Target Audience
This activity is intended for physicians and other healthcare providers who are involved with or have an interest in the management of psychiatric disorders.

Learning Objectives
- Recognize and implement new approaches to the treatment of psychiatric disorders.
- Determine appropriate treatment selection for psychiatric disorders.
- Identify and appropriately prescribe medications or other therapeutic interventions for various psychiatric disorders.
- Recognize, avoid, and manage drug side effects and drug interactions.

Upon completing this activity as designed and achieving a passing score of 70% or higher on the post-test examination, participants will receive a letter of credit awarding AMA PRA Category 1 Credit(s)™ and the test answer key four (4) weeks after receipt of the post-test and registration/evaluation form.

Accreditation
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In order to obtain CME/CEU credit, participants are required to complete all of the following:
1. Read the learning objectives and review Psychiatry Drug Alerts, Volume XXX, July 2016 through December 2016 (6 issues) and complete the post-test.
2. Complete the enclosed registration/evaluation form and record your test answers in the boxes using either pen or pencil.
3. Mail the form to M.J. Powers & Co. Publishers, 45 Carey Ave, Ste 111, Butler, NJ 07405; scan and email it to cme@alertpubs.com; or fax it to 973-898-1201.
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Kate Casano has no relevant financial relationships.
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CME credit for this activity can be claimed through June 30, 2018.
1. A promising strategy to improve response to antidepressants is the addition of antiinflammatory agents, such as aspirin or COX-2 inhibitors. _______ also have direct antiinflammatory effects, which are not mediated by their cholesterol-lowering effects.

   A. NSAIDs
   B. Statins
   C. PCSK9 inhibitors
   D. Fibrates

   7/16, pgs. 49–50

2. In a population-based study, patients who received a combination of an SSRI and a statin experienced _______ than patients who received an SSRI alone.

   A. Fewer psychiatric hospital contacts
   B. More psychiatric hospital contacts
   C. More suicides
   D. Both B and C

   7/16, pgs. 49–50

3. A recent review concluded that combining an SSRI and a statin is almost certain to be safe, with the exception of _______, which inhibits the hepatic enzymes that metabolize statins.

   A. Fluoxetine
   B. Sertraline
   C. Paroxetine
   D. Fluvoxamine

   7/16, pgs. 49–50

4. In a multisite trial in clinically stable but symptomatic patients with schizophrenia, study subjects who switched from another antipsychotic to lurasidone experienced significant improvement in:

   A. Physical health
   B. Mental health
   C. Both A and B
   D. None of the above

   7/16, pgs. 50–51

5. Significant improvement occurred between baseline and 6 weeks for patients whose previous antipsychotic was any of the following except:

   A. Quetiapine
   B. Aripiprazole
   C. Risperidone
   D. Olanzapine

   7/16, pgs. 50–51

6. Basimglurant is an investigational inhibitor of the postsynaptic metabolic glutamate subtype 5 receptor, a mechanism it shares with:

   A. Ketamine
   B. Sertraline
   C. Escitalopram
   D. Aripiprazole

   7/16, pgs. 51–52

7. In a randomized trial in patients with major depression, adjunctive basimglurant was not superior to placebo for clinician-rated endpoints. However, the 1.5-mg dose did significantly improve patient-rated scores for:

   A. Depressive symptoms
   B. Quality of life and enjoyment
   C. Both A and B

   7/16, pgs. 51–52

8. Data from registration trials for brexpiprazole indicate that the agent has a favorable safety and tolerability profile. In these studies, _______ was the most common adverse effect of brexpiprazole at 6 weeks.

   A. Weight gain
   B. Insomnia
   C. Akathisia
   D. Sedation

   7/16, pgs. 52–53

9. Rates of most of the common adverse effects of brexpiprazole treatment declined with longer-term treatment. However, rates of _______ were higher at 52 weeks than at 6 weeks.

   A. Weight gain ≥7%
   B. Metabolic syndrome
   C. Agitation
   D. Both A and B

   7/16, pgs. 52–53

10. According to a large registry-based study _______ or SNRIs may be safer than other antidepressants in terms of hyponatremia in older patients.

    A. Nortriptyline
    B. Bupropion
    C. Mirtazapine
    D. Agomelatine

    7/16, pgs. 53–54
11. In the analysis _______ was found to be associated with the highest risk for hyponatremia.

