

Department of Health and Human Services  
National Institutes of Health  
National Institute of Mental Health  
Bethesda, MD, USA

**Clinical Fellowship in PET Imaging of Schizophrenia:  
Jointly Mentored by NIMH and Columbia University**

Drs. Robert Innis (NIMH) and Anissa Abi-Dargham (Department of Psychiatry, Columbia University) will jointly mentor a psychiatry clinical fellow (PGY-IV and beyond) in positron emission tomographic (PET) studies of schizophrenia. The fellow will be based at NIMH, but travel to Columbia University, as needed, for training or research purposes. Drs. Innis and Abi-Dargham will work closely with the Fellow to design studies, recruit patients, analyze data, and prepare results for publication. The initial research in PET imaging is expected to develop into proof-of-concept studies associated with PET imaging – e.g., early study of D1 agonist to improve cognition combined with PET imaging of the D1 dopamine receptor. The Fellow will have the opportunity to perform PET studies in animals to explore related physiology or to develop new imaging paradigms.

The Fellowship may begin in 2015 or 2016 and will last three years. If currently in a psychiatry residency program, a candidate can apply to transfer and complete his/her PGY-IV at NIMH and receive ACGME credit, but must otherwise be within 2 years of having completed a US-certified residency in psychiatry and have a full US medical license.

The salary for the fellowship will be competitive and based on postgraduate year of training. All applicants will receive consideration without regard to ethnicity, gender, national origin, age, religion, disability, or sexual orientation. NIMH is a major research component of the National Institutes of Health and the Department of Health and Human Services, which have nationwide responsibility for improving the health and well-being of all Americans.

Interested applicants should send their CV to Drs. Innis and Abi-Dargham:

Robert Innis, MD, PhD

Chief, Molecular Imaging Branch

Email: robert.innis@nih.gov

<http://intramural.nimh.nih.gov/mib/>

Anissa Abi-Dargham, MD;

Professor of Psychiatry, Columbia University

Email: aa324@cumc.columbia.edu

<http://schizophrenia.conte.cumc.columbia.edu/index.html>



**Application Deadline Date: Applications will be considered until the position is filled.**

*DHHS and NIH are Equal Opportunity Employers*

*The NIH is dedicated to building a diverse community in its training and employment programs*



*Helping People the Healthiest Lives Possible.*

Psychiatrists are currently needed in Utah's major cities:

**Logan • Ogden • Provo,  
Salt Lake City • St. George**

Employment with Intermountain Medical Group.  
Competitive salary and incentive recognition bonuses.

Signing bonus and loan repayment available.  
Full Intermountain benefits to include defined pension, 401k match & CME.  
Relocation provided up to 15k.

Intermountain Healthcare is frequently referenced nationally as one of the leaders in delivering high quality/low cost health care.

Contact Intermountain Physician Recruiting.  
800-888-3134

**PhysicianRecruit@imail.org  
<http://physicianjobsintermountain.org>**

**Special Discounts  
for American Psychiatric  
Association members  
on [www.appi.org](http://www.appi.org)**

**20% Discount for APA Members**

**25% Discount for  
APA Resident-Fellow Members**

• • • • •

**Subscribe to APP News**

for the latest information on new titles, special offers,  
and other useful information.

Sign up @ [www.appi.org](http://www.appi.org)

AMERICAN  
PSYCHIATRIC  
ASSOCIATION  
PUBLISHING



[www.appi.org](http://www.appi.org) Email: [appi@psych.org](mailto:appi@psych.org) Phone: 1-800-368-5777

AH1506N

Are You Ready to  
**Take the Next Step**  
in Your  
Psychiatric  
Career?

Become a  
**Fellow** of the  
**American  
Psychiatric  
Association**

Earn the  
**FAPA**  
or  
**IFAPA**  
designation

We've made  
it even  
**EASIER**  
to apply!

or  
**International  
Fellow**

For more information and to apply, visit [www.psychiatry.org/BecomeaFellow](http://www.psychiatry.org/BecomeaFellow)

There's So Much More to **PSYCHIATRIC SERVICES**  
Than Meets the Page!



### Psychiatric Services in Advance

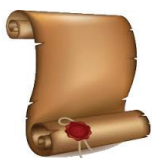
Latest research reports!

#### **Depression Intervention Improves Workers' Productivity**

A telephone intervention significantly boosted workers' performance and reduced depressive symptoms.

#### **A Tale of Two States: Mental Health Parity on State Exchanges**

When consumers with mental health problems shop for plans on state exchanges, poorly presented parity information may steer them away from some plans.



Revisit the field's rich history!

#### **50 Years Ago in *Psychiatric Services***

- Congress Considers Bill for Staffing CMHCs
- President Asks for More Mental Health Funding
- Teaching Psychiatry by Using Videotapes

AMERICAN  
**PSYCHIATRIC  
ASSOCIATION**  
PUBLISHING



[ps.psychiatryonline.org](http://ps.psychiatryonline.org)

[www.appi.org](http://www.appi.org) • 1-800-368-5777 • Fax: 703-907-1091 • Email: [appi@psych.org](mailto:appi@psych.org)

Priority Code AH1520

## Subscription and Business Information

*The American Journal of Psychiatry*, ISSN 0002-953X, is published monthly by the American Psychiatric Association.

The American Psychiatric Association does not hold itself responsible for statements made in its publications by contributors or advertisers. Unless so stated, material in *The American Journal of Psychiatry* does not reflect the endorsement, official attitude, or position of the American Psychiatric Association or of the Journal's Editorial Board.

Periodicals postage paid at Arlington, VA, and additional mailing offices. POSTMASTER: Send address changes to *The American Journal of Psychiatry*, Circulation Department, American Psychiatric Association, 1000 Wilson Blvd., Suite 1825, Arlington, VA 22209-3901.

### Editorial Office

*American Journal of Psychiatry*  
American Psychiatric Association  
1000 Wilson Blvd., Suite 1825  
Arlington, VA 22209-3901  
Phone: (703) 907-7885, (703) 907-7889  
E-mail: [ajp@psych.org](mailto:ajp@psych.org)

### Customer Service

Phone: (800) 368-5777 (tollfree)  
E-mail: [appi@psych.org](mailto:appi@psych.org)

### APA Member Subscription Services

Phone: (888) 35-PSYCH (tollfree)

### Subscriptions

Per year: individual \$285.00,  
international \$429.00

Institutional subscriptions are tier priced. For institutional site license or pricing information, contact (703) 907-8538 or [institutions@psych.org](mailto:institutions@psych.org).

*Additional subscription options, including single issues and student rates*

Contact Customer Service

### Advertising

*Pharmaceutical Print and Online Advertising*  
Frank Cox, Kathleen Harrison, Tim Wolfinger  
Pharmaceutical Media, Inc.

30 East 33rd Street  
New York, NY 10016  
Phone: (212) 904-0379  
E-mail: [twolfinger@pminy.com](mailto:twolfinger@pminy.com)

*Nonpharmaceutical and Online Sales*

Eamon Wood  
Pharmaceutical Media, Inc.  
E-mail: [ewood@pminy.com](mailto:ewood@pminy.com)  
(see address and phone above).

