

Treating MDD in Primary
Care & CANMAT 2024
MDD Pearls

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Dr. Jeffrey Habert MD CCFP FCFP

Assistant Professor, University of Toronto, DFCM



Speaker's Disclosures

• **Name:** Dr. Jeffrey Habert MD CCFP FCFP

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Learning Objectives

- **Review** the updated **CANMAT 2023/2024 guidelines** for diagnosing and managing Major Depressive Disorder (MDD), including evidence-based treatment pathways.
- **Understand and apply** the principles of **early optimized treatment and measurement-based care** to improve functional outcomes and remission rates in MDD.
- **Identify strategies for managing inadequate response** to initial therapy, including antidepressant switching, adjunctive treatments, psychotherapy, and neuromodulation options.

MDD Unmet Needs



MDD is a highly prevalent disorder and a serious public health problem^{1,2}



of Canadians will experience a major depressive episode in their lifetime¹



Stigma surrounding mental illnesses is prevalent, insidious, and presents a large barrier to treatment²

Primary care practitioners have the first opportunity to intercept and optimally treat depression earlier, potentially reducing the substantial morbidity, mortality, and functional impairment associated with MDD.³

1. Lewinsohn PA, Rohlfing DB, Rohlfing ME. (2013) MDD. In: Merck's Manual of Clinical Diagnosis and Therapy, 19th ed. Merck & Co, Inc. 2. Lewinsohn PA, Rohlfing DB, Rohlfing ME. (2013) MDD. In: Merck's Manual of Clinical Diagnosis and Therapy, 19th ed. Merck & Co, Inc. 3. Lewinsohn PA, Rohlfing DB, Rohlfing ME. (2013) MDD. In: Merck's Manual of Clinical Diagnosis and Therapy, 19th ed. Merck & Co, Inc.

Unmet Needs in the Treatment of MDD



Untreated MDD Non-adherence Treatment failure Recurrence/relapse Subsequent episode

Up to
50%
of cases^{1,2}

Up to
70%
of cases or over all³

60%

stop antidepressant therapy before 6 months

28%

of primary care patients stop antidepressant therapy at 1 month⁴

40–60%

of cases⁵

Up to
80%
of cases⁶

50%

probability of a 2nd episode⁶

80–90%

probability of a 3rd episode⁶



Residual symptoms are associated with risk of relapse and recurrence⁷

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Diagnosing MDD With DSM-5-TR

≥5 of the following symptoms:

Depressed mood	Markedly diminished interest or pleasure	Weight or appetite changes
Insomnia or hypersomnia	Psychomotor agitation or retardation	Fatigue or loss of energy
Feelings of worthlessness, or excessive or inappropriate guilt	Executive dysfunction	Recurrent thoughts of death or suicidal ideation (not empty)

Symptoms present during same 2-week period and represent a change from previous functioning

At least 1 symptom must be "depressed mood" or "markedly diminished interest or pleasure"

MDD can cause clinically significant distress or impairment in social, occupational, or other important areas of functioning

What is this Concept of Early optimized treatment

Functional Recovery in Major Depressive Disorder: Focus on Early Optimized Treatment

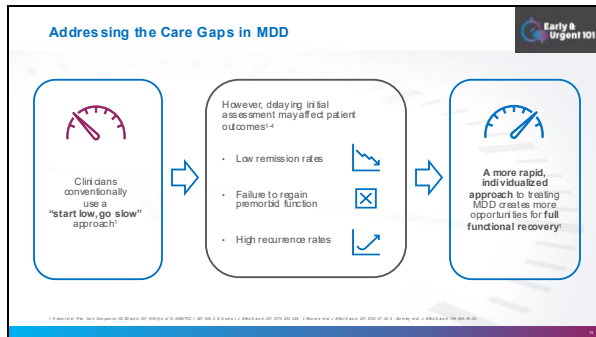
Jeffrey Habert, MD, CCFP, FCFP^{1,2}; Martin A. Katzman, MD, FRCPC³; Oloruntoba J. Oluboka, Roger S. McIntyre, MD⁴; Diane McIntosh, MD, FRCPC⁵; Glenda M. MacQueen, MD, PhD⁶; Atul Khullar, MD, FRCPC⁷; Roumen V. Milev, MD, PhD, FRCPC⁸; Kevin D. Kjernisted, MD⁹; Pratap R. Chokka, MD⁹; and Sidney H. Kennedy, MD, FRCPC¹

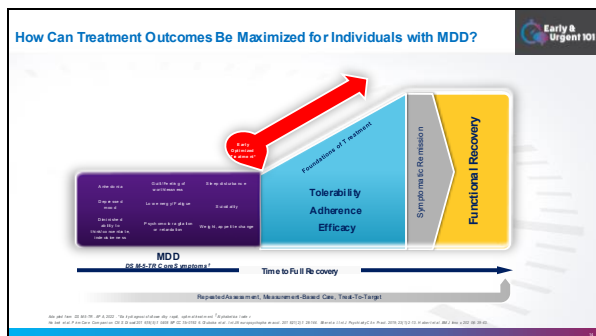
Pain Care, Comparisons Q&A Round
October 19, 2024 for depression treatment

Early Optimized Treatment in MDD: Making Your First Shot the Best Shot

"Shortening the time between onset of depression and providing optimized treatment may result in better clinical outcomes, increasing the likelihood of achieving full functional recovery from the depressive episode."

