

# Index

- 
- 5-HT<sub>2A</sub> blockers, 43  
 5-HT<sub>2A</sub> receptor antagonists, 40  
 5-hydroxytryptophan supplements, 253  
 ABCB1 candidate gene, 373  
 Academy of Cognitive Therapy, 264  
 acetylcholine, 38  
 N-acetylcysteine, 110  
 achlorhydria, 249  
 acupuncture, 251–252  
   consideration of the evidence, 252  
   description, 251  
   for depression, 212  
   patient dosing, 252  
   review of the evidence, 251–252  
   side effects, 252  
 adaptogens, 251  
 ADHD (attention deficit hyperactivity disorder), 212  
   co-morbid pediatric bipolar disorder, 166, 175  
   co-morbid pediatric depression case example, 154  
   co-morbidity with chronic depression, 26  
   co-morbidity with dysthymia, 26  
   co-occurring substance-use disorders, 236  
   overlap with bipolar mania, 147  
 adjunctive medications, 43  
 adolescent mood disorders. *See* pediatric bipolar disorder; pediatric depression  
 aerobic exercise  
   beneficial effects on depression, 156  
 age  
   and manifestation of functional impairment, 10, 119  
   influence on mood disorder presenting symptoms, 119  
 age of onset  
   significance in chronic depression, 27–28  
   significance in dysthymia, 27–28  
 agomelatine, 89–90  
 akathisia  
   side effect of aripiprazole, 94  
 Akiskal, H.S., 143  
 alcohol dependence, 68, 175  
 alcohol-use disorder  
   co-morbid with pediatric depression, 155  
 Alcoholics Anonymous, 238  
 alcoholism  
   and depression, 234  
   *See also* substance-use disorders  
 alleles, 369  
 alpha-2-adrenergic autoreceptor antagonists, 40  
 alpha-linolenic acid (ALA), 245, 246  
 alprazolam, 247  
 alternative medicine. *See* complementary and alternative treatments  
 Altman Self-Rating Mania Scale (ASRMS), 16  
 Alzheimer's disease, 126–127  
   clinical case description, 128–129  
   neurobiological markers, 126–127  
   treatment of co-morbid depression, 127–128  
 amantadine, 70  
 American Society of Addiction Medicine Patient Placement Criteria (ASAM-PPT), 237  
 amitriptyline, 41, 247  
 AMPA receptors, 346  
 amphetamine, 154  
 amygdala  
   functions of, 2  
   hyper-responsiveness and depression, 2  
 anesthetic drug interactions, 247  
 anorexia nervosa, 65, 68  
 antepartum depression. *See* pregnancy  
 anticonvulsants  
   incompatibility with ECT, 317  
 antidepressant-related suicidal events, 152, 153  
 Antidepressant Treatment History Form, 25  
 Antidepressant Treatment Response Questionnaire, 25  
 antidepressants, 40–43  
   acute effects on bipolar depression, 87–88  
   adjunctive medications, 43  
   augmenting medications, 43  
   avoiding drug–drug interactions, 68  
   catecholamine hypothesis of depression, 3  
   combined therapies, 68  
   controversy over use in bipolar disorder, 87  
   maintenance treatment for bipolar depression, 88–89  
   neurotransmitter reuptake inhibitors, 3  
   pharmacogenetic studies, 370–374  
   risk of rapid cycling in bipolar disorder, 89–90  
   risk of switching in bipolar disorder, 87, 89–90  
 antiepileptic drugs, 41  
 antimanic light protection, 342  
 antiplatelet therapies, 184  
 antipsychotic drugs, 43, 68  
   effects during pregnancy, 214  
 antiretrovirals, 247

- antisocial personality disorder  
co-occurring substance-use disorders, 236
- anxiety  
co-morbid with pediatric depression, 154
- anxiety disorders  
co-morbidity with chronic depression, 25  
co-morbidity with dysthymia, 25  
co-occurring substance-use disorders, 236
- anxious depression  
anxiety treatments, 49–50
- Arctic Root, 251
- aripiprazole, 43, 105, 107, 155  
acute effects on bipolar depression, 94–95  
akathisia side effect, 94  
pediatric bipolar disorder studies, 170–172  
side effects, 110  
use in bipolar depression, 94  
use in mania maintenance treatment, 109
- asenapine, 105, 107
- atomoxetine, 154
- attention deficit hyperactivity disorder.  
*See* ADHD
- attitudes  
dysfunctional attitudes and schema, 260
- atypical antipsychotic drugs, 40, 43
- atypical depression. *See* depression  
with atypical features
- auditory-evoked potentials and  
treatment response, 387–389
- augmentation strategies  
late-life depression treatment, 124
- augmentation studies, 303
- augmentation therapies, 68
- augmentations  
future directions, 398
- augmenting medications, 43
- autism, 369
- autism spectrum disorders, 212
- automatic negative thoughts, 258–260  
identifying, 262–263
- avoidant personality disorder, 136
- BDNF (brain-derived neurotrophic factor), 38
- BDNF (brain-derived neurotrophic factor) candidate gene, 372
- Beck, Aaron T., 258, 259, 260
- Beck Depression Inventory (BDI), 25, 127, 183
- Beck Institute, 264
- behavioral activation therapy (BAT), 25, 30
- benzodiazepines  
anxiety treatment, 49–50  
incompatibility with ECT, 317  
insomnia treatment, 50  
risks and side effects, 50  
use in treatment of mania, 109
- bereavement-related depression, 9–10
- bethanechol, 68
- binge eating, 175
- biofeedback  
for PMS/PMDD, 224
- biogenic monoamine hypothesis of depression, 3
- biological factors in depression, 181–182
- biomarkers  
Alzheimer's disease, 126–127  
borderline personality disorder, 200–201  
indicators of dementia, 126–127
- biopsychosocial model of depression, 181–182
- bipolar depression  
acute effects of antidepressants, 87–88  
acute effects of aripiprazole, 94–95  
acute effects of lamotrigine, 92–93  
acute effects of lithium, 86–87  
acute effects of olanzapine/fluoxetine combination, 93–94  
acute effects of quetiapine, 90–91  
carbamazepine studies, 95  
controversy over use of antidepressants, 87  
development of treatments, 86  
disability caused by, 86  
electroconvulsive therapy (ECT), 96  
FDA approval for quetiapine, 90  
in children and adolescents, 155  
in pediatric bipolar disorder, 173–174
- lack of research focus on treatment, 86
- maintenance studies for lithium, 87
- maintenance studies with olanzapine/fluoxetine combination, 94
- maintenance treatment with antidepressants, 88–89
- maintenance treatment with lamotrigine, 93
- maintenance treatment with quetiapine, 91–92
- olanzapine/fluoxetine combination, 86, 93
- relationship to depression with atypical features, 61–62
- risk of antidepressant-induced switching, 89–90
- risperidone studies, 95
- suicide risk, 86
- treatment strategies, 97
- use of aripiprazole, 94
- use of deep brain stimulation (DBS), 96
- use of lamotrigine, 92
- use of repetitive transcranial magnetic stimulation, 96–97
- valproate studies, 95–96
- ziprasidone studies, 95
- bipolar diathesis  
pediatric depression, 155
- bipolar disorder  
adapting cognitive therapy (CT) for, 264  
and post-partum psychosis risk, 213  
and pregnancy, 213  
controversy over use of antidepressants, 87  
co-occurring substance-use disorders, 236  
functional neuroimaging studies, 359–360  
molecular neuroimaging studies, 360–361  
overlap with ADHD, 147  
psychodynamic psychotherapy, 293  
rapid cycling, 115  
relationship to borderline personality disorder, 198–199  
relationship to psychotic major depression, 76  
risk factors in children and adolescents, 147  
risk of switching with antidepressants, 87  
structural neuroimaging studies, 359  
treatment challenges, 104  
*See also* pediatric bipolar disorder

