### Acetylcholinesterase Inhibitors (AChEIs)

<table>
<thead>
<tr>
<th>Generic name (trade name) (dosage form, strengths)</th>
<th>Usual effective maximum dose</th>
<th>Annual cost</th>
<th>PharmaCare coverage</th>
<th>Common adverse effects</th>
<th>Therapeutic considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>donepezil</strong> (Aricept) (tablet: 5 mg, 10 mg) (rapidly disintegrating tablet: 5 mg, 10 mg)</td>
<td>5-10 mg PO once daily in the morning</td>
<td>$1850</td>
<td>Limited Coverage</td>
<td>GI: nausea, vomiting, diarrhea (dose related), anorexia, weight loss, abdominal pain, dyspepsia, constipation</td>
<td>May be administered without regard to food. Only AChEI approved for severe dementia of the Alzheimer’s type. Lowest risk of GI adverse effects. Maximum recommended dose in elderly women of low body weight is 5 mg daily. Use caution in doses exceeding 5 mg daily in elderly patients with chronic comorbid disease(s).</td>
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<tr>
<td><strong>galantamine</strong> (Reminyl ER, G) (ER capsule: 8 mg, 16 mg, 24 mg)</td>
<td>16–24 mg PO once daily in the morning</td>
<td>$1810</td>
<td>Limited Coverage</td>
<td>Limited Coverage</td>
<td>Dose titration: initial dose 5 mg once daily for 4-6 weeks; if tolerated, may increase to a maximum of 10 mg once daily. Consider initial dose of 2.5 mg once daily for frail patients or patients whom have experienced adverse effects due to other AChEIs.</td>
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<tr>
<td><strong>rivastigmine</strong> (Exelon, G) (capsule: 1.5 mg, 3 mg, 4.5 mg, 6 mg) (oral solution: 2 mg/mL) (patch: 4.6 mg released per 24 hours [as 9 mg/5cm² patch], 9.5 mg released per 24 hours [as 18mg/10cm² patch])</td>
<td>3-6 mg PO bid</td>
<td>$2050</td>
<td>Limited Coverage</td>
<td>GI: nausea, vomiting, diarrhea (dose related), anorexia, weight loss, abdominal pain, dyspepsia, constipation</td>
<td>May be administered without regard to food. Some evidence to suggest that 16 mg per day dose appears to be the best tolerated, with similar efficacy to higher doses. If treatment is interrupted for ≥ 3 days, restart treatment as per initial dose titration. Maximum 16 mg daily in moderate renal (CrCl &gt;10 mL/min) or moderate liver impairment (Child-Pugh 7-9). Not recommended for severe renal (CrCl &lt; 9 mL/min) or severe liver (Child-Pugh 10-15) impairment.</td>
</tr>
</tbody>
</table>

### Appendix F: Medication Table (for the treatment of cognitive impairment in the elderly)

1-6 Cognitive Impairment – Recognition, Diagnosis and Management in Primary Care: Appendix F (2014, Revised 2016)
### N-methyl-D-aspartate (NMDA) Receptor Antagonist

<table>
<thead>
<tr>
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</tr>
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<tbody>
<tr>
<td>memantine (Ebixa, G) (tablet: 10 mg)</td>
<td>10 mg PO bid</td>
<td>$920</td>
<td>No coverage</td>
<td>GI: diarrhea, constipation, nausea, vomiting, CNS: dizziness, headache, confusion, somnolence, anxiety, hallucination, CV: hypertension, angina, bradycardia, cardiac failure, Resp: cough, MSK: back pain, Urogenital: incontinence, UTI, Ocular: cataract, conjunctivitis</td>
<td>Use cautious dose titration in moderate renal impairment (CrCl 30–49 mL/min). Maximum 5 mg bid in severe renal impairment (CrCl 15–29 mL/min). No dosage adjustment in mild-moderate hepatic impairment. Avoid use in severe hepatic impairment.</td>
</tr>
</tbody>
</table>

**Dose titration:** initial dose 5 mg once daily in the morning for at least 1 week. If tolerated, titrate dose to 5 mg bid for at least 1 week, then 10 mg in the morning and 5 mg in the afternoon for at least 1 week, followed by titration to a maximum dose of 10 mg bid.

**Notes:**

- Pricing is approximate as per PharmaNet 2012/11/14 and does not include dispensing fee or additional markups, updated to PharmaCare coverage made June 2016.
- **PharmaCare Coverage Definitions**
  - **Regular Coverage:** also known as regular benefit; does not require Special Authority. Regular benefits may be fully or partially covered.*
  - **Limited Coverage:** requires Special Authority for coverage. Limited Coverage benefits approved by Special Authority may be fully or partially covered.*
  - **No coverage:** also known as non-benefit; does not fit the above categories.

* Information on which products PharmaCare covers can be obtained using the B.C. PharmaCare Formulary Search (www.health.gov.bc.ca/pharmacare/benefitslookup). In all cases, coverage is subject to drug price limits set by PharmaCare and to the patient's PharmaCare plan rules and deductibles. See: www.health.gov.bc.ca/pharmacare/plans/index.html and www.health.gov.bc.ca/pharmacare/policy.html for further information.

### Abbreviations

- **AChEIs:** Acetylcholinesterase Inhibitors;
- **bid:** twice daily;
- **cm:** centimeter;
- **CNS:** central nervous system;
- **CrCl:** creatinine clearance in millimeters per minute;
- **CV:** cardiovascular;
- **ER:** extended release;
- **G:** generic brands available;
- **GI:** gastrointestinal;
- **kg:** kilogram;
- **mg:** milligrams;
- **mL:** milliliters;
- **MSK:** musculoskeletal;
- **NMDA:** N-methyl-D-aspartate;
- **PO:** oral;
- **Resp:** respiratory;
- **UTI:** urinary tract infection.

**Note:** Please review product monographs at hc-sc.gc.ca/dhp-mps/prodpharma/databasdon/index-eng.php and regularly review current Health Canada advisories, warnings and recalls at www.hc-sc.gc.ca/ahc-asc/media/advisories-avis/index_e.html.

### References