






GENERIC/TRADE (Strength & formulations)	THERAPEUTIC USE/ COMMENTS	ADVERSE EVENTS <b>AE</b> /DRUG INTERACTIONS <b>DI</b> <sup>3,23,24</sup>	INITIAL, USUAL <b>Elderly</b> & <b>MAXIMUM DOSE</b>	<b>\$</b>  /MONTH
<b>ACETYLCHOLINESTERASE INHIBITORS (ChEI):</b> differing activity contributes to AE>benefit <sup>43</sup>				
<b>Relative CIs</b> ↓HR, sick sinus syndrome, active peptic ulcer, severe asthma/COPD, anesthesia ↑succinylcholine effect, <b>anticholinergic meds</b> antagonistic effects (see <a href="#">RxFiles Anticholinergics List</a> ), Parkinson's ↑EPS, epilepsy ?↓sz threshold & beta-blockers ?↓HR ⚡ = <b>EDS in SK</b> <b>New pts:</b> a) dx of probable Alzheimer's b) MMSE score of 10-26 within 60 day before coverage c) Functional Activities Questionnaire (FxAQ) within 60 days before coverage d) Stop all anticholinergic meds 14 days before MMSE & FxAQ e) if intolerant: may switch to another ChEIs. <b>To continue coverage</b> must <b>not</b> have <b>both</b> >2point ↓MMSE & 1point ↑ FxAQ in a 6month period. <b>MMSE must always be ≥10.</b> Patients who do not meet criteria to continue can be reevaluated within 3 months to confirm deterioration before coverage is discontinued. <b>Re-evaluate q 6 months.</b>				
<b>DONEPEZIL <b>ARICEPT</b></b> <small>25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42</small> 5 <sup>5</sup> , 10 <sup>5</sup> mg tablet ⚡ ⚡ <b>RDT</b> rapid dissolve tablet 5, 10mg x⊗ acetylcholinesterase activity "central effects" - possibly↑ tolerability? t½ ~75hr approved 1997	✓ <b>Mild to moderate</b> Alzheimer's (MMSE 10-26) <b>DONEPEZIL</b> ✓mod-severe FDA approved Oct/06 Alzheimer's <sup>43,44</sup> ; Howard NEJM/07 <b>Not</b> better than placebo for <b>agitation</b> <b>GALANTAMINE</b> To reverse neuromuscular blockers <b>RIVASTIGMINE</b> ✓Parkinson's dementia (benefit vs AE) <sup>Almaraz'09</sup> & ? Lewy Body Dementia ♦ <b>May</b> <sup>45</sup> temp. <b>stabilize dementia</b> & behaviour (& may help apathy, anxiety, depression, hallucinations & delusions) ♦ May help ↓ visual sx's of Lewy Body dementia <sup>46,47</sup> ♦ <b>May</b> ↓rate of functional loss ♦ <b>Does not</b> delay institutionalisation <sup>36 AD2000</sup> ♦ <b>Not</b> effective for mild cognitive impairment. <sup>120,48</sup> NNT 12 minimal benefit <sup>12</sup> NNT 42 marked benefit <sup>12</sup> <b>NNH 16</b> AE-dropout <sup>12</sup> ♦ ↑ADAS-Cog ~2-3 points vs placebo <sup>8</sup> (~20% ↑ 4 points; ~10% ↑ 7 points) ♦ ↑ MMSE ~1 point vs placebo <sup>8,36</sup> ♦ Takes ~ <b>3-6 months</b> treatment for fairly <b>modest benefit</b> ♦ If ChEI tx stopped & then restarted, some pts may not return to baseline fx level; but outcome in cohort not compromised Pariente <sup>12</sup> . If <b>restarted</b> ≥3days later, use low dose.	<b>AE</b> ↑ with ↑ dose: N/V, diarrhea ~10%; anorexia, muscle cramps, insomnia, fatigue, wt loss~3%, other cholinergic effects ( <b>incontinence</b> , stomach, ↓HR esp with high dose, syncope, falls, nightmares) & agitation initially <b>DI</b> ↑ level by erythromycin, grapefruit juice, ketoconazole, paroxetine & quinidine ; ↓ level by CYP 2D6 & 3A4 e.g. carbamazepine, dexamethasone, phenytoin, phenobarbital & rifampin <b>AE</b> ↑ with ↑ dose: N/V, diarrhea ~10%; anorexia, wt loss~3%, insomnia, abdominal pain other cholinergic effects (incontinence, stomach, ↓HR, syncope, falls, nightmares), agitation initially; ↑ mortality 1.3 vs 0.1% <sup>61</sup> <b>DI</b> ↑ levels with: antidepressants (~30%) e.g. amitriptyline, fluoxetine, fluvoxamine, paroxetine & CYP 2D6 & 3A4 e.g. cimetidine 16%, ketoconazole 30% & quinidine 30% <b>AE</b> ↑ with ↑ dose (? ↓ with patch): N/V, diarrhea ~>10%; anorexia, cramps muscle, insomnia, fatigue, sweat, wt loss ~3%, asthenia, headache, confusion, other cholinergic effects (incontinence, stomach, ↓HR, syncope, falls, nightmares), agitation initially Patch administration errors: >1patch cut → death reported) Patch:↓N/V, avoid heat. <b>DI</b> low risk of Dis ↓↓ <b>DI's</b> but smoking↓levels. <b>Delirium pts:</b> ↑mortality <sup>Van Eijk'10</sup>	<b>Initial:</b> 2.5-5mg po daily <b>Usual:</b> 5 -10mg po <b>OD</b> in <b>am</b> ( <b>cc</b> may ↓ AE) <b>Maximum:</b> 10mg po daily ♦ ↑ dose q 1 month if needed; trial ~6 month; taper over ~1 wk, if d/c therapy CCCDT04	\$166 \$166 \$166
<b>GALANTAMINE <b>REMINYL</b>, g</b> ⚡ ⚡ <small>49,50,5152,53,54,55,56,57,58,59,60</small> 8,16,24 <b>ER</b> capsule (4,8,12 <sup>5</sup> mg tab - d/c June 2006) acetylcholinesterase & nicotinic activity presynaptic receptor binding ↑ [acetylcholine] t½ ~6hr ⚡ ⚡			<b>Initial:</b> 4-8mg <b>ER</b> cap po daily <b>Usual:</b> 8-24mg <b>ER</b> cap po <b>OD</b> <b>cc</b> in am <b>Maximum:</b> 24-32mg po daily ♦ ↑ dose q 1 month if needed; trial ~6 month; taper over ~1 wk, if d/c therapy CCCDT04; ↓ dose in hepatic/renal dysfx.	\$122 \$122 \$122
<b>RIVASTIGMINE <b>EXELON</b>, g</b> ⚡ ⚡ <small>62,63,64,65,66,67,68,69</small> 1.5, 3, 4.5, 6 mg capsule 2mg/mL <b>solution</b> (stable for <b>4hrs</b> when mixed with juice/soda) <b>EXELON 5</b> (4.6mg/d), <b>10</b> (9.5mg/d) patch x⊗ acetyl & butyrylcholinesterase activity "peripheral effects" - ↓tolerability t½ ~2hr			<b>Initial:</b> 1.5mg po BID <b>Usual:</b> 1.5-6mg po BID <b>cc</b> 4.5 mg po (2.25mL) BID <b>Maximum:</b> 12mg po daily <b>Patch:</b> 4.6mg/day, may ↑ to 9.5mg/day after a minimum of 4 weeks ♦ ↑ dose <b>q 1 month</b> if needed; trial ~6 month, taper over ~1 wk, if d/c therapy.	\$67 \$67 \$210 soln \$67 \$155
<b>NMDA ANTAGONIST</b>				
<b>MEMANTINE <b>EBIXA</b>, g</b> ⚡ x⊗ <b>NAMENDA</b> (USA) 10 <sup>5</sup> mg tablet <sup>70,71,72</sup> t½ ~80hr	✓Moderate (if not tolerate ChEIs) to severe Alzheimer's ♦ Option: combo with ChEIs <sup>DOMINO NS</sup> ♦ May help agitation/aggression <sup>Herrmann'13 NS</sup> , irritability, disinhibition & psychosis case reports, only post-hoc RCT ♦ Not effective for Down's syndrome <sup>MEADOWS</sup> or in Frontotemporal Dementia <sup>Boxer'13</sup>	<b>AE</b> dizzy, drowsy ↓5mg BID, confusion, insomnia, headache, restlessness inner & motor, akathisia, nausea, ?cornea changes, seizures, ↑BP, ?↑LFTs, & over excitation; <b>Caution:</b> seizures & heart disease. <b>DI</b> ↓ DI risk: renally excreted → trimethoprim, SSRI?; amantadine, dextromethorphan & ketamine since also NMDA antagonists; NaHCO3 & acetazolamide.	<b>Initial:</b> 5mg po daily <b>Usual:</b> 5-10mg po BID <b>Maximum:</b> 20mg po daily possible ♦ ↑ dose <b>q1-2wk</b> if needed	\$36 \$50-100 \$100
<b>ANTIPSYCHOTICS:</b> Start low dose, go slow				
<b>HALOPERIDOL</b> <sup>73</sup> <b>HALDOL</b> , g 0.5 <sup>5</sup> , 1 <sup>5</sup> , 2 <sup>5</sup> , 5 <sup>5</sup> , 10 <sup>5</sup> mg tablet (2mg/mL <b>soln</b> x▼); <b>DEPOT</b> 250 & 500/5mL vials, 100mg/1mL amp x⊗; 5mg/mL amp	♦ Helps <b>delusions</b> , hallucinations, hostility & aggression. ♦ Aim for <b>improvement</b> . not resolution ♦ <b>Minimal improvements</b> with olanzapine, risperidone & quetiapine in general, <b>offset with AE</b> <sup>Catie-AD 74</sup> ♦ In <b>Lewy body</b> dementia cause significant ↑ in EPS AE (if tx required & Parkinson's or Lewy Body dementia, quetiapine or clozapine (12.5-50mg daily & watch WBC) are options) <b>HALOPERIDOL</b> For acute delirium 0.5mg q30min prn day 1→ 0.5mg TID x 3-4days	<b>HALOPERIDOL</b> <b>AE</b> ↑EPS, ↑ALT ≤16%, <b>weight gain ≤ 1 kg</b>  <b>OLANZAPINE</b> <b>AE</b> somnolence, dry mouth, dizzy, headache, asthenia, <b>falls</b> , constipation, blurred vision, urinary incontinence, dyspepsia, <b>↑ALT ≤ 6%</b> , <b>diabetes</b> , postural ↓BP, seizures 0.9%, <b>anticholinergic</b> , ? ↑ <b>stroke/death</b> , ↑ triglyceride, ↑ cholesterol, ↔↑ <b>prolactin effect, weight ↑, akathisia&gt;10%</b>  <b>QUETIAPINE</b> <b>AE</b> somnolence, dizzy, drowsy, constipation, dry mouth, <b>falls</b> , lens changes in beagles-annual slit lamp exam, ↓BP, seizures ≤0.8%, dyspepsia, headache, urinary incontinence, diabetes, ↑ALT ≤ 9%, ↑ triglyceride 17%, ↑ cholesterol 11%, hypothyroidism 0.4%, ? ↑ <b>stroke/death</b> , QT, low EPS effect (option in <b>Lewy Body Dementia &amp; Parkinson's</b> ), ↔ <b>prolactin effect, weight ↑, akathisia &gt;2%</b>  <b>RISPERIDONE</b> <b>AE</b> sedation, headache, dry mouth, constipation, blurred vision, urinary incontinence, insomnia, asthenia, ↓BP, ↓appetite, TTP, seizures≤0.3%, photosensitive, ?↑ <b>stroke/death</b> , ↑ <b>EPS at doses ≥ 2-4mg/day</b> , <b>↑ prolactin effect, weight ↑, akathisia &gt;10%</b> <b>DI</b> ? Furosemide ↑ associated mortality	<b>Initial:</b> 0.25mg BID-TID <b>Usual:</b> 0.25-1mg BID <b>Maximum:</b> 5mg daily  <b>Initial:</b> 1.25-5mg po daily <b>Usual:</b> 2.5-7.5mg po daily <b>Maximum:</b> 10-20mg po daily  <b>Initial:</b> 12.5mg po daily <b>Usual:</b> 25-100mg po HS 50-100mg po <b>XR</b> HS <b>Maximum:</b> 200-750mg po daily  <b>Initial:</b> 0.25-1mg po daily <b>Usual:</b> 0.5-2mg po HS 1-2mg <b>M-TAB</b> po HS <b>Maximum:</b> 2-6mg po daily	\$12 \$12 \$12  \$28 \$28-69 \$69  \$15 \$39-72 \$72  \$21 \$20-34 \$41-74 \$74
<b>OLANZAPINE <b>ZYPREXA</b>, g</b> ⚡ ▼ <small>77,78,79,80,81,82,83,84,85,86</small> 2.5, 5, 7.5, 10, 15mg tablet <b>ZYDIS</b> 5, 10, 15mg tablet 10mg IM x⊗ vial use SWFI; don't mix in same syringe with diazepam, haloperidol or lorazepam	<b>RISPERIDONE</b> ✓ <b>Official BPSD indication</b> (others used off-label) <b>SHARED AE</b> Delirium, confusion, anticholinergic, <b>sedation</b> , constipation, ↓BP, ↑weight, EPS esp. <b>parkinsonian (least with quetiapine &amp; clozapine)</b> , akathisia, falls <sup>75</sup> , NMS & tardive dyskinesia, <b>diabetes</b> esp. with <b>clozapine</b> & olanzapine. <sup>76</sup> ♦ <b>Health Canada:</b> as of Nov'08 received 69 total reports of agranulocytosis / <b>neutropenia</b> for olanzapine, quetiapine & risperidone. ♦ <b>CDN &amp; FDA warning:</b> atypical antipsychotics may, in BPSD pts, ↑ mortality 4.5 vs 2.6% placebo, mainly by <b>cardiovascular or pneumonia</b> or DVT causes. Haloperidol may ↑ mortality most. <b>M</b> ECG to assess cardiac abnormalities.			
<b>QUETIAPINE <b>SEROQUEL</b>, g</b> 25, 50, 100, (150x▼) 200, 300mg tab <sup>87,88</sup> ; <b>XR</b> 50,150,200,300,400mg tablet ⊗				
<b>RISPERIDONE</b> ⚡ <b>RISPERDAL</b> , g <small>89,90,91,92,93</small> 0.25, 0.5 <sup>5</sup> , 1, 2 <sup>5</sup> , 3 <sup>5</sup> , 4 <sup>5</sup> mg tablet <b>M-TAB</b> 0.5,1,2,3,4mg tablet 1mg/mL <b>soln</b> (do <b>not</b> mix with cola/tea) <b>DEPOTCONSTA</b> 12.5,25,37.5,50mg vial ⚡ ⊗				