[illegible][illegible][illegible]





Canadian Network for Mood and Anxiety Treatments (CANMAT) 2023 Update on Clinical Guidelines for Management of Major Depressive Disorder in Adults

Réseau canadien pour les traitements de l'humeur et de l'anxiété (CANMAT) 2023 : Mise à jour des lignes directrices cliniques pour la prise en charge du trouble dépressif majeur chez les adultes

Raymond W. Lam, MD^{1,2}, Sidney H. Kennedy, MD^{3,4}, Camella Adams, MD, MSc⁵, Annes Bahji, MD^{6,7}, Serge Beaulieu, MD, PhD^{8,9}, Venkat Bhat, MD, MSc¹⁰, Pierre Blier, MD, PhD¹¹, Daniel M. Blumberg, MD, MSc¹², Elias Briessle, MD, PhD^{13,14}, Trisha Chakrabarty, MD¹⁵, Andre Du, MD¹⁶, Benicio N. Frey, MD, PhD¹⁷, Peter Giacobbe, MD, MSc¹⁸, David Gratzler, MD¹⁹, Sophie Grigoridis, MD, PhD²⁰, Jeffrey Habert, MD²¹, H. Ibrah Haseen, MD²², Zahoor Ismail, MD²³, Alexander McGillivray, MD, PhD²⁴, Roger S. McIntyre, MD²⁵, Erin E. Michalak, PhD²⁶, Daniel J. Müller, MD, PhD²⁷, Sagar V. Parikh, MD²⁸, Lena S. Quilty, PhD²⁹, Anne V. Barendse, MD, PhD³⁰, Nisha Rastrow, MD³¹, Johanne Renaud, MD, MSc³², Joshua D. Rosenblatt, MD, MSc³³, Zahrah Samman, MBChB, PhD³⁴, Gaetano Saraf, MD³⁵, Kathryn Schade, MA³⁶, Ayal Schaffer, MD³⁷, Mark Sinyor, MD³⁸, Claudio N. Soares, MD, PhD³⁹, Jennifer Swainson, MD⁴⁰, Valerie H. Taylor, MD, PhD⁴¹, Sander V. Tourjman, MD, PhD⁴², Rudolf Uher, MD, PhD⁴³, Michael van Ameringen, MD⁴⁴, Gustavo Vazquez, MD, PhD⁴⁵, Simone Vigod, MD, MSc⁴⁶, Daphne Voineskos, MD, PhD⁴⁷, Lakshmi N. Tatham, MBBS, MBA(exec)⁴⁸, and Roumen V. Milev, MD, PhD⁴⁹

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CANMAT 2023 Guidelines for Major Depressive Disorder

Core Editors

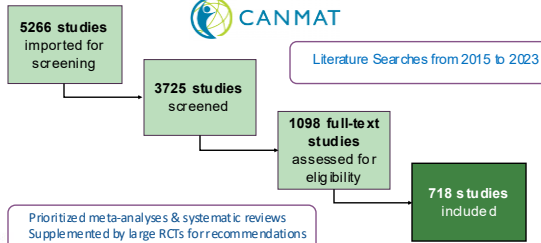
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- Smadar Valérie Tourjman
- Rudolf Uher
- Daphne Voineskos

Co-Authors

- Adams, Camelia
- Bhat, Venkat
- Blier, Pierre
- Blumberger, Daniel
- Frey, Benicio
- Giacobbe, Peter
- Gratzner, David
- Grigoriadis, Sophie
- Hubert, Jeff
- Husain, Ishrat
- Ismail, Zahinoor
- McGirr, Alexander
- McIntyre, Roger
- Michalak, Erin
- Müller, Daniel
- Ravindran, Arun
- Ravindran, Nisha
- Renaud, Johanne
- Samaan, Zainab
- Schaffer, Ayal
- Sinyor, Mark
- Swainson, Jennifer
- Taylor, Valerie
- van Ameringen, Michael
- Vasquez, Gustavo
- Vigod, Simone
- Yatham, Lakshmi



CANMAT Depression Guidelines 2024



CANMAT 2023 Update on Guidelines for Major Depressive Disorder

CANMAT Definitions for Level of Evidence and Line of Treatment

Level of Evidence Ratings

Level	Evidence Criteria
1	Meta-analysis with narrow confidence interval or replicated double-blind (DB), randomized controlled trial (RCT) that includes a placebo or active control comparison (n≥30 in each active treatment arm)
2	Meta-analysis with wide confidence interval or one DB RCT with placebo or active control comparison condition (n≥30 in each active treatment arm)
3	At least one DB RCT with placebo or active control comparison condition (n=20-29 in each active treatment arm) or health system administrative data
4	Uncontrolled trial, anecdotal reports, or expert opinion