## Index

- bipolar disorder not otherwise specified (NOS)  
 DSM-IV criteria, 13
- bipolar I disorder, 7  
 DSM-IV criteria, 12–13  
 mania, 104
- bipolar II disorder, 7  
 DSM-IV criteria, 13  
 hypomania, 104
- bipolar spectrum disorders  
 controversy over extent, 395  
 differential diagnosis, 135
- Black Box Warning about SSRIs, 153
- bleeding vulnerability, 184
- blood oxygen level dependent (BOLD) signal, 358
- BOLDER study, 90
- borderline personality disorder, 280  
 and MDD (clinical vignette), 197–198  
 atypical depression, 197  
 biomarkers, 200–201  
 co-morbid major depressive disorder, 195–196  
 consideration in mood disorder assessment, 201  
 co-occurring substance-use disorders, 236  
 frequent co-occurrence of mood disorders, 195  
 mental pain versus depression, 196–197  
 rejection sensitivity and mood reactivity, 197  
 relationship to bipolar disorder, 198–199  
 relationship to depression with atypical features, 62  
 suicidal behavior with co-morbid MDD, 197  
 treatment response with co-occurring mood disorders, 199
- brain-derived neurotrophic factor (BDNF), 38
- brain-derived neurotrophic factor (BDNF) candidate gene, 372
- brain imaging. *See* neuroimaging
- brain structural model of depression, 3
- brief dynamic therapy (BDT), 290, 293–294
- brief psychodynamic treatment of depression, 294
- brief supportive psychotherapy (BSP), 30
- bulimia nervosa, 65, 68, 175
- bupropion, 41, 42, 70, 154, 155, 184, 185, 212, 240  
 depression with atypical features  
 treatment studies, 64  
 for late-life depression, 123  
 managing side effects, 68  
 risk of birth defects, 210  
 treatment for depression with atypical features, 65  
 with mirtazapine, 49
- buspirone, 68, 70, 247
- Cade, John, 86
- calcium channel antagonists, 110
- Calendar of Premenstrual Experiences (COPE), 221
- cancer and depression, 189–190
- carbamazepine, 105, 107  
 concerns over use in children and adolescents, 169  
 contraindications, 169  
 drug interactions, 111  
 pharmacogenetic studies, 375–376  
 side effects, 111, 169  
 teratogenic effects, 111, 214  
 use in bipolar depression, 95  
 use in mania preventive treatment, 109
- carbohydrate cravings  
 effect of chromium, 65
- cardiovascular disease and depression, 186–188  
 psychopharmacological strategies, 187–188  
 psychosocial strategies, 186–187
- catecholamine hypothesis of depression, 3
- Center for Epidemiologic Studies Depression Scale, 183
- cerebrovascular disease  
 link with late-life depression, 4
- chasteberry (*Vitex agnus castus*)  
 for PMS/PMDD, 224
- chemotherapy, 184, 247
- childhood adversity or abuse  
 and vulnerability to depression, 1–3, 38–39
- childhood mood disorders. *See* pediatric bipolar disorder; pediatric depression
- chiropractic manipulation  
 for PMS/PMDD, 224
- chlorpromazine, 43, 105, 107, 109
- cholinesterase inhibitors, 129
- chromium  
 depression with atypical features  
 treatment studies, 65  
 effect on carbohydrate cravings, 65
- chronic depression  
 burden of disease, 21–22  
 clinical vignette, 20, 140–141  
 course and duration, 22–23  
 definitions and diagnostic criteria, 21  
 disease burden, 133  
 distinction from acute episodic depression, 21  
 distinction from treatment-resistant depression, 133  
 epidemiology, 21–22  
 evolution of the diagnosis, 133–134  
 future research directions, 30–31  
 importance of early diagnosis and treatment, 31  
 proposed DSM-5 category, 134  
 role of temperamental and cognitive factors, 27  
 socioeconomic variables associated with, 28  
 stressors associated with, 28  
 undertreatment of, 133
- chronic depression diagnosis, 134–137  
 ancillary diagnostic information, 25  
 assessment tools, 25  
 clinical diagnostic features, 24  
 clinical pearls of diagnostic wisdom, 28, 141–143  
 co-morbidity with ADHD, 26  
 co-morbidity with anxiety disorders, 25  
 co-morbidity with personality disorders, 26–27  
 co-morbidity with substance-use disorders, 25–26  
 complicated grief, 137  
 complicating diagnostic and clinical factors, 25–27  
 diagnostic criteria, 21  
 diagnostic evaluation, 24–28  
 evolution of the diagnosis, 133–134  
 exclusion of a bipolar spectrum disorder, 135  
 exclusion of a medical condition  
 etiology, 134–135  
 exclusion of medication side effect, 135

- initial differential diagnosis, 134
- initial safety and suicide risk evaluation, 134
- laboratory tests, 24–25
- significance of age of onset, 27–28
- temperamental and cognitive factors, 27
- with co-morbid personality disorder, 135–136
- chronic depression sub-types, 21
- chronic depression treatment
  - acute treatment, 137–139
  - efficacy of psychopharmacology, 28–29
  - efficacy of psychotherapy, 29–30
  - relapse prevention studies, 139–140
- chronic depressive disorder (DSM-5), 12, 21
- chronic major depression, 21
- chronobiology
  - approach to mood regulation, 110
  - future research, 397
- chronotherapy
  - aims of, 332
  - and melatonin, 333
  - antimanic light protection, 342
  - blue-blocking glasses, 342
  - clinical pearls, 342–343
  - dawn simulation, 341–342
  - description, 332
  - future developments, 397
  - future directions, 341–342
  - melatonin as a chronobiotic, 341
  - morning light therapy, 341–342
  - resources, 343
  - triple chronotherapy, 333, 338–340
  - triple chronotherapy case vignette, 340
  - types of, 332
  - See also* light therapy; wake therapy
- circadian rhythms
  - and mood regulation, 110
- circadian timing
  - and melatonin production, 340–341
- citalopram, 151
  - for late-life depression, 122
  - hypomanic response to treatment (case example), 155
  - side effects, 122
- Clinical Global Impression (CGI), 90
- clinical interview guides, 15
- Clinician-Administered Rating Scale for Mania (CARS-M), 17
- clomipramine, 63
- clonazepam, 109
- Cloninger's Tridimensional Personality Questionnaire, 27
- clozapine, 170
  - mania treatment, 110
- cobalamin. *See* vitamin B12
- cognitive behavior analysis system of psychotherapy (CBASP), 30, 137–138, 139
- cognitive behavior therapy (CBT), 3, 25, 29, 30, 258, 299
  - combination with antidepressant for pediatric depression, 150–151
  - distinction from DBT, 282–283
  - for depression with atypical features, 64
  - for late-life depression, 124
  - for pediatric depression, 146–156
  - for PMDD, 224
  - group CBT for pediatric depression prevention, 157
  - pediatric depression studies, 150
  - to help prevent recurrence of depression, 156
  - treatment for depression with atypical features, 65
- cognitive factors
  - role in chronic depression, 27
  - role in dysthymia, 27
- cognitive impairment
  - common clinical aspects with late-life depression, 129
- cognitive impairment and depression
  - indicators of dementia, 126–127
- cognitive-interpersonal group psychotherapy for chronic depression (CIGP-CD), 30
- cognitive model of depression, 258–260
  - automatic negative thoughts, 258–260
  - dysfunctional attitudes and schema, 260
  - information processing errors, 258
  - targets for intervention, 260
- cognitive models of depression, 3–4
- cognitive therapy (CT)
  - activity scheduling intervention, 262
  - adapting for bipolar disorder, 264
  - behavioral activation strategies, 262
  - cognitive interventions, 262–264
- cognitive model of depression, 258–260
- collaborative empiricism, 261, 264
- coping card strategy, 262
- development of, 258
- efficacy of treatment, 264–266
- future directions, 266–267
- graded task assignment, 262
- identifying automatic negative thoughts, 262–263
- modifying negative thoughts, 263–264
- nature of CT sessions, 260–261
- Socratic questioning, 263
- therapeutic strategies, 260–264
- therapist training programs, 264
- thought recording, 263
- use in mood disorders, 258
- Colace, 68
- collaborative care models, 184, 185–186
- collaborative empiricism, 261, 264
- combination pharmacotherapy for psychotic major depression, 78–79
- combination therapies
  - acute mania treatment, 108
  - antidepressant therapies, 68
  - pediatric bipolar disorder, 172
- combined medication and psychotherapy
  - challenges in conducting ongoing treatments, 306–308
  - changing views on, 299
  - clinical technique, 304–308
  - clinical vignette, 307–308
  - empirical research, 299–304
  - evaluation of the patient, 305–306
  - methodological issues for studies, 303–304
  - role in the treatment of mood disorders, 308
  - structuring a combined treatment, 305
- complementary and alternative medicine
  - future directions, 397–398
- complementary and alternative treatments
  - acupuncture, 251–252
  - DHEA, 253
  - evidence for role in mood disorder treatment, 253–254
  - folate, 250–251
  - for pediatric bipolar disorder, 175
  - methylators, 248–250

## Index

- complementary and alternative treatments (*cont.*)  
 need for physician to be informed about, 245  
 nutrition counseling, 252  
 omega-3 fatty acids, 245–247  
 pharmacology of plant compounds, 252  
 premenstrual dysphoric disorder (PMDD), 224  
 premenstrual syndrome (PMS), 224  
*Rhodiola rosea*, 251  
 saffron (*Crocus sativus*), 253  
 SAME, 248  
 St. John's wort (*Hypericum perforatum*), 247–248  
 tryptophan/5-hydroxytryptophan supplements, 253  
 use by patients with mood disorders, 245  
 vitamin B12 (cobalamin), 248–250  
 vitamin D, 253  
 yoga, 252
- complex carbohydrate supplementation for PMS/PMDD, 224
- complicated grief, 137
- complicated grief treatment, 137
- computed tomography (CT), 358
- conduct disorder  
 co-morbid with pediatric bipolar disorder, 166
- contextual emotion regulation therapy (CERT), 151
- copy number variants (CNVs), 369
- core conflictual relationship themes (CCRT), 294
- Cornell Dysthymia Rating Scale (CDRS), 25, 125
- corticotropin-releasing factor, 38
- corticotropin-releasing factor antagonists, 345
- cortisol levels  
 effects of stress, 2  
 influence of the HPA (hypothalamic pituitary adrenal) axis, 2  
 link with vascular disease and depression, 4
- coumadin, 317
- Crocus sativus* (saffron), 253
- cyanocobalamin, 248
- cyclosporin, 247
- cyclothymic disorder, 7  
 DSM-IV criteria, 13
- cyclothymic personality, 133
- cypheptidine, 70
- cytochrome P450 1A2 247
- cytochrome P450 2D6 185
- cytochrome P450 3A4 247
- cytochrome P450 (CYP450) candidate genes, 371–372
- Daily Diary for Premenstrual Syndrome (DPS), 221
- Daily Record of Dysfunctional Thoughts (DRDT), 264
- Daily Record of Severity of Problems (DRSP), 221
- danazol, 223
- deep brain stimulation (DBS), 3, 320, 329  
 future developments, 397  
 use in bipolar depression, 96
- delusional depression, 43, 75
- delusions  
 and suicide, 77  
 and suicide risk, 82  
 assessing extent of conviction, 77  
 comparison of delusional and non-delusional depression, 76  
 identification of, 77  
 psychotic major depression, 75  
 relationship to severity of depression, 76
- dementia  
 indicators of, 126–127  
 treatment of co-morbid depression, 127–128
- depakote, 167
- deplin, 250, 251
- depression  
 association with medical illness, 181  
 biopsychosocial model, 181–182  
 EEG alpha power and asymmetry, 381–382
- depression with atypical features, 42  
 and borderline personality disorder, 197  
 augmentation therapies, 68  
 bupropion treatment, 65  
 bupropion treatment studies, 64  
 CBT treatment, 65  
 CBT treatment studies, 64  
 chromium treatment studies, 65  
 clinical vignette, 70
- combined antidepressant therapy, 68  
 definitions, 59–61  
 difficulty of defining, 59–61  
 DSM-IV criteria, 59  
 ECT studies, 65  
 features of, 59  
 fluoxetine treatment, 65  
 future research directions, 70–71  
 managing partial remission, 66–68  
 managing treatment side effects, 68–70  
 MAOI treatment studies, 62–63  
 pathologic rejection sensitivity, 62  
 psychotherapy, 68  
 psychotherapy studies, 64  
 rates of occurrence, 59  
 relationship to bipolar depression, 61–62  
 relationship to borderline personality disorder, 62  
 relationship to personality disorders, 62  
 SNRI treatment studies, 64  
 SSRI treatment studies, 63–64  
 treatment algorithm, 65–66  
 treatment studies, 62–65  
 tyramine-free diet for MAOIs, 66  
 validity as a diagnostic entity, 59–61
- depressive neurosis, 133
- depressive temperament (Kraepelin), 133
- desipramine, 42, 210
- desvenlafaxine, 65
- developmental brain disorders, 370
- dexamethasone suppression test, 2, 7
- dextroamphetamine, 154
- DHEA (dehydroepiandrosterone), 253
- diabetes and depression, 185–186  
 collaborative care models, 185–186  
 psychopharmacologic strategies, 185  
 psychotherapeutic strategies, 185  
 stepped-care models, 185–186
- diagnosis of depression  
 bereavement exclusion, 9–10  
 in context of medical illness, 183
- diagnosis of mood disorders  
 basis of organization in the DSM, 7–8  
 bipolar disorder not otherwise specified (NOS), 13  
 bipolar I disorder, 12–13  
 bipolar II disorder, 13  
 changes in DSM-5, 17  
 chronic depressive disorder (DSM-5), 12