### Permissions and Reprints

Material published in the journals of the American Psychiatric Association and American Psychiatric Publishing is protected by copyright and all rights are reserved. Material may not be reproduced in any form or by any means without written permission from the copyright owner. For permission to reproduce material published by APA, please visit <http://www.appi.org/CustomerService/Pages/Permissions.aspx> for more information. Permission can also be secured through the Copyright Clearance Center ([www.copyright.com](http://www.copyright.com)).

APA does not require that permission be obtained for the photocopying of isolated articles for nonprofit classroom or library reserve use; all fees associated with such permission are waived. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Requests for commercial distribution should be directed to (703) 907-7875.

For bulk reprints, please contact Cecilia Stoute, (703) 907-8547; e-mail: [cstoute@psych.org](mailto:cstoute@psych.org)

Indexed in Abstracts for Social Workers, Academic Abstracts, Biological Abstracts, Chemical Abstracts, Chicago Psychoanalytic Literature Index, Cumulative Index to Nursing Literature, Excerpta Medica, Hospital Literature Index, Index Medicus, International Nursing Index, Nutrition Abstracts, Psychological Abstracts, Science Citation Index, Social Science Source, and Social Sciences Index.

Pages are produced by Dartmouth Journal Services, Waterbury, VT, and printed by Dartmouth Printing Company, Hanover, NH, on acid-free paper effective with Volume 169, Number 1, January 2012.

© 2015 American Psychiatric Association.



**BRIF SUMMARY.** See package insert for full Prescribing Information. For further product information and current package insert, please visit [www.pristiqhcp.com](http://www.pristiqhcp.com) or call Pfizer US Medical Information toll-free at (800) 438-1985.

**WARNING: SUICIDAL THOUGHTS AND BEHAVIORS**  
**Antidepressants increased the risk of suicidal thoughts and behavior in children, adolescents, and young adults in short-term studies. These studies did not show an increase in the risk of suicidal thoughts and behavior with antidepressant use in patients over age 24; there was a reduction in risk with antidepressant use in patients aged 65 and older [see Warnings and Precautions (5.1) in the full prescribing information].**  
**In patients of all ages who are started on antidepressant therapy, monitor closely for worsening, and for emergence of suicidal thoughts and behaviors. Advise families and caregivers of the need for close observation and communication with the prescriber [see Warnings and Precautions (5.1) in the full prescribing information].**  
**PRISTIQ is not approved for use in pediatric patients [see Use in Specific Populations (8.4) in the full prescribing information].**

**INDICATIONS AND USAGE:** PRISTIQ, a serotonin and norepinephrine reuptake inhibitor (SNRI), is indicated for the treatment of major depressive disorder (MDD) [see Clinical Studies (14) and Dosage and Administration (2.1) in the full prescribing information]. The efficacy of PRISTIQ has been established in four short-term (8-week, placebo-controlled studies) and two maintenance studies in adult outpatients who met DSM-IV criteria for major depressive disorder.

**CONTRAINDICATIONS:** Hypersensitivity to desvenlafaxine succinate, venlafaxine hydrochloride or to any excipients in the PRISTIQ formulation. Angioedema has been reported in patients treated with PRISTIQ [see Adverse Reactions (6.1) in the full prescribing information]. The use of monoamine oxidase inhibitors (MAOIs) intended to treat psychiatric disorders with PRISTIQ or within 7 days of stopping treatment with PRISTIQ is contraindicated because of an increased risk of serotonin syndrome. The use of PRISTIQ within 14 days of stopping an MAOI intended to treat psychiatric disorders is also contraindicated [see Dosage and Administration (2.6) and Warnings and Precautions (5.2) in the full prescribing information]. Starting PRISTIQ in a patient who is being treated with MAOIs such as linezolid or intravenous methylene blue is also contraindicated because of an increased risk of serotonin syndrome [see Dosage and Administration (2.6) and Warnings and Precautions (5.2) in the full prescribing information].

**WARNINGS AND PRECAUTIONS: Suicidal Thoughts and Behaviors in Children, Adolescents and Young Adults—** Patients with major depressive disorder (MDD), both adult and pediatric, may experience worsening of their depression and/or the emergence of suicidal ideation and behavior (suicidality) or unusual changes in behavior, whether or not they are taking antidepressant medications, and this risk may persist until significant remission occurs. Suicide is a known risk of depression and certain other psychiatric disorders, and these disorders themselves are the strongest predictors of suicide. There has been a long-standing concern, however, that antidepressants may have a role in inducing worsening of depression and the emergence of suicidality in certain patients during the early phases of treatment. Pooled analyses of short-term placebo-controlled studies of antidepressant drugs (SSRIs and others) showed that these drugs increase the risk of suicidal thinking and behavior (suicidality) in children, adolescents, and young adults (ages 18 to 24) with major depressive disorder (MDD) and other psychiatric disorders. Short-term studies did not show an increase in the risk of suicidality with antidepressants compared to placebo in adults beyond age 24; there was a reduction with antidepressants compared to placebo in adults aged 65 and older. The pooled analyses of placebo-controlled studies in children and adolescents with MDD, obsessive compulsive disorder (OCD), or other psychiatric disorders included a total of 24 short-term studies of 9 antidepressant drugs in over 4,400 patients. The pooled analyses of placebo-controlled studies in adults with MDD or other psychiatric disorders included a total of 295 short-term studies (median duration of 2 months) of 11 antidepressant drugs in over 77,000 patients. There was considerable variation in risk of suicidality among drugs, but a tendency toward an increase in the younger patients for almost all drugs studied. There were differences in absolute risk of suicidality across the different indications, with the highest incidence in MDD. The risk differences (drug vs. placebo), however, were relatively stable within age strata and across indications. These risk differences (drug-placebo difference in the number of cases of suicidality per 1,000 patients treated) included 14 additional cases of increases among those aged <18, 5 additional cases of increases among those aged 18 to 24, 1 fewer case of decrease among those aged 25 to 64, and 6 fewer cases of decrease among those aged ≥65.