Line of Treatment Recommendations

Line of Treatment	Evidence Level
1 st Line	Level 1 or Level 2 evidence for efficacy plus clinical support* for safety / tolerability / feasibility
2 nd Line	Level 3 or higher evidence for efficacy plus clinical support* for safety / tolerability / feasibility
3 rd Line	Level 4 evidence or higher for efficacy plus clinical support* for safety / tolerability / feasibility

* Instances where lack of clinical support for safety/tolerability/feasibility has impacted recommendations have been highlighted in the text and table.



CANMAT 2023 Update on Guidelines for Major Depressive Disorder

Primary Questions

8 primary questions representing a patient's care journey from assessment through treatment to maintenance

1. What are important issues for assessment and diagnosis?
2. What are principles for depression management?
3. How are treatments selected?
4. What is the role of digital health interventions?
5. How do you monitor treatment?
6. What do you do when a patient is better?
7. What do you do when a patient is not better?
8. What neuromodulation treatments are available?



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Question 2: Principles for MDD Management

- Collaborative Decision Making is essential
- Psychoeducation and self-management are integral to MDD management
 - Psychoeducation refers to knowledge and information about the symptoms, coping strategies and treatment options for depression.
 - Where self-management uses techniques (e.g., problem-solving, lifestyle changes, and behavioural activation (BA)) to empower patients to actively manage their illness and live well
- Symptom remission remains a crucial clinical target for acute treatment, as substantial evidence supports a lower risk of relapse in those who achieve remission compared with those who do not
 - In contrast, failure to achieve remission is associated with continuing symptom burden and poor functional outcomes. Evidence supports symptomatic remission as a realistic goal of acute phase treatment for most patients both in psychiatric and primary care settings

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Risk Factors for Depression



Non-modifiable

- Female sex and gender issues
- Early age of onset
- Family history
- Adverse childhood events / maltreatment
- Prior history of MDD, anxiety, mental health comorbidity
- Death of a spouse

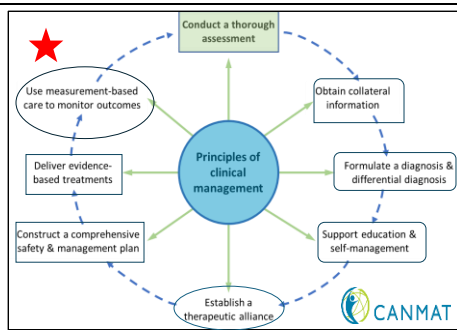


Dynamic (modifiable)

- Chronic physical disease
- Substance use disorders
- Insomnia, night work, later chronotype
- Bullying / Cyberbullying
- Stressful life events
- Job strain / Income inequality
- Lifestyle / Screen time



Principles of Clinical Assessment and Management of MDD



Lifestyle Interventions in the Treatment of Depression

Line of Treatment	Lifestyle Intervention	Level of Evidence
First Line	Supervised exercise (low to moderate intensity, for 30 to 40 minutes at a time, three to four times a week, for a minimum of nine weeks) for MDE of mild severity.	●
	Light therapy (10,000 lux white light for 30 minutes daily) for MDEs with seasonal (winter) pattern.	●
Second Line	Light therapy for mild severity nonseasonal MDE.	●
	Adjunctive exercise for moderate severity MDE.	●
	Adjunctive light therapy for moderate severity nonseasonal MDE.	●
	Adjunctive sleep hygiene and cognitive-behavioural therapy for insomnia (CBT-I).	●
Third Line	Adjunctive healthy diet (varied diet with high content of fruit, vegetables, and fibre, and low content of saturated fat and carbohydrates).	●
	Adjunctive Mediterranean diet.	●
	Adjunctive sleep deprivation (wake therapy).	●
Insufficient Evidence	Probiotics.	n/a

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2. What are the principles for depression management?
3. **How are treatments selected?**
4. What is the role of digital health interventions?
5. How is treatment monitored?
6. What should be done when a patient is better?
7. What should be done when a patient is not better?
8. When should neuromodulation treatments be used?



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How Do You Choose the Initial Treatment?

Considerations for selecting treatment(s)

- Collaborative decision-making
- Patients' attitudes and preferences
- Informed awareness of treatments
- Quality of evidence
- Availability of treatments
- Risk from delay in treatment initiation
- **Severity of depression**



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How Do You Choose the Initial Treatment?

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- Quality of evidence
- Availability of treatments
- Risk from delay in treatment initiation
- **Severity of depression**

Depression Severity	Recommendations for Initial Treatment ¹
Mild, with low risk	• Psychotherapy (preferred) or pharmacotherapy • Serotonergic or GABA treatments, guided DHTs can be considered as monotherapies*

¹ There is stronger evidence for efficacy and safety of pharmacotherapy and psychotherapy compared to exercise, complementary and alternative medicine, and digital health interventions.