   A. Venlafaxine  
   B. Citalopram  
   C. Sertraline  
   D. Duloxetine  

   7/16, pgs. 53–54

12. In a controlled trial in patients with Alzheimer’s disease, citalopram reduced agitation. In a secondary analysis of data from that study, citalopram was associated with lower rates of:

   A. Delusions  
   B. Irritability/lability  
   C. Anxiety  
   D. All of the above  

   7/16, pgs. 54–55

13. However, severity of _______ was increased significantly with citalopram.

   A. Disinhibition  
   B. Nighttime behavior disturbances  
   C. Aberrant motor behavior  
   D. All of the above  

   7/16, pgs. 54–55

14. The citalopram dosage used in this study was _______ than that now recommended for patients over age 60 years.

   A. Lower  
   B. Higher  

   7/16, pgs. 54–55

15. According to a systematic review and meta-analysis of treatments for binge eating disorder (BED), compared with placebo, abstinence from binge eating was achieved by more patients who received lixiviatamine, the only FDA-approved pharmacotherapy for BED, or:

   A. Lurasidone  
   B. Second-generation antidepressants  
   C. Lamotrigine  
   D. Both A and B  

   8/16, pgs. 57–58

16. Compared with 11% of wait listed patients, _______% of CBT patients achieved abstinence.

   A. 19  
   B. 36  
   C. 43  
   D. 59  

   8/16, pgs. 57–58

17. Results of a population-based study suggest that patients taking SSRIs have a nearly 6-fold increased risk of acute angle-closure glaucoma, a potentially blinding ocular emergency. Risk appeared to be related to:

   A. Concomitant ADHD  
   B. Severity of depression  
   C. Eye color  
   D. SSRI Dose  

   8/16, pgs. 58–59

18. Clinicians should consider patient glaucoma risk factors, such as _______, before prescribing an SSRI.

   A. Advancing age and female gender  
   B. Ethnicity  
   C. Glaucoma family history, hyperopia, and cataracts  
   D. All of the above  

   8/16, pgs. 58–59

19. In a preliminary study, patients with depression who continued to experience at least mild symptoms despite treatment with antidepressants experienced significant decreases in clinician-rated irritability and self-reported:

   A. Irritability and impulsiveness  
   B. Anger-hostility  
   C. Fear  
   D. Both A and B  

   8/16, pgs. 59–60

20. In this study, depression scores remained the same after 6 weeks of adjunctive brexipiprazole.

   A. True  
   B. False  

   8/16, pgs. 59–60
21. While methadone is the only FDA-approved treatment for opioid addiction during pregnancy, a review of limited available evidence suggests that _______ may be equally safe and effective.
   A. Clonidine  
   B. Naltrexone  
   C. Buprenorphine  
   D. Both A and B

22. In a population-based study in nearly 25,000 patients, thyroid abnormalities were found with a high frequency in patients with bipolar disorder, regardless of treatment.
   A. True 
   B. False

23. In the study, the 4-year risks of hypothyroidism were lowest for oxcarbazepine at 6.3% and highest for _______ at 8.8%.
   A. Quetiapine 
   B. Lithium 
   C. Olanzapine 
   D. Lamotrigine

24. In a large safety trial mandated by the FDA, _______ was/were safe and effective for smoking cessation in patients with or without psychiatric disorders.
   A. Fluvoxamine 
   B. Bupropion 
   C. Varenicline 
   D. Both B and C

25. This study did not find longitudinal changes in:
   A. Mood 
   B. Suicidality 
   C. Anxiety 
   D. All of the above

26. In an NIMH-funded randomized trial in 80 veterans with military PTSD, monotherapy with quetiapine _______ superior to placebo; however, patients remained symptomatic.
   A. Was 
   B. Was not

27. Treatment with quetiapine was not associated with significant improvement in PANSS negative symptoms or:
   A. Sleep 
   B. PANSS positive symptoms 
   C. Depression 
   D. All of the above

28. In a study of patients with heart failure and depression, treatment with escitalopram improved depressive symptoms to a significantly greater degree than placebo.
   A. True 
   B. False

29. In a 12-week placebo-controlled trial, adjunctive raloxifene produced clinical response in _______% of women with refractory schizophrenia.
   A. 13 
   B. 36 
   C. 42 
   D. 80

30. In this study, there were _______ adverse effects of treatment.
   A. No notable 
   B. Minimal 
   C. Mild-to-moderate 
   D. Several serious
31. Because estrogens are known to improve _______, raloxifene and other selective estrogen receptor modulators (SERMs) are under investigation as potential treatments for women with schizophrenia.