- clinical interview guides, 15  
clinical interview measures of  
  severity of mood disorder, 16–17  
cyclothymic disorder, 13  
definitions of episodes, 8–11  
diagnostic assessment procedures,  
  14–17  
diagnostic self-report  
  questionnaires, 15–16  
DSM-IV mood disorder criteria,  
  11–14  
dysthymic disorder, 12  
episodes vs. disorders, 7–8  
evaluation of severity of mood  
  disorder, 16–17  
hypomanic episode, 10–11  
lumping strategy for criteria, 7  
major depressive disorder, 11–12  
major depressive episode, 8–10  
manic episode, 10–11  
mixed episode, 11  
mood disorder due to a general  
  medical condition, 13–14  
mood specifiers in DSM-IV, 14  
self-report measure of severity of  
  manic symptoms, 16  
self-report measures of severity of  
  mood disorders, 16  
splitting strategy for criteria, 7  
substance-induced mood disorders,  
  13  
  use of DSM criteria, 7  
Diagnostic and Statistical Manual of  
  Mental Disorders. *See* DSM  
diagnostic self-report questionnaires,  
  15–16  
dialectical behavior therapy (DBT), 3,  
  199, 299  
  acceptance and validation strategies,  
    281  
  adaptations, 286–287  
  change strategies, 281  
  clinical vignettes, 281–282, 283  
  description, 280–281  
  development of, 280  
  dialectical strategies, 281  
  distinction from CBT, 282–283  
  domains or targets, 280  
  empirical support for, 283–284  
  focus on emotion dysregulation,  
    282  
  for mood disorders, 284–286  
  future directions, 287  
  original purpose with suicidal  
    patients, 280  
  underpinnings, 282  
diffusion weighted (diffusion tensor)  
  MRI, 358  
dihydrofolate, 250  
discontinuation syndrome, 51  
disorders vs. episodes, 7–8  
divalproex, 105, 175  
  for pediatric bipolar disorder,  
    167–169  
  side effects, 168–169  
divalproex sodium, 167  
docosahexaenoic acid (DHA), 245  
donepezil  
  for depression with cognitive  
    impairment, 127  
dopamine, 3, 38  
dopamine D2 receptor blockers, 43  
double depression, 12, 21, 22, 23, 27,  
  29, 134  
downward arrow technique, 260  
drospirenone, 223  
drug–drug interactions, 49, 66, 68, 111  
drug interactions  
  omega-3 fatty acids, 246  
  St. John's wort (*Hypericum*  
    *perforatum*), 247  
DSM-III, 75  
  introduction of dysthymia, 134  
DSM-IV  
  basis of organization of mood  
    disorders, 7–8  
  bipolar disorder not otherwise  
    specified (NOS), 13  
  bipolar I disorder, 12–13  
  bipolar II disorder, 13  
  categories of depression with  
    substance-use disorders, 234–236  
  coded criteria sets for mood  
    disorders, 7  
  cyclothymic disorder, 13  
  definitions of episodes, 8–11  
  depression with atypical features, 59  
  diagnostic criteria for PMDD, 222  
  dysthymic disorder, 12  
  episodes vs. disorders, 7–8  
  hypomanic episode, 10–11  
  major depressive disorder, 11–12  
  major depressive episode, 8–10  
  manic episode, 10–11  
  mixed episode, 11  
  mood disorder criteria, 11–14  
  mood disorder due to a general  
    medical condition, 13–14  
  mood specifiers, 14  
  premenstrual syndrome (PMS)  
    criteria, 221  
substance-induced mood disorders,  
  13  
uncoded criteria sets for mood  
  episodes, 7  
use in diagnosis of mood disorders,  
  7  
use of specifiers, 7, 8  
DSM-5, 7  
  bereavement exclusion for  
    depression, 10  
  changes in the mood disorders  
    section, 17  
  changes to mood disorders  
    diagnostic framework, 394–395  
  chronic depression category, 134  
  chronic depressive disorder, 12, 21  
  expected date of publication, 17  
  possible inclusion of premenstrual  
    dysphoric disorder (PMDD),  
    220–221  
  proposals for depressive disorders,  
    134  
dual-action reuptake inhibitors (newer  
  types), 41–42  
dual-action reuptake inhibitors (older  
  types), 41  
duloxetine, 41, 64, 65, 185  
  late-life depression study, 123  
Dysfunctional Attitude Scale, 260  
dysfunctional cognition model of  
  depression, 3–4  
dysphoric mania, 104  
dysthymia  
  ancillary diagnostic information, 25  
  as MDD prodrome, 31  
  assessment tools, 25  
  burden of disease, 21–22  
  changes in DSM-5, 21  
  classification, 21  
  clinical diagnostic features, 24  
  clinical pearls of diagnostic wisdom,  
    28  
  clinical vignette, 20  
  co-morbidity with ADHD, 26  
  co-morbidity with anxiety disorders,  
    25  
  co-morbidity with personality  
    disorders, 26–27  
  co-morbidity with substance-use  
    disorders, 25–26  
  complicating diagnostic and clinical  
    factors, 25–27  
  course and duration, 22–23  
  diagnostic evaluation, 24–28  
  epidemiology, 21–22  
  future research directions, 30–31

## Index

- dysthymia (*cont.*)
- importance of early diagnosis and treatment, 31
  - in later life, 124–126
  - introduction in DSM-III, 134
  - laboratory tests, 24–25
  - role of temperamental and cognitive factors, 27
  - significance of age of onset, 27–28
  - socioeconomic variables associated with, 28
  - stressors associated with, 28
- dysthymia treatment
- efficacy of psychopharmacology, 28–29
  - efficacy of psychotherapy, 29–30
- dysthymic disorder, 7
- DSM-IV criteria, 12
- earlier recovery sleep, 333
- early-onset mood disorders. *See* pediatric bipolar disorder; pediatric depression
- eating disorders, 65, 154, 175
- Edinburgh Postnatal Depression Scale (EPDS), 16, 293
- eicosapentaenoic acid (EPA), 245
- electrocardiogram (ECG), 65
- electroconvulsive therapy (ECT), 12, 41, 43, 50, 59, 105
- absolute and relative contraindications, 312–314
  - adverse effects, 318–319
  - and pre-existing seizure disorder, 313
  - anesthesia for ECT, 314–316
  - clinical pearls of therapeutic wisdom, 320–321
  - clinical vignettes, 317–318, 319
  - cognitive adverse effects, 318–319
  - conducting treatment, 314–317
  - consent for ECT, 314
  - course of treatment, 318
  - course of treatment (clinical pearls), 320–321
  - development of, 311–312
  - dose titration and seizure adequacy, 316–317
  - electrode placement, 316
  - for depression with atypical features, 65
  - for late-life depression, 120
  - for nonremitting depression during pregnancy, 215
  - for psychotic depression in young people, 155
  - future directions, 321
  - history of convulsive therapies, 311–312
  - incompatibility of some medications, 317
  - indications for ECT in depression, 312
  - indications for treatment (clinical pearls), 320
  - long-term outcome (clinical pearl), 321
  - maintenance treatment, 319–320
  - mania treatment, 109–110
  - preclinical studies, 321
  - range of rates of response, 318
  - risks related to anesthesia, 314
  - risks related to baseline cognitive status, 314
  - risks related to blood pressure, 313
  - risks related to heart rate, 313
  - risks related to intracranial pressure, 313
  - risks related to mechanical forces, 313–314
  - treatment alternatives for nonremission, 320
  - treatment strategy summary, 321
  - use in bipolar depression, 96
  - use in children and adolescents, 157–158
  - use in psychotic major depression, 79–80
  - waveform of electrical stimulation, 316
- electroencephalogram (EEG)
- alpha power and asymmetry in antidepressant nonresponders, 382–384
  - alpha power and asymmetry in antidepressant responders, 382–384
  - alpha power and asymmetry in depression, 381–382
  - auditory-evoked potentials and treatment response, 387–389
  - clinical implications of findings in depression, 387
  - cordance and antidepressant response index, 386–387
  - future developments, 396
  - LORETA measures of theta and treatment response, 385–386
  - measurement procedure, 380
  - role in predicting antidepressant treatment response, 389–390
  - role in psychiatry, 380
  - theoretical implications of findings in depression, 387
  - theta power in nonresponders, 384–385
  - theta power in responders, 384–385
- electrophysiological measures
- role in prediction of antidepressant treatment response, 389–390
  - role in psychiatry, 380
- EMBOLDEN studies, 90–91
- emotional realism, 259
- endoxifen, 185
- eosinophilia myalgia syndrome, 253
- ephedrine, 69
- epigenetic studies, 395
- epilepsy, 189
- episodes
- DSM-IV definitions, 8–11
  - vs. disorders, 7–8
- ERPs (evoked potentials, event-related potentials), 380
- role in psychiatry, 380
- escitalopram, 41, 151
- late-life depression studies, 122–123
- ethnic diversity, 370
- evening primrose oil
- for PMS/PMDD, 224
- event-related potentials. *See* ERPs
- evoked potentials. *See* ERPs
- exercise
- benefits in chronic depression, 30
- exploratory psychotherapy, 289
- expressive psychotherapy, 289
- extrapyramidal side effects, 110
- family-based attachment therapy, 151
- family-based interpersonal psychotherapy (FBIPT), 151
- first-generation antipsychotics, 105
- FKB5 candidate gene, 372
- fludrocortisone, 70
- fluoxetine, 40, 41, 49, 63, 64, 134, 185
- late-life depression study, 123
  - managing side effects, 70
  - treatment for depression with atypical features, 65
  - use in pediatric depression, 151
  - with mirtazapine, 49