The level of evidence refers to the choice of being optimal, not to the treatments themselves.

*Especially if preferred by patients.



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1st Line

- Citalopram (SSRI)
- Escitalopram (SSRI)
- Fluoxetine (SSRI)
- Fluvoxamine (SSRI)
- Paroxetine (SSRI)
- Sertraline (SSRI)
- Desvenlafaxine (SNRI)
- Duloxetine (SNRI)
- Levomilnacipran (SNRI)
- Venlafaxine (SNRI)
- Risperidone (NDRI)
- Mirtazapine (α₂-adrennergic & 5-HT₂ antagonist)
- Vilazodone (5-HT_{1A} partial agonist & 5-HT_{2C} antagonist)
- Vortioxetine (5-HT_{1A} partial agonist & 5-HT_{2C} antagonist)
- Mianserin* (α₁-adrennergic antagonist & 5-HT₂ antagonist)
- Milnacipran* (SNRI)

2nd Line

- Amitriptyline, clomipramine, nortriptyline, doxepin (TCA)
- Moclobemide (reversible inhibitor MAO-A)
- Tramadol (SR 1, 5-HT₂ antagonist)
- Quetiapine (QA, 5-HT_{2C} antagonist, NR)
- Escitalopram with venlafaxine has potential (NMJDA on serotonin, SNRI, NDRI)**
- Venlafaxine* (SR 1, 5-HT₂ antagonist)
- Seliglin* (reversible MAO-B inhibitor)

3rd Line

- Phenelzine* (irreversible MAO inhibitor MAO-A)
- Trazodone (5-HT_{2A} antagonist, NR)
- Reboxetine* (NR)

MT, mirtazapine; 5-HT_{2A}, 5-HT_{2A} receptor; MAO, monoamine oxidase; NDRI, norepinephrine and dopamine reuptake inhibitor; NMJDA, norepinephrine-monoamine depletor; SNRI, serotonin and norepinephrine reuptake inhibitor; SR, serotonin reuptake inhibitor; SSRI, selective serotonin reuptake inhibitor; TCA, tricyclic agent.

All agents have Level 1 evidence

* Not available in Canada

Refractory to new since 2016.

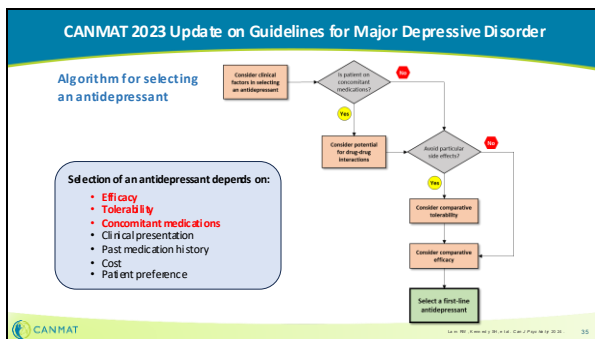
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CANMAT 2023 Recommendations: Antidepressants

Summary Recommendations for Antidepressant 1st Line

Antidepressant	Daily dose ¹	Mechanism	Level of evidence
Citalopram	20-60 mg	SSRI	●●●●●
Escitalopram	10-20 mg	SSRI	●●●●●
Fluoxetine	20-60 mg	SSRI	●●●●●
Fluvoxamine	100-300 mg	SSRI	●●●●●
Paroxetine	20-50 mg	SSRI	●●●●●
Sertraline	50-200 mg	SSRI	●●●●●
Duloxetine	50-120 mg	SNRI	●●●●●
Desvenlafaxine	60-120 mg	SNRI	●●●●●
Venlafaxine*	40-120 mg	SNRI	●●●●●
Vortioxetine	10-20 mg	SNRI	●●●●●
Milnacipran*	120-240 mg	SNRI	●●●●●
Mianserin*	12-24 mg	SNRI	●●●●●
Levomilnacipran*	20-60 mg	SNRI	●●●●●
Venlafaxine	100-200 mg	SNRI	●●●●●
Agomelatine*	25-50 mg	MT, 5-HT _{2C} antagonist	●●●●●
Mirtazapine*	15-45 mg	MT, 5-HT _{2C} antagonist	●●●●●
Milnacipran*	120-240 mg	SNRI	●●●●●

1. SSRI, selective serotonin reuptake inhibitor; SNRI, serotonin and norepinephrine reuptake inhibitor; MAO, monoamine oxidase; NDRI, norepinephrine and dopamine reuptake inhibitor; NMJDA, norepinephrine-monoamine depletor; SR, serotonin reuptake inhibitor; SSRI, selective serotonin reuptake inhibitor; TCA, tricyclic agent.



Nausea	Somnolence
Greater than 20% (>30% *) - Citalopram - Paroxetine - Desvenlafaxine - Fluoxetine - Milnacipram)* - Sertraline - Venlafaxine XR* - Vilazodone - Vortioxetine - Duloxetine	Greater than 20% - Fluvoxamine - Paroxetine
Less than 20% - Agomelatine - Bupropion - Escitalopram (15%)	Less than 10% - Agomelatine - Bupropion XL - Desvenlafaxine - Escitalopram - Vilazodone - Vortioxetine

CANMAT 2023 Update on Guidelines for Major Depressive Disorder

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1. What are important issues for assessment and diagnosis?
2. What are the principles for depression management?
3. How are treatments selected?
4. What is the role of digital health in interventions?
5. **How is treatment monitored?**
6. What should be done when a patient is better?
7. What should be done when a patient is not better?
8. When should neuromodulation treatments be used?

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Measurement-Based Care in MDD: General Principles

- Use of routine outcome measurements and feedback to support clinical decisions
- Measurement-based care (MBC) has been demonstrated to improve medication adherence and outcomes, especially in the pharmacological treatment of MDD

Three components:

Regularly using validated outcome scales during patient encounters

Reviewing the scale scores with patients

Using the scales alongside clinical assessment to support collaborative decision-making

- The use of scales for MBC is similar to the use of laboratory tests in that the results must be considered within the context of clinical assessment and care

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Meta-analysis of measurement-based care (MBC) for depression



PRISMA methodology
Literature search of databases to July 1, 2020
Comprehensive search terms
Studies identified
(5 in English literature, 2 in Chinese)
Only pharmacotherapy studies were identified

Zhu M et al. JGIM. 2021;36:11484

CANMAT 2023 Update on Guidelines for Major Depressive Disorder

Tools to Monitor Course of Treatment

Outcome	Clinician-Rated	Patient-Rated
Symptoms/severity	- Hamilton Depression Rating Scale (HAM-D, HAM-2) - Montgomery-Åsberg Depression Rating Scale (MADRS) - Inventory for Depressive Symptomatology (IDS) - Columbia Suicide Severity Rating Scale (C-SSRS)	- Beck Depression Inventory-II (BDI-II) - Clinically Useful Depression Outcome Scale (CUDOS) - Patient Rated Outcome Measurement Information System (PROMIS) - Patient Health Questionnaire (PHQ-9) - Quick Inventory for Depressive Symptomatology, Self-Rated (QIDS-S16) - Suicidality Scale
Functioning	- Multidimensional Scale of Independent Functioning (MSIF) - Social and Occupational Functioning Assessment Scale (SOFAS) - WHO Disability Assessment Scale (WHO-DAS)	- Lam Employment Absence and Productivity Scale (LEAPS) - Sheehan Disability Scale (SDS) - WHO-DAS, self-rated - Work and Social Adjustment Scale (WSAS)
Quality of Life	Quality of Life Interview (QOLI)	- EuroQOL-5D (EQ-5D) - Quality of Life, Enjoyment and Satisfaction Questionnaire (QLESQ)
Side Effects	- UKU Side Effect Rating Scale - Toronto Side Effects Scale	Frequency, Intensity and Burden of Side Effects Rating (FIBSER)



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PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)

Over the last 2 weeks, how often have you been bothered by any of the following problems? (Use "N" to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling that you are a failure or that you are not living up to your expectations	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

PHQ-9 score: 0 = 0, 1 = 1, 2 = 2, 3 = 3, 4 = 4, 5 = 5, 6 = 6, 7 = 7, 8 = 8, 9 = 9

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get going with other people?

	Not difficult at all	Somewhat difficult	Very difficult	Extremely difficult
10. How difficult?	0	1	2	3

PHQ-9 score: 0 = 0, 1 = 1, 2 = 2, 3 = 3, 4 = 4, 5 = 5, 6 = 6, 7 = 7, 8 = 8, 9 = 9

GAD-7

Over the last 2 weeks, how often have you been bothered by the following problems? (Use "N" to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling that you are not in control of what you are doing	0	1	2	3

(For office coding: Total Score 7 + 0 + 1 + 2 + 3)

Interpretation of Self-rated scales

PHQ-9 Interpretation

Score	Interpretation
5 - 9	Mild
10 - 14	Moderate
15 - 19	Moderately severe
20 - 27	Severe

GAD-7 Interpretation

Score	Interpretation
5 - 9	Mild
10 - 15	Moderate
16 - 21	Severe



CANMAT 2023 Update on Guidelines for Major Depressive Disorder

What laboratory tests do you monitor during treatment?

- No routine tests are necessary, but CBC and TSH are low cost blood tests to rule out medical conditions that present with depressive symptoms
- Other baseline tests (blood, imaging, ECG) should only be considered if history or physical examination indicates clinical suspicion
- No routine lab tests are recommended to monitor antidepressant treatment, except in specific situations (e.g., LFTs in liver disease, electrolytes in elderly patients, bloodwork during lithium treatment)
- Metabolic monitoring (weight, glucose, lipid profile) is recommended because weight gain is common in depression (as a symptom, a medication side effect, or both).

CBC, complete blood count;
TSH, thyroid stimulating hormone;
LFTs, liver function tests.

Levinson, Nemeroff, et al. Can J Psychiatry 2024



SUMMARY

- Use MBC routinely to guide decision-making
- Incorporate MBC tools (paper-pencil, mobile, internet)
- Incorporate MBC in EMR
- Integrate MBC into pathways (stepped, stratified, collaborative care)
- Laboratory or imaging tests should be ordered case-by-case
- MBC should include basic metabolic monitoring



CANMAT 2023 Update on Guidelines for Major Depressive Disorder

Table 5.1. Summary Recommendations for Monitoring Treatment*.

Summary Recommendations for Monitoring	Level of Evidence
Use validated rating scales for measurement-based care.	Level 2
Obtain laboratory and imaging tests only when clinically indicated.	Level 4
Monitor weight, glucose, and lipid profiles at baseline and every 6 months when prescribing medications associated with weight gain.	Level 2

Level 1 Level 2 Level 3 Level 4

* Recommendations for principles of care generally have Level 3 or Level 4 evidence.



Law ES, Wilkerson BJ, et al. *Can J Psychiatry* 2024

CANMAT 2023 Update on Guidelines for Major Depressive Disorder

Primary Questions

8 primary questions representing a patient's care journey from assessment through treatment to maintenance

1. Who should be treated for depression?
2. What are principles for depression management?
3. How do you select the initial treatment?
4. What is the role of digital health interventions?
5. How do you monitor treatment?
6. **What do you do when a patient is better?**
7. What do you do when a patient is not better?
8. What neuromodulation treatments are available?



When a person achieves remission

- ☐ Confirm Remission using MBC
- ☐ Continue Psycho/Pharmacotherapy for 6-12 months after achieving remission
- ☐ If history of previous relapses/recurrences suggest- maintain treatment for 2 years or longer
- ☐ Taper medication gradually
- ☐ Psychological therapies may be initiated during taper of medication
- ☐ Reinforce lifestyle interventions as part of daily routine

Who needs longer duration of Maintenance Therapy (2 Years +)



Major Risk Factors

- History of Childhood maltreatment
- Residual symptoms
- Higher number of previous episodes
- Comorbid anxiety

Other Risk Factors

- Early age of onset
- Longer duration of depressive episodes
- Greater severity of depressive episodes

Managing Discontinuation Symptoms by Antidepressant

High Risk

- Desvenlafaxine
- Paroxetine
- Venlafaxine

Moderate risk

- Citalopram
- Duloxetine
- Escitalopram
- Fluvoxamine
- Levomilnacipran
- Milnacipran
- Sertraline
- Vilazodone
- TCAs
- MAOIs

Low Risk

- Bupropion
- Mirtazapine

Minimal/No Risk

- Agomelatine
- Fluoxetine
- Vortioxetine



Lam RW, Kennedy SH, et al. Can J Psychiatry 2024



CANMAT 2023 Update on Guidelines for Major Depressive Disorder

Primary Questions

8 primary questions representing a patient's care journey from assessment through treatment to maintenance

1. What are important issues for assessment and diagnosis?
2. What are the principles for depression management?
3. How are treatments selected?
4. What is the role of digital health interventions?
5. How is treatment monitored?
6. What should be done when a patient is better?
7. **What should be done when a patient is not better?**
8. When should neuromodulation treatments be used?



Can J Psychiatry 2023;68(12):1-14 / J Can J Psychiatry 2023;68(12):1-14

Poor Response to Initial Treatment

- Wrong diagnosis
- Older age, female sex, greater severity, younger age of onset
- Psychiatric comorbidities
- Medical comorbidities
- Obesity
- Substance use
- Acute or chronic stressors
- Poor adherence
- Pharmacogenetic variability



Patient Factors

- Dose is too high/low
- Duration is too short
- Adherence is sporadic
- Side effects are intolerable



Medication Factors

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Importance of Recognizing Inadequate Response Quickly

If improvement (a 20% or greater reduction in scores on a symptom rating scale) is not seen by 4 weeks, there is a low likelihood of response or remission at 8 to 12 weeks.¹

Consequences of Not Achieving Remission of Depression²

Disease Course	Costs
• Higher risk of relapse • More rapid relapse • Increased rate of recurrence • Shorter course of well intervals • Fewer symptom-free weeks • Increased risk of suicide	• Medical, psychiatric, emergency care • More psychiatric hospitalizations • Increased welfare or disability insurance benefits • Associated work impairment

1. Aghajanian et al. J Clin Psychiatry 2016;77(1):1-11. 2. Gajwani et al. J Am Acad Child Adolesc Psychiatry 2016;55(1):1-11.

CANMAT

Antidepressant Dose Optimization in MDD

Optimizing the antidepressant dose is essential for successful treatment of MDD¹

? What does dose optimization mean in MDD treatment?

