse prevention trial. In this trial, patients with panic disorder assigned to paroxetine
- 1240 demonstrated a lower relapse rate compared to patients on placebo (see CLINICAL
- 1241 PHARMACOLOGY—Clinical Trials). Panic disorder is a chronic condition, and it is reasonable
- 1242 to consider continuation for a responding patient. Dosage adjustments should be made to
- 1243 maintain the patient on the lowest effective dosage, and patients should be periodically
- 1244 reassessed to determine the need for continued treatment.
- Social Anxiety Disorder: Usual Initial Dosage: PAXIL should be administered as a single daily dose with or without food, usually in the morning. The recommended and initial dosage is 20 mg/day. In clinical trials the effectiveness of PAXIL was demonstrated in patients dosed in a range of 20 to 60 mg/day. While the safety of PAXIL has been evaluated in patients with social anxiety disorder at doses up to 60 mg/day, available information does not suggest any additional benefit for doses above 20 mg/day (see CLINICAL PHARMACOLOGY—Clinical Trials).
- Maintenance Therapy: There is no body of evidence available to answer the question of how long the patient treated with PAXIL should remain on it. Although the efficacy of PAXIL beyond 12 weeks of dosing has not been demonstrated in controlled clinical trials, social anxiety disorder is recognized as a chronic condition, and it is reasonable to consider continuation of treatment for a responding patient. Dosage adjustments should be made to maintain the patient on the lowest effective dosage, and patients should be periodically reassessed to determine the need for continued treatment.
- 1258 Generalized Anxiety Disorder: Usual Initial Dosage: PAXIL should be administered as a
- 1259 single daily dose with or without food, usually in the morning. In clinical trials the effectiveness
- 1260 of PAXIL was demonstrated in patients dosed in a range of 20 to 50 mg/day. The recommended
- 1261 starting dosage and the established effective dosage is 20 mg/day. There is not sufficient
- 1262 evidence to suggest a greater benefit to doses higher than 20 mg/day. Dose changes should occur
- 1263 in 10 mg/day increments and at intervals of at least 1 week.
- Maintenance Therapy: Systematic evaluation of continuing PAXIL for periods of up to
 24 weeks in patients with Generalized Anxiety Disorder who had responded while taking PAXIL
 during an 8-week acute treatment phase has demonstrated a benefit of such maintenance (see

- 1267 CLINICAL PHARMACOLOGY—Clinical Trials). Nevertheless, patients should be periodically
 1268 reassessed to determine the need for maintenance treatment.
- 1269 **Posttraumatic Stress Disorder:** *Usual Initial Dosage:* PAXIL should be administered as
- 1270 a single daily dose with or without food, usually in the morning. The recommended starting
- 1271 dosage and the established effective dosage is 20 mg/day. In 1 clinical trial, the effectiveness of
- 1272 PAXIL was demonstrated in patients dosed in a range of 20 to 50 mg/day. However, in a fixed
- 1273 dose study, there was not sufficient evidence to suggest a greater benefit for a dose of 40 mg/day
- 1274 compared to 20 mg/day. Dose changes, if indicated, should occur in 10 mg/day increments and at1275 intervals of at least 1 week.
- Maintenance Therapy: There is no body of evidence available to answer the question of how long the patient treated with PAXIL should remain on it. Although the efficacy of PAXIL beyond 12 weeks of dosing has not been demonstrated in controlled clinical trials, PTSD is recognized as a chronic condition, and it is reasonable to consider continuation of treatment for a responding patient. Dosage adjustments should be made to maintain the patient on the lowest effective dosage, and patients should be periodically reassessed to determine the need for
- 1282 continued treatment.
- 1283 Special Populations: *Treatment of Pregnant Women During the Third Trimester:*
- 1284 Neonates exposed to PAXIL and other SSRIs or SNRIs, late in the third trimester have
- 1285 developed complications requiring prolonged hospitalization, respiratory support, and tube
- 1286 feeding (see WARNINGS). When treating pregnant women with paroxetine during the third
- 1287 trimester, the physician should carefully consider the potential risks and benefits of treatment.
- 1288 The physician may consider tapering paroxetine in the third trimester.
- Dosage for Elderly or Debilitated Patients, and Patients With Severe Renal or
 Hepatic Impairment: The recommended initial dose is 10 mg/day for elderly patients,
 debilitated patients, and/or patients with severe renal or hepatic impairment. Increases may be
- 1292 made if indicated. Dosage should not exceed 40 mg/day.
- **Switching Patients to or From a Monoamine Oxidase Inhibitor:** At least 14 days
- 1294 should elapse between discontinuation of an MAOI and initiation of therapy with PAXIL.
- 1295 Similarly, at least 14 days should be allowed after stopping PAXIL before starting an MAOI.
- 1296 **Discontinuation of Treatment With PAXIL:** Symptoms associated with discontinuation of
- 1297 PAXIL have been reported (see PRECAUTIONS). Patients should be monitored for these
- 1298 symptoms when discontinuing treatment, regardless of the indication for which PAXIL is being
- 1299 prescribed. A gradual reduction in the dose rather than abrupt cessation is recommended
- 1300 whenever possible. If intolerable symptoms occur following a decrease in the dose or upon
- 1301 discontinuation of treatment, then resuming the previously prescribed dose may be considered.
- 1302 Subsequently, the physician may continue decreasing the dose but at a more gradual rate.
- 1303 **NOTE:** SHAKE SUSPENSION WELL BEFORE USING.

1304 HOW SUPPLIED

1305 **Tablets:** Film-coated, modified-oval as follows:

1306	10-mg yellow, scored tablets engraved on the front with PAXIL and on the back with 10.
1307	NDC 0029-3210-13 Bottles of 30
1308	20-mg pink, scored tablets engraved on the front with PAXIL and on the back with 20.
1309	NDC 0029-3211-13 Bottles of 30
1310	NDC 0029-3211-59 Bottles of 90
1311	NDC 0029-3211-21 SUP 100s (intended for institutional use only)
1312	30-mg blue tablets engraved on the front with PAXIL and on the back with 30.
1313	NDC 0029-3212-13 Bottles of 30
1314	40-mg green tablets engraved on the front with PAXIL and on the back with 40.
1315	NDC 0029-3213-13 Bottles of 30
1316	Store tablets between 15° and 30°C (59° and 86°F).
1317	Oral Suspension: Orange-colored, orange-flavored, 10 mg/5 mL, in 250 mL white bottles.
1318	NDC 0029-3215-48
1319	Store suspension at or below 25°C (77°F).
1320	PAXIL is a registered trademark of GlaxoSmithKline.
1321	
1322	
1323	Medication Guide
1324	Antidepressant Medicines, Depression and Other Serious Mental Illnesses, and Suicidal
1325	Thoughts or Actions
1326	PAXIL[®] (PAX-il) (paroxetine hydrochloride) Tablets and Oral Suspension
1327	
1328	Read the Medication Guide that comes with your or your family member's antidepressant
1329	medicine. This Medication Guide is only about the risk of suicidal thoughts and actions with
1330	antidepressant medicines. Talk to your, or your family member's, healthcare provider
1331	about:
1332	• All risks and benefits of treatment with antidepressant medicines
1333	• All treatment choices for depression or other serious mental illness
1334	
1335	What is the most important information I should know about antidepressant medicines,
1336	depression and other serious mental illnesses, and suicidal thoughts or action?
1337	
1338	
	1. Antidepressant medicines may increase suicidal thoughts and actions in some children,
1339 1340	1. Antidepressant medicines may increase suicidal thoughts and actions in some children, teenagers, and young adults within the first few months of treatment.
1340	teenagers, and young adults within the first few months of treatment.
	teenagers, and young adults within the first few months of treatment.2. Depression and other serious mental illnesses are the most important causes of suicidal
1340 1341	teenagers, and young adults within the first few months of treatment.
1340 1341 1342 1343 1344	teenagers, and young adults within the first few months of treatment.2. Depression and other serious mental illnesses are the most important causes of suicidal thoughts and actions. Some people may have a particularly high risk of having suicidal
1340 1341 1342 1343	 teenagers, and young adults within the first few months of treatment. 2. Depression and other serious mental illnesses are the most important causes of suicidal thoughts and actions. Some people may have a particularly high risk of having suicidal thoughts or actions. These include people who have (or have a family history of) bipolar

1347	family member?
1348	• Pay close attention to any changes, especially sudden changes, in mood, behaviors,
1349	thoughts, or feelings. This is very important when an antidepressant is started or when the
1350	dose is changed.
1351	• Call the healthcare provider right away to report new or sudden changes in mood,
1352	behavior, thoughts, or feelings.
1353	• Keep all follow-up visits with the healthcare provider as scheduled. Call the healthcare
1354	provider between visits as needed, especially if you have concerns about symptoms.
1355	
1356	Call a healthcare provider right away if you or your family member hasany of the
1357	following symptoms, especially if they are new, worse, or worry you:
1358	Thoughts about suicide or dying
1359	Attempts to commit suicide
1360	New or worse depression
1361	• New or worse anxiety
1362	• Feeling very agitated or restless
1363	• Panic attacks
1364	• Trouble sleeping (insomnia)
1365	• New or worse irritability
1366	• Acting aggressive, being angry, or violent
1367	 Acting on dangerous impulses
1368	 An extreme increase in activity and talking (mania)
1369	 Other unusual changes in behavior or mood
1370	• Other unusual changes in benavior of mood
1370	What else do I need to know about antidepressant medicines?
	what else do I need to know about antidepressant medicines:
1372 1373	• Never stop an antidepressant medicine without first talking to a healthcare
1373	provider. Stopping an antidepressant medicine suddenly can cause other symptoms.
1375	provider. Stopping an antidepressant medicine suddenry can cause other symptoms.
1376	• Antidepressants are medicines used to treat depression and other illnesses. It is
1377	important to discuss all the risk of treating depression and also the risks of not treating it.
1378	Patients and their families or other caregivers should discuss all treatment choices with
1379	the healthcare provider, not just the use of antidepressants.
1380	
1381	• Antidepressant medicines have other side effects. Talk to the healthcare provider about
1382	the side effects of the medicine prescribed for you or your family member.
1383	
1384	• Antidepressant medicines can interact with other medicines. Know all of the medicines that you or your family member takes. Keen a list of all medicines to show the
1385 1386	medicines that you or your family member takes. Keep a list of all medicines to show the healthcare provider. Do not start new medicines without first checking with your
1380	healthcare provider. Do not start new medicines without first checking with your healthcare provider.
1387	neuticale provider.
1389	• Not all antidepressant medicines prescribed for children are FDA approved for use

1390	in children. Talk to your child's healthcare provider for more information.	
1391		
1392	This Medication Guide has been approved by the U.S. Food and Drug Administration for	all
1393	antidepressants.	
1394	PXL:3N	ИG
1395		
1396	gsk GlaxoSmithKline	
1397	GlaxoSmithKline	
1398	Research Triangle Park, NC 27709	
1399		
1400	©2007, GlaxoSmithKline. All rights reserved.	
1401		
1402	June 2007 PXL:44PI	
1403		