

## Medication Examples for BPSD – Psychosis

Medication*	Initial Oral Dose (mg)	Dosing Frequency	Formulation	Titration Dose (mg) & Schedule	Average Total Daily Dose (mg)	Common Side Effects	Medication Administration
Risperidone	0.25	daily to bid	<ul style="list-style-type: none"> <li>tablet</li> <li>“M” Tablet</li> <li>oral liquid</li> </ul>	0.25 qweekly	1	<ul style="list-style-type: none"> <li>parkinsonian symptoms**</li> <li>sedation</li> <li>postural hypotension</li> <li>peripheral edema</li> <li><b>see Key Messages for further side effects</b></li> </ul>	<ul style="list-style-type: none"> <li>M tablets – remove from package just prior to administration to avoid dissolving prematurely</li> <li>caution use in those with renal and/or hepatic impairment</li> </ul>
Aripiprazole	2	qam	<ul style="list-style-type: none"> <li>tablet</li> </ul>	2 – 5 qweekly	10	<ul style="list-style-type: none"> <li>parkinsonian symptoms**</li> <li>nausea</li> <li>insomnia</li> <li>dizziness</li> <li>headache</li> <li>postural hypotension</li> <li>may cause restlessness early in treatment</li> <li><b>see Key Messages for further side effects</b></li> </ul>	-
Olanzapine	2.5	qhs	<ul style="list-style-type: none"> <li>tablet</li> <li>oral dissolving tablet</li> <li>IM</li> </ul>	2.5 qweekly	5	<ul style="list-style-type: none"> <li>parkinsonian symptoms**</li> <li>sedation</li> <li>postural hypotension</li> <li>dry mouth</li> <li>constipation</li> <li><b>see Key Messages for further side effects</b></li> </ul>	<ul style="list-style-type: none"> <li>oral dissolving tablets – remove from package just prior to administration to avoid dissolving prematurely</li> <li>may need to decrease dose if hepatic impairment</li> <li>IM is not commonly used in this population</li> </ul>
Quetiapine	12.5 – 25	bid to tid daily if XR	<ul style="list-style-type: none"> <li>tablet</li> <li>slow release (XR)</li> </ul>	12.5 – 25 qweekly	100 – 200	<ul style="list-style-type: none"> <li>parkinsonian symptoms**</li> <li>sedation</li> <li>postural hypotension</li> <li><b>see Key Messages for further side effects</b></li> </ul>	<ul style="list-style-type: none"> <li>do not crush XR tablets</li> <li>may need to decrease dose if hepatic impairment</li> </ul>
Clozapine  (for Psychosis in Parkinson’s Disease, Parkinson’s Disease Dementia, Dementia with Lewy Bodies)	6.25	qhs	<ul style="list-style-type: none"> <li>tablet</li> </ul>	6.25 qweekly	50	<ul style="list-style-type: none"> <li>sedation</li> <li>constipation</li> <li>postural hypotension</li> <li>drooling</li> <li>dizziness</li> <li>dry mouth</li> <li>tachycardia</li> <li><b>see Key Messages for further side effects</b></li> </ul>	<ul style="list-style-type: none"> <li><b>see Key Messages for rare but potentially life-threatening side effects</b></li> <li>caution use if renal and/or hepatic impairment</li> <li>contraindicated in those with active liver disease and severe renal impairment</li> </ul>
Other							

\* We recognize that some of the medications listed here could potentially be used for off-label use. Refer to Health Canada’s Drug Product Database for labelled indications at: <https://www.canada.ca/en/>.

\*\*Parkinsonian symptoms include rigidity, slow movements, shuffling gait, flat affect, and tremor.