No suicides occurred in any of the pediatric studies. There were suicides in the adult studies, but the number was not sufficient to reach any conclusion about drug effect on suicide. It is unknown whether the suicidality risk extends to longer-term use, i.e., beyond several months. However, there is substantial evidence from placebo-controlled maintenance studies in adults with depression that the use of antidepressants can delay the recurrence of depression. **All patients being treated with antidepressants for any indication should be monitored appropriately and observed closely for clinical worsening, suicidality, and unusual changes in behavior, especially during the initial few months of a course of drug therapy, or at times of dose changes, either increases or decreases.** The following symptoms, anxiety, agitation, panic attacks, insomnia, irritability, hostility, aggressiveness, impulsivity, akathisia (psychomotor restlessness), hypomania, and mania, have been reported in adult and pediatric patients being treated with antidepressants for major depressive disorder as well as for other indications, both psychiatric and nonpsychiatric. 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 that such symptoms may represent precursors to emerging suicidality. Consideration should be given to changing the therapeutic regimen, including possibly discontinuing the medication, in patients whose depression is persistently worse, or who are experiencing emergent suicidality or symptoms that might be precursors to worsening depression or suicidality, especially if these symptoms are severe, abrupt in onset, or were not part of the patient's presenting symptoms. If the decision has been made to discontinue treatment, medication should be tapered, as rapidly as is feasible, but with recognition that abrupt discontinuation can be associated with certain symptoms [see Dosage and Administration (2.4) and Warnings and Precautions (5.7) in the full prescribing information for a description of the risks of discontinuation of PRISTIQ]. **Families and caregivers of patients being treated with antidepressants for major depressive disorder or other indications, both psychiatric and nonpsychiatric, should be alerted about the need to monitor patients for the emergence of agitation, irritability, unusual changes in behavior, and the other symptoms described above, as well as the emergence of suicidality, and to report such symptoms immediately to healthcare providers. Such monitoring should include daily observation by families and caregivers.** Prescriptions for PRISTIQ should be written for the smallest quantity of tablets consistent with good patient management, in order to reduce the risk of overdose. **Screening patients for bipolar disorder—**A major depressive episode may be the initial presentation of bipolar disorder. It is generally believed (though not established in controlled studies) that treating such an episode with an antidepressant alone may increase the likelihood of precipitation of a mixed/manic episode in patients at risk for bipolar disorder. Whether any of the symptoms described above represent such a conversion is unknown. However, prior to initiating treatment with an antidepressant, patients with depressive symptoms should be adequately screened to determine if they are at risk for bipolar disorder; such screening should include a detailed psychiatric history, including a family history of suicide, bipolar disorder, and depression. It should be noted that PRISTIQ is not approved for use in treating bipolar depression. **Serotonin Syndrome:** The development of a potentially life-threatening serotonin syndrome has been reported with SNRIs and SSRIs, including PRISTIQ, alone but particularly with concomitant use of other serotonergic drugs (including triptans, tricyclic antidepressants, fenfluramine, lithium, tramadol, tryptophan, buspirone, and St. John's Wort), and with drugs that impair metabolism of serotonin (in particular, MAOIs, both those intended to treat psychiatric disorders and also others, such as linezolid and intravenous methylene blue). Serotonin syndrome symptoms may include mental status changes (e.g., agitation, hallucinations, delirium, and coma), autonomic instability (e.g., tachycardia, labile blood pressure, dizziness, diaphoresis, flushing, hyperthermia), neuromuscular symptoms (e.g., tremor, rigidity, myoclonus, hyperreflexia, incoordination), seizures, and/or gastrointestinal symptoms (e.g., nausea, vomiting, diarrhea). Patients should be monitored for the emergence of serotonin syndrome. The concomitant use of PRISTIQ with MAOIs intended to treat psychiatric disorders is contraindicated. PRISTIQ should also not be started in a patient who is being treated with MAOIs such as linezolid or intravenous methylene blue. All reports with methylene blue that provided information on the route of administration involved intravenous administration in the dose range of 1 mg/kg to 8 mg/kg. No reports involved the administration of methylene blue by other routes (such as oral tablets or local tissue injection) or at lower doses. There may be circumstances when it is necessary to initiate treatment with a MAOI such as linezolid or intravenous methylene blue in a patient taking PRISTIQ. PRISTIQ should be discontinued before initiating treatment with the MAOI [see Contraindications (4.2) and Dosage and Administration (2.6) in the full prescribing information]. If concomitant use of PRISTIQ with other serotonergic drugs, including triptans, tricyclic antidepressants, fenfluramine, lithium, tramadol, buspirone, tryptophan, and St. John's Wort is clinically warranted, patients should be made aware of a potential increased risk for serotonin syndrome, particularly during treatment initiation and dose increases. Treatment with PRISTIQ and any concomitant serotonergic agents should be discontinued immediately if the above events occur and supportive symptomatic treatment should be initiated. **Elevated Blood Pressure:** Patients receiving PRISTIQ should have regular monitoring of blood pressure since increases in blood pressure were observed in clinical studies [see Adverse Reactions (6.1) in the full prescribing information]. Pre-existing hypertension should be controlled before initiating treatment with PRISTIQ. Caution should

be exercised in treating patients with pre-existing hypertension, cardiovascular, or cerebrovascular conditions that might be compromised by increases in blood pressure. Cases of elevated blood pressure requiring immediate treatment have been reported with PRISTIQ. Sustained blood pressure increases could have adverse consequences. For patients who experience a sustained increase in blood pressure while receiving PRISTIQ, either dose reduction or discontinuation should be considered [see Adverse Reactions (6.1) in the full prescribing information]. **Abnormal Bleeding:** SSRIs and SNRIs, including PRISTIQ, may increase the risk of bleeding events. Concomitant use of aspirin, nonsteroidal anti-inflammatory drugs, warfarin, and other anticoagulants may add to this risk. Case reports and epidemiological studies (case-control and cohort design) have demonstrated an association between use of drugs that interfere with serotonin reuptake and the occurrence of gastrointestinal bleeding. Bleeding events related to SSRIs and SNRIs have ranged from ecchymosis, hematoma, epistaxis, and petechiae to life-threatening hemorrhages. Patients should be cautioned about the risk of bleeding associated with the concomitant use of PRISTIQ and NSAIDs, aspirin, or other drugs that affect coagulation or bleeding. **Angle Closure Glaucoma:** The pupillary dilation that occurs following the use of many antidepressant drugs including PRISTIQ may trigger an angle closure attack in a patient with anatomically narrow angles who does not have a patent iridectomy. **Activation of Mania/Hypomania:** During all MDD phase 2 and phase 3 studies, mania was reported for approximately 0.02% of patients treated with PRISTIQ. Activation of mania/hypomania has also been reported in a small proportion of patients with major affective disorder who were treated with other marketed antidepressants. As with all antidepressants, PRISTIQ should be used cautiously in patients with a history or family history of mania or hypomania. **Discontinuation Syndrome:** Discontinuation symptoms have been systematically and prospectively evaluated in patients treated with PRISTIQ during clinical studies in Major Depressive Disorder. Abrupt discontinuation or dose reduction has been associated with the appearance of new symptoms that include dizziness, nausea, headache, irritability, insomnia, diarrhea, anxiety, fatigue, abnormal dreams, and hyperhidrosis. In general, discontinuation events occurred more frequently with longer duration of therapy. During marketing of SNRIs (Serotonin and Norepinephrine Reuptake Inhibitors), and SSRIs (Selective Serotonin Reuptake Inhibitors), there have been spontaneous reports of adverse events occurring upon discontinuation of these drugs, particularly when abrupt, including the following: dysphoric mood, irritability, agitation, dizziness, sensory disturbances (e.g., paresthesia, such as electric shock sensations), anxiety, confusion, headache, lethargy, emotional lability, insomnia, hypomania, tinnitus, and seizures. While these events are generally self-limiting, there have been reports of serious discontinuation symptoms. Patients should be monitored for these symptoms when discontinuing treatment with PRISTIQ. 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 (2.4) and Adverse Reactions (6.1) in the full prescribing information]. **Seizure:** Cases of seizure have been reported in pre-marketing clinical studies with PRISTIQ. PRISTIQ has not been systematically evaluated in patients with a seizure disorder. Patients with a history of seizures were excluded from pre-marketing clinical studies. PRISTIQ should be prescribed with caution in patients with a seizure disorder. **Hypotension:** Hypotension may occur as a result of treatment with SSRIs and SNRIs, including PRISTIQ. In many cases, this hypotension appears to be the result of the syndrome of inappropriate antidiuretic hormone secretion (SIADH). Cases with serum sodium lower than 110 mmol/L have been reported. Elderly patients may be at greater risk of developing hypotension with SSRIs and SNRIs. Also, patients taking diuretics or who are otherwise volume depleted can be at greater risk [see Use in Specific Populations (8.5) and Clinical Pharmacology (12.6) in the full prescribing information]. Discontinuation of PRISTIQ should be considered in patients with symptomatic hypotension and appropriate medical intervention should be instituted. Signs and symptoms of hypotension include headache, difficulty concentrating, memory impairment, confusion, weakness, and unsteadiness, which can lead to falls. Signs and symptoms associated with more severe and/or acute cases have included hallucination, syncope, seizure, coma, respiratory arrest, and death. **Interstitial Lung Disease and Eosinophilic Pneumonia:** Interstitial lung disease and eosinophilic pneumonia associated with venlafaxine (the parent drug of PRISTIQ) therapy have been rarely reported. The possibility of these adverse events should be considered in patients treated with PRISTIQ who present with progressive dyspnea, cough, or chest discomfort. Such patients should undergo a prompt medical evaluation, and discontinuation of PRISTIQ should be considered.