Optimization means using medications that patients can tolerate at doses sufficient for achieving remission and recovery.²

Most antidepressants have starting doses that are lower than the average dose required for full response. Thus, the target dose is reached over time, and an optimized dose is achieved when therapeutic efficacy and patient tolerance are balanced.³

1. Aghajanian et al. J Clin Psychiatry 2016;77(1):1-11. 2. Gajwani et al. J Am Acad Child Adolesc Psychiatry 2016;55(1):1-11. 3. Aghajanian et al. J Clin Psychiatry 2016;77(1):1-11.

Early & Urgent 101

Switching vs Adjunctive Treatment ?

Advantages of switching monotherapies.

- Fewer adverse effects
- Fewer medical costs of treatment
- Few drug-drug interactions
- Possible reduced adherence to multiple agents



Advantages of adding an adjunctive agent

- 1) Keep gains generated by the first agent
- 2) Avoid a delay in response with immediate 'add-on'
- 3) Avoid discontinuation symptoms
- 4) Potential for complementary mechanisms of action
- 5) Address symptoms targeted by an adjunctive agent

CANMAT 2023 Update on Guidelines for Major Depressive Disorder

New Evidence for Medication Strategies for Poor Initial Antidepressant Response

Dose-Response

- Higher than minimal therapeutic doses are more effective but less well-tolerated ●
- There is little evidence that high doses of antidepressants (especially SSRIs) lead to better response (exceptions of note are Venlafaxine, Sertraline, and Vortioxetine) ●

Switching antidepressants

- RCTs show that switching the antidepressant does not lead to better response ●
- Response rates diminish with each successive switch ○

LoE, Level of Evidence ● Level 1 ● Level 2 ○ Level 3 ○ Level 4



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CANMAT 2023 Update on Guidelines for Major Depressive Disorder

Medication Strategies for Difficult to Treat Depression (DTD) (poor response to initial AD)

- Consider: Re-evaluate diagnosis, co-morbidities (ADHD, substance abuse, anxiety) and tolerance/adherence
- Optimize – one dose increase usually adequate (notable exceptions sertraline, venlafaxine)
- Switch – for non-response (oneswitch): evidence limited and typically for lack of tolerability
- Add Adjunctive/augmentation agents - Consider earlier (greater efficacy and shorter time to response/remission)
- Stop: Medications that have uncertain benefit (e.g., sleep meds, OTC meds)
- (Consider Psychotherapy or Neuromodulation)



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CANMAT First-line Recommendations for Adjunctive Medications for DTD

Adjunctive agent	Target dose*
Aripiprazole	2–15 mg
Brexpiprazole	0.5–2 mg

Indicated as adjunct to antidepressants for adult MDD patients with inadequate response to prior antidepressant treatments

DTD: Dysthymic disorder
*Doses are taken from product monographs and clinical data. Please consult the package insert for details.
Lewinsohn, et al. Clin Psychopharmacol. 2016;31(1):1-10.

Efficacy of Adjunctive Treatment

Adjunctive aripiprazole

Adjunctive aripiprazole was observed to be efficacious in routine clinical practice, for reducing scores on assessment scales including both Hamilton Anxiety Rating scale (HAM-A) and Hamilton Depression Rating scale (HAM-D)

Adjunctive brexpiprazole

Adjunctive brexpiprazole is efficacious in reducing core depressive symptoms, and appetite, as well as improving functioning, in patients with MDD and anxious distress who have inadequate response to first-line antidepressants

Lewinsohn, et al. Clin Psychopharmacol. 2016;31(1):1-10.
Lewinsohn, et al. Clin Psychopharmacol. 2016;31(1):1-10.
Lewinsohn, et al. Clin Psychopharmacol. 2016;31(1):1-10.

Recommendations for Adjunctive Medications			
Recommendation	Adjunctive Agent	Level of Evidence	Target Dose
Third Line	TCA's	C	Various
	Lamotrigine		100-300 mg
	Other monotherapies for MDD		Various
	Releasers (stimulants)		Various
	No n-IV racemic ketamine		Various
	Pramipexole		1-4 mg
Third Line in Subgroups	Ziprasidone	D	20-80 mg BID
	Estradiol (only during perimenopause)		2 mg
	L-Methyl Folate (especially with MTHFR mutation)*		15-30 mg BID *associated with homocysteinuria
Experimental	Psychedelic-Assisted Therapy	E	Moderate to high doses accompanied with psychotherapy
Not Recommended	Cannabis	F	Lack of efficacy, potential harm Not Applicable

Adapted from Lewinsohn et al. (2016) and Lewinsohn et al. (2017) guidelines.

Lewinsohn, et al. Clin Psychopharmacol. 2016;31(1):1-10.

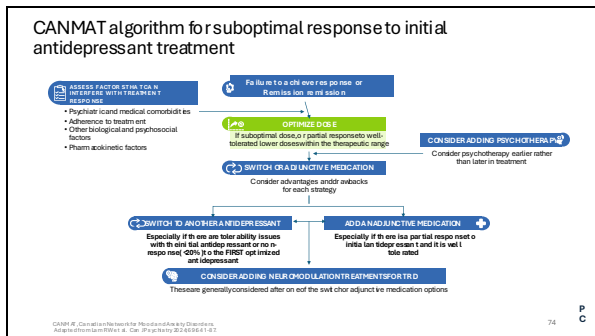


Conclusion (anxious distress)¹

- In patients with anxious distress at baseline, adjunctive brexpiprazole showed greater improvements than adjunctive placebo across various MADRS items
- In patients with anxious distress at baseline, adjunctive brexpiprazole showed greater improvement in functioning than adjunctive placebo (SDS Mean, SDS social life, and SDS family life)
- Improvements with adjunctive brexpiprazole were generally larger in patients with anxious distress than in those without anxious distress
- Adjunctive brexpiprazole improved anxious distress versus adjunctive placebo, as shown by a reduced likelihood of patients still having anxious distress after 6 weeks of treatment

- Adjunctive brexpiprazole is efficacious in reducing core depressive symptoms, sleep, and appetite, and improving functioning, in patients with MDD and anxious distress who have inadequate response to ADTs
- Furthermore, adjunctive brexpiprazole reduces the likelihood of patients meeting anxious distress criteria following treatment

1. A 12-week study in patients with MDD and anxious distress. A study of the efficacy and safety of brexpiprazole as an add-on to antidepressant treatment in patients with MDD and anxious distress. *Am J Psychiatry*. 2019;176(10):1045-1054. doi:10.1176/appi.ajp.2019.176.10.1045



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Line of Treatment	Complementary and Alternative Medicine (CAM) Treatment	Level of Evidence
First Line	St. John's wort for MDE of mild severity.	Level 1
Second Line	Acupuncture for mild severity MDE.	Level 2
	St. John's wort for moderate severity MDE.	Level 2
	Adjunctive acupuncture for moderate severity MDE.	Level 2
	Adjunctive L-methylfolate for mild-moderate severity MDE.	Level 2
Third Line	Adjunctive S-adenosyl-L-methionine (SAM-e) for mild to moderate severity MDE.	Level 2
	Dihydroepiandrosterone (DHEA) for mild severity MDE.	Level 2
	Omega-3 fatty acids for mild severity MDE.	Level 2
	Saffron, lavender, or roseroot for mild severity MDE.	Level 2

Level 1 Level 2 Level 3 Level 4

Lin RW, Kennedy SH, et al. *Can J Psychiatry*. 2024.

Reasons Behind Lack of Remission

There are several potential reasons why patients may not achieve remission:¹⁻⁴

Non-adherence issues	Inadequate dose	Patient is a non-responder	Alternative or comorbid diagnosis	Patient has treatment-resistant depression
- Choose drugs with better tolerability - Use fewest medications possible - Adjust dose/medication to minimize side effects - Patient education	- Increase dose - Prolong treatment course	Switch or add (if weight, depending on clinical scenario)	- Consider common differential diagnoses (e.g., ADHD, bipolar disorder, substance abuse, personality disorder) - Treat accordingly	Consider alternative therapies (e.g., ECT, ketamine)

In the patient-centred Early Optimized Treatment approach, treatment decisions are made earlier, which can substantially improve patients' chances of a timely and long-lasting return to best possible functioning.¹⁻⁴

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Quote from patient 26 yo female patient: Sept. 2025

"Prior to starting any medication for my mood, I really thought it wasn't that bad. I was running most of the time, constantly tired and moody, and feeling like I could burst into tears at any second. Since starting Trintalix and Raxit, my whole life has changed. I feel better about myself and I'm able to let things go more easily. I didn't realize that I was doing life the hard way."

Thank you

Early Optimized Treatment and Urgency to Treat in MDD: How to Implement This Strategy in My Clinical Practice

Treat-to-Target: Establish clear goals & targets

Guideline-Based Approach: Use treatment guidelines and/or algorithms

Urgency to Treat: Treat as seriously with a sense of urgency

Measurement-Based Care: Use clinical scales to ensure objective symptom assessment

Repeated Assessments (Every 2-4 weeks): Track symptoms over time with repetition of assessments

Early Optimized Treatment

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CLINICAL PEARLS



The Early Optimized Treatment CANMAT based approach to MDD management involves:

1. Using measurement-based care
2. Seeing patients ~2-3 weeks after treatment initiation to optimize the antidepressant dose
3. Considering a therapy switch if <20% early improvement (and 1st antidepressant used), as lack of early improvement >20% correlates with patients being unlikely to achieve remission
4. Using adjunctive therapy if >25% improvement and no remission can be effective, with dose optimization at 4-6 weeks
5. Considering medical/psychiatric comorbidities that can complicate depression or explain non-response to therapy