## Key Messages/Considerations

- Ensure comprehensive non-pharmacologic treatment plan has been tried.
- Rule out pain as a contributing factor for BPSD.
- Start low and go slow.
- Strive for a good clinical trial. Increase dose only until clinical effectiveness is achieved.
- Monitor for adverse effects especially when combining medications. Review potential for drug-drug interactions with the addition of any new medication.
- All of these medications may have a risk of falls.
- Risperidone, Aripiprazole, Olanzapine, Quetiapine and Clozapine are known as atypical antipsychotics.
  - **Caution for all atypical antipsychotics:** Extra-pyramidal symptoms (tardive dyskinesia, acute dystonia, parkinsonism, akathisia), Neuroleptic Malignant Syndrome, QTc prolongation, metabolic syndrome (lipid increases, insulin resistance/increases in blood glucose, weight gain), sexual dysfunction and increased risk of all-cause mortality and cerebrovascular adverse events.
- Risperidone is the only medication approved by Health Canada for the short-term management of aggression or psychotic symptoms in patients with severe dementia of the Alzheimer type unresponsive to non-pharmacological approaches and when there is a risk of harm to self or others.
- Clozapine is administered in a low dose relative to schizophrenia treatment i.e.  $\leq 50$  mg.
  - Specialized monitoring is necessary due to association with rare (0.38%) but potentially life-threatening agranulocytosis.
  - Rare but potentially life-threatening side effects include myocarditis, severe neutropenia, paralytic ileus, pulmonary embolism.
  - Close monitoring of bowel patterns is required.
  - Black box warning for clozapine (p6). [https://pdf.hres.ca/dpd\\_pm/00042421.PDF](https://pdf.hres.ca/dpd_pm/00042421.PDF).
  - Health Canada summary safety review for clozapine. 2018. <https://www.canada.ca/en/health-canada/services/drugs-health-products/medeffect-canada/safety-reviews/clozapine-white-blood-cells.html>.
- The doses used to treat behavioural and psychological symptoms of dementia are generally lower than that used for schizophrenia and other mental illnesses.
- If target behaviours are stable at 3 months, then consider tapering medication. (Antipsychotic Deprescribing Guideline and Algorithm 2018. <https://deprescribing.org/>).

## References

- Bjerre LM, Farrell B, Hogel M et al. Deprescribing antipsychotics for behavioural and psychological symptoms of dementia and insomnia. Evidence-based clinical practice guideline. Cdn Fam Phys 2018;64(1):17-27.
- Choosing Wisely Canada, Psychiatry, Recommendation #12 (updated June 2017) [www.choosingwiselycanada.org](http://www.choosingwiselycanada.org).
- Clinical Handbook of Psychotropic Drugs, 22<sup>th</sup> Edition. (2017) Hogrefe and Huber.
- Conn D, Gibson M, & McCabe D. (2014). 2014 CCSMH Guideline Update-The Assessment and Treatment of Mental Health Issues in Long Term Care Homes: (Focus on Mood and Behaviour Symptoms). Toronto: Canadian Coalition for Seniors' Mental Health (CCSMH), [www.ccsmh.ca](http://www.ccsmh.ca).
- CPS- Compendium of Pharmaceutical and Specialties .2019
- Davies S, Burhan A, Kim D, et al. Sequential drug treatment algorithm for agitation and aggression in Alzheimer's and mixed dementia. Jn of Psychopharm 2018;32(5):509-523.
- Health Canada. Atypical antipsychotic drugs and dementia-advisories, warns and recalls for health professionals (internet). 2005. Available from: <http://www.healthcanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2005/14307a-eng.php>.
- Health Canada Summary Safety Review for Clozapine. 2018. <https://www.canada.ca/en/health-canada/services/drugs-health-products/medeffect-canada/safety-reviews/clozapine-white-blood-cells.html>.
- Health Canada. Risperidone-restriction of the dementia indication (Internet). 2015. Available from: <http://healthcanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2015/43797a-eng.php>.
- Herrmann N, Lanctôt KL, Hogan DB. Pharmacological recommendations for the symptomatic treatment of dementia: the Canadian Consensus Conference on the diagnosis and treatment of dementia 2012. Alzheimer's Res Ther 2013; 5(Suppl 1):S5.
- P.I.E.C.E.S.<sup>TM</sup> Canada Consult Group. P.I.E.C.E.S.<sup>TM</sup> Learning and Development Model Psychotropic Framework. October 2016 [www.pieceslearning.com](http://www.pieceslearning.com).
- Stahl, Steven M (2017) Essential Psychopharmacology: The Prescriber's Guide. 6<sup>th</sup> Edition. Cambridge University Press.