**ADVERSE REACTIONS:** The following adverse reactions are discussed in greater detail in other sections of the label: Hypersensitivity [see Contraindications (4)], Suicidal Thoughts and Behaviors in Adolescents and Young Adults [see Warnings and Precautions (5.1)], Serotonin Syndrome [see Warnings and Precautions (5.2)], Elevated Blood Pressure [see Warnings and Precautions (5.3)], Abnormal Bleeding [see Warnings and Precautions (5.4)], Angle Closure Glaucoma [see Warnings and Precautions (5.5)], Activation of Mania/Hypomania [see Warnings and Precautions (5.6)], Discontinuation Syndrome [see Warnings and Precautions (5.7)], Seizure [see Warnings and Precautions (5.8)], Hypotension [see Warnings and Precautions (5.9)], Interstitial Lung Disease and Eosinophilic Pneumonia [see Warnings and Precautions (5.10)]. **Clinical Studies Experience:** Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical studies of another drug and may not reflect the rates observed in clinical practice. **Patient exposure—**PRISTIQ was evaluated for safety in 8,394 patients diagnosed with major depressive disorder who participated in multiple-dose pre-marketing studies, representing 2,784 patient-years of exposure. Of the total 8,394 patients exposed to at least one dose of PRISTIQ, 2,116 were exposed to PRISTIQ for 6 months, representing 1,658 patient-years of exposure, and 421 were exposed for one year, representing 416 patient-years of exposure. **Adverse reactions reported as reasons for discontinuation of treatment—**In the pre-marketing pooled 8-week placebo-controlled studies in patients with MDD, 1,834 patients were exposed to PRISTIQ (50 to 400 mg). Of the 1,834 patients, 12% discontinued treatment due to an adverse reaction, compared with 3% of the 1,116 placebo-treated patients. At the recommended dose of 50 mg, the discontinuation rate due to an adverse reaction for PRISTIQ (4.1%) was similar to the rate for placebo (3.8%). For the 100 mg dose of PRISTIQ the discontinuation rate due to an adverse reaction was 8.7%. The most common adverse reactions leading to discontinuation in at least 2% and at a rate greater than placebo of the PRISTIQ treated patients in the short-term studies, up to 8 weeks, were: nausea (4%); dizziness, headache and vomiting (2% each). In a longer-term study, up to 9 months, the most common was vomiting (2%). **Common adverse reactions in placebo-controlled MDD studies—**The most commonly observed adverse reactions in PRISTIQ treated MDD patients in pre-marketing pooled 8-week, placebo-controlled fixed-dose studies (incidence ≥5% and at least twice the rate of placebo in the 50 or 100 mg dose groups) were: nausea, dizziness, insomnia, hyperhidrosis, constipation, somnolence, decreased appetite, anxiety, and specific male sexual function disorders. The incidence of common adverse reactions that occurred in ≥2% of PRISTIQ treated MDD patients and twice the rate of placebo at any dose in the pre-marketing pooled 8-week, placebo-controlled, fixed dose clinical studies (placebo, n=636; PRISTIQ 50 mg, n=317; PRISTIQ 100 mg, n=424; PRISTIQ 200 mg, n=307; PRISTIQ 400 mg, n=317) included: **Cardiac disorders:** Blood pressure increased (1% placebo, 1% PRISTIQ 50 mg, 1% PRISTIQ 100 mg, 2% PRISTIQ 200 mg, 2% PRISTIQ 400 mg); **Gastrointestinal disorders:** Nausea (10% placebo, 22% PRISTIQ 50 mg, 26% PRISTIQ 100 mg, 36% PRISTIQ 200 mg, 41% PRISTIQ 400 mg); Dry mouth (9% placebo, 11% PRISTIQ 50 mg, 17% PRISTIQ 100 mg, 21% PRISTIQ 200 mg, 25% PRISTIQ 400 mg); Constipation (4% placebo, 9% PRISTIQ 50 mg, 9% PRISTIQ 100 mg, 10% PRISTIQ 200 mg, 14% PRISTIQ 400 mg); Vomiting (3% placebo, 3% PRISTIQ 50 mg, 4% PRISTIQ 100 mg, 6% PRISTIQ 200 mg, 9% PRISTIQ 400 mg); **General disorders and administration site conditions:** Fatigue (4% placebo, 7% PRISTIQ 50 mg, 7% PRISTIQ 100 mg, 10% PRISTIQ 200 mg, 11% PRISTIQ 400 mg); Chills (1% placebo, 1% PRISTIQ 50 mg, <1% PRISTIQ 100 mg, 3% PRISTIQ 200 mg, 4% PRISTIQ 400 mg); Feeling jittery (1% placebo, 1% PRISTIQ 50 mg, 2% PRISTIQ 100 mg, 3% PRISTIQ 200 mg, 3% PRISTIQ 400 mg); **Metabolism and nutrition disorders:** Decreased appetite (2% placebo, 5% PRISTIQ 50 mg, 8% PRISTIQ 100 mg, 10% PRISTIQ 200 mg, 10% PRISTIQ 400 mg); **Nervous system disorders:** Dizziness (5% placebo, 13% PRISTIQ 50 mg, 10% PRISTIQ 100 mg, 15% PRISTIQ 200 mg, 16% PRISTIQ 400 mg); Somnolence (4% placebo, 4% PRISTIQ 50 mg, 9% PRISTIQ 100 mg, 12% PRISTIQ 200 mg, 12% PRISTIQ 400 mg); Tremor (2% placebo, 2% PRISTIQ 50 mg, 3% PRISTIQ 100 mg, 9% PRISTIQ 200 mg, 9% PRISTIQ 400 mg); Disturbance in attention (<1% placebo, <1% PRISTIQ 50 mg, 1% PRISTIQ 100 mg, 2% PRISTIQ 200 mg, 1% PRISTIQ 400 mg); **Psychiatric disorders:** Insomnia (6% placebo, 9% PRISTIQ 50 mg, 12% PRISTIQ 100 mg, 14% PRISTIQ 200 mg, 15% PRISTIQ 400 mg); Anxiety (2% placebo, 3% PRISTIQ 50 mg, 5% PRISTIQ 100 mg, 4% PRISTIQ 200 mg, 4% PRISTIQ 400 mg); Abnormal dreams (1% placebo, <1% PRISTIQ 50 mg, 1% PRISTIQ 100 mg, 2% PRISTIQ 200 mg, 2% PRISTIQ 400 mg); **Renal and urinary disorders:** Urinary hesitation (0% placebo, <1% PRISTIQ 50 mg, 1% PRISTIQ 100 mg, 2% PRISTIQ 200 mg, 2% PRISTIQ 400 mg); **Respiratory, thoracic and mediastinal disorders:** Yawning (<1% placebo, 1% PRISTIQ 50 mg, 1% PRISTIQ 100 mg, 4% PRISTIQ 200 mg, 3% PRISTIQ 400 mg); **Skin and subcutaneous tissue disorders:** Hyperhidrosis (4% placebo, 10% PRISTIQ 50 mg, 11% PRISTIQ 100 mg, 18% PRISTIQ 200 mg, 21% PRISTIQ 400 mg); **Special senses:** Vision blurred (1% placebo, 3% PRISTIQ 50 mg, 4% PRISTIQ 100 mg, 6% PRISTIQ 200 mg, 6% PRISTIQ 400 mg); Mydriasis (<1% placebo, 2% PRISTIQ 50 mg, 2% PRISTIQ 100 mg, 4% PRISTIQ 200 mg, 6% PRISTIQ 400 mg); Vertigo (<1% placebo, 2% PRISTIQ 50 mg, 1% PRISTIQ 100 mg, 5% PRISTIQ 200 mg, 3% PRISTIQ 400 mg); Tinnitus (1% placebo, 2% PRISTIQ 50 mg, 1% PRISTIQ 100 mg, 1% PRISTIQ 200 mg, 2% PRISTIQ 400 mg); **Dysgeusia** (1% placebo, 1% PRISTIQ 50 mg, 1% PRISTIQ 100 mg, 1% PRISTIQ 200 mg, 2% PRISTIQ 400 mg); **Vascular disorders:** Hot flush (<1% placebo, 1% PRISTIQ 50 mg, 1% PRISTIQ 100 mg, 2% PRISTIQ 200 mg, 2% PRISTIQ 400 mg).

**Sexual function adverse reactions—**The incidence of sexual function adverse reactions that occurred in ≥2% of PRISTIQ treated MDD patients in any fixed-dose group (pre-marketing pooled 8-week, placebo-controlled, fixed-dose, clinical studies) included: Men only (placebo, n=239; PRISTIQ 50 mg, n=108; PRISTIQ 100 mg, n=157; PRISTIQ 200 mg, n=131; PRISTIQ 400 mg, n=154): Anorgasmia (0% placebo, 0% PRISTIQ 50 mg, 3% PRISTIQ 100 mg, 5% PRISTIQ 200 mg, 8% PRISTIQ 400 mg); Libido decreased (1% placebo, 4% PRISTIQ 50 mg, 5% PRISTIQ 100 mg, 6% PRISTIQ 200 mg, 3% PRISTIQ 400 mg); Orgasm abnormal (0% placebo, 0% PRISTIQ 50 mg, 1% PRISTIQ 100 mg, 2% PRISTIQ 200 mg, 3% PRISTIQ 400 mg); Ejaculation delayed (<1% placebo, 1% PRISTIQ 50 mg, 5% PRISTIQ 100

mg, 7% PRISTIQ 200 mg, 6% PRISTIQ 400 mg). Erectile dysfunction (1% placebo, 3% PRISTIQ 50 mg, 6% PRISTIQ 100 mg, 8% PRISTIQ 200 mg, 11% PRISTIQ 400 mg). Ejaculation disorder (0% placebo, 0% PRISTIQ 50 mg, 1% PRISTIQ 100 mg, 2% PRISTIQ 200 mg, 5% PRISTIQ 400 mg). Ejaculation failure (0% placebo, 1% PRISTIQ 50 mg, 0% PRISTIQ 100 mg, 2% PRISTIQ 200 mg, 2% PRISTIQ 400 mg). Sexual dysfunction (0% placebo, 1% PRISTIQ 50 mg, 0% PRISTIQ 100 mg, 0% PRISTIQ 200 mg, 2% PRISTIQ 400 mg). Women only (placebo, n=397; PRISTIQ 50 mg, n=209; PRISTIQ 100 mg, n=267; PRISTIQ 200 mg, n=176; PRISTIQ 400 mg, n=163): Anorgasmia (0% placebo, 1% PRISTIQ 50 mg, 1% PRISTIQ 100 mg, 0% PRISTIQ 200 mg, 3% PRISTIQ 400 mg).

**Other adverse reactions observed in pre-marketing and post-marketing clinical studies:** Other infrequent adverse reactions, not described elsewhere in the label, occurring at an incidence of <2% in MDD patients treated with PRISTIQ were: **Cardiac disorders**—Tachycardia; **General disorders and administration site conditions**—Asthenia; **Investigations**—Weight increased, liver function test abnormal, blood protein increased; **Musculoskeletal and connective tissue disorders**—Musculoskeletal stiffness; **Nervous system disorders**—Syncope, convulsion, dystonia; **Psychiatric disorders**—Depersonalization, bruxism; **Renal and urinary disorders**—Urinary retention; **Skin and subcutaneous tissue disorders**—Rash, alopecia, photosensitivity reaction, angioedema. In clinical studies, there were uncommon reports of ischemic cardiac adverse reactions, including myocardial ischemia, myocardial infarction, and coronary occlusion requiring revascularization; these patients had multiple underlying cardiac risk factors. More patients experienced these events during PRISTIQ treatment as compared to placebo.

**Laboratory, ECG and vital sign changes observed in MDD clinical studies**—The following changes were observed in pre-marketing placebo-controlled, short-term MDD studies with PRISTIQ. **Lipids**—Elevations in fasting serum total cholesterol, LDL (low density lipoproteins) cholesterol, and triglycerides occurred in the controlled studies. Some of these abnormalities were considered potentially clinically significant. The percentage of patients who exceeded a predetermined threshold value included: Total Cholesterol increase of  $\geq 50$  mg/dl and an absolute value of  $\geq 261$  mg/dl (2% placebo, 3% PRISTIQ 50 mg, 4% PRISTIQ 100 mg, 4% PRISTIQ 200 mg, 10% PRISTIQ 400 mg), LDL Cholesterol increase 50 mg/dl and an absolute value of 190 mg/dl (0% placebo, 1% PRISTIQ 50 mg, 0% PRISTIQ 100 mg, 1% PRISTIQ 200 mg, 2% PRISTIQ 400 mg), Triglycerides, fasting,  $\geq 327$  mg/dl (3% placebo, 2% PRISTIQ 50 mg, 1% PRISTIQ 100 mg, 4% PRISTIQ 200 mg, 6% PRISTIQ 400 mg).

**Proteinuria**—Proteinuria, greater than or equal to trace, was observed in the pre-marketing fixed-dose controlled studies. This proteinuria was not associated with increases in BUN or creatinine and was generally transient. The percentages of patients with proteinuria in the fixed-dose clinical studies were: 4% placebo, 6% PRISTIQ 50 mg, 8% PRISTIQ 100 mg, 5% PRISTIQ 200 mg, 7% PRISTIQ 400 mg.

**Vital sign changes**—Mean changes observed in placebo-controlled, short-term, fixed-dose, pre-marketing, controlled studies with PRISTIQ in patients with MDD included **Blood pressure:** Supine systolic bp (-1.4 mm Hg placebo, 1.2 mm Hg PRISTIQ 50 mg, 2.0 mm Hg PRISTIQ 100 mg, 2.5 mm Hg PRISTIQ 200 mg, 2.1 mm Hg PRISTIQ 400 mg); Supine diastolic bp (-0.6 mm Hg placebo, 0.7 mm Hg PRISTIQ 50 mg, 0.8 mm Hg PRISTIQ 100 mg, 1.8 mm Hg PRISTIQ 200 mg, 2.3 mm Hg PRISTIQ 400 mg); **Pulse rate:** Supine pulse (-0.3 bpm placebo, 1.3 bpm PRISTIQ 50 mg, 1.3 bpm PRISTIQ 100 mg, 0.9 bpm PRISTIQ 200 mg, 4.1 bpm PRISTIQ 400 mg); **Weight:** (0.0 kg placebo, -0.4 kg PRISTIQ 50 mg, -0.6 kg PRISTIQ 100 mg, -0.9 kg PRISTIQ 200 mg, -1.1 kg PRISTIQ 400 mg).

Treatment with PRISTIQ at all doses from 50 mg/day to 400 mg/day in controlled studies was associated with sustained hypertension, defined as treatment-emergent supine diastolic blood pressure (SDBP)  $\geq 90$  mm Hg and  $\geq 10$  mm Hg above baseline for 3 consecutive on-therapy visits. The proportion of patients with sustained elevation of supine diastolic blood pressure included 0.5% placebo, 1.3% PRISTIQ 50 mg, 0.7% PRISTIQ 100 mg, 1.1% PRISTIQ 200 mg, 2.3% PRISTIQ 400 mg. Analyses of patients in PRISTIQ pre-marketing short-term controlled studies who met criteria for sustained hypertension revealed a consistent increase in the proportion of patients who developed sustained hypertension. This was seen at all doses with a suggestion of a higher rate at 400 mg/day.

**Orthostatic hypotension**—In the pre-marketing short-term, placebo-controlled clinical studies with doses of 50 to 400 mg, systolic orthostatic hypotension (decrease  $\geq 30$  mm Hg from supine to standing position) occurred more frequently in patients  $\geq 65$  years of age receiving PRISTIQ (8%, 7/87) versus placebo (2.5%, 1/40), compared to patients  $< 65$  years of age receiving PRISTIQ (0.9%, 18/1,937) versus placebo (0.7%, 8/1,218).

**Post-marketing experience**—The following adverse reaction has been identified during post-approval use of PRISTIQ. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure: **Skin and subcutaneous tissue disorders**—Stevens-Johnson syndrome. **DRUG INTERACTIONS: Monoamine Oxidase Inhibitors (MAOI)**—[see Dosage and Administration (2.6), Contraindications (4) and Warnings and Precautions (5.2) in the full prescribing information]. **Serotonergic Drugs**—[see Dosage and Administration (2.6), Contraindications (4) and Warnings and Precautions (5.2) in the full prescribing information]. **Drugs that Interfere with Hemostasis (e.g., NSAIDs, Aspirin, and Warfarin)**—Serotonin release by platelets plays an important role in hemostasis. Epidemiological studies of case-control and cohort design that have demonstrated an association between use of psychotropic drugs that interfere with serotonin reuptake and the occurrence of upper gastrointestinal bleeding. These studies have also shown that concurrent use of an NSAID or aspirin may potentiate this risk of bleeding. Altered anticoagulant effects, including increased bleeding, have been reported when SSRIs and SNRIs are co-administered with warfarin. Patients receiving warfarin therapy should be carefully monitored when PRISTIQ is initiated or discontinued [see Warnings and Precautions (5.4) in the full prescribing information].

**Potential for Other Drugs to Affect Desvenlafaxine**—Based on *in vitro* data, no dose adjustment is required for PRISTIQ when used concomitantly with inhibitors of CYP3A4 and CYP1A2, 1A2, 2A6, 2D6, 2C8, 2C9, 2C19, 2E1, and the P-glycoprotein transporter. Clinical studies have demonstrated no clinically significant pharmacokinetic interaction between PRISTIQ and strong CYP3A4 inhibitors (see Figure 1 in full prescribing information). **Potential for Desvenlafaxine to Affect Other Drugs**—Clinical studies have shown that desvenlafaxine does not have a clinically relevant effect on CYP2D6 metabolism at the dose of 100 mg daily (see Figure 2 in full prescribing information). Substrates primarily metabolized by CYP2D6 (e.g., desipramine, atomoxetine, dextromethorphan, metoprolol, nebivolol, perphenazine, tolterodine) should be dosed at the original level when co-administered with PRISTIQ 100 mg or lower or when PRISTIQ is discontinued. Reduce the dose of these substrates by one-half if co-administered with 400 mg of PRISTIQ. No additional dose adjustment is required for concomitant use of substrates of CYP3A4, 1A2, 2A6, 2C8, 2C9, and 2C19 isozymes, and P-glycoprotein transporter. Clinical studies have demonstrated no clinically significant pharmacokinetic interaction between PRISTIQ and CYP3A4 substrates (see Figure 2 in full prescribing information). Clinical studies have shown that desvenlafaxine (100 mg daily) does not have a clinically relevant effect on tamoxifen and aripiprazole, compounds that are metabolized by a combination of both CYP2D6 and CYP3A4 enzymes (see Figure 2 in full prescribing information). *In vitro* studies showed minimal inhibitory effect of desvenlafaxine on the CYP2D6 isoenzyme. *In vitro*, desvenlafaxine does not inhibit or induce the CYP3A4 isozyme. *In vitro*, desvenlafaxine does not inhibit CYP1A2, 2A6, 2C8, 2C9, and 2C19 isozymes, and P-glycoprotein transporter and would not be expected to affect the pharmacokinetics of drugs that are substrates of these CYP isozymes and transporter. **Other Drugs Containing Desvenlafaxine or Venlafaxine**—Avoid use of PRISTIQ with other desvenlafaxine-containing products or venlafaxine products.

The concomitant use of PRISTIQ with other desvenlafaxine-containing products or venlafaxine will increase desvenlafaxine blood levels and increase dose-related adverse reactions [see Adverse Reactions (6) in the full prescribing information]. **Ethanol**—A clinical study has shown that PRISTIQ does not increase the impairment of mental and motor skills caused by ethanol. However, as with all CNS-active drugs, patients should be advised to avoid alcohol consumption while taking PRISTIQ. **Drug-Laboratory Test Interactions**—False-positive urine immunoassay screening test for phencyclidine (PCP) and amphetamine have been reported in patients taking desvenlafaxine. This is due to lack of specificity of the screening tests. False positive test results may be expected for several days following discontinuation of desvenlafaxine therapy. Confirmatory tests, such as gas chromatography/mass spectrometry, will distinguish desvenlafaxine from PCP and amphetamine.

**USE IN SPECIFIC POPULATIONS: Pregnancy—Pregnancy Category C: Risk summary**—There are no adequate and well-controlled studies of PRISTIQ in pregnant women. In reproductive developmental studies in rats and rabbits with desvenlafaxine succinate, evidence of teratogenicity was not observed at doses up to 30 times a human dose of 100 mg/day (on a mg/m<sup>2</sup> basis) in rats, and up to 15 times a human dose of 100 mg/day (on a mg/m<sup>2</sup> basis) in rabbits. An increase in rat pup deaths was seen during the first 4 days of lactation when dosing occurred during gestation and lactation, at doses greater than 10 times a human dose of 100 mg/day (on a mg/m<sup>2</sup> basis). PRISTIQ should be used during pregnancy only if the potential benefit justifies the potential risks to the fetus. **Clinical considerations**—A prospective longitudinal study of 201 women with history of major depression who were euthymic at the beginning of pregnancy, showed women who discontinued antidepressant medication during pregnancy were more likely to experience a relapse of major depression than women who continued antidepressant medication. **Human data**—Neonates exposed to SNRIs (Serotonin and Norepinephrine Reuptake Inhibitors), or SSRIs (Selective Serotonin Reuptake Inhibitors), late in the third trimester have developed complications requiring prolonged hospitalization, respiratory support, and tube feeding. Such complications can arise immediately upon delivery. Reported clinical findings have included respiratory distress, cyanosis, apnea, seizures, temperature instability, feeding difficulty, vomiting, hypoglycemia, hypotonia, hypertonia, hyperreflexia, tremor, jitteriness, irritability, and constant crying. These features are consistent with either a direct toxic effect of SSRIs and SNRIs or, possibly, a drug discontinuation syndrome. It should be noted that, in some cases, the clinical picture is consistent with serotonin syndrome [see Warnings and Precautions (5.2) in the full prescribing information]. **Animal data**—When desvenlafaxine succinate was

administered orally to pregnant rats and rabbits during the period of organogenesis at doses up to 300 mg/kg/day and 75 mg/kg/day, respectively, no teratogenic effects were observed. These doses are 30 times a human dose of 100 mg/day (on a mg/m<sup>2</sup> basis) in rats and 15 times a human dose of 100 mg/day (on a mg/m<sup>2</sup> basis) in rabbits. However, fetal weights were decreased and skeletal ossification was delayed in rats in association with maternal toxicity at the highest dose, with a no-effect dose 10 times a human dose of 100 mg/day (on a mg/m<sup>2</sup> basis). When desvenlafaxine succinate was administered orally to pregnant rats throughout gestation and lactation, there was a decrease in pup weights and an increase in pup deaths during the first four days of lactation at the highest dose of 300 mg/kg/day. The cause of these deaths is not known. The no-effect dose for rat pup mortality was 10 times a human dose of 100 mg/day (on a mg/m<sup>2</sup> basis). Post-weaning growth and reproductive performance of the progeny were not affected by maternal treatment with desvenlafaxine succinate at a dose 30 times a human dose of 100 mg/day (on a mg/m<sup>2</sup> basis). **Nursing Mothers**—Desvenlafaxine (O-desmethylvenlafaxine) is excreted in human milk. Because of the potential for serious adverse reactions in nursing infants from PRISTIQ, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother. **Pediatric Use**—Safety and effectiveness in pediatric patients have not been established [see Boxed Warning and Warnings and Precautions (5.1) in the full prescribing information]. Anyone considering the use of PRISTIQ in a child or adolescent must balance the potential risks with the clinical need. **Geriatric Use**—Of the 4,158 patients in pre-marketing clinical studies with PRISTIQ, 6% were 65 years of age or older. No overall differences in safety or efficacy were observed between these patients and younger patients; however, in the short-term placebo-controlled studies, there was a higher incidence of systolic orthostatic hypotension in patients  $\geq 65$  years of age compared to patients  $< 65$  years of age treated with PRISTIQ [see Adverse Reactions (6) in the full prescribing information]. For elderly patients, possible reduced renal clearance of PRISTIQ should be considered when determining dose [see Dosage and Administration (2.2) and Clinical Pharmacology (12.3) in the full prescribing information]. SSRIs and SNRIs, including PRISTIQ, have been associated with cases of clinically significant hyponatremia in elderly patients, who may be at greater risk for this adverse event [see Warnings and Precautions (5.9) in the full prescribing information]. **Other Patient Factors:** The effect of intrinsic patient factors on the pharmacokinetics of PRISTIQ is presented in Figure 3 (refer to figure in full prescribing information). **Renal Impairment**—In subjects with renal impairment the clearance of PRISTIQ was decreased. In subjects with severe renal impairment (24-hr CrCl  $< 30$  mL/min, Cockcroft-Gault) and end-stage renal disease, elimination half-lives were significantly prolonged, increasing exposures to PRISTIQ; therefore, dosage adjustment is recommended in these patients [see Dosage and Administration (2.2) and Clinical Pharmacology (12.3) in the full prescribing information]. **Hepatic Impairment**—The mean terminal half-life ( $t_{1/2}$ ) changed from approximately 10 hours in healthy subjects and subjects with mild hepatic impairment to 13 and 14 hours in moderate and severe hepatic impairment, respectively. The recommended dose in patients with moderate to severe hepatic impairment is 50 mg/day. Dose escalation above 100 mg/day is not recommended [see Clinical Pharmacology (12.3) in the full prescribing information].

**DRUG ABUSE AND DEPENDENCE: Controlled Substance**—PRISTIQ is not a controlled substance.

**OVERDOSAGE: Human Experience with Overdosage**—There is limited clinical trial experience with desvenlafaxine succinate overdosage in humans. However, desvenlafaxine (PRISTIQ) is the major active metabolite of venlafaxine. Overdose experience reported with venlafaxine (the parent drug of PRISTIQ) is presented below; the identical information can be found in the *Overdosage* section of the venlafaxine package insert. In post-marketing experience, overdose with venlafaxine (the parent drug of PRISTIQ) has occurred predominantly in combination with alcohol and/or other drugs. The most commonly reported events in overdosage include tachycardia, changes in level of consciousness (ranging from somnolence to coma), mydriasis, seizures, and vomiting. Electrocardiogram changes (e.g., prolongation of QT interval, bundle branch block, QRS prolongation), sinus and ventricular tachycardia, bradycardia, hypotension, rhabdomyolysis, vertigo, liver necrosis, serotonin syndrome, and death have been reported. Published retrospective studies report that venlafaxine overdosage may be associated with an increased risk of fatal outcomes compared to that observed with SSRI antidepressant products, but lower than that for tricyclic antidepressants. Epidemiological studies have shown that venlafaxine-treated patients have a higher pre-existing burden of suicide risk factors than SSRI-treated patients. The extent to which the finding of an increased risk of fatal outcomes can be attributed to the toxicity of venlafaxine in overdosage, as opposed to some characteristic(s) of venlafaxine-treated patients, is not clear. **Management of Overdosage**—No specific antidotes for PRISTIQ are known. In managing overdosage, consider the possibility of multiple drug involvement. In case of overdose, call Poison Control Center at 1-800-222-1222 for latest recommendations.

This brief summary is based on PRISTIQ Prescribing Information LAB-0452-11.0, revised June 2014.

© 2014 Pfizer Inc.

All rights reserved.

July 2014



# Major Depressive Disorder (MDD) can make it all feel overwhelming



## Consider PRISTIQ® (desvenlafaxine) 50 mg for your adult MDD patients

An SNRI with a starting dose that is the proven effective dose\* and a low discontinuation rate due to adverse reactions<sup>1</sup>

- Discontinuation rate due to adverse reactions comparable to placebo (4.1% vs 3.8%)<sup>2</sup>
- Most commonly observed adverse reactions vs placebo include nausea (22% vs 10%), dizziness (13% vs 5%), hyperhidrosis (10% vs 4%), constipation (9% vs 4%), and decreased appetite (5% vs 2%)

\*50 mg per day is the recommended dose for most patients. The maximum recommended dose in patients with severe renal impairment (24-hr CrCl less than 30 mL/min, C-G) or end-stage renal disease (ESRD) is 50 mg every other day. Supplemental doses should not be given to patients after dialysis.

### Important Safety Information for PRISTIQ

#### WARNING: SUICIDAL THOUGHTS AND BEHAVIORS

Antidepressants increased the risk of suicidal thoughts and behavior in children, adolescents, and young adults in short-term studies. These studies did not show an increase in the risk of suicidal thoughts and behavior with antidepressant use in patients over age 24; there was a reduction in risk with antidepressant use in patients aged 65 and older.

In patients of all ages who are started on antidepressant therapy, monitor closely for worsening, and for emergence of suicidal thoughts and behaviors. Advise families and caregivers of the need for close observation and communication with the prescriber.

PRISTIQ is not approved for use in pediatric patients.

#### Contraindications

- PRISTIQ is contraindicated in patients with a known hypersensitivity to PRISTIQ or venlafaxine. Angioedema has been reported in patients treated with PRISTIQ.
- **Serotonin syndrome and MAOIs:** Do not use MAOIs intended to treat psychiatric disorders with PRISTIQ or within 7 days of stopping treatment with PRISTIQ. Do not use PRISTIQ within 14 days of stopping an MAOI intended to treat psychiatric disorders. In addition, do not start PRISTIQ in a patient who is being treated with an MAOI such as linezolid or intravenous methylene blue.

#### Selected Warnings and Precautions

- **All patients treated with antidepressants should be monitored appropriately and observed closely for clinical worsening, suicidality, and unusual changes in behavior, especially during the first few months of treatment and when changing the dose.** Consider changing the therapeutic regimen, including possibly discontinuing the medication, in patients whose depression is persistently worse or includes symptoms of anxiety, agitation, panic attacks, insomnia, irritability, hostility, aggressiveness, impulsivity, akathisia, hypomania, mania, or suicidality that are severe, abrupt in onset, or were not part of the patient's presenting symptoms. **Families and caregivers of patients being treated with antidepressants should be alerted about the need to monitor patients.**
- The development of a potentially life-threatening serotonin syndrome has been reported with SSRIs and SNRIs, including with PRISTIQ, both when taken alone, but especially when co-administered with other serotonergic agents (including triptans, tricyclic antidepressants, fentanyl, lithium, tramadol, tryptophan, buspirone, and St. John's Wort) and with drugs that impair metabolism of serotonin (in particular, MAOIs, both those intended to treat psychiatric disorders and also others, such as linezolid and intravenous methylene blue). If such events occur, immediately discontinue PRISTIQ and any concomitant serotonergic agents, and initiate supportive treatment. If concomitant use of PRISTIQ with other serotonergic drugs is clinically warranted, patients should be made aware of a potential increased risk for serotonin syndrome, particularly during treatment initiation and dose increase.
- Patients receiving PRISTIQ should have regular monitoring of blood pressure, since increases in blood pressure were observed in clinical studies. Pre-existing hypertension should be controlled before starting PRISTIQ. Caution should be exercised in treating patients with pre-existing hypertension, cardiovascular or cerebrovascular conditions that might be compromised by increases in blood pressure. Cases of elevated blood pressure requiring immediate treatment have been reported. For patients who experience a sustained increase in blood pressure, either dose reduction or discontinuation should be considered.
- SSRIs and SNRIs, including PRISTIQ, may increase the risk of bleeding events. Concomitant use of aspirin, NSAIDs, warfarin, and other anticoagulants may add to this risk.



**Copy Savings Offer<sup>†</sup>**  
for Your Patients

For more information about a great copay savings offer for your adult MDD patients, **call your PRISTIQ rep or visit [Pristiqhcp.com](http://Pristiqhcp.com).**

- The pupillary dilation that occurs following use of many antidepressant drugs including PRISTIQ may trigger an angle closure attack in a patient with anatomically narrow angles (Angle Closure Glaucoma) who does not have a patent iridectomy.
- PRISTIQ is not approved for use in bipolar depression. Prior to initiating treatment with an antidepressant, patients should be adequately screened to determine the risk of bipolar disorder.
- PRISTIQ should be used cautiously in patients with a history or family history of mania or hypomania or with a history of seizure disorder.
- On discontinuation, adverse events, some of which may be serious, have been reported with PRISTIQ and other SSRIs and SNRIs. Abrupt discontinuation of PRISTIQ has been associated with the appearance of new symptoms. Patients should be monitored for symptoms when discontinuing treatment. A gradual reduction in dose rather than abrupt cessation is recommended whenever possible.
- Hyponatremia may occur as a result of treatment with SSRIs and SNRIs, including PRISTIQ. Discontinuation of PRISTIQ should be considered in patients with symptomatic hyponatremia.
- Interstitial lung disease and eosinophilic pneumonia associated with venlafaxine (the parent drug of PRISTIQ) therapy have been rarely reported.

#### Adverse Reactions

- The most commonly observed adverse reactions in patients taking PRISTIQ vs placebo for MDD in short-term fixed-dose premarketing studies (incidence  $\geq 5\%$  and at least twice the rate of placebo in the 50-mg dose group) were nausea (22% vs 10%), dizziness (13% vs 5%), hyperhidrosis (10% vs 4%), constipation (9% vs 4%), and decreased appetite (5% vs 2%).

#### Indication

PRISTIQ Extended-Release Tablets are indicated for the treatment of major depressive disorder in adults.

**References:** 1. Thase ME, Kornstein SG, Germain JM, Jiang Q, Guico-Pabia C, Ninan PT. An integrated analysis of the efficacy of desvenlafaxine compared with placebo in patients with major depressive disorder. *CNS Spectr*. 2009;14(3):144-154. 2. Clayton AH, Kornstein SG, Rosas G, Guico-Pabia C, Tourian KA. An integrated analysis of the safety and tolerability of desvenlafaxine compared with placebo in the treatment of major depressive disorder. *CNS Spectr*. 2009;14(4):183-195.

Please see brief summary of full Prescribing Information on adjacent pages.

<sup>†</sup>Eligibility required. Terms and conditions apply. Card will be accepted only at participating pharmacies. Card is not health insurance. No membership fees. The maximum savings per month is \$60 and the maximum savings per calendar year is \$720. For more information, visit [www.Pristiq.com](http://www.Pristiq.com), call 1-855-498-3563, or write: PRISTIQ Savings Card, 14001 Weston Parkway, Suite 103, Cary, NC 27513-9967.

**Pristiq**  
desvenlafaxine 50 mg  
EXTENDED-RELEASE TABLETS

To learn more about PRISTIQ,  
go to [www.pristiqhcp.com](http://www.pristiqhcp.com)