A. Psychotic symptoms
B. Manic symptoms
C. Cognition
D. All of the above

9/16, pg. 66

32. In a post-hoc exploratory analysis of a study of raloxifene in women with schizophrenia, women with a specific UGT1A8 genotype were more likely than others to show improvement in _______ when receiving treatment with raloxifene.

A. Positive symptoms
B. Negative symptoms
C. Depression
D. Both B and C

9/16, pg. 66

33. In a pilot study, a nasal spray containing _______ was effective for as-needed treatment of social anxiety symptoms.

A. Sertraline
B. Paroxetine
C. Pherine
D. Venlafaxine

9/16, pgs. 67–68

34. In a controlled trial of patients who experienced a weak response to 2 weeks of 80 mg/day lurasidone, increasing the lurasidone to 160 mg/day resulted in significantly greater reductions in PANSS total scores, as well as increases in the incidence of anxiety, akathisia, insomnia, and somnolence.

A. True
B. False

9/16, pgs. 68–69

35. Current treatments for Alzheimer’s disease target neurotransmission but do not address:

A. Neurodegeneration
B. Neuronal performance
C. Neuroinflammation
D. All of the above

9/16, pgs. 69–70

36. GLP-1 receptor agonists, like liraglutide, cross the blood-brain barrier and are reportedly neuroprotective of several neurodegenerative disorders in animal models. In a study in patients with Alzheimer’s disease, treatment with liraglutide prevented:

A. Cognitive decline
B. Increases in amyloid deposits
C. Decline of brain glucose metabolism
D. Both A and B

9/16, pgs. 69–70

37. According to updated guidelines on depression pharmacotherapy from the Canadian Network for Mood and Anxiety Treatments (CANMAT), studies show a _______% differential in efficacy among all antidepressants.

A. 5–6
B. 6–8
C. 7–10
D. 10–14

9/16, pgs. 70–71

38. The new CANMAT guidelines suggest pharmacogenetic testing for drug selection.

A. True
B. False

9/16, pgs. 70–71

39. In a large population-based study of the effects of antipsychotic use in early pregnancy, after adjusting for multiple confounding factors, neither relative risk for overall malformations nor cardiac malformations was increased with:

A. First-generation antipsychotics
B. Second-generation antipsychotics
C. Both A and B

9/16, pgs. 71–72

40. Among individual antipsychotics, only _______ showed significantly increased risk for both overall and cardiac malformations.

A. Aripiprazole
B. Ziprasidone
C. Olanzapine
D. Risperidone

9/16, pgs. 71–72
41. According to a review, for women with bipolar disorder who want to breastfeed:
   A. All mood stabilizers and antipsychotics are considered safe; no precautions are needed
   B. The benefits of breastfeeding generally outweigh the risks of taking mood stabilizers or antipsychotics
   C. No mood stabilizer or antipsychotics should be taken
   D. Only mood stabilizers should be taken

42. In breastfeeding, drugs with a high percentage of plasma protein binding are the _______ likely to enter breast milk.
   A. Most
   B. Least

43. Among second-generation antipsychotics, _______ is/are considered safe, based on numerous reports of low plasma concentrations in exposed infants.
   A. None
   B. Quetiapine
   C. Olanzapine
   D. Both B and C

44. According to results of a secondary analysis of safety data from a phase III clinical trial, the metabolic safety and tolerability of aripiprazole lauroxil are similar to that reported in studies of:
   A. Oral aripiprazole
   B. Clozapine
   C. Quetiapine
   D. Both B and C

46. Compared with non-users, in women taking hormonal contraceptives relative risk of depression was highest for:
   A. Progestin-only contraceptives
   B. Transdermal patch (norelgestromin)
   C. Medroxyprogesterone acetate depot
   D. Vaginal ring (etonorgestrel)