- fluoxetine/olanzapine combination, 86  
   acute effects on bipolar depression, 93–94  
   maintenance studies in bipolar depression, 94  
   use in bipolar depression, 93  
 focalized electrically administered seizure therapy (FEAST), 321  
 folate, 250–251  
   consideration of the evidence, 251  
   description, 250  
   review of the evidence, 250  
   use in clinical practice, 250–251  
 folic acid, 250, 251  
 folinic acid, 250  
 fragile X syndrome, 369  
 frank paranoia, 69  
 Freud, Sigmund, 260  
 functional impairment  
   manifestation at different ages, 119  
 functional magnetic resonance imaging (fMRI), 351, 358  
 future directions  
   augmentations, 398  
   chronobiology, 397  
   complementary and alternative medicine, 397–398  
   controversial extent of bipolar disorders, 395  
   deep brain stimulation (DBS), 397  
   disease burden of mood disorders, 394  
   EEG techniques, 396  
   electrophysiology, 396  
   genetics of mood disorders, 395–396  
   glutamatergic medications, 397  
   increasing importance of mood disorders, 394  
   long-term prospects, 398  
   mood disorders diagnostic framework in DSM-5, 394–395  
   multi-dimensional clinical neuroscience, 396–397  
   neuroimaging, 396  
   proteomics, 396  
   psychotherapy, 398  
 GABA, 3, 38  
 GABAergic system, 40  
 gabapentin, 107, 110  
   pediatric bipolar disorder studies, 170  
 GENDEP study, 370, 371, 373–374  
 gene–environment interaction model of depression, 1–3  
 gene–environment interactions  
   major depressive disorder, 38–39  
 genetic ancestry, 370  
 genetic markers  
   to predict treatment response, 368  
 genetic polymorphisms  
   response prediction in lamotrigine, 93  
 genetics of mood disorders  
   future directions, 395–396  
 genome-wide association studies (GWAS), 368, 395  
   antidepressant treatment effects, 373  
 gepirone, 65  
 Geriatric Depression Scale, 16  
 ginkgo biloba  
   for PMS/PMDD, 224  
 glucocorticoid hypothesis of psychotic major depression, 80  
 glucocorticoid receptor gene, 38  
 glucocorticoid receptors, 2  
 glutamate, 3  
 glutamatergic medications  
   future developments, 397  
 Golden Root, 251  
 grief  
   complicated grief, 137  
 GRIK4 candidate gene, 372  
 guided discovery technique, 260  
 hallucinations  
   psychotic major depression, 75  
 haloperidol, 43, 94, 105, 107  
 Hamilton Rating Scale for Depression (HAM-D), 16–17, 25, 47, 90, 92  
 Hamilton Rating Scale for Depression (HRSD-24), 325  
 hippocampus  
   effects of elevated cortisol release, 2  
 homocysteine levels, 248, 250  
 hormones, 3  
 Hospital Anxiety and Depression Scale, 16, 183  
 hot thoughts, 259  
 HPA (hypothalamic pituitary adrenal) axis, 38  
   dysfunction in depression, 2  
   dysregulation hypothesis of psychotic major depression, 80  
   hyperactive function in major depression, 43  
   hyper-responsiveness to stress, 38  
   influence on cortisol levels, 2  
 Huntington's disease, 359, 369  
 hyperforin, 247  
 hypericin, 247, 248  
 hyperlipidemia, 110  
 hypertensive crisis, 66, 184, 210  
 hypertensive reaction, 49  
 hypomania  
   in bipolar II disorder, 104  
   response to pediatric depression treatment (case example), 155  
 hypomanic episode, 7  
   DSM-IV criteria, 10–11  
 ICD-10, 7  
   criteria for premenstrual syndrome (PMS), 221  
 imatinib, 247  
 imipramine, 41, 62, 63, 64, 65  
 immunosuppressants, 247  
 impaired glucose tolerance, 110  
 indinavir, 247  
 insertion/deletion polymorphisms (indels), 369  
 insight-oriented psychotherapy, 289  
 insomnia, 69  
   bupropion side effect, 68  
 insomnia treatment  
   benzodiazepines, 50  
 insulin resistance model of depression, 4  
 International Classification of Diseases, tenth Edition. *See* ICD-10  
 interpersonal psychotherapy (IPT), 3, 25, 29, 30, 64, 138–139, 212, 299  
   adaptations, 276–277  
   clinical trials with mood disorders, 270  
   components of depression, 270  
   description, 270  
   family-based (FB IPT), 151  
   focus on interpersonal problem areas, 270  
   for late-life depression, 124  
   for pediatric depression, 146



## Index

- interpersonal psychotherapy (*cont.*)  
 fundamental concept, 270  
 future of IPT, 277  
 group IPT for pediatric depression  
 prevention, 157  
 maintenance IPT, 276  
 manuals, 270  
 pediatric depression studies, 150  
 training programs, 277  
 treatment phases, 271–276
- Inventory of Depressive  
 Symptomatology (IDS), 16
- ionotropic glutamate receptors,  
 346
- irinotecan, 247
- ischemic events  
 depression as risk factor, 4
- ischemic heart disease  
 link with depression, 1
- isocarboxazid, 63  
 managing side effects, 69
- kainate receptors, 346
- ketamine, 3, 40, 42  
 enantiomers, 347–348  
 history, 346  
 indications, 346–347  
 pharmacology, 347  
 routes of administration, 348
- ketamine in treatment-resistant  
 depression  
 cognitive side effects, 352–353  
 future directions, 353  
 hemodynamic side effects, 352  
 impact on suicidal ideation and  
 related cognition, 350–351  
 neural mechanisms of  
 antidepressant efficacy, 351–352  
 repeated dose, 350  
 side effects, 352–353  
 single dose, 348–349
- Kraepelin, Emil, 75, 133
- Kramer, Peter, 134
- Lamictal, 169
- lamotrigine, 40, 41, 43, 105, 107, 155,  
 250, 346  
 acute effects on bipolar depression,  
 92–93  
 drug interactions, 111  
 effects in pregnancy, 214  
 for pediatric bipolar disorder,  
 169–170  
 genetic polymorphisms and  
 response prediction, 93
- maintenance treatment in bipolar  
 depression, 93  
 side effects, 169–170  
 use in bipolar depression, 92
- late-life depression  
 and cerebrovascular disease, 4  
 augmentation strategies, 124  
 bupropion, 123  
 citalopram, 122  
 clinical case description, 128  
 cognitive behavior therapy (CBT),  
 124  
 common clinical aspects with  
 cognitive impairment, 129  
 consequences of aging populations,  
 119  
 diagnostic challenge, 119–120  
 duloxetine, 123  
 dysthymia in later life, 124–126  
 effects of antidepressants on older  
 patients, 120–121  
 electroconvulsive therapy (ECT),  
 120  
 escitalopram, 122–123  
 factors affecting treatment response,  
 120  
 interpersonal psychotherapy (IPT),  
 124  
 manifestation of functional  
 impairment, 119  
 mirtazapine, 122, 123  
 nortriptyline, 122  
 paroxetine, 122  
 pharmacological treatments,  
 121–123  
 post-stroke depression, 119  
 problem-solving therapy, 124  
 role of psychotherapy, 124  
 sertraline, 122  
 SSRIs, 122  
 sub-syndromal depressive disorders,  
 126  
 sub-types, 119–120  
 treatment considerations for older  
 people, 120–121  
 tricyclic antidepressants, 121–122  
 use of SSRIs, 122–123  
 vascular depression, 119–120  
 venlafaxine, 123
- late-life depression with cognitive  
 impairment  
 clinical case description, 128–129  
 common clinical aspects of both  
 conditions, 129  
 potential conversion to dementia,  
 126–127  
 treatment, 127–128
- late-life mood disorders
- age-associated changes in presenting  
 symptoms, 119–120
- late luteal phase dysphoria, 155
- learned helplessness model of  
 depression, 2–3
- leucovorin, 250
- leuprolide acetate, 221, 223
- levetiracetam, 110
- Lewy body dementia, 127
- light therapy, 212, 333  
 antimanic light protection, 342  
 applications, 332  
 blue-blocking glasses, 110, 342  
 clinical pearls, 342–343  
 dawn simulation, 341–342  
 dosing and timing strategy, 335–337  
 for hypomania, 110  
 for PMS/PMDD, 224  
 for seasonal affective disorder  
 (SAD), 155  
 future directions, 341–342  
 preparatory diagnostics, 333–334  
 resources, 343  
 treatment management, 337–338  
 triple chronotherapy, 338–340  
 triple chronotherapy case vignette,  
 340
- linezolid, 184
- lithium, 40, 43, 68, 94, 105  
 acute effects on bipolar depression,  
 86–87  
 discovery of mood-altering  
 properties, 86  
 effects in pregnancy, 213  
 for pediatric bipolar disorder, 167  
 history of, 86  
 incompatibility with ECT, 317  
 maintenance studies in bipolar  
 depression, 87  
 maintenance treatment for mania,  
 108  
 mania treatment, 107  
 pharmacogenetic studies, 374–375  
 side effects, 110–111  
 tapering, 111  
 teratogenic effects, 111
- lorazepam, 109
- LORETA measures of theta and  
 treatment response, 385–386
- lumping strategy for diagnostic  
 criteria, 7
- macrocytic anemia, 249
- magnesium oxide  
 for PMS/PMDD, 224

- magnetic resonance imaging (MRI),  
     358  
     leukoencephalopathy, 127  
     techniques, 358
- magnetic resonance spectroscopy (MRS), 358
- magnetic seizure therapy (MST), 321
- magnetoencephalography (MEG), 351
- major depression sub-types, 21
- major depressive disorder, 7  
     and BPD (clinical vignette), 197–198  
     and serotonin transporter gene variants, 38–39  
     association with suicide, 37  
     brain imaging, 3  
     brain structural and functional alterations, 39  
     burden of disease, 37  
     co-morbid with borderline personality disorder, 195–196  
     cortisol levels, 2  
     diagnosis, 39–40  
     diagnostic complications, 37  
     disordered neurocircuitry, 39  
     DSM-IV criteria, 11–12  
     dysthymia as prodrome, 31  
     effects of childhood adversity, 38–39  
     functional neuroimaging studies, 361–362  
     gene–environment interactions, 38–39  
     heritability, 38–39  
     heterogeneity of the patient group, 1  
     incidence, 37  
     molecular neuroimaging studies, 362  
     neuroimaging prediction of treatment response, 363  
     neurotransmitter system abnormalities, 38  
     pathophysiology of depression, 38–39  
     possible etiologies, 38–39  
     somatic symptoms, 37  
     structural neuroimaging studies, 361  
     suicidal behavior with co-morbid BPD, 197  
     undertreatment of, 37
- major depressive disorder treatment  
     acute phase treatment, 46–47  
     adjunctive treatment, 49–50  
     augmenting treatment, 49–50  
     classes of medications, 40–43  
     combining medications, 49  
     continuation phase, 50  
     defining treatment response, 47–49  
     discontinuation of treatment, 51  
     discontinuation syndrome, 51  
     factors affecting medication dosage, 47–49  
     goal of treatment, 47–49, 51–52  
     maintenance phase, 51  
     medication taper, 51  
     monitoring treatment response, 47–49  
     overall therapeutic strategy, 43–46  
     phases of treatment, 46  
     switching medications, 48–49
- major depressive episode, 7  
     DSM-IV criteria, 8–10
- mania  
     and bipolar disorder, 104  
     approaches to treatment, 104  
     features of, 104  
     treatment challenges, 104
- mania treatment  
     acute phase, 104  
     acute phase recommendations, 112–114  
     benzodiazepines, 109  
     characteristics of mood stabilizers, 105  
     clozapine, 110  
     combination therapies for acute mania, 108  
     continuation phase, 104  
     continuation phase recommendations, 114  
     definition of recurrence, 105  
     definition of relapse, 105  
     definitions of mood stabilizers, 105  
     electroconvulsive therapy (ECT), 109–110  
     experimental antimanic treatments, 110  
     first-line medications for acute phase, 105  
     first-line medications for maintenance phase, 105  
     initial assessment for mania and hypomania, 111–112  
     maintenance phase, 104–105  
     maintenance phase recommendations, 114–115  
     monotherapy for acute mania, 107  
     preventive treatments, 108–109  
     rapid cycling, 115  
     research methods, 105–106  
     review of published guidelines, 111  
     safety and side effects considerations, 110–111  
     standard medications for acute mania, 107–108  
     standard medications for maintenance, 108–109  
     time course, 104–105
- manic episode, 7  
     DSM-IV criteria, 10–11
- maprotiline, 42
- MARS study, 370, 371, 373–374
- massage  
     for PMS/PMDD, 224
- McCullough, John, 137
- MDR1 (multi-drug resistance 1)  
     candidate gene, 373
- medical illness  
     approaches to depression management, 184  
     biological factors in depression, 181–182  
     biopsychosocial model of depression, 181–182  
     cancer and depression, 189–190  
     cardiovascular disease and depression, 186–188  
     clinical pearls for depression treatment, 184–185  
     collaborative care models, 184  
     decision whether or not to treat depression, 183–184  
     depression as medication side effect, 182  
     depression caused by substance abuse, 182  
     diabetes and co-morbid depression, 185–186  
     diagnosing co-morbid depression, 183  
     future research on co-morbid depression, 190  
     general principles of depression treatment, 183–185  
     medical causes of depression, 182  
     neurological disorders and depression, 189  
     pharmacodynamic issues in depression treatment, 184  
     pharmacokinetic issues in depression treatment, 184  
     prevalence of depression, 181  
     psychosocial factors in depression, 182  
     specific indications and warnings for depression treatment, 184–185  
     stepped-care models, 184
- medication response measures, 25
- medication side effects  
     depression, 182

## Index

- medication taper, 51  
lithium, 111
- medications  
antidepressant adjunctive medications, 43  
antidepressant augmenting medications, 43  
antidepressants, 40–43  
antipsychotic drugs, 43  
atypical antipsychotic drugs, 43  
combining medications, 49  
dual-action reuptake inhibitors (newer types), 41–42  
dual-action reuptake inhibitors (older types), 41  
ketamine, 42  
mifepristone, 43  
mirtazapine, 42  
monoamine oxidase inhibitors (MAOIs), 42  
mood stabilizers, 43  
nefazodone, 42  
norepinephrine reuptake inhibitors (NRIs), 42  
selective serotonin reuptake inhibitors (SSRIs), 41  
serotonin–norepinephrine reuptake inhibitors (SNRIs), 41–42  
substance P antagonists, 43  
switching medications, 48–49  
thyroid hormonal supplements, 43  
trazodone, 42  
tricyclic antidepressants, 41  
typical antipsychotic drugs, 43
- Mediterranean diet, 252
- melancholia, 69
- melatonin  
and chronotherapy, 333  
melatonin as a chronobiotic, 333  
hormone production and circadian timing, 340–341  
therapeutic microdose regimen, 341
- memantine, 129, 346
- menopause transition  
alternatives for non-remitting depression, 226–227  
antidepressant therapy, 225–226  
atypical antipsychotic treatment for depression, 226  
clinical vignette, 226  
depression risk, 225  
future research directions, 227  
hormone therapy for depression, 226  
initial management of depression, 225–226
- mental pain versus depression in BPD, 196–197
- metabolic syndrome, 110
- metabotropic glutamate receptor modulators, 346
- metabotropic glutamate receptors, 346
- Metamucil, 68
- methadone, 247
- methotrexate, 250
- methylators, 248–250
- L-methylfolate, 248, 250, 251  
review of the evidence, 250  
use in clinical practice, 250–251
- methylmalonic acid, 250
- methyltetrahydrofolate, 250
- mifepristone, 43, 80
- mindfulness meditation  
benefits in chronic depression, 30
- Mini International Neuropsychiatric Interview (MINI), 15
- Mini Mental State Exam (MMSE), 126
- mirtazapine, 42, 64, 65, 184  
clinical observations, 69  
late-life depression study, 122, 123  
managing side effects, 69  
with bupropion, 49  
with fluoxetine, 49  
with venlafaxine, 49
- mixed episode, 7  
DSM-IV criteria, 11
- moclobemide, 63
- modafinil, 50, 69
- models of depression  
altered brain structure model, 3  
altered neurocircuitry model, 3  
biogenic monoamine hypothesis of depression, 3  
catecholamine hypothesis of depression, 3  
depression and ischemic heart disease, 1  
desirable features for models, 4–5  
dysfunctional cognition, 3–4  
effects of childhood adversity or abuse, 1–3  
effects of hypercortisolemia, 4  
gene–environment interaction, 1–3  
heterogeneity of clinical features, 1  
HPA axis dysfunction in depression, 2  
insulin resistance model, 4  
ischemic event risk factor, 4  
late-life depression and cerebrovascular disease, 4  
learned helplessness model, 2–3  
levels and scope of models, 1  
links with vascular disease, 4  
myocardial infarction risk factor, 4  
purposes of, 1  
types of validity, 1
- monoamine oxidase inhibitors (MAOIs), 40, 42, 49  
and stimulants, 69–70  
clinical observations, 68–70  
depression with atypical features  
treatment studies, 62–63  
incompatibility with ECT, 317  
interaction with SSRIs, 66  
managing side effects, 68–69  
tyramine-free diet, 66
- Montgomery–Asberg Depression Rating Scale (MADRS), 16, 90–91, 92, 325, 371
- Montreal Cognitive Assessment (MOCA), 126
- mood disorder due to a general medical condition, 7  
DSM-IV criteria, 13–14
- mood disorder secondary to general medical condition, 135
- mood disorders  
age-associated changes in presenting symptoms, 119–120  
limitations of neuroimaging, 363–364
- mood reactivity  
and borderline personality disorder, 197
- mood specifiers  
in DSM-IV, 14
- mood stabilizers, 41, 43  
definitions and characteristics, 105  
for pediatric bipolar disorder, 167–170  
pharmacogenetic studies, 374–376  
teratogens, 111  
use during pregnancy, 213–214
- morning light therapy, 333, 341–342
- motivational enhancement therapy, 238
- motivational interviewing, 238
- multi-dimensional clinical neuroscience, 396–397
- multi-family psychoeducation, 151
- multiple sclerosis, 189

## Index

- myocardial infarction  
 link with depression, 4  
 use of SSRIs after, 123
- nefazodone, 42
- negative thoughts  
 modifying, 263–264
- neonatal behavioral syndrome  
 and SSRI exposure, 211
- neonatal outcomes  
 effects of antidepressants during  
 pregnancy, 210–211
- neurobiological markers  
 Alzheimer's disease, 126–127
- neurocircuitry model of depression,  
 3
- neurogenesis  
 reduction in depression, 38
- neuroimaging  
 blood oxygen level dependent  
 (BOLD) signal, 358  
 brain imaging in depression, 3  
 diffusion weighted (diffusion tensor)  
 MRI, 358  
 functional MRI, 358  
 functional neuroimaging studies of  
 bipolar disorder, 359–360  
 functional neuroimaging studies of  
 major depressive disorder,  
 361–362  
 future directions, 396  
 future directions in mood disorder  
 studies, 364  
 imaging modalities, 358–359  
 limitations in mood disorders,  
 363–364  
 magnetic resonance spectroscopy  
 (MRS), 358  
 molecular neuroimaging studies of  
 bipolar disorder, 360–361  
 molecular neuroimaging studies of  
 major depressive disorder, 362  
 MRI techniques, 358  
 positron emission tomography  
 (PET), 358–359  
 prediction of treatment response in  
 MDD, 363  
 role in clinical care of mood  
 disorders, 358  
 role in mood disorder research, 358  
 single photon emission computed  
 tomography (SPECT), 358–359  
 structural MRI, 358  
 structural neuroimaging studies of  
 bipolar disorder, 359  
 structural neuroimaging studies of  
 major depressive disorder, 361
- neurokinin antagonists, 345
- neurological disorders and depression,  
 189
- Neurontin, 170
- neuropeptides, 3
- neuroplasticity  
 alteration in depression, 38
- NeuroStar® TMS Therapy system, 326
- Neuroticism-Extraversion-Openness  
 Five Factor Inventory (NEO-FFI),  
 304
- nevirapine, 247
- nicotine dependence, 234, 240
- nifedipine, 66
- nimodipine, 110
- NMDA antagonists, 40
- NMDA receptor modulators, 346
- NMDA receptors, 346
- norepinephrine, 38  
 catecholamine hypothesis of  
 depression, 3
- norepinephrine reuptake inhibitors  
 (NRIs), 40, 42  
 risk of birth defects, 210
- nortriptyline, 42, 65, 210, 240, 317  
 for late-life depression, 122
- nutrition counseling  
 consideration, 252  
 description, 252
- nutritional supplements, 50, 110  
 for PMS/PMDD, 224
- obsessive compulsive disorder (OCD)  
 co-morbid with pediatric  
 depression, 154
- obsessive compulsive personality  
 disorder, 136
- obsessive compulsive symptoms, 50
- olanzapine, 43, 105, 107  
 pediatric bipolar disorder studies,  
 170–172  
 side effects, 110  
 use in mania maintenance  
 treatment, 109
- olanzapine/fluoxetine combination,  
 86  
 acute effects on bipolar depression,  
 93–94  
 maintenance studies in bipolar  
 depression, 94  
 use in bipolar depression, 93
- older patients. *See* late-life depression
- omega-3 fatty acids, 110, 151, 212,  
 245–247  
 consideration of the evidence,  
 246–247  
 description, 245  
 drug interactions, 246  
 forms available, 246  
 review of the evidence, 245–246  
 side effects, 246  
 use in clinical practice, 246
- omega-6 fatty acids, 245
- omeprazole, 249
- oral contraceptives, 170, 223, 247  
 drug interactions, 111
- orthostatic hypotension  
 drug side effect, 70
- over-the-counter decongestants  
 interaction with MAOIs, 66
- oxcarbazepine, 105, 109  
 pediatric bipolar disorder studies,  
 170
- paliperidone, 105
- panic attacks  
 treatments, 49–50
- parasitosis, 69
- Parkinson's disease, 189
- paroxetine, 41, 42, 151, 185  
 late-life depression studies, 122  
 managing side effects, 70
- pathologic rejection sensitivity, 62
- pathophysiology of depression, 38–39
- Patient Health Questionnaire (PHQ),  
 15–16  
 depression module, 183
- Patient Health Questionnaire  
 (PHQ-2), 183
- Patient Health Questionnaire  
 (PHQ-9), 25, 183
- pediatric bipolar disorder  
 aggressive symptoms, 175  
 atypical antipsychotics studies,  
 170–172  
 bipolar depression treatment,  
 173–174  
 clinical pearls, 176  
 combination treatment strategies,  
 172  
 co-morbid ADHD, 175  
 co-morbid disorders, 166  
 co-morbid disruptive behavior  
 disorders, 175

## Index

- pediatric bipolar disorder (*cont.*)  
 complementary and alternative treatments, 175  
 concerns over use of carbamazepine, 169  
 diagnosis, 165–166  
 future research directions, 176  
 gabapentin studies, 170  
 increasing recognition and diagnosis, 165  
 lamotrigine treatment, 169–170  
 lithium treatment, 167  
 maintenance treatment, 174  
 medication algorithm for treatment of mania, 172–173  
 mood stabilizers, 167–170  
 morbidity and mortality associated with, 165  
 novel antiepileptic treatments, 169–170  
 oxcarbazepine studies, 170  
 prevalence in children and adolescents, 165  
 substance-use disorders in adolescents, 175  
 topiramate studies, 170  
 treatment of co-morbid disorders, 175  
 treatment of mania/hypomania, 167–173  
 valproate (valproic acid) treatment, 167–169
- pediatric depression  
 acute treatment, 149–155  
 and ADHD, 147  
 antidepressant-related suicidal events, 152, 153  
 assessment of the patient, 147–148  
 benefits of group CBT and group IPT, 157  
 bipolar diathesis, 155  
 case example, 153–154  
 CBT and antidepressant combination therapies, 150–151  
 choice of treatment modality, 150  
 cognitive behavior therapy (CBT), 150  
 collaborating with parents, 148  
 collaborating with schools, 148  
 combination therapies, 150–151  
 co-morbid ADHD case example, 154  
 co-morbid alcohol or substance-use disorder, 155  
 co-morbid anxiety, 154  
 co-morbid OCD, 154  
 continuation treatment, 156  
 course of episodes, 147
- depression severity and treatment indication, 149  
 developmental epidemiology, 146–147  
 educating patients and families about, 149–150  
 effects of Black Box Warning about SSRIs, 153  
 future research directions, 158–159  
 hypomanic response to treatment (case example), 155  
 initial medication titration, 151  
 interpersonal psychotherapy (IPT) studies, 150  
 management of adverse effects of medications, 152–153  
 medications, 151  
 partial response to treatment, 155–156  
 patient confidentiality issues, 148  
 phenomenology, 146–147  
 preadolescent depression treatment, 151  
 prevention, 157  
 psychotic depression, 155  
 risk for bipolar disorder, 147  
 risk of recurrence, 147  
 safety plan, 150  
 seasonal affective disorder (SAD), 155  
 sleep difficulties, 153–154  
 suicidal events related to antidepressants, 152, 153  
 suicide risk, 152  
 suicide risk safety plan, 150  
 tapering of successful continuation treatment, 156  
 third-step switch for treatment resistance, 157  
 treatment of bipolar depression, 155  
 treatment-resistant depression, 155, 157–158  
 tricyclic antidepressants, 153  
 use of ECT, 157–158
- persistent pulmonary hypertension of the newborn (PPHN) and SSRI exposure, 210–211
- personality disorders  
 co-morbidity with chronic depression, 26–27, 135–136  
 co-morbidity with dysthymia, 26–27  
 relationship to depression with atypical features, 62
- pervasive developmental disorders  
 risk for developing mania, 166
- pharmacodynamic effects, 368
- pharmacogenetic studies  
 methodological issues, 368–370
- pharmacogenetic studies (antidepressants), 370–374  
 ABCB1 candidate gene, 373  
 adverse events, 373–374  
 BDNF candidate gene, 372  
 candidate genes, 371–373  
 cytochrome P450 (CYP450) candidate genes, 371–372  
 FKBP5 candidate gene, 372  
 GRIK4 candidate gene, 372  
 MDR1 (multi-drug resistance 1) candidate gene, 373  
 phosphodiesterase (PDE) family candidate genes, 372–373  
 prediction of sexual dysfunction side effect, 374  
 prediction of treatment-emergent suicidal ideation (TESI), 373–374  
 serotonin 2A receptor (HTR2A) candidate gene, 372  
 serotonin transporter (SLC6A4) candidate gene, 371  
 symptomatic improvement, 370–373
- pharmacogenetic studies (mood stabilizers), 374–376  
 carbamazepine, 375–376  
 lithium, 374–375
- pharmacogenetics  
 definition, 368  
 future directions in psychiatry, 376  
 genetic markers to predict treatment response, 368  
 matching medications with patients, 368  
 pharmacodynamic effects, 368  
 pharmacokinetic effects, 368
- pharmacogenomics, 368
- pharmacokinetic effects, 368
- phenelzine, 62, 63, 64, 65, 70  
 managing side effects, 69
- phenytoin, 110
- phosphodiesterase (PDE) family candidate genes, 372–373
- phosphodiesterase inhibitors, 345
- physical illness. *See* medical illness
- polycystic ovarian syndrome (PCOS) valproate side effect, 168–169
- polycystic ovary disease, 111
- polymorphisms, 369
- positron emission tomography (PET), 358–359



- positron emission tomography (PET)-FDG, 351
- post-partum depression  
 effects of, 214–215  
 psychodynamic psychotherapy, 293  
 risk factors, 214–215  
 treatment, 215
- post-partum psychosis, 213
- post-stroke depression, 119, 189
- post-traumatic stress disorder (PTSD)  
 co-occurring substance-use disorders, 236  
 cortisol levels, 2  
 treatment for anxiety, 49–50
- pregnancy  
 ACPG guidelines for treating depression, 206  
 adverse effects of antenatal depression, 207–208  
 alternative treatments for nonremitting depression, 215–216  
 alternatives to antidepressants, 212  
 and bipolar disorder, 213  
 clinical pearls of therapeutic wisdom, 216  
 depression case vignette, 212  
 depression maintenance treatment, 213  
 Ebstein's anomaly, 213  
 ECT for nonremitting depression, 215  
 effects of antidepressants on neonatal outcomes, 210–211  
 effects of lamotrigine, 214  
 effects of lithium, 213  
 future studies of depression treatment, 216  
 information on effects of antidepressant medications, 208  
 initial management of depression, 206–207  
 long-term developmental effects of antidepressants, 211–212  
 low birth weight and antidepressant exposure, 211  
 medications for bipolar disorder, 111  
 neonatal behavioral syndrome and SSRI exposure, 211  
 persistent pulmonary hypertension of the newborn (PPHN) and SSRI exposure, 210–211  
 post-partum depression, 214–215  
 post-partum psychosis, 213  
 preterm birth and antidepressant exposure, 211  
 prevalence of depression, 206
- risk of birth defects with bupropion, 210
- risk of birth defects with SNRIs and NRIs, 210
- risk of birth defects with SSRIs, 208–210
- risk of birth defects with tricyclic antidepressants, 210
- risk of congenital malformations associated with antidepressants, 208–210
- risk of spontaneous abortion with antidepressants, 210
- risks and benefits of antidepressant treatment, 206
- teratogenic effects of carbamazepine, 214
- teratogenic effects of valproate, 213–214
- teratogenic mood stabilizers, 111
- use of antipsychotic drugs, 214
- use of mood stabilizers, 213–214
- use of TMS for nonremitting depression, 216
- vagus nerve stimulation for nonremitting depression, 216
- premenstrual dysphoric disorder (PMDD), 220  
 antidepressant treatment, 222–223  
 assessing clinical severity, 221–222  
 clinical vignette, 222–223, 225  
 cognitive behavior therapy (CBT), 224  
 complementary and alternative approaches, 224  
 DSM-IV criteria, 222  
 future research directions, 227  
 group psychoeducation and support, 224  
 hormonal strategies, 223  
 initial treatment, 221–224  
 maintenance treatment, 224–225  
 nonpharmacological interventions, 223–224  
 nutritional supplements, 224  
 possible etiology, 220–221  
 possible inclusion in DSM-5, 220–221  
 relaxation techniques, 223  
 symptoms, 220–221
- premenstrual exacerbation of symptoms, 221
- premenstrual symptoms  
 recognition of, 220
- Premenstrual Symptoms Screening Tool (PSST), 222
- premenstrual syndrome (PMS), 220  
 clinical vignette, 225  
 complementary and alternative approaches, 224  
 DSM-IV criteria, 221  
 ICD-10 criteria, 221  
 maintenance treatment, 224–225  
 symptoms, 220–221
- premenstrual tension syndrome, 220
- primary and secondary control  
 enhancement therapy (PASCET), 151
- problem-solving therapy  
 for late-life depression, 124
- problem-solving treatment in primary care (PST-PC), 30
- progesterone, 223
- progestins, 223
- Prospective Record of the Impact and Severity of Menstruation (PRISM), 221
- protein kinase C, 110
- proteomics  
 mood disorder research potential, 396
- proton MRS, 351
- pseudodementia, 128
- pseudoephedrine, 69
- Psychiatric Diagnostic Screening Questionnaire (PDSQ), 15–16
- psychoanalysis, 289
- psychodynamic psychotherapy, 29, 299  
 brief dynamic therapy (BDT), 293–294  
 brief psychodynamic treatment of depression, 294  
 core conflictual relationship themes (CCRT), 294  
 description, 289  
 evidence base for use in bipolar disorder, 293  
 evidence base for use in depression, 289–293  
 evidence base for use in post-partum depression, 293  
 long-term (LTPP), 292–293  
 models used in treatment of depression, 293–294  
 role in the treatment of mood disorders, 297  
 short-term (STPP), 289–292  
 supportive expressive psychotherapy (SE), 294

## Index

- psychodynamic psychotherapy  
 guidelines, 295–297  
 alliance, 295  
 assessment, 295  
 awareness of countertransference, 297  
 common themes in depressed patients, 296  
 conducting the treatment, 295–297  
 goals, 295  
 supporting weakened ego function, 295–296  
 transference, 296–297  
 uncovering unconscious thoughts and feelings, 296
- psychosocial factors in depression, 182
- psychotherapy  
 diabetes and co-morbid depression, 185  
 dysfunctional cognition model of depression, 3–4  
 efficacy in chronic depression, 29–30  
 efficacy in dysthymia, 29–30  
 for depression with atypical features, 64, 68  
 future directions, 398  
 future of, 277  
 response evaluation, 25  
 role in late-life depression treatment, 124  
*See also* cognitive behavior therapy (CBT); cognitive therapy (CT); combined medication and psychotherapy; dialectical behavior therapy (DBT); interpersonal psychotherapy (IPT); psychodynamic psychotherapy
- psychotic depression, 43  
 electroconvulsive therapy (ECT), 155  
 in young people, 155  
 treatment, 50
- psychotic major depression  
 acute treatment, 78–80  
 antidepressants plus antipsychotic combination, 78–79  
 assessment of risk for suicide, 78  
 choice of treatment setting, 78  
 combination pharmacotherapy, 78–79  
 comparison of delusional and nondelusional depression, 76  
 continuation treatment, 80–81  
 course of illness, 77  
 definition, 75  
 differential diagnosis, 77
- ECT (electroconvulsive therapy), 79–80  
 epidemiology, 76  
 evolution of the diagnosis, 75  
 glucocorticoid hypothesis, 80  
 health care costs associated with, 76  
 historical background, 75  
 HPA axis dysregulation hypothesis, 80  
 identification of delusions, 77  
 importance of identifying delusions, 82  
 increased suicide risk, 82  
 maintenance treatment, 80–81  
 mifepristone, 80  
 obstacles to diagnosis, 78  
 public health significance, 76–77  
 relationship of delusions to severity of depression, 76  
 relationship to bipolar disorder, 76  
 scope of the problem, 76–77  
 suicide risk, 77
- psychotic major depression (case example)  
 comment on treatment and outcome, 81  
 history, 81  
 hospital treatment, 81  
 post-hospital course, 81  
 presenting symptoms, 81
- Qi therapy  
 for PMS/PMDD, 224
- quetiapine, 43, 86, 105, 107  
 acute effects on bipolar depression, 90–91  
 maintenance treatment of bipolar depression, 91–92  
 pediatric bipolar disorder studies, 170–172  
 side effects, 110  
 use in bipolar depression, 90  
 use in mania maintenance treatment, 109
- Quick Inventory of Depression Symptoms (QIDS16), 371
- Quick Inventory of Depressive Symptomatology (QIDS), 16
- Quick Inventory of Depressive Symptomatology – Self Report (QIDS-SR16), 25
- rapid cycling in bipolar disorder, 104, 115  
 risk with antidepressant treatment, 89–90
- reboxetine, 42
- recurrence  
 definition, 105
- reflexology  
 for PMS/PMDD, 224
- rejection sensitivity, 62  
 and borderline personality disorder, 197
- relapse  
 definition, 105
- renal failure patients, 184
- repeat polymorphisms, 369
- repetitive transcranial magnetic stimulation (TMS)  
 use in bipolar depression, 96–97
- response prediction  
 lamotrigine, 93
- Rhodiola rosea*, 251  
 description, 251  
 drug interactions, 251  
 mechanism of action, 251  
 review of the evidence, 251  
 side effects, 251  
 use in clinical practice, 251
- riluzole, 346
- risperidone, 43, 105, 107  
 pediatric bipolar disorder studies, 170–172  
 side effects, 110  
 use in bipolar depression, 95  
 use in mania maintenance treatment, 109
- Rosen root, 251
- saffron  
 for PMS/PMDD, 224
- saffron (*Crocus sativus*), 253
- SAMe (S-adenosyl methionine), 248  
 consideration of the evidence, 248  
 description, 248  
 review of the evidence, 248  
 use in clinical practice, 248
- schema  
 dysfunctional attitudes and schema, 260
- schizoaffective disorder, 105  
 differential diagnosis, 77
- schizophrenia, 369  
 differential diagnosis, 77
- seasonal affective disorder (SAD), 155, 221, 253

## Index

- switch to hypomania or mania in spring, 342
- second-generation antipsychotics, 105
- seizure risk  
   bupropion side effect, 68
- seizure threshold, 184
- selective norepinephrine reuptake inhibitors (SRNIs), 155
- selective serotonin reuptake inhibitors (SSRIs), 40, 41  
   and ECT, 317  
   and neonatal behavioral syndrome, 211  
   and persistent pulmonary hypertension of the newborn (PPHN), 210–211  
   depression with atypical features  
     treatment studies, 63–64  
   effects of Black Box Warning, 153  
   for late-life depression, 122  
   interaction with MAOIs, 66  
   managing sexual dysfunction side effect, 68  
   managing side effects, 68  
   risk of birth defects, 208–210  
   suicidality risk, 68  
   use in late-life depression, 122–123
- selegiline, 62–63, 66  
   managing side effects, 69
- serotonin, 38  
   catecholamine hypothesis of depression, 3
- serotonin 2A receptor (HTR2A)  
   candidate gene, 372
- serotonin–norepinephrine reuptake inhibitors (SNRIs), 40, 41–42  
   depression with atypical features  
     treatment studies, 64  
   risk of birth defects, 210
- serotonin syndrome, 49, 66, 184, 247, 317
- serotonin transporter gene  
   polymorphism, 369
- serotonin transporter gene variants  
   and vulnerability to depression, 2, 38–39
- serotonin transporter (SLC6A4)  
   candidate gene, 371
- serotonin transporter (SLC6A4) gene  
   variation, 370
- sertraline, 41, 63, 127  
   late-life depression studies, 122
- sexual abuse  
   and vulnerability to depression, 38–39
- sexual dysfunction  
   antidepressant side effect prediction, 374  
   drug side effects, 70  
   managing SSRI side effect, 68
- sexual function  
   managing drug side effects, 70
- Sheehan Disability Scale, 90
- sildenafil, 70
- single nucleotide polymorphisms (SNPs), 369
- single nucleotide variants (SNVs), 369
- single photon emission computed tomography (SPECT), 358–359
- sleep deprivation  
   effect on depression, 333
- sleep difficulties  
   medication side effect, 153–154
- sleep phase advance, 333
- Socratic questioning, 263
- somatic mosaicism, 370
- somatostatin, 38
- specifiers  
   in DSM-IV, 8, 14
- splitting strategy for diagnostic  
   criteria, 7
- St. John's wort (*Hypericum perforatum*), 247–248  
   consideration of the evidence, 248  
   description, 247  
   drug interactions, 247  
   forms available, 247–248  
   for PMS/PMDD, 224  
   review of the evidence, 247  
   side effects, 247  
   use in clinical practice, 247–248
- STAR\*D study, 47, 49, 66–68, 133, 141, 370–371, 373–374
- stepped-care models, 184, 185–186
- Stevens–Johnson syndrome, 370  
   possible lamotrigine side effect, 169  
   risk with carbamazepine, 169, 375–376
- stimulants  
   and MAOIs, 69–70
- stress response  
   effect on cortisol levels, 2
- HPA (hypothalamic pituitary adrenal) axis dysfunction, 2
- stroke  
   post-stroke depression, 119
- structural MRI, 358
- Structured Clinical Interview for personality disorders DSM-III-R (SCID-II), 136
- Structured Clinical Interview for the DSM-III-TR (SCID), 293
- Structured Clinical Interview for DSM-IV Axis I disorders (SCID-IV), 15
- Structured Clinical Interview for DSM-IV-TR Axis I disorders (SCID), 25
- Structured Clinical Interview for DSM-IV-TR Axis I disorders (SCID-CV), 25
- substance-induced depression, 235–236
- substance-induced mood disorders, 7  
   DSM-IV criteria, 13
- substance P, 38
- substance P antagonists, 43
- substance use  
   depression caused by, 182
- substance-use disorders  
   and depression, 234  
   antidepressant medication treatment  
     studies, 238–240  
   assessment of substance use, 237  
   avoiding relapse, 240–241  
   clinical history, 236  
   clinical pearls of therapeutic  
     wisdom, 241–242  
   co-morbid with pediatric  
     depression, 155  
   co-morbidity with chronic  
     depression, 25–26  
   co-morbidity with dysthymia, 25–26  
   co-occurring medical disorders, 236  
   depressive symptoms that are usual  
     effects of substances, 234–235  
   diagnosis of depression, 234–236  
   DSM-IV categories of co-occurring  
     depression, 234–236  
   evidence-based outpatient  
     counseling methods, 238  
   future research directions, 242  
   identifying other co-occurring  
     disorders, 236  
   in adolescents with bipolar disorder,  
     166

## Index

- substance-use disorders (*cont.*)  
 in bipolar adolescents, 175  
 independent depression syndrome, 235–236  
 inpatient treatment, 238  
 long-term continuation of treatment medications, 240–241  
 maintenance treatment, 240–241  
 medication treatments, 237  
 neuropsychological deficits, 236  
 nicotine dependence, 240  
 past history of treatment response, 236  
 relationship with mood syndromes, 234  
 severity and choice of treatment setting, 237  
 substance-induced depression, 235–236  
 treatment alternatives for nonremission, 241
- sub-syndromal depression  
 in late life, 126
- suicidal behavior  
 dialectical behavior therapy (DBT), 280  
 in BPD with co-morbid MDD, 197
- suicidal events  
 related to antidepressants, 152, 153
- suicidal ideation  
 antidepressant treatment-emergent suicidal ideation (TESI), 373–374  
 effects of ketamine on, 350–351  
 treatments, 41
- suicidality  
 and SSRIs, 68
- suicide risk  
 and delusions, 77, 82  
 assessment in psychotic major depression, 78  
 bipolar depression, 86  
 evaluation in chronic depression, 134  
 major depressive disorder, 37  
 pediatric depression, 152  
 pediatric depression safety plan, 150  
 psychotic major depression, 77, 82
- supportive expressive psychotherapy (SE), 294
- suprachiasmatic nuclei (SCN), 340, 341
- synthroid, 43
- tamoxifen, 110, 184
- tardive dyskinesia  
 medication side effect, 110
- temperamental factors  
 in chronic depression, 27  
 role in dysthymia, 27
- Texas Medication Algorithm Project, 141
- thyroid hormonal supplements, 43
- thyroid medications, 68
- thyroid-related hormones, 38
- thyroxine treatment, 50
- Topamax, 170
- topiramate, 107, 110  
 pediatric bipolar disorder studies, 170  
 use in impulse control disorders, 175
- toxic epidermal necrolysis  
 possible lamotrigine side effect, 169  
 risk with carbamazepine, 169, 375–376
- transcranial magnetic stimulation (TMS)  
 alternative treatment for depression in pregnancy, 216  
 clinical pearls of therapeutic wisdom, 329  
 definition, 325  
 description, 325  
 determination of motor threshold, 327  
 evidence for antidepressant efficacy, 325–326  
 future directions, 329–330  
 initial management, 328  
 maintenance treatment, 328–329  
 professional guidelines, 326  
 regulatory status, 326  
 safety guidelines, 328  
 side effects, 328  
 stimulation of the motor cortex, 327  
 treatment alternatives for nonremission, 329  
 treatment technique, 327–328  
 use of repetitive TMS in bipolar depression, 96–97
- tranylcypromine, 66  
 clinical observations, 69  
 managing side effects, 69
- traumatic brain injury, 189
- trazodone, 42, 64, 69
- treatment-emergent suicidal ideation (TESI)  
 search for predictive biomarkers, 373–374
- treatment-resistant depression, 43, 50
- distinction from chronic depression, 133  
 effects of ketamine on suicidal ideation and related cognition, 350–351  
 future directions for ketamine therapy, 353  
 ketamine side effects, 352–353  
 ketamine studies (repeated dose), 350  
 ketamine studies (single dose), 348–349  
 limitations of current treatments, 345  
 major clinical problem, 345  
 need for new antidepressant approaches, 345  
 neural mechanisms of ketamine antidepressant efficacy, 351–352  
 rationale for glutamate modulation, 345–346
- treatment-resistant major depression, 43
- treatment-resistant pediatric depression, 155–156, 157–158
- treatment response prediction  
 EEG alpha power, 382–384  
 EEG auditory-evoked potentials, 387–389  
 EEG cordance and antidepressant response index, 386–387  
 EEG theta power, 384–385  
 implications of EEG findings, 387  
 LORETA measures of theta, 385–386  
 neuroimaging in MDD, 363  
 role of electrophysiological measures, 389–390
- tricyclic antidepressants, 40, 41  
 clinical observations, 69  
 for late-life depression, 121–122  
 managing side effects, 68, 69  
 risk of birth defects, 210
- Trileptal, 170
- triple chronotherapy, 333, 338–340  
 case vignette, 340
- tryptophan/5-hydroxytryptophan supplements, 253
- typical antipsychotic drugs, 43
- tyramine-free diet for MAOIs, 66
- vagus nerve stimulation (VNS), 320, 325, 329  
 for nonremitting depression in pregnancy, 216
- valproate, 41, 94, 105, 107

drug interactions, 111	for late-life depression, 123	weight gain, 110
for pediatric bipolar disorder, 167–169	managing side effects, 70	Western diet, 252
side effects, 111, 168–169	with mirtazapine, 49	withdrawal syndrome, 51
teratogenic effects, 111, 213–214	verapamil, 110	World Health Organization, 394
use in bipolar depression, 95–96	Visual Analogue Scale (VAS) for Premenstrual Mood Symptoms, 221	yoga, 252
use in mania treatment, 108–109	vitamin B12 (cobalamin), 248–250	beneficial effects on depression, 156
valproic acid, 105	consideration of the evidence, 250	consideration of the evidence, 252
for pediatric bipolar disorder, 167–169	deficiency symptoms, 248–250	description, 252
side effects, 168–169	description, 248–250	review of the evidence, 252
varenicline, 240	review of the evidence, 250	yohimbine, 70
vascular dementia, 127	vitamin D	Young Mania Rating Scale (YMRS), 17, 107, 168
vascular depression, 119–120, 127	deficiency symptoms, 253	ziprasidone, 43, 105, 107
vascular disease	<i>Vitex agnus castus</i> (chasteberry) for PMS/PMDD, 224	pediatric bipolar disorder studies, 170–172
link with hypercortisolemia and depression, 4	wake therapy, 333	side effects, 110
links with depression, 4	triple chronotherapy, 338–340	use in bipolar depression, 95
velazodone, 64	warfarin, 184	zonisamide, 110
venlafaxine, 40, 41, 42, 64, 65, 151, 317	drug interactions, 111	