GENERIC/TRADE (Strength & formulations)	THERAPEUTIC USE/ COMMENTS	ADVERSE EVENTS AE /DRUG INTERACTIONS DI <sup>3,116,117</sup>	INITIAL, USUAL Elderly & MAXIMUM DOSE	\$🇨🇦 /MONTH	
All antidepressants may help depression (mood, appetite, sleep or energy) & apathy (rare potential for worsening) which often occurs early in dementia. May help behaviour/disinhibition in frontotemporal dementia.					
SELECTIVE SEROTONIN REUPTAKE INHIBITORS (SSRIs): limited efficacy for specific phobias					
CITALOPRAM <sup>118,119,120</sup> = CC CELEXA, g 10 X ▼, 20 <sup>5</sup> , 40mg <sup>5</sup> tablets	<b>DOSING STRATEGY:</b> ♦ <b>Start low, slow but go</b> ♦ <b>Elderly may need &gt; 8week trial</b> ♦ A small number of people with dementia & neuropsychiatric sx experience clinically significant worsening when antidepressants are <b>stopped</b> <sup>DESEP</sup> <b>Serotonin Antagonist and Reuptake Inhibitor:</b> <b>Trazodone:</b> 25-50mg HS ♦ similar to SSRIs ♦ Helps sleep, sun downing & depression ♦ <b>Flat dose response curve for depression;</b> however titration to ↑ doses sometimes required for anxiety	<b>SHARED AE (GI &amp; CNS):</b> <b>nausea</b> {21%(5) - 36%(X)}, anxiety, insomnia {~14%}, agitation, anorexia, <b>tremor</b> , somnolence {11-26%}, sweating, dry mouth, headache, dizziness, falls, diarrhea {12%(5P)-17%(S)}, constipation {13-18%}, sexual dysfx. <sup>121,122</sup> , <b>d/c Syndrome</b> (esp with 5) <b>Serotonergic syndrome</b> with MAOI's ♦ ↓BP, tremor, agitation, hypomania <b>SHARED DI</b> s Many ( <a href="#">see RxFiles Antidepressant DI Chart p. 106</a> )	<b>AE</b> may ↑ QT if >40mg /day <b>DI</b> fewer DI	<b>Initial:</b> 10-20mg am po daily; <b>Usual:</b> 20-40mg po daily <b>Maximum:</b> 20mg po daily ?safety of 40mg	\$25-38 \$25
ESCITALOPRAM CIPRALEX X ▼ 10 <sup>5</sup> , 20 <sup>5</sup> mg tablets CIPRALEX MELTZ® 5, 10, 15, 20mg ODT		<b>AE</b> may ↑ QT if >20mg /day	<b>Initial:</b> 5-10mg po daily <b>Usual:</b> 10-20mg po daily <b>Maximum:</b> 10mg po daily ? 20mg daily may be safe	\$65 \$65 \$65	
FLUOXETINE <sup>123</sup> = F PROZAC, g 10,20,40X ▼mg capsules & 4mg/mL soln		<b>AE</b> most anorexic and stimulating (↑t½, thus 5 week washout) <b>AE</b> most nausea, contipation & sedation	<b>Initial:</b> 10-20mg po OD; <b>Usual:</b> 20-40mg am OD <b>Maximum:</b> 60-80mg po daily	\$28-50 \$70	
FLUVOXAMINE <sup>124</sup> = X LUVOX, g 50 <sup>5</sup> , 100 <sup>5</sup> mg tablets		<b>AE</b> most anticholinergic AE; ↑weight & a discontinuation reaction possible	<b>Initial:</b> 25-50mg po HS; <b>Usual:</b> 100-150mg po HS <b>Maximum:</b> 300mg po daily	\$17-33 \$59	
PAROXETINE <sup>125,126</sup> = P PAXIL, g 10 <sup>5</sup> , 20 <sup>5</sup> , 30mg tablets 🍉		<b>AE</b> ↑diarrhea & sexual dysfx <b>DI</b> fewer DI	<b>Initial:</b> 10-20mg am OD; <b>Usual:</b> 20-40mg am OD <b>Maximum:</b> 60mg po daily	\$18-50 \$50	
SERTRALINE <sup>127,128</sup> = S ZOLOFT, g 25, 50, 100mg capsules		<b>Initial:</b> 25-50mg am po daily <b>Usual:</b> 100mg OD-BID cc <sup>DIADS-2 NS, HTA-SADD NS 95mg OD</sup> <b>Maximum:</b> 200mg po daily	\$26 \$26-46 \$46		

SELECTIVE NOREPINEPHRINE REUPTAKE INHIBITOR (SNRI): serotonin (5HT), norepinephrine (NE) & some dopamine action					
<b>VENLAFAXINE</b> <b>EFFEXOR</b> , g (Reg 37.5, 75mg tablets-Co D/C Jul04)  <b>XR</b> , g 37.5, 75, 150mg capsules (contents of XR may be <b>sprinkled</b> )	<b>DULOXETINE:</b> ✓depression (adult & maintenance) ⊗, GAD ⊗, diabetic neuropathic pain ♀, fibromyalgia & ? stress incontinence ⊗	<b>SHARED AE</b> similar to SSRIs <b>Caution:</b> d/c Syndrome (e.g. agitation, nausea, fatigue, dizziness, headache, etc.)	<b>AE</b> As dose ↑: ↑BP, agitation, tremor, <u>less</u> <u>weight ↑</u> , sweating, nausea {~37%}, sleep disturbances, headache, “clean TCA” <b>DI</b> fewer DIs	<b>Initial:</b> 37.5mg <b>XR</b> po daily <b>Usual:</b> 75-150mg <b>XR</b> po daily <b>Maximum:</b> 225-375mg <b>XR</b> po daily	\$13 \$20 \$40-60
<b>DESVENLAFAXINE ER</b> <b>PRISTIQ</b> <b>X</b> ⊗ 50, 100mg extended release tablets 		<b>SHARED DIs</b> Many ( <a href="#">see RxFiles</a> <a href="#">Antidepressant DI Chart p. 106</a> )	<b>DI</b> Cyp 3A4 (?clarithromycin)	<b>Initial:</b> 50mg po daily; <b>Usual:</b> 50-100mg po OD <b>Maximum:</b> 400mg po daily	\$95 \$335
<b>DULOXETINE</b> <b>CYMBALTA</b> 30, 60mg capsules 			<b>AE</b> nausea, insomnia, somnolence, headache, diarrhea, ↓appetite, fatigue, ↑sweat, ↑BP, ↑LFTs, dry mouth, urinary retention <b>DI</b> CYP 1A2, 2D6	<b>Initial:</b> 30mg po daily <b>Usual:</b> 30-60mg po daily <b>Maximum:</b> 120mg po daily	\$69 \$69-132 \$254

<b>TRICYCLIC ANTIDEPRESSANTS (TCAs):</b>				
<b>DESIPRAMINE</b> = <b>D</b> <b>NORPRAMIN</b> , g 10, 25, 50, 75, 100mg tablets	♦ Trough plasma level available ♦ ~2-3 months for maximum effect	<b>AE</b> <b>CNS:</b> agitation initially, confusion, drowsiness, headache, tremors, seizures, <b>anticholinergic (least with <b>D</b>)</b> : dry mouth, blurred vision, constipation etc.; nausea, sweating, rash, <b>cardiovascular</b> : ↑ heart rate, arrhythmias, ↓ BP; anorgasmia, <b>Fatal</b> (≥2g) <b>overdose</b> → to heart & CNS; <b>Nortriptyline</b> : ↑ <b>tolerated vs</b> other TCA's <b>DI</b> May ↑ effect of anticholinergic & CNS meds.	<b>Initial:</b> 10-25mg po HS; <b>Usual:</b> 50-75mg po HS <b>Maximum:</b> 150-300mg po HS	\$20-36 \$58-95
<b>NORTRIPTYLINE</b> = <b>N</b> <b>AVENTYL</b> , g 10, 25mg capsules <sup>129</sup>			<b>Initial:</b> 10-25mg po HS <b>Usual:</b> 25-50mg po HS <b>Maximum:</b> 150mg po HS	\$15-24 \$28

<b>NORADRENERGIC AND SPECIFIC SEROTONERGIC ANTIDEPRESSANT (NaSSA):</b> 5HT & NE				
<b>MIRTAZAPINE</b> <b>REMERON</b> , g 15 <sup>5</sup> ,30 <sup>5</sup> ,45mg tabs; <b>RD</b> , g 15,30,45mg tab ♦ <b>RD</b> form useful if difficulty swallowing	♦ <b>Useful</b> if anxiety, <b>anorexia</b> , somatization, or difficulty <b>sleeping</b> ♦ t½ =20-40hr	<b>AE</b> Dry mouth, <b>sedation</b> , edema, arthralgias, dizzy, rare neutropenia. May ↑appetite & <b>weight</b> , but may have ↓ sexual dysfx <b>DI</b> Clonidine & many others (see <a href="#">RxFiles Antidepressant DI Chart p. 106</a> )	<b>Initial:</b> 7.5-15mg po daily <b>Usual:</b> 15-30mg po daily <sup>HTA-SADD NS</sup> <b>Maximum:</b> 60mg po daily <sup>Star*D</sup>	\$12 <b>RD</b> -15 \$12 <b>RD</b> -22 \$25 <b>RD</b> -36

<b>AZAPIRONE 5HT<sub>1A</sub> AGONIST:</b>				
<b>BUSPIRONE</b> <b>BUSPAR</b> , g ( <b>5X</b> ), 10 <sup>5</sup> mg tablets  ♦ Onset 1wk; Max effect 6 wks	✓ Anxiety in benzodiazepine naive pt & for alcohol withdrawal ♦ Non-addicting	<b>AE</b> Nausea, headache, dizziness <b>DI</b> Many (see <a href="#">RxFiles Antidepressant DI Chart p. 106</a> )	<b>Initial:</b> 5mg TID-QID ↓\$ if taken as ½ of 10mg tablet <b>Usual:</b> 5-10mg po TID-QID <b>Maximum:</b> 60-90mg po daily	\$25-46 \$25-56 \$80-117