47. In this study, relative risks of depression associated with hormonal contraception were highest in:
   A. Adolescents, aged 15–19 years
   B. Young adults, aged 18–22 years
   C. Women aged 25–35 years
   D. Perimenopausal women

48. According to a literature review, the quality of evidence supporting medical marijuana in psychiatry is sufficient to recommend its use in:
   A. Tourette’s disorder
   B. PTSD
   C. Alzheimer’s disease
   D. None of the above

49. In a population-based study, rates of all-cause hospitalization were significantly lower in those receiving _______ than second-generation antipsychotic monotherapy as initial treatment for a manic episode.
   A. Aripiprazole
   B. Lithium
   C. Valproate
   D. Either B or C

50. In this study, the combination of a second-generation antipsychotic plus valproate was associated with a _______ likelihood of all-cause hospitalization than second-generation antipsychotics alone.
   A. Lower
   B. Higher
51. In a placebo-controlled relapse-prevention trial in patients with body dysmorphic disorder, after 6 months of continued treatment, ______% of the escitalopram-treated patients had experienced a relapse, compared with 40% of the placebo group.

A. 18  
B. 26  
C. 29  
D. 38

52. The results of this study and others suggest that relatively low doses of escitalopram can be used to treat body dysmorphic disorder.

A. True  
B. False

53. Results of a placebo-controlled trial suggest that ______sertraline may be effective in preventing depression when administered soon after a traumatic brain injury.

A. Low-dose  
B. High-dose

54. In a small randomized, controlled trial, rivastigmine improved ______ in patients with schizophrenia already receiving conventional, first-generation antipsychotics.

A. Positive symptoms  
B. Negative symptoms  
C. Cognition  
D. All of the above

55. In a cross-sectional study of patients with schizophrenia or bipolar disorder, SSRIs were associated with ______ adverse metabolic changes.

A. Dose-related  
B. Small  
C. Large  
D. Both A and B

56. The alterations found in this study ______ likely to be clinically concerning.

A. Are  
B. Are not

57. In a retrospective chart review of patients with treatment-resistant psychotic disorders and preexisting benign ethnic neutropenia (BEN) who received treatment with clozapine, there were no cases of severe neutropenia, and no patient discontinued the drug for falling below their assigned threshold.

A. True  
B. False

58. These results, in addition to the FDA's recent decision to permit low absolute neutrophil counts in patients with BEN, may lead to:

A. Increased monitoring  
B. Less frequent monitoring  
C. More widespread use of the drug  
D. Both B and C

59. SSRIs and TCAs are often avoided in frail elderly patients because of concern they may increase risk of falls. An analysis of clinical-trial data suggests that other antidepressants, except possibly ______, may not be safer with regard to falls.

A. Venlafaxine  
B. Selegiline  
C. Amitriptyline  
D. Bupropion

60. A 51-year-old man with recurrent, severe, nonpsychotic unipolar major depression and concomitant generalized anxiety disorder experienced rapid remission of depression after administration of dextromethorphan. According to the Naranjo probability scale, the patient’s response was ______ attributed to dextromethorphan.

A. Definitely  
B. Probably  
C. Possibly  
D. Doubtfully
61. Although some SSRIs are potent inhibitors of CYP2D6, the enzyme that converts tamoxifen to its most important active metabolite, results of a large cohort study indicate that concomitant use of tamoxifen and SSRIs _______ increase risk of mortality.

A. Does
B. Does not

11/16, pgs. 85–86

*************

62. The SSRIs citalopram and escitalopram carry FDA maximum-dose warnings related to the risk of:

A. Excessive somnolence
B. Mania
C. Sudden unexpected cardiac death
D. Hallucinations

11/16, pgs. 86–87

*************

63. In a large cohort of high-dose SSRI users, risk of sudden cardiac death was no higher with citalopram or escitalopram than with:

A. Other SSRIs
B. TCAs
C. Bupropion
D. All of the above

11/16, pgs. 86–87

*************

64. The investigational alpha7 nicotinic acetylcholine receptor agonist ABT-126 has been withdrawn from clinical development because the agent _______ in patients with mild-to-moderate Alzheimer’s dementia.

A. Was associated with worsening of symptoms
B. Induced agitation
C. Caused seizures
D. Failed to show efficacy

11/16, pg. 87–88

*************

65. In a head-to-head comparison of metformin and topiramate in patients with schizophrenia, patients in the _______ group had significantly greater weight loss and a greater reduction in waist circumference at 7 weeks.

A. Metformin
B. Topiramate

12/16, pgs. 89–90

*************

66. In a manufacturer-sponsored trial of quetiapine monotherapy in military veterans with PTSD, changes in scores on the Clinician-Administered PTSD Scale (CAPS) were significantly larger at 12 weeks in the quetiapine group than in the placebo group. However:

A. Quetiapine did not improve sleep quality scores
B. Quetiapine did not improve negative symptoms
C. The mean CAPS score was still higher than the cutoff for study entry
D. All of the above

12/16, pgs. 90–91

*************

67. In this study, quetiapine was not associated with:

A. Somnolence
B. Weight gain
C. Blood pressure changes
D. Both B and C

12/16, pgs. 90–91

*************

68. A pilot study was undertaken of adjunctive asenapine in patients with residual symptoms of PTSD who were receiving serotonergic antidepressants. Asenapine was investigated in this study because it has a higher affinity than other atypicals for _______ receptors, which are implicated in PTSD.

A. Serotonergic
B. Alpha 1 adrenergic
C. Alpha 2 adrenergic
D. All of the above

12/16, pgs. 91–92

*************

69. On average, the study patients experienced a large, clinically meaningful decrease in PTSD symptoms with adjunctive asenapine. Responses extended to each of the 3 CAPS symptom clusters, with robust reductions in:

A. Re-experiencing
B. Hyperarousal
C. Avoidance/emotional numbing
D. Both A and B

12/16, pgs. 91–92

*************

70. Results of a meta-analysis, based on only high-quality studies support switching antidepressants in patients with major depression who do not experience response to initial antidepressant monotherapy.

A. True
B. False

12/16, pgs. 92–93
71. Pending more research, clinicians are advised to choose a second-stage strategy with better support, such as:
   A. Increasing the dosage of the current antidepressant
   B. Combining 2 antidepressants
   C. Augmentation
   D. Any of the above

12/16, pgs. 92–93

72. In a secondary analysis of data from a clinical trial of patients with bipolar II disorder receiving medication for depression, the odds of experiencing response or remission during acute venlafaxine or lithium therapy was _______ in a stepwise fashion with each previous antidepressant trial.
   A. Increased
   B. Decreased

12/16, pgs. 93–94

73. In a cohort study, current use of SSRIs was associated with an increased risk of intracranial hemorrhage compared with current use of:
   A. Lithium
   B. TCAs
   C. SNRIs
   D. Both A and B

12/16, pgs. 94–95

74. Risk was greatest during the first _______ of SSRI use; the difference was no longer statistically significant after that point.
   A. 7 days
   B. 14 days
   C. 30 days
   D. 6 months

12/16, pgs. 94–95

75. In a randomized trial in patients with social anxiety disorder, at the 12-week endpoint, cognitive therapy was significantly superior to _______ but not combination treatment.
   A. Paroxetine
   B. Placebo
   C. Combination treatment
   D. Both A and B

12/16, pgs. 95–96
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Psychiatry Drug Alerts - Activity Evaluation Form

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Having completed this activity, you are better able to:

Recognize and implement new approaches to the treatment of psychiatric disorders.
Determine appropriate treatment selection for psychiatric disorders.
Identify and appropriately prescribe medications or other therapeutic interventions for various psychiatric disorders.
Recognize, avoid, and manage drug side effects and drug interactions.

Overall Evaluation:

The information presented increased my awareness/understanding of the subject.
The information presented will influence how I practice.
The information presented will help me improve patient care.
The information demonstrated current knowledge of the subject.
The program was educationally sound and scientifically balanced.
The program avoided commercial bias or influence.
Overall, the program met my expectations.

Based on information presented in the program, I will
(please check one):

☐ Do nothing as the content was not convincing.
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☐ Change my practice.
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If you anticipate changing one or more aspects of your practice as a result of your participation in this activity, please provide us with a brief description of how you plan to do so:

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Please provide any additional comments pertaining to this activity and suggestions for improvement:

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Signature: ___________________________ Date: ________________

Exam must be returned by June 30, 2018

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