<b>BENZODIAZEPINES:</b> may help severe <b>anxiety</b> (use short term/with caution if at all)				
<b>CLONAZEPAM</b> <b>RIVOTRIL</b> , g 0.25 <b>X</b> <b>▼</b> , 0.5 <sup>5</sup> , 1, 2 <sup>5</sup> mg tablets	✓ Anticonvulsant, Panic attack; Other: <b>sedative</b> , social phobia & akathisia, acute mania & neuralgic pain	<b>AE</b> <b>Drowsiness</b> (tolerance develops), <b>dizziness</b> , <b>falls</b> , ↓ concentration, anterograde amnesia, ↑ traffic <b>accidents</b> , physical <b>dependence</b> & paradoxical anger/hostility <b>Disinhibition:</b> inappropriate sexual behaviour, physical/verbal outbursts ♦ Taper off slowly to ↓ rebound anxiety ♦ clonazepam is long-acting & lorazepam is a short-acting ♦ Lorazepam ↓ <b>DI</b> 's versus other therapeutic options	<b>Initial:</b> 0.25mg po daily-BID <b>Usual:</b> 0.5mg po TID-1mg po BID <b>Maximum:</b> 10-20mg po daily	\$10 \$15 \$27-46
<b>LORAZEPAM</b> <b>ATIVAN</b> , g 0.5, 1 <sup>5</sup> , 2 <sup>5</sup> mg tablets (0.5,1,2mg SL <b>▼</b> tablets; 4mg/mL <b>ampule</b>  <b>X</b> )	✓ Anxiety, Preanesthetic, Status epilepticus; Other: <b>sedative</b> ; muscle relaxant;delirium (from alcohol withdrawal, Parkinson's or NMS)		<b>Initial:</b> 0.5mg daily <b>Usual:</b> 0.5mg TID-1mg po TID <b>Maximum:</b> 10mg daily	\$10 \$10 \$20

**Legend:** **▲**=↓dose for renal dysfunction **▼**=↓dose for liver dysfunction **C**=scored tab **g**=generic **X**=Non-formulary Sask **■**=Exceptional Drug Status Sask. **⊗**=not covered by NIHB **▼**=covered by NIHB **?**=prior by NIHB **\$**=cost **ADAS-cog**=cognitive section of the 70 point Alzheimer's Disease Assessment Scale **am**=morning **Bz**=benzodiazepine **BP**=blood pressure **cc**=with meal **COPD**=chronic obstructive pulmonary disorder **CV**=cardiovascular **CYP**=cytochrome **d/c**=discontinue **DI**=drug interaction **DM**=diabetes mellitus **DVT**=deep vein thrombosis **dx**=disease **EDS**=exception drug status **EPS**=extrapyramidal symptoms **ER**=extended release **FxAQ**=Functional Activities Questionnaire **GAD**=generalized anxiety disorder **hr**=hour **HR**=heart rate **HS**=at bedtime **LFT**=liver function test **M**=monitor **MMSE**=Mini-mental state examination (Scale 0-30) **NaHCO3**=sodium bicarbonate **NNH**=number needed to harm **NNT**=number needed to treat **NMDA**=N-methyl-D-aspartate **NMS**=neuroleptic malignant syndrome **NS**=not significant **N/V**=nausea & vomiting **OD**=once daily **ODT**=oral disolvable tablet **Pt**=patient **SWFI**=sterile water for injection **sx**=syndrome **sz**=seizure **TG** =triglycerides t½=half life **tx**=treatment **WBC**=white blood cell **wk**=week **wt**=weight **XR**=extended release

<b>OTHER MEDS</b> See <a href="#">RxFiles Charts</a> : Mood Stabilizers ( <a href="#">p. 103</a> ), Antidepressants ( <a href="#">p. 105</a> ) & <a href="#">Behavior Management in Dementia</a> Newsletter; <a href="#">Alzheimer's Association</a> <a href="http://www.alz.org">www.alz.org</a> <b>Not an Option:</b> ASA 75mg daily x 2yrs <sup>131</sup> , estrogen <sup>130</sup> , NSAID <sup>131</sup> , ADAPT NS, or ginkgo <sup>132</sup> GEM, GuidAge <sup>133</sup> <b>Uncertain:</b> 2statin <sup>133</sup> <b>LeadE</b> & <b>Safo</b> <sup>11</sup> NS, ?Vit E <sup>135</sup> not for mild cognitive impairment, ↑mortality if >400IU/day, ?B12 <sup>135</sup> & vegetables. <b>PREVENTION</b> ↓ CV risk (↓BP <sup>136</sup> , ↓cholesterol, <b>stop smoking</b> , ↑exercise & ASA in ↑risk pts). Cognitive rehab may ↑ cognitive function (mnemonics, association strategies, & computer-assisted training programs). <sup>140</sup> If mild cognitive impairment, 5-10% progress to dementia annually. Assess risk for postop delirium. <b>EPIDEMIOLOGIC</b> 1.5% @ 65yrs; doubles q4yr; 30% @80yrs; average survival 8yr from diagnosis. <b>NON DRUG</b> involve family/caregivers in enviro & behavioural tx; advance health care directive & discourage driving.	<b>DEMENTIA Type</b> Alzheimer's >50% (short term <b>memory</b> , word & way finding), vascular ~25% (often stepwise evolution, apathy, dys-executive sx), combo, Lewy body ~15% (fluctuations in cognition, hallucinations visual & spontaneous motor features of Parkinsonism), Frontotemporal ~5% (disinhibition, behavioural & social tactlessness, language changes, often onset <60yr) & hydrocephalus normal pressure (rapid progressing, early gait abnormalities & incontinence). Progressive deterioration req. interventions to ↓ progression, ↓ sx (cognitive, behavioural & psychological) & ↓ caregiver burden. Comorbidity with diabetes & HTN ↑ mortality. <b>DRUG INDUCED DELIRIUM</b> antiemetics (eg. dimenhydrinate, meclizine), antihistamines sedating (eg. chlorpheniramine & diphenhydramine), <b>anticholinergics</b> (antipsychotics like chlorpromazine, clozapine & olanzapine; benzotropine, oxybutynin, procyclidine, scopolamine, TCAs like amitriptyline & imipramine; tolterodine), antiparkinsonian meds, <b>benzodiazepines</b> , digoxin, disopyramide, muscle relaxants, narcotics (eg. meperidine, pentazocine, propoxyphene) & NSAIDs (rarely eg. high-dose aspirin, indomethacin, sulindac).
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**Background:** very common ( $\leq 90\%$  in dementia); major cause of distress to pts/families/caregivers; harm to self & others;  $\uparrow$ cost (e.g. institutionalization). Not just agitation but non-agitated sx (apathy, withdrawal, daytime somnolence {circadian rhythm disturbances}, depression, disinhibition, etc.)

**Diagnosis:** (Evaluate behaviour  $\rightarrow$  ABC's Antecedents (causes: Physical Intellectual Emotional Cultural Environmental Social), Behaviours & Consequences),  $\rightarrow$  Assess hx (unique factors like Down's sx), physical exam, cognitive tests<sup>Feldman<sup>08</sup></sup> & nurse/collateral family info! Behavioural Vital Signs tool [www.cagp.ca](http://www.cagp.ca)

**Lab Tests:** Recommend CBC, electrolytes,  $\text{Ca}^{++}$ ,  $\text{B}_{12}$ , glucose & TSH; Optional: BUN & SCr, ferritin, magnesium, LFTs, arterial blood gases, ECG, CT/MRI if suggestion of structural lesion (eg. renal failure, brain tumor, normal pressure hydrocephalus, subdural hemorrhage) ♦ Eliminate delirium source<sup>Young BMJ<sup>07</sup></sup> (eg. meds eg. opiates, benzos, anticholinergics) /withdrawal rx's/DI's, dehydration & infections (if indicated: urinalysis/ C&S, chest x-ray, lumbar puncture if suspicion of meningitis)

**Step 1:** Assess for & treat any comorbidities (eg. infection, pain, constipation, depression, psychosis)

**Step 2:** Explore environmental, exercise, music & behavioural measures<sup>COPE</sup> Reserve drug tx where non-drug tx has been fully explored & implemented or if **significant dangerous risk**. Specify problem behaviour (eg. "agitation" is less useful than "screaming", "hitting when bathed"). Identify triggers & what makes it go away. Identify whom the behavior is bothering (pt, caregiver/staff or other pts). Human interactions eg. Activity [www.enasco.com/senioractivities](http://www.enasco.com/senioractivities), adequate staff eg. nursing home & proper environment most critical.

**Step 3:** Drug tx consider if sx having no physical cause, are unrelated to other drugs or unresponsive to non-pharmacological interventions, generally start with **1/3 to 1/2 of usual adult** dose & titrate up slowly; individualize dose

**Step 4:** Reevaluate drug regimen after 3 months; may attempt to taper/withdraw meds after 3 months of behavioural stability

MAJOR DEPRESSION $\downarrow$ mood, apathy, amotivation	PSYCHOSIS/AGITATION delusions, hallucinations; agitation, aggression	ANXIETY pacing, chanting, psychomotor agitation, etc.
<b>Mild</b> $\rightarrow$ non pharmacologic	-use non-drug validation, environment... when possible! <u>Psychosis:</u> Positive sx delusions, hallucinations or paranoia Negative sx poverty of thought, apathy, social withdrawal <u>Agitation:</u> aggression, shouting, pacing, psychomotor <b>Start Low, Go Slow... Then Taper!</b>	-use non-pharmacological intervention -minimize provocation -consider antidepressant therapy if anxiety is secondary to depression or very chronic in nature
<b>Moderate to severe</b> $\rightarrow$ <b>ANTIDEPRESSANT Medication</b> <b>Anxiety often coexists</b> thus use antidepressants with anxiolytic properties e.g. citalopram, sertraline, venlafaxine CANMAT 09 suggests: (See also RxFiles Charts book pg 104-5). <b>SSRI's, venlafaxine, mirtazapine, duloxetine, moclobemide, bupropion.</b> In general $\rightarrow$ may be good for depression, depression assoc. agitation, emotionality & irritability. May help behaviours/disinhibition (May worsen apathy in some pts) Allow >6 week for adequate trial at an adequate dose <b>Start Low, Go Slow, But go!</b> <b>SSRIs:</b> <b>AE</b> N/V, restlessness, falls, insomnia, $\downarrow$ weight, agitation initially, hyponatremia & bleeding $<0.5\%$ <b>Citalopram</b> 10-20mg/d, <b>escitalopram</b> $\otimes$ 10mg/d, <b>sertraline</b> 25-100mg OD, fluvoxamine 25-150mg OD, paroxetine 10-30mg OD etc. <b>Venlafaxine:</b> 37.5-225mg XR OD (Similar AE as SSRI, but $\uparrow$ GI AE & may $\uparrow$ BP); <b>XR</b> cap: can sprinkle on food. <b>Bupropion:</b> 100-150mg BID or 150-300mg XL to activate pt with withdrawal or psychomotor retardation <b>TCA's:</b> Avoid anticholinergics $\rightarrow$ $\downarrow$ with <b>nortriptyline</b> 10-75mg HS & desipramine 25-150mg OD; <b>AE</b> $\downarrow$ BP, blurred vision, urinary hesitancy, cardiac conduction changes <b>Mirtazapine:</b> consider if anorexia/anxiety/sleep problem; <b>RD</b> rapid dissolve form if difficulty swallowing; $\leq 7.5$ -45mg OD <b>Moclobemide:</b> role in anxiety & mood dx but may $\uparrow$ stimulation; 100mg OD-300mg BID <b>Trazodone:</b> $\downarrow$ doses for sedation & some anxiolytic effect; monitor for $\downarrow$ BP, serotonin syndrome & rare $\delta$ priapism. Consider ECT in tx resistant or severe depression.	<b>ANTIPSYCHOTIC Medication</b> -first designate target sx ( <b>not wandering or mild sx</b> ); try to $\downarrow$ sedation, $\uparrow$ confusion, hypotension & EPS; titrate no more frequent than q1-2wks - <b>target sx</b> (hallucinations, delusions, hostility, aggression, severe agitation, & violent/high risk behaviour) risperidone 0.25-2mg OD } $\Rightarrow$ monitor for AE; may quetiapine 12.5-200mg OD } attempt to taper or olanzapine $\approx$ $\nabla$ 1.25-10mg OD } d/c q3 months haloperidol 0.25-2mg OD (especially useful in delirium) [aripiprazole $\approx$ $\nabla$ & ziprasidone $\nabla$ : caution stimulating agents] ♦ Newer agents, as effective, $\uparrow$ tolerated. Monitor for <b>AE</b> sedation, $\downarrow$ BP, falls <sup>138</sup> , EPS (drooling, rigidity & akinesia), anticholinergic AE dry mouth, delirium, constipation, ??ECG, $\uparrow$ weight/lipids/diabetes, $\uparrow$ ? stroke OR 2.5-3/death OR 1.5-1.8 Class effect & tardive dyskinesia $\rightarrow$ need to <b>reevaluate ongoing use</b> . ♦ Pts with <b>Lewy bodies</b> (often visual hallucination sx) have $\uparrow$ sensitivity to neuroleptics (option: quetiapine $\downarrow$ dose)	<b>ANTIANXIETY Medication</b> - consider <b>short term as needed</b> lorazepam 0.5-2mg OD oxazepam 5-30mg OD clonazepam 0.125-2mg OD (Caution long-acting!) <b>Benzodiazepines-caution!</b> <b>AE</b> sedation, ataxia, altered sleep architecture, motor & cognitive impairment & possible withdrawal sx when d/c. Paradoxical excitation, <b>disinhibition</b> & falls may occur. An intermediate acting such as temazepam/oxazepam/lorazepam can be best used short term, if possible for sleep/anxiety states or before planned anxiety provoking situation Seg. bathing, dental work <b>Trazodone</b> 12.5-100mg OD considered option by some 50-100mg po HS <b>Buspirone</b> $\nabla$ 10-30mg OD; $\downarrow$ sedation, $\downarrow$ DI's, $\downarrow$ withdrawal & $\downarrow$ impairment of motor fx; option $\rightarrow$ chronic anxiety but <b>slow onset</b> ~3wk <b>APATHY</b> tx with external activity & environmental measures. <b>Possible drug options</b> (not without concern): methylphenidate, dopamine agonists or cholinesterase inhibitors.

**Sexually Inappropriate Behaviour** assess for **medical reason** eg. UTI & any drug causes eg. lorazepam, dopamine agonists. Remove disinhibiting drugs including benzo's & alcohol.

**Behavioural interventions:** First **redirection, distraction, avoiding stimulants**,  $\downarrow$  data on drug tx antidepressants, antipsychotics, cholinesterase inhibitor (see also RxFiles Hypersexuality Chart, pg 107).

**Sleep Disturbances** assess for **medical reason** eg. heart failure, sleep apnea, drug cause eg. stimulants, Options: **behavioural**, trazodone 25-50mg HS, zopiclone  $\times$   $\otimes$  3.75-5mg HS, Limit to 3-4 weeks.

**Pain** consider trial of regularly scheduled acetaminophen  $\leq 3.25$ g OD (e.g. 650mg po QID; or long-acting 1300mg BID AM & HS) to reduce agitation & pain<sup>Husebo<sup>11</sup></sup>; opioids may be appropriate alternative in select patients.

**Cholinesterase Inhibitors (ChEIs)** modest cognitive, functional & behavioural benefit; may help apathy, hallucination & delusion? post hoc analyses; **unlikely  $\downarrow$  agitation & aggression - not better than placebo** for agitation<sup>Howard<sup>07</sup></sup>, may help **Lewy Body dementia**  $\downarrow$  visual sx's. Consider cholinesterase inhibitors in Alzheimer's (donepezil, galantamine, rivastigmine)  $\approx$   $\nabla$ ; but **AE** N/V, fatigue, anorexia,  $\uparrow$  HR, urinary incontinence

**Memantine**  $\times$   $\otimes$  NMDA receptor antagonist, may help agitation, aggression, irritability, disinhibition & psychosis-case reports, only post-hoc analysis of RCT. Option: combo with ChEIs in mod-severe AD.

**Anticonvulsants** some use short term ( $<6$  weeks) in agitation, aggression, hostility, sleep-wake disturbance cycle & mania ♦ **carbamazepine** 100-600mg OD  $\leq 400$ mg OD in BPSD **AE** sedation, ataxia, falls, rash, headache, leukopenia &  $\uparrow$  liver tests & DIs.  
✓ Good for impulsivity or if brain injury. ♦ **topiramate** 25-50mg OD<sup>cognitive difficulties</sup> ♦ **valproate** no longer recommended dose required associated with sedation, diarrhea, tremor, nausea, hair loss,  $\uparrow$  liver tests; <sup>CCCDT<sup>04</sup></sup>; **useful if manic**  
♦ other agents (gabapentin, lamotrigine-rash, levetiracetam) benefit unknown; concerns re: worsening existing behaviour (eg. gabapentin-worsening agitation if Lewy Body dementia)

**Beta Blocker** propranolol 10-80mg OD; possible  $\downarrow$  aggression but diminishes over time; **AE**  $\downarrow$  HR &  $\downarrow$  BP Caution: asthma, PVD & possibly depression Hx

$\approx$ =Exception Drug Status Sask.  $\times$ =non-formulary in Sask.  $\otimes$ =not covered by NIHB  $\nabla$ =covered by NIHB  $\nabla$ =prior approval NIHB AD=Alzheimer's **AE**=adverse effect BP=blood pressure BPSD=behavioural & psychological symptoms of dementia BUN=blood urea nitrogen  $\text{Ca}^{++}$ =calcium CBC=complete blood count C&S=culture & sensitivity CT=computed tomography d/c=discontinued DI=drug interaction dx=disorder ECG=electrocardiogram ECT=electroconvulsive therapy EPS=extrapyramidal symptoms fx=function GI=gastrointestinal HR=heart rate hx=history LFTs=liver function tests MRI=magnetic resonance imaging NMDA=N-methyl-D-aspartate N/V=nausea/vomiting pt=patient PVD=peripheral vascular disease RCT=randomized controlled trial SCr=serum creatinine sx=symptom SSRI=selective serotonin reuptake inhibitors TSH=thyroid stimulating hormone tx=treatment UTI=urinary tract infection

## Behavioural & Psychological Symptoms of DEMENTIA (BPSD) Treatment Chart

<sup>1</sup> Therapeutic Choices 5<sup>th</sup> Edition, 2007

<sup>2</sup> Ontario Guidelines for the Management of Anxiety Disorders in Primary Care Fall 2000 1<sup>st</sup> Edition

<sup>3</sup> Micromedex 2012

<sup>4</sup> **Treatment Guidelines:** Drugs for Psychiatric Disorders. **The Medical Letter:** August 2010. (July, 2003; p. 69-76). Updated **June 2013**.

<sup>5</sup> Kawas CH. Clinical practice. Early Alzheimer's disease. N Engl J Med. 2003 Sep 11; 349(11): 1056-63.

<sup>6</sup> Ritchie K, Lovestone S. The dementias. Lancet. 2002 Nov 30; 360(9347): 1759-66.

Corrada MM, Brookmeyer R, Berlau D, Paganini-Hill A, Kawas CH. Prevalence of dementia after age 90: results from the 90+ study. Neurology. 2008 Jul 29;71(5):337-43. Epub 2008 Jul 2. In a very large sample of participants aged 90 and older, prevalence of all-cause dementia doubled every 5 years for women but not men. The overall prevalence of all-cause dementia was higher in women (45%, 95% CI = 41.5-49.0) than men (28%, 95% CI = 21.7-34.2).

<sup>7</sup> Doody RS. Current treatments for Alzheimer's disease: **cholinesterase inhibitors**. J Clin Psychiatry. 2003;64 Suppl 9:11-7. s. 2000 Nov;60(5):1095-122.

<sup>8</sup> Cummings JL. Use of **cholinesterase inhibitors** in clinical practice: **evidence-based** recommendations. Am J Geriatr Psychiatry. 2003 Mar-Apr;11(2):131-45.

<sup>9</sup> Gauthier S. Advances in the pharmacotherapy of **Alzheimer's** disease. CMAJ. 2002 Mar 5;166(5):616-23.

<sup>10</sup> DeLaGarza VW. Pharmacologic treatment of **Alzheimer's** disease: an update. Am Fam Physician. 2003 Oct 1; 68(7): 1365-72.

<sup>11</sup> Kindermann SS, Dolder CR, Bailey A, Katz IR, Jeste DV. Pharmacological treatment of **psychosis and agitation** in elderly patients with dementia: four decades of experience. Drugs Aging. 2002; 19(4): 257-76.

<sup>12</sup> Lanctot KL, Herrmann N, Yau KK, et al. Efficacy and safety of **cholinesterase inhibitors** in Alzheimer's disease: a **meta-analysis**. CMAJ. 2003 Sep 16;169(6):557-64.

<sup>13</sup> Trinh NH, Hoblyn J, et al. Efficacy of **cholinesterase inhibitors** in the treatment of neuropsychiatric symptoms and functional impairment in Alzheimer disease: a **meta-analysis**. JAMA. 2003 Jan 8;289(2):210-6.

<sup>14</sup> Wilkinson DG, Passmore AP, et al. A multinational, randomised, 12-week, **comparative** study of **donepezil** and **rivastigmine** in patients with mild to moderate Alzheimer's disease. Int J Clin Pract. 2002 Jul-Aug;56(6):441-6.

<sup>15</sup> AGS Clinical Practice Committee. Guidelines abstracted from the **American Academy of Neurology's Dementia Guidelines** for Early Detection, Diagnosis, and Management of Dementia. J Am Geriatr Soc. 2003 Jun; 51(6): 869-73.

<sup>16</sup> U.S. Preventive Services Task Force. **Screening for dementia:** recommendation and rationale. Ann Intern Med. 2003 Jun 3; 138(11): 925-6. No abstract available. Summary for patients in: Ann Intern Med. 2003 Jun 3;138(11):160.

<sup>17</sup> Patterson CJ, Gauthier S, Bergman H, Cohen CA, et al. The recognition, assessment and management of dementing disorders: conclusions from the **Canadian Consensus Conference on Dementia**. (CCCD) CMAJ. 1999 Jun 15; 160(12 Suppl): S1-15.

<sup>18</sup> Bullock R. Cholinesterase inhibitors and **vascular dementia**: another string to their bow? CNS Drugs. 2004; 18(2): 79-92.

<sup>19</sup> Department of Veterans Affairs; Drug Review March 2004 <http://www.vapbm.org/reviews/Cholinestlnh.pdf>

<sup>20</sup> Cummings JL. **Alzheimer's** disease. N Engl J Med. 2004 Jul 1;351(1):56-67.

<sup>21</sup> Sink KM, Holden KF, Yaffe K. Pharmacological treatment of **neuropsychiatric** symptoms of dementia: a review of the evidence. **JAMA**. 2005 Feb 2;293(5):596-608. (InfoPOEMs: Pharmacologic agents are minimally, if at all, effective in managing the neuropsychiatric symptoms of dementia. The atypical antipsychotics olanzapine (Zyprexa) and risperidone (Risperdal) are the most effective, but these agents may increase the risk of stroke. The decision to use any of these drugs must be made on the basis of individual circumstances. (LOE = 1a-))

<sup>22</sup> Desai AK, Grossberg GT. Diagnosis and treatment of Alzheimer's disease. Neurology. 2005 Jun 28;64(12 Suppl 3):S34-9.

<sup>23</sup> Clinical **Handbook of Psychotropic Drugs** 13<sup>th</sup> Edition, Bechlibnyk-Butler K, Jeffries J. 2003

<sup>24</sup> Bentue-Ferrer D, Tribut O, Polard E, Allain H. Clinically significant drug interactions with cholinesterase inhibitors: a guide for neurologists. CNS Drugs. 2003; 17(13): 947-63.

<sup>25</sup> Birks JS, Harvey R. **Donepezil** for dementia due to Alzheimer's disease. Cochrane Database Syst Rev. 2003;(3):CD001190.

<sup>26</sup> Black S, et al. **Donepezil** 307 **Vascular** Dementia Study Group. Efficacy & tolerability of donepezil in vascular dementia: positive results of a 24-week, multicenter, international, randomized, placebo-controlled clinical trial. Stroke. 2003 Oct;34(10):2323-30.

<sup>27</sup> Geldmacher DS, Provenzano G, McRae T, Mastey V, Ieni JR. **Donepezil** is associated with delayed nursing home placement in patients with Alzheimer's disease. J Am Geriatr Soc. 2003 Jul;51(7):937-44.

<sup>28</sup> Feldman H, Gauthier S, et al. Donepezil MSAD Study Investigators. Efficacy of **donepezil** on maintenance of activities of daily living with moderate to severe Alzheimer's disease & the effect on caregiver burden. J Am Geriatr Soc. 2003 Jun;51(6):737-44.

<sup>29</sup> Wimo A, Winblad B, Engedal K, et al. Donepezil Nordic Study Group. An economic evaluation of **donepezil** in mild to moderate Alzheimer's disease: results of a 1-year, double-blind, randomized trial. Dement Geriatr Cogn Disord. 2003;15(1):44-54.

<sup>30</sup> Winblad B, Engedal K, Soininen H, Verhey F, et al. Donepezil Nordic Study Group. A 1-year, randomized, placebo-controlled study of **donepezil** in patients with mild to moderate AD. Neurology. 2001 Aug 14;57(3):489-95.

<sup>31</sup> Mohs RC, Doody RS, Morris JC, Ieni JR, et al. "312" Study Group. A 1-year, placebo-controlled preservation of function survival study of **donepezil** in AD patients. Neurology. 2001 Aug 14;57(3):481-8. Erratum in: Neurology 2001 Nov 27;57(10):1942.

<sup>32</sup> Homma A, et al. Clinical efficacy & safety of **donepezil** on cognitive & global function in Alzheimer's. A 24-wk, multicenter, double-blind, placebo-controlled study in Japan. E2020 Study Gp. Dement Geriatr Cogn Disord. 2000 Nov-Dec;11(6):299-313.

<sup>33</sup> Rogers SL, Doody RS, et al. Long-term efficacy and safety of **donepezil** in the treatment of Alzheimer's disease: final analysis (up to 4.9yrs) of a US multicentre open-label study. Eur Neuropsychopharmacol. 2000 May;10(3):195-203

<sup>34</sup> Wilkinson D, Doody R, Helme R, Taubman K, Mintzer J, Kertesz A, Pratt RD; Donepezil 308 Study Group. **Donepezil** in **vascular** dementia: a randomized, placebo-controlled study. Neurology. 2003 Aug 26; 61(4): 479-86.

<sup>35</sup> Auriacombe S, Pere JJ, Loria-Kanza Y, Vellas B. Efficacy and safety of **rivastigmine** in patients with Alzheimer's disease who failed to benefit from treatment with **donepezil**. Curr Med Res Opin. 2002; 18(3): 129-38.

<sup>36</sup> Courtney C, Farrell D, Gray R, et al.; **AD2000** Collaborative Group. **Long-term donepezil** treatment in 565 patients with Alzheimer's disease (AD2000): randomised double-blind trial. Lancet. 2004 Jun 26;363(9427):2105-15. (Author reply: Oct 2,2004)

<sup>37</sup> Seltzer B, Zolnouni P, Nunez M, Goldman R, Kumar D, Ieni J, Richardson S; Donepezil "402" Study Group. Efficacy of **donepezil** in **early-stage** Alzheimer disease: a randomized placebo-controlled trial. Arch Neurol. 2004 Dec;61(12):1852-6.

<sup>38</sup> Ronald C. Petersen, Ph.D., M.D., Ronald G. Thomas, Ph.D., Michael Grundman, M.D., M.P.H., et al., for the Alzheimer's Disease Cooperative Study Group Vitamin E & Donepezil for the Treatment of **Mild Cognitive Impairment**. N Engl J Med 2005

June 9;352:2379-88. (Conclusions: Vitamin E had no benefit in patients with mild cognitive impairment. Although donepezil therapy was associated with a lower rate of progression to Alzheimer's disease during the first 12 months of treatment, the rate of progression to Alzheimer's disease after three years was not lower among patients treated with donepezil than among those given placebo.) (InfoPOEMs: Vitamin E does not slow progression of mild cognitive impairment to full-fledged Alzheimer's disease. Donepezil provides an early benefit that is gone by 3yr. A secondary analysis found that donepezil appeared more beneficial for pts with the apolipoprotein E4 (APOE) gene. This finding requires prospective confirmation before we begin to test all pts with mild cognitive impairment for APOE & use it to guide therapy. (LOE = 1b) ) Lu PH, Edland SD, Teng E, Tingus K, Petersen RC, Cummings JL; Alzheimer's Disease Cooperative Study Group. Donepezil delays progression to AD in MCI subjects with depressive symptoms. Neurology. 2009 Jun 16;72(24):2115-21.

<sup>39</sup> Holmes C, Wilkinson D, Dean C, Vethanayagam S, et al. The efficacy of donepezil in the treatment of **neuropsychiatric** symptoms in Alzheimer disease. Neurology. 2004 Jul 27;63(2):214-9.

<sup>40</sup> Suh DC, Thomas SK, Valiyeva E, Arcona S, Vo L. Drug Persistency of Two Cholinesterase Inhibitors : Rivastigmine versus Donepezil in Elderly Patients with Alzheimer's Disease. Drugs Aging. 2005;22(8):695-707.

<sup>41</sup> Bullock R, Touchon J, Bergman H, Gambina G, He Y, Rapatz G, Nagel J, Lane R. Rivastigmine and donepezil treatment in moderate to moderately-severe Alzheimer's disease over a 2-year period. Curr Med Res Opin. 2005 Aug;21(8):1317-27.

<sup>42</sup> Winblad B, et al.; Severe Alzheimer's Disease Study Group. **Donepezil** in patients with severe **Alzheimer's** disease: double-blind, parallel-group, placebo-controlled study. Lancet. 2006 Apr 1;367(9516):1057-65.

INTERPRETATION: Donepezil improves cognition and preserves function in individuals with severe Alzheimer's disease who live in nursing homes. (Editorial: a case of too little, too late & points out the limitations of using last observation carried forward & questions the clinical sig. of the findings.)

<sup>43</sup> Feldman H, Gauthier S, et al. Donepezil MSAD Study Investigators Group. A 24-week, randomized, double-blind study of **donepezil** in moderate to severe Alzheimer's disease. Neurology. 2001 Aug 28;57(4):613-20.

- <sup>44</sup> Tariot PN, Cummings JL, Katz IR, Mintzer J, et al. A randomized, double-blind, placebo-controlled study of the efficacy and safety of **donepezil** in patients with Alzheimer's disease in the nursing home setting. *J Am Geriatr Soc*. 2001 Dec;49(12):1590-9.
- <sup>45</sup> Kadoszkiewicz H, Zimmermann T, Beck-Bornholdt HP, et al. **Cholinesterase inhibitors** for patients with Alzheimer's disease: **systematic review** of randomised clinical trials. *BMJ*. 2005 Aug 6;331(7512):321-7. (InfoPOEMs: The evidence supporting the effectiveness of cholinesterase inhibitors is based on exceedingly **small effects found in poorly analyzed studies**. Studies of Alzheimer's drugs need to be carefully scrutinized for methodologic errors that inflate the appearance of benefit. [\(LOE = 1a\)](#) )
- <sup>46</sup> Wild R, Pettit T, Burns A. Cholinesterase inhibitors for dementia with **Lewy bodies**. *Cochrane Database Syst Rev*. 2003;(3):CD003672.
- <sup>47</sup> McKeith I, Del Ser T, Spano P, et al. Efficacy of **rivastigmine** in dementia with Lewy bodies: a randomised, double-blind, placebo-controlled international study. *Lancet*. 2000 Dec 16;356(9247):2031-6.
- <sup>48</sup> Health Canada Public Advisory April 2005 -Information about Reminyl in patients with mild cognitive impairment (mortality: 1.3% galantamine vs 0.1% placebo group) [http://www.hc-sc.gc.ca/hpfb-dgpsa/tpd-dpt/reminyln\\_hpc\\_e.html](http://www.hc-sc.gc.ca/hpfb-dgpsa/tpd-dpt/reminyln_hpc_e.html) Doody RS et al. Donepezil treatment of patients with MCI: A 48-week randomized, placebo-controlled trial. *Neurology* 2009 May 5; 72:1555.
- Russ TC, Morling JR. **Cholinesterase inhibitors for mild cognitive impairment**. *Cochrane Database Syst Rev*. 2012 Sep 12;9:CD009132. doi: 10.1002/14651858.CD009132.pub2. There is very little evidence that cholinesterase inhibitors affect progression to dementia or cognitive test scores in mild cognitive impairment. This weak evidence is overwhelmed by the increased risk of adverse events, particularly gastrointestinal. Cholinesterase inhibitors should not be recommended for mild cognitive impairment.
- <sup>49</sup> Olin J, Schneider L. **Galantamine** for Alzheimer's disease. *Cochrane Database Syst Rev*. 2002;(3):CD001747.
- <sup>50</sup> Scott LJ, Goa KL. **Galantamine**: a review of its use in Alzheimer's disease. *Drugs*. 2000 Nov;60(5):1095-122.
- <sup>51</sup> Kurz AF, Erkinjuntti T, et al. Long-term safety and cognitive effects of **galantamine** in the treatment of probable vascular dementia or Alzheimer's disease with cerebrovascular disease. *Eur J Neurol*. 2003 Nov;10(6):633-40.
- <sup>52</sup> Small G, Erkinjuntti T, Kurz A, Lilienfeld S. **Galantamine** in the treatment of cognitive decline in patients with vascular dementia or Alzheimer's disease with cerebrovascular disease. *CNS Drugs*. 2003;17(12):905-14.
- <sup>53</sup> Mintzer JE, Kershaw P. The efficacy of **galantamine** in the treatment of Alzheimer's disease: comparison of patients previously treated with acetylcholinesterase inhibitors to patients with no prior exposure. *Int J Geriatr Psychiatry*. 2003 Apr;18(4):292-7.
- <sup>54</sup> Blesa R, Davidson M, Kurz A, Reichman W, et al. **Galantamine** provides sustained benefits in patients with 'advanced moderate' Alzheimer's disease for at least 12 months. *Dement Geriatr Cogn Disord*. 2003;15(2):79-87.
- <sup>55</sup> Erkinjuntti T, Kurz A, Gauthier S, et al. Efficacy of **galantamine** in probable vascular dementia and Alzheimer's disease combined with cerebrovascular disease: a randomised trial. *Lancet*. 2002 Apr 13;359(9314):1283-90.
- <sup>56</sup> Wilcock GK, et al. Efficacy & safety of **galantamine** in mild to moderate Alzheimer's disease: multicentre randomised controlled trial. *Galantamine International-1 Study Group*. *BMJ*. 2000 Dec 9;321(7274):1445-9. Erratum: *BMJ* 2001 Feb 17;322(7283):405.
- <sup>57</sup> Tariot PN, Solomon PR, Morris JC, Kershaw P, et al. A 5-month, randomized, placebo-controlled trial of **galantamine** in AD. The Galantamine USA-10 Study Group. *Neurology*. 2000 Jun 27;54(12):2269-76.
- <sup>58</sup> Raskind MA, Peskind ER, Wessel T, et al. **Galantamine** in AD: A 6-month randomized, placebo-controlled trial with a 6-month extension. The Galantamine USA-1 Study Group. *Neurology*. 2000 Jun 27;54(12):2261-8.
- <sup>59</sup> Raskind MA, Peskind ER, Truyen L, Kershaw P, Damaraju CV. The cognitive benefits of **galantamine** are sustained for at least 36 months: a long-term extension trial. *Arch Neurol*. 2004 Feb;61(2):252-6.
- <sup>60</sup> Pirttila T, Wilcock G, Truyen L, Damaraju CV. Long-term efficacy and safety of **galantamine** in patients with mild-to-moderate Alzheimer's disease: multicenter trial. *Eur J Neurol*. 2004 Nov;11(11):734-41.
- <sup>61</sup> Health Canada Public Advisory April 2005 -Information about Reminyl in patients with mild cognitive impairment (mortality: 1.3% galantamine vs 0.1% placebo group) [http://www.hc-sc.gc.ca/hpfb-dgpsa/tpd-dpt/reminyln\\_hpc\\_e.html](http://www.hc-sc.gc.ca/hpfb-dgpsa/tpd-dpt/reminyln_hpc_e.html) Winblad B, Gauthier S, Scinto L, Feldman H, Wilcock GK, Truyen L, Mayorga AJ, Wang D, Brashear HR, Nye JS; GAL-INT-11/18 Study Group. Safety and efficacy of galantamine in subjects with mild cognitive impairment. *Neurology*. 2008 May 27;70(22):2024-35. Doody RS et al. Donepezil treatment of patients with MCI: A 48-week randomized, placebo-controlled trial. *Neurology* 2009 May 5; 72:1555.
- <sup>62</sup> Birks J, Grimley Evans J, Iakovidou V, Tsolaki M. **Rivastigmine** for Alzheimer's disease. *Cochrane Database Syst Rev*. 2000;(4):CD001191.
- <sup>63</sup> Rigaud AS, Andre G, Vellas B, Touchon J, Pere JJ; French Study Group. No additional benefit of HRT on response to **rivastigmine** in menopausal women with AD. *Neurology*. 2003 Jan 14;60(1):148-9.
- <sup>64</sup> Farlow M, Anand R, Messina J Jr, Hartman R, Veatch J. A 52-week study of the efficacy of **rivastigmine** in patients with mild to moderately severe Alzheimer's disease. *Eur Neurol*. 2000;44(4):236-41.
- <sup>65</sup> Rosler M, Anand R, et al. Efficacy and safety of **rivastigmine** in patients with Alzheimer's disease: international randomised controlled trial. *BMJ*. 1999 Mar 6;318(7184):633-8. Erratum: *BMJ* 2001 Jun 16;322(7300):1456.
- <sup>66</sup> Moretti R, Torre P, Antonello RM, Cazzato G, Bava A. **Rivastigmine** in subcortical vascular dementia: a randomized, controlled, open 12-month study in 208 patients. *Am J Alzheimers Dis Other Dement*. 2003 Sep-Oct; 18(5): 265-72.
- <sup>67</sup> Aupperle PM, Koumaras B, Chen M, Rabinowicz A, Mirski D. Long-term effects of **rivastigmine** treatment on neuropsychiatric and behavioral disturbances in nursing home residents with moderate to severe Alzheimer's disease: results of a 52-week open-label study. *Curr Med Res Opin*. 2004 Oct;20(10):1605-12.
- <sup>68</sup> Farlow MR, Lilly ML. **Rivastigmine**: An open-label, observational study of safety and effectiveness in treating patients with Alzheimer's Disease for up to 5 years. *BMC Geriatr*. 2005 Jan 19;5(1):3 [Epub ahead of print]
- <sup>69</sup> Lai MW, Moen M, Ewald MB. Pesticide-like poisoning from a prescription drug. *N Engl J Med*. 2005 Jul 21;353(3):317-8.
- <sup>70</sup> Wilcock GK. **Memantine** for the treatment of dementia. *Lancet Neurol*. 2003 Aug; 2(8): 503-5.
- Wilcock G, Mobius HJ, Stoffler A; MMM 500 group. A double-blind, placebo-controlled multicentre study of **memantine** in mild to moderate vascular dementia. *Int Clin Psychopharmacol*. 2002 Nov; 17(6): 297-305.
- Orgogozo JM, Rigaud AS, Stoffler A, et al. Efficacy and safety of **memantine** in patients with mild to moderate vascular dementia: a randomized, placebo-controlled trial (MMM 300). *Stroke*. 2002 Jul; 33(7): 1834-9.
- Memantine** for Alzheimer's disease. *Med Lett Drugs Ther*. 2003 Sep 15; 45(1165): 73-4.
- Areosa SA, Sherriff F. **Memantine** for dementia. *Cochrane Database Syst Rev*. 2003; (3): CD003154.
- Reisberg B, Doody R, Stoffler A, Schmitt F, Ferris S, Mobius HJ; Memantine Study Group. Memantine in moderate-to-severe Alzheimer's disease. *N Engl J Med*. 2003 Apr 3;348(14):1333-41.
- Tariot PN, et al. Memantine Study Group. **Memantine** treatment in patients with moderate to severe Alzheimer disease already receiving donepezil: a randomized controlled trial. *JAMA*. 2004 Jan 21; 291(3): 317-24.
- Perras C. Memantine for treatment of moderate to severe Alzheimer's disease. *Issues Emerg Health Technol*. 2005 Mar;(64):1-4.
- Gauthier S, Wirth Y, et al. Effects of memantine on behavioural symptoms in Alzheimer's disease patients: an analysis of the Neuropsychiatric Inventory (NPI) data of two randomised, controlled studies. *Int J Geriatr Psychiatry*. 2005 May;20(5):459-64.
- Hanney M, Prasher V, Williams N, et al, on behalf of the **MEADOWS** trial researchers. **Memantine** for dementia in adults older than 40 years with **Down's syndrome** (MEADOWS): a randomised, double-blind, placebo-controlled trial. *Lancet* 2012; online Jan 10.
- <sup>71</sup> Reisberg B, Doody R, Stöffler A et al. A 24-Week Open-Label Extension Study of Memantine in Moderate to Severe Alzheimer Disease. *Archives of Neurology* 2006;63:1-6 (Kirby J, et al. A systematic review of the clinical and cost-effectiveness of memantine in patients with moderately severe to severe Alzheimer's disease. *Drugs Aging*. 2006;23(3):227-40. ) (Cummings JL, Schneider E, Tariot PN, Graham SM; Memantine MEM-MD-02 Study Group. Behavioral effects of memantine in Alzheimer disease patients Receiving donepezil treatment. *Neurology*. 2006 Jul 11;67(1):57-63. )
- <sup>72</sup> Herrmann N, Li A, Lancot K. Memantine in dementia: a review of the current evidence. *Expert Opin Pharmacother* 2011; 12(5): 787-800.
- Gauthier S, Loft H, Cummings J. Improvement in behavioural symptoms in patients with moderate to severe Alzheimer's disease by memantine: a pooled data-analysis. *Int J Geriatr Psychiatry* 2008; 23: 537-545.
- Maidment I, Fox CG, Boustani M, Rodriguez J, et al. Efficacy of memantine on behavioral and psychological symptoms related to dementia: a systematic meta-analysis. *Ann Pharmacother* 2008; 43:32-38.
- Herrmann N, Cappell J, Eryavec GM, Lancot KL. Changes in nursing burden following memantine for agitation and aggression in LTC residents with moderate-severe Alzheimers' disease. *CNS Drugs* 2011; 25(5): 425-433.
- <sup>73</sup> Devanand DP, Marder K, Michaels KS, et al. A randomized, placebo-controlled dose-comparison trial of **haloperidol** for psychosis and disruptive behaviors in Alzheimer's disease. *Am J Psychiatry*. 1998 Nov; 155(11): 1512-20.
- Devanand DP, Pelton GH, Cunqueiro K, Sackeim HA, Marder K. A 6-month, randomized, double-blind, placebo-controlled pilot **discontinuation trial following response to haloperidol** treatment of psychosis and agitation in Alzheimer's disease. *Int J Geriatr Psychiatry*. 2011 Sep;26(9):937-43.
- <sup>74</sup> Schneider LS, Tariot PN, Dagerman KS, et al. **CATIE-AD** Study Group. Effectiveness of atypical antipsychotic drugs in patients with Alzheimer's disease. *N Engl J Med*. 2006 Oct 12;355(15):1525-38. (n=421 36weeks risperidone 1mg/d, olanzapine 5.5mg/d, & quetiapine 56.5mg/d) Adverse effects offset advantages in the efficacy of atypical antipsychotic drugs for the treatment of psychosis, aggression, or agitation in patients with Alzheimer's disease. There were no significant differences among treatments with regard to the time to the discontinuation of treatment for any reason: olanzapine (median, 8.1 weeks), quetiapine (median, 5.3 weeks), risperidone (median, 7.4 weeks), and placebo (median, 8.0 weeks) (P=0.52). The median time to the discontinuation of treatment due to a lack of efficacy favored olanzapine (22.1 weeks) and risperidone (26.7 weeks) as compared with quetiapine (9.1 weeks) and placebo (9.0 weeks) (P=0.002). The time to the discontinuation of treatment due to adverse events or intolerability favored placebo. Overall, 24% of patients who received olanzapine, 16% of patients who received quetiapine, 18% of patients who received risperidone, & 5% of patients who received placebo discontinued their assigned treatment owing to intolerability (P=0.009). No significant differences were noted among the groups with regard to improvement on the CGIC scale. Improvement was observed in 32% of patients assigned to olanzapine, 26% of patients assigned to quetiapine, 29% of patients assigned to risperidone, and 21% of patients assigned to placebo (P=0.22). (InfoPOEMs: Atypical antipsychotics are minimally, if at all, effective for patients with Alzheimer's disease (AD), and they have significant adverse effects. They should not be routinely used for the treatment of psychosis, agitation, or aggression in these patients. (LOE = 1b))
- <sup>75</sup> Hien le TT, Cumming RG, Cameron ID, et al. Atypical antipsychotic medications and **risk of falls** in residents of aged care facilities. *J Am Geriatr Soc*. 2005 Aug;53(8):1290-5. CONCLUSION: Despite fewer extrapyramidal side effects, atypical antipsychotic medications are not associated with fewer falls than the older, more-established antipsychotics.
- <sup>76</sup> Consensus Development Conference on Antipsychotic Drugs and Obesity and **Diabetes**; Diabetes Care.2004; 27: 596-558.



- <sup>77</sup> Lee PE, Gill SS, Freedman M, Bronskill SE, Hillmer MP, Rochon PA. **Atypical antipsychotic** drugs in the treatment of behavioural and psychological symptoms of dementia: systematic review. *BMJ*. 2004 Jul 10;329(7457):75.  
**CONCLUSIONS:** Although atypical antipsychotic drugs are being used with increasing frequency, few randomised trials have evaluated their use for BPSD. Limited evidence supports the perception of improved efficacy and adverse event profiles compared with typical antipsychotic drugs.
- <sup>78</sup> Herrmann N, Mamdani M, Lanctot KL. Atypical antipsychotics and risk of cerebrovascular accidents. *Am J Psychiatry*. 2004 Jun;161(6):1113-5.
- <sup>79</sup> Cummings JL, Street J, Masterman D, Clark WS. Efficacy of **olanzapine** in the treatment of psychosis in dementia with lewy bodies. *Dement Geriatr Cogn Disord*. 2002; 13(2): 67-73.
- <sup>80</sup> Street JS, Clark WS, Kadam DL, Mitani SJ, et al. A. Long-term efficacy of **olanzapine** in the control of psychotic and behavioral symptoms in nursing home patients with Alzheimer's dementia. *Int J Geriatr Psychiatry*. 2001 Dec; 16 Suppl 1: S62-70.
- <sup>81</sup> Street JS, et al. **Olanzapine** treatment of psychotic & behavioral symptoms in patients with Alzheimer's in nursing care facilities: a double-blind, randomized, placebo-controlled trial. HGEU Study Group. *Arch Gen Psychiatry*. 2000 Oct; 57(10): 968-76.
- <sup>82</sup> De Deyn PP, Carrasco MM, Deberdt W, et al. Olanzapine versus placebo in the treatment of psychosis with or without associated behavioral disturbances in patients with Alzheimer's disease. *Int J Geriatr Psychiatry*. 2004 Feb;19(2):115-26.
- <sup>83</sup> De Deyn PP, Carrasco MM, Deberdt W, Jeandel C, Hay DP, Feldman PD, Young CA, Lehman DL, Breier A. Olanzapine versus placebo in the treatment of psychosis with or without associated behavioral disturbances in patients with Alzheimer's disease. *Int J Geriatr Psychiatry*. 2004 Feb;19(2):115-26.
- <sup>84</sup> Deberdt WG, Dysken MW, Rappaport SA, Feldman PD, et al. Comparison of olanzapine and risperidone in the treatment of psychosis and associated behavioral disturbances in patients with dementia. *Am J Geriatr Psychiatry*. 2005 Aug;13(8):722-30. **CONCLUSIONS:** Patients' neuropsychiatric functioning improved with **olanzapine**, **risperidone**, and placebo treatment. There was a substantial response in the **placebo** group, and **no significant differences emerged among treatments**.
- <sup>85</sup> Kennedy J, Deberdt W, Siegel A, et al. **Olanzapine does not enhance cognition** in non-agitated and non-psychotic patients with mild to moderate Alzheimer's dementia. *Int J Geriatr Psychiatry*. 2005 Oct 26;20(11):1020-1027.
- <sup>86</sup> Lim CJ, Trevino C, Tampi RR. Can Olanzapine Cause Delirium in the Elderly? (January). *Ann Pharmacother*. 2005 Dec 20; [Epub ahead of print]
- <sup>87</sup> Sajatovic M, Mullen JA, Sweitzer DE. Efficacy of quetiapine and risperidone against depressive symptoms in outpatients with psychosis. *J Clin Psychiatry*. 2002 Dec; 63(12): 1156-63.
- <sup>88</sup> Ballard C, Margallo-Lana M, Juszcak E, et al. **Quetiapine and rivastigmine and cognitive decline in Alzheimer's disease:** randomised double blind placebo controlled trial. *BMJ*. 2005 Apr 16;330(7496):874.  
**CONCLUSIONS:** Neither **quetiapine** nor **rivastigmine** are effective in the treatment of agitation in people with dementia in institutional care. Compared with placebo, **quetiapine** is associated with significantly greater **cognitive decline**.
- <sup>89</sup> Brodaty H, Ames D, Snowdon J, et al. A randomized placebo-controlled trial of **risperidone** for the treatment of aggression, agitation, and psychosis of dementia. *J Clin Psychiatry*. 2003 Feb; 64(2): 134-43.
- <sup>90</sup> Katz IR, Jeste DV, Mintzer JE, et al. Comparison of **risperidone** and placebo for psychosis and behavioral disturbances associated with dementia: a randomized, double-blind trial. Risperidone Study Group. *J Clin Psychiatry*. 1999 Feb; 60(2): 107-15.
- <sup>91</sup> De Deyn PP, Rabheru K, Rasmussen A, et al. A randomized trial of **risperidone**, placebo, and **haloperidol** for behavioral symptoms of dementia. *Neurology* 1999;53:946-55.
- <sup>92</sup> Fontaine CS, Hyman LS, Koch K, et al. A double-blind comparison of **olanzapine versus risperidone** in the acute treatment of dementia-related behavioral disturbances in extended care facilities. *J Clin Psychiatry*. 2003 Jun; 64(6): 726-30.
- <sup>93</sup> De Deyn PP, Katz IR, et al. Management of agitation, aggression, and psychosis associated with dementia: A pooled analysis including three randomized, placebo-controlled double-blind trials in nursing home residents treated with risperidone. *Clin Neurol Neurosurg*. 2005 May 24; [Epub ahead of print]
- Komossa K, Rummel-Kluge C, Schwarz S, et al. Risperidone versus other atypical antipsychotics for schizophrenia. *Cochrane Database Syst Rev*. 2011 Jan 19;1:CD006626. Risperidone seems to produce somewhat more extrapyramidal side effects and clearly more prolactin increase than most other SGAs. It may also differ from other compounds in efficacy and in the occurrence of other adverse effects such as weight gain, metabolic problems, cardiac effects, sedation and seizures. Nevertheless, the large proportion of participants leaving studies early and incomplete reporting of outcomes makes it difficult to draw firm conclusions.
- <sup>94</sup> Therapeutic Choices 5<sup>th</sup> Edition, 2007
- <sup>95</sup> Ontario Guidelines for the Management of Anxiety Disorders in Primary Care Fall 2000 1<sup>st</sup> Edition
- <sup>96</sup> Micromedex 2012
- <sup>97</sup> **Treatment Guidelines:** Drugs for Psychiatric Disorders. **The Medical Letter:** August 2010. (July, 2003; p. 69-76). Updated **June 2013**.
- <sup>98</sup> Kawas CH. Clinical practice. Early Alzheimer's disease. *N Engl J Med*. 2003 Sep 11; 349(11): 1056-63.
- <sup>99</sup> Ritchie K, Lovestone S. The dementias. *Lancet*. 2002 Nov 30; 360(9347): 1759-66.
- Corrada MM, Brookmeyer R, Berlau D, Paganini-Hill A, Kawas CH. Prevalence of dementia after age 90: results from the 90+ study. *Neurology*. 2008 Jul 29;71(5):337-43. Epub 2008 Jul 2. In a very large sample of participants aged 90 and older, prevalence of all-cause dementia doubled every 5 years for women but not men. The overall prevalence of all-cause dementia was higher in women (45%, 95% CI = 41.5-49.0) than men (28%, 95% CI = 21.7-34.2).
- <sup>100</sup> Doody RS. Current treatments for Alzheimer's disease: **cholinesterase inhibitors**. *J Clin Psychiatry*. 2003;64 Suppl 9:11-7. s. 2000 Nov;60(5):1095-122.
- <sup>101</sup> Cummings JL. Use of **cholinesterase inhibitors** in clinical practice: **evidence-based** recommendations. *Am J Geriatr Psychiatry*. 2003 Mar-Apr;11(2):131-45.
- <sup>102</sup> Gauthier S. Advances in the pharmacotherapy of **Alzheimer's disease**. *CMAJ*. 2002 Mar 5;166(5):616-23.
- <sup>103</sup> DeLaGarza VW. Pharmacologic treatment of **Alzheimer's disease**: an update. *Am Fam Physician*. 2003 Oct 1; 68(7): 1365-72.
- <sup>104</sup> Kindermann SS, Dolder CR, Bailey A, Katz IR, Jeste DV. Pharmacological treatment of **psychosis and agitation** in elderly patients with dementia: four decades of experience. *Drugs Aging*. 2002; 19(4): 257-76.
- <sup>105</sup> Lanctot KL, Herrmann N, Yau KK, et al. Efficacy and safety of **cholinesterase inhibitors** in Alzheimer's disease: a **meta-analysis**. *CMAJ*. 2003 Sep 16;169(6):557-64.
- <sup>106</sup> Trinh NH, Hoblyn J, et al. Efficacy of **cholinesterase inhibitors** in the treatment of neuropsychiatric symptoms and functional impairment in Alzheimer disease: a **meta-analysis**. *JAMA*. 2003 Jan 8;289(2):210-6.
- <sup>107</sup> Wilkinson DG, Passmore AP, et al. A multinational, randomised, 12-week, **comparative** study of **donepezil** and **rivastigmine** in patients with mild to moderate Alzheimer's disease. *Int J Clin Pract*. 2002 Jul-Aug;56(6):441-6.
- <sup>108</sup> AGS Clinical Practice Committee. Guidelines abstracted from the **American Academy of Neurology's Dementia Guidelines** for Early Detection, Diagnosis, and Management of Dementia. *J Am Geriatr Soc*. 2003 Jun; 51(6): 869-73.
- <sup>109</sup> U.S. Preventive Services Task Force. **Screening for dementia:** recommendation and rationale. *Ann Intern Med*. 2003 Jun 3; 138(11): 925-6. No abstract available. Summary for patients in: *Ann Intern Med*. 2003 Jun 3;138(11):160.
- <sup>110</sup> Patterson CJ, Gauthier S, Bergman H, Cohen CA, et al. The recognition, assessment and management of dementing disorders: conclusions from the **Canadian Consensus Conference on Dementia**. (CCCD) *CMAJ*. 1999 Jun 15; 160(12 Suppl): S1-15.
- <sup>111</sup> Bullock R. Cholinesterase inhibitors and **vascular dementia**: another string to their bow? *CNS Drugs*. 2004; 18(2): 79-92.
- <sup>112</sup> Department of Veterans Affairs; Drug Review March 2004 <http://www.vapbm.org/reviews/CholinestInh.pdf>
- <sup>113</sup> Cummings JL. **Alzheimer's disease**. *N Engl J Med*. 2004 Jul 1;351(1):56-67.
- <sup>114</sup> Sink KM, Holden KF, Yaffe K. Pharmacological treatment of **neuropsychiatric** symptoms of dementia: a review of the evidence. *JAMA*. 2005 Feb 2;293(5):596-608. (**InfoPOEMs:** Pharmacologic agents are minimally, if at all, effective in managing the neuropsychiatric symptoms of dementia. The atypical antipsychotics olanzapine (Zyprexa) and risperidone (Risperdal) are the most effective, but these agents may increase the risk of stroke. The decision to use any of these drugs must be made on the basis of individual circumstances. (**LOE = 1a**))
- <sup>115</sup> Desai AK, Grossberg GT. Diagnosis and treatment of Alzheimer's disease. *Neurology*. 2005 Jun 28;64(12 Suppl 3):S34-9.
- <sup>116</sup> **Clinical Handbook of Psychotropic Drugs** 13<sup>th</sup> Edition, Bechtholby-Butler K, Jeffries J. 2003
- <sup>117</sup> Bentue-Ferrer D, Tribut O, Polard E, Allain H. Clinically significant drug interactions with cholinesterase inhibitors: a guide for neurologists. *CNS Drugs*. 2003; 17(13): 947-63.
- <sup>118</sup> Pollock BG, et al. Comparison of **citalopram**, perphenazine, and placebo for the acute treatment of psychosis and behavioral disturbances in hospitalized, demented patients. *Am J Psychiatry*. 2002 Mar;159(3):460-5.
- <sup>119</sup> Nyth AL, et al. A controlled multicenter clinical study of **citalopram** and placebo in elderly depressed patients with and without concomitant dementia. *Acta Psychiatr Scand*. 1992 Aug;86(2):138-45.
- <sup>120</sup> Nyth AL, Gottfries CG. The clinical efficacy of **citalopram** in treatment of emotional disturbances in dementia disorders. A Nordic multicentre study. *Br J Psychiatry*. 1990 Dec;157:894-901.
- Seitz DP, Adunuri N, Gill SS, et al. Antidepressants for agitation and psychosis in dementia. *Cochrane Database Syst Rev*. 2011 Feb 16;2:CD008191. Currently there are relatively few studies of antidepressants for the treatment of agitation and psychosis in dementia. The SSRIs sertraline and citalopram were associated with a reduction in symptoms of agitation when compared to placebo in two studies. Both SSRIs and trazodone appear to be tolerated reasonably well when compared to placebo, typical antipsychotics and atypical antipsychotics.
- <sup>121</sup> Modell JG, Katholi CR, Modell JD, et al. Comparative **sexual side effects** of bupropion, fluoxetine, paroxetine, and sertraline. *Clin Pharmacol Ther* 1997;61(4):476-87.

- <sup>122</sup> Gonzalez M, Llorca G, Izquierdo JA, et al. J Sex Marital Ther 1997;23(3):176-94.
- <sup>123</sup> Petracca GM, Chemerinski E, Starkstein SE. A double-blind, placebo-controlled study of **fluoxetine** in depressed patients with Alzheimer's disease. Int Psychogeriatr. 2001 Jun; 13(2): 233-40.
- <sup>124</sup> Olafsson K, Jorgensen S, Jensen HV, Bille A, Arup P, Andersen J. **Fluvoxamine** in the treatment of demented elderly patients: a double-blind, placebo-controlled study. Acta Psychiatr Scand. 1992 Jun; 85(6): 453-6.
- <sup>125</sup> Katona CL, Hunter BN, Bray J. A double-blind comparison of the efficacy and safety of **paroxetine** and **imipramine** in the treatment of depression with dementia. Int J Geriatr Psychiatry. 1998 Feb; 13(2): 100-8.
- <sup>126</sup> Schatzberg AF, Kremer C, Rodrigues HE, Murphy GM Jr; Mirtazapine vs. Paroxetine Study Group. Double-blind, randomized comparison of mirtazapine and paroxetine in elderly depressed patients. Am J Geriatr Psychiatry. 2002 Sep-Oct; 10(5): 541-50.
- <sup>127</sup> Lyketsos CG, et al. Randomized, placebo-controlled, double-blind clinical trial of **sertraline** in the treatment of depression complicating Alzheimer's: initial results from the Depression in Alzheimer's Disease study. Am J Psychiatry. 2000 Oct;157(10):1686-9.
- <sup>128</sup> Lyketsos CG, DelCampo L, et al. Treating depression in Alzheimer disease: efficacy and safety of **sertraline** therapy, and the benefits of depression reduction: the DIADS. Arch Gen Psychiatry. 2003 Jul; 60(7): 737-46.
- <sup>129</sup> Mulsant BH, Pollock BG, Nebes R, et al. A twelve-week, double-blind, randomized comparison of **nortriptyline** and **paroxetine** in older depressed inpatients and outpatients. Am J Geriatr Psychiatry. 2001 Fall; 9(4): 406-14.
- <sup>130</sup> Shumaker SA, et al; **Estrogen plus progestin** & the incidence of dementia & mild cognitive impairment in postmenopausal women: Women's Health Initiative Memory Study: randomized controlled trial. JAMA. 2003 May 28; 289(20): 2651-62. (WHIMS)
- Mulnard RA, et al. **Estrogen replacement** therapy for treatment of mild to moderate Alzheimer disease: a randomized controlled trial. Alzheimer's Disease Cooperative Study. JAMA. 2000 Feb 23; 283(8): 1007-15. Erratum: JAMA 2000 Nov 22-29; 284(20):2597.
- Shao H, Breitner JCS, Whitmer RA, et al. **Hormone therapy and Alzheimer** disease dementia: new findings from the **Cache County Study**. Neurology 2012;79:1846–1852.
- <sup>131</sup> Etminan M, Gill S, Samii A. Effect of non-steroidal **anti-inflammatory** drugs on risk of Alzheimer's disease: systematic review and meta-analysis of observational studies. BMJ. 2003 Jul 19; 327(7407): 128.
- AD2000 Collaborative Group. **Aspirin 75mg/d in Alzheimer's disease** (AD2000): a randomised open-label trial. Lancet Neurol. 2007 Dec 6; [Epub ahead of print] n=310. Although aspirin is commonly used in dementia, in patients with typical AD 2 years of treatment with low-dose aspirin has no worthwhile benefit and increases the risk of serious bleeds.
- Martyn C. **Anti-inflammatory** drugs and Alzheimer's disease. BMJ. 2003 Aug 16;327(7411):353-4.
- Tabet N, Feldman H. **Ibuprofen** for Alzheimer's disease. Cochrane Database Syst Rev. 2003;(2):CD004031. (Naproxen 220 mg BID and celecoxib 200 mg BID or placebo. do not prevent AD in early results from a randomized controlled trial. **ADAPT** Research Group. Neurology. 2007 Apr 25; [Epub ahead of print] These results do not support the hypothesis that celecoxib or naproxen prevent Alzheimer dementia, at least within the early years after initiation of treatment. Masked long-term follow-up of these participants will be essential. Kang JH, Cook N, Manson J, Buring JE, Grodstein F. Low dose aspirin and cognitive function in the **Women's Health Study** cognitive cohort. BMJ. 2007 Apr 27; [Epub ahead of print] n=6377 mean 9.6yr. Long term use of low dose aspirin (100mg on alternate days) does not provide overall benefits for cognition among generally healthy women aged 65 or more.)
- ADAPT** Research Group. Cognitive Function Over Time in the Alzheimer's Disease Anti-inflammatory Prevention Trial (ADAPT): Results of a Randomized, Controlled Trial of Naproxen and Celecoxib. Arch Neurol. 2008 May 12. [Epub ahead of print] Use of naproxen or celecoxib did not improve cognitive function. There was weak evidence for a detrimental effect of naproxen.
- Arvanitakis Z, Grodstein F, Bienias JL, Schneider JA, Wilson RS, Kelly JF, Evans DA, Bennett DA. Relation of NSAIDs to incident AD, change in cognitive function, and AD pathology. Neurology. 2008 Jun 3;70(23):2219-25. These data do not support a strong relation between nonsteroidal anti-inflammatory drugs and Alzheimer disease or cognition. Consistent findings across clinical and pathologic outcomes provide additional confidence in these results.
- Price JF, Stewart MC, et al. AAA Trialists. Low dose aspirin and cognitive function in middle aged to elderly adults: randomised controlled trial. BMJ. 2008 Sep 1;337:a1198. doi: 10.1136/bmj.a1198. Low dose aspirin (100 mg daily) or placebo for five years. Low dose aspirin does not affect cognitive function in middle aged to elderly people at increased cardiovascular risk.
- Jaturapatporn D, Isaac MG, McCleery J, et al. Aspirin, steroidal and non-steroidal anti-inflammatory drugs for the treatment of Alzheimer's disease. Cochrane Database Syst Rev. 2012 Feb 15;2:CD006378. Based on the studies carried out so far, the efficacy of aspirin, steroid and NSAIDs (traditional NSAIDs and COX-2 inhibitors) is not proven. Therefore, these drugs cannot be recommended for the treatment of AD.
- <sup>132</sup> Le Bars PL, Katz MM, Berman N, et al. A placebo-controlled, double-blind, randomized trial of an extract of **Ginkgo biloba** for dementia. North American EGb Study Group. JAMA. 1997 Oct 22-29;278(16):1327-32.
- van Dongen MC, et al. The efficacy of **ginkgo** for elderly people with dementia & age-associated memory impairment: new results of a randomized trial. J Am Geriatr Soc. 2000 Oct;48(10):1183-94.
- Birks J, Grimley EV, Van Dongen M. **Ginkgo biloba** for cognitive impairment and dementia. Cochrane Database Syst Rev. 2002;(4):CD003120.
- Dekosky ST, Williamson JD, Fitzpatrick AL, Kronmal RA, Ives DG, Saxton JA, Lopez OL, Burke G, Carlson MC, Fried LP, Kuller LH, Robbins JA, Tracy RP, Woolard NF, Dunn L, Snitz BE, Nahin RL, Furberg CD; for the Ginkgo Evaluation of memory (**GEM**) Study Investigators. Ginkgo biloba for Prevention of Dementia: A Randomized Controlled Trial. JAMA. 2008 Nov 19;300(19):2253-2262. In this study, G biloba at 120 mg twice a day was **not effective in reducing either the overall incidence rate of dementia or AD incidence** in elderly individuals with normal cognition or those with MCI.
- Snitz Beth E.; O'Meara Ellen S.; Carlson Michelle C.; et al. for the Ginkgo Evaluation of Memory (**GEM**) Study Investigators. Ginkgo biloba for Preventing Cognitive Decline in Older Adults: A Randomized Trial. JAMA. 2009;302(24):2663-2670. Compared with placebo, the use of G biloba, 120 mg twice daily, did not result in less cognitive decline in older adults with normal cognition or with mild cognitive impairment.
- Geng J, Dong J, Ni H, et al. **Ginseng** for cognition. Cochrane Database of Systematic Reviews 2010, Issue 12. Art. No.: CD007769. DOI: 10.1002/14651858.CD007769.pub2. Currently, there is a lack of convincing evidence to show a cognitive enhancing effect of Panax ginseng in healthy participants and no high quality evidence about its efficacy in patients with dementia. Randomized, double-blind, placebo-controlled, parallel group trials with large sample sizes are needed to further investigate the effect of ginseng on cognition in different populations, including dementia patients.
- Vellas B, Coley N, Ousset P-J, et al, for the GuidAge Study Group. Long-term use of standardised **ginkgo biloba extract** for the prevention of Alzheimer's disease (**GuidAge**): a randomised placebo-controlled trial. Lancet Neurol 2012; online Sept 6
- <sup>133</sup> Rockwood K, Kirkland S, Hogan DB, MacKnight C, Merry H, Verreault R, Wolfson C, McDowell I. Use of lipid-lowering agents, indication bias, and the risk of dementia in community-dwelling elderly people. Arch Neurol. 2002 Feb;59(2):223-7.
- Scott HD, Laake K. **Statins** for the prevention of Alzheimer's disease. Cochrane Database Syst Rev. 2001;(4):CD003160.
- Rea TD, Breitner JC, Psaty BM, et al. **Statin** use and the risk of incident dementia: the cardiovascular health study. Arch Neurol. 2005 Jul;62(7):1047-51. CONCLUSIONS: In this cohort study, statin therapy was not associated with a decreased risk of dementia.
- Arvanitakis Z, Schneider JA, Wilson RS, et al. Statins, incident Alzheimer disease, change in cognitive function, and neuropathology. Neurology. 2008 Jan 16; [Epub ahead of print] Overall, **statins were not** related to incident Alzheimer disease (AD) or change in cognition, or continuous measures of AD pathology or infarction.
- Feldman HH, Doody RS, Kivipelto M, Sparks DL, Waters DD, Jones RW, Schwam E, Schindler R, Hey-Hadavi J, Demicco DA, Breazna A; On behalf of the **LEADe** Investigators. Randomized controlled trial of atorvastatin in mild to moderate Alzheimer disease. LEADe. Neurology. 2010 Mar 3.
- McGuinness B, O'Hare J, Craig D, et al. Statins for the treatment of dementia. Cochrane Database Syst Rev. 2010 Aug 4;8:CD007514. There is insufficient evidence to recommend statins for the treatment of dementia. Analysis from the studies available, including one large RCT, indicate statins have no benefit on the outcome measures ADAS-Cog or MMSE. We need to await full results from CLASP 2008 before we can be certain.
- Mielke MM, Zandi PP, Shao H, et al. The 32-year relationship between **cholesterol and dementia** from midlife to late life. Neurology. 2010 Nov 10.
- Sano M, Bell KL, Galasko D, et al. A randomized, double-blind, placebo-controlled trial of **simvastatin to treat Alzheimer disease**. Neurology. 2011 Aug 9;77(6):556-63. (no benefit)
- <sup>134</sup> Tabet N, Birks J, Grimley Evans J. **Vitamin E** for Alzheimer's disease. Cochrane Database Syst Rev. 2000;(4):CD002854. (Pham DQ, Plakogiannis R. **Vitamin e** supplementation in Alzheimer's disease, Parkinson's disease, tardive dyskinesia, and cataract: part 2. Ann Pharmacother. 2005 Dec;39(12):2065-71. Epub 2005 Nov 15.)
- Ronald C, Petersen, Ph.D., M.D., Ronald G. et al., for the Alzheimer's Disease Cooperative Study Group **Vitamin E** and Donepezil for the Treatment of Mild Cognitive Impairment Published at www.nejm.org April 13, 2005
- Farina N, Isaac MGEKN, Clark AR, Rusted J, Tabet N. **Vitamin E** for Alzheimer's dementia and mild cognitive impairment. Cochrane Database of Systematic Reviews 2012, Issue 11. Art. No.: CD002854. DOI: 10.1002/14651858.CD002854.pub3. No convincing evidence that vitamin E is of benefit in the treatment of AD or MCI. Future trials assessing vitamin E treatment in AD should not be restricted to alpha-tocopherol.
- <sup>135</sup> Malouf R, Areosa Sastre A. **Vitamin B12** for cognition. Cochrane Database Syst Rev. 2003;(3):CD004326.
- Aisen PS, Schneider LS, Sano M, et al. Alzheimer Disease Cooperative Study (ADCS). High-dose B vitamin supplementation and cognitive decline in Alzheimer disease: a randomized controlled trial. JAMA. 2008 Oct 15;300(15):1774-83. This regimen of high-dose B vitamin supplements does not slow cognitive decline in individuals with mild to moderate AD.

- Hooshmand B, Solomon A, Kåreholt I, et al. Homocysteine and holotranscobalamin and the risk of Alzheimer disease: A longitudinal study. *Neurology*. 2010 Oct 19;75(16):1408-14.
- <sup>136</sup> Forette F, et al. Systolic Hypertension in Europe Investigators. The prevention of dementia with antihypertensive treatment: new evidence from the Systolic Hypertension in Europe (Syst-Eur) study. *Arch Intern Med* 2002 Oct 14;162(18):2046-52.
- Peila R, et al. Reducing the risk of dementia: efficacy of long-term treatment of hypertension. *Stroke*. 2006 May;37(5):1165-70. Epub 2006 Apr 6. )
- <sup>137</sup> Adapted from: Primary Care Management & Pharmacological Management of BPSD, International Psychogeriatric Association, Module 1-8 2002. <http://www.ipa-online.org/ipaonlinev3/ipaprograms/bpsdrev/6BPSDfinal.pdf>
- <sup>138</sup> Hien le TT, Cumming RG, Cameron ID, et al. Atypical antipsychotic medications and risk of falls in residents of aged care facilities. *J Am Geriatr Soc*. 2005 Aug;53(8):1290-5.
- <sup>139</sup> Feldman HH, Ferris S, Winblad B, Sfikas N, Mancione L, He Y, Tekin S, Burns A, Cummings J, del Ser T, Inzitari D, Orgogozo JM, Sauer H, Scheltens P, Scarpini E, Herrmann N, Farlow M, Potkin S, Charles HC, Fox NC, Lane R. Effect of rivastigmine on delay to diagnosis of Alzheimer's disease from mild cognitive impairment: the InDDEx study. *Lancet Neurol*. 2007 Jun;6(6):501-12.
- <sup>140</sup> Massoud F, Belleville S, Bergman H, et al. Mild cognitive impairment and cognitive impairment, no dementia: Part B, therapy. *Alzheimers Dement* 2007;3:283- 91. Jean L, Bergeron ME, Thivierge S, Simard M. Cognitive intervention programs for individuals with mild cognitive impairment: systematic review of the literature. *Am J Geriatr Psychiatry* 2010;18:281-96.
- Petersen RC, Stevens JC, Ganguli M, Tangalos EG, Cummings JL, DeKosky ST. Practice parameter: early detection of dementia: mild cognitive impairment (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. *Neurology* 2001;56:1133-42.

#### **Additional references:**

- Acosta-Baena Natalia, Sepulveda-Falla Diego, Lopera-Gomez Carlos Mario, et al. **Pre-dementia** clinical stages in presenilin 1 E280A familial early-onset Alzheimer's disease: a retrospective cohort study, *The Lancet Neurology*, Vol10, Issue 3, Mar 2011.
- AHA-ASA**-American Heart Association/American Stroke Association. Scientific statement: **Vascular contributions to cognitive impairment and dementia**. *Stroke* 2011; DOI:10.1161/STR.0b013e3182299496. <http://stroke.ahajournals.org/content/early/2011/07/21/STR.0b013e3182299496.full.pdf+html>
- Alagiakrishnan K, Marrie T, Rolfson D, et al. Gaps in patient care practices to **prevent hospital-acquired delirium**. *Can Fam Physician*. 2009 Oct;55(10):e41-6.
- Albert MS, DeKosky ST, Dickson D, et al. The diagnosis of mild cognitive impairment due to Alzheimer's disease: recommendations from the National Institute on Aging and Alzheimer's Association workgroup. *Alzheimers Dement* 2011 April 20 (Epub ahead of print).
- Alexopoulos GS, Streim J, et al.; **Expert Consensus Panel** for Using Antipsychotic Drugs in Older Patients. Using antipsychotic agents in older patients. *J Clin Psychiatry*. 2004;65 Suppl 2:5-99;discussion 100-102;quiz 103-4.
- Allen M, Zou F, Chai HS, et al. Novel late-onset Alzheimer disease **loci variants** associate with brain gene expression. *Neurology* 2012;79:221–228.
- Almaraz AC, Driver-Dunckley ED, Woodruff BK, et al. Efficacy of rivastigmine for cognitive symptoms in **Parkinson** disease with dementia. *Neurologist*. 2009 Jul;15(4):234-7. Rivastigmine therapy for PDD is associated with significant tradeoffs in efficacy and adverse effects. Carefully monitored trials of rivastigmine may provide meaningful benefits for a minority of PDD patients.
- Amariglio RE, Townsend MK, Grodstein F, et al. **Specific Subjective Memory Complaints** in Older Persons May Indicate Poor Cognitive Function. *J Am Geriatr Soc*. 2011 Sep 15.
- Amato MP, Hakiki B, Goretti B, et al. Association of **MRI metrics** and cognitive impairment in radiologically isolated syndromes. *Neurology*. 2012 Jan 31;78(5):309-314.
- Ancelin ML, et al. Non-degenerative mild **cognitive impairment** in elderly people and use of **anticholinergic** drugs: longitudinal cohort study. *BMJ*. 2006 Feb 25;332(7539):455-9. Epub 2006 Feb 1. CONCLUSIONS: Elderly people taking anticholinergic drugs had significant deficits in cognitive functioning and were highly likely to be classified as mildly cognitively impaired, although not at increased risk for dementia. Doctors should assess current use of anticholinergic drugs in elderly people with mild cognitive impairment before considering administration of acetylcholinesterase inhibitors.
- Anderson Craig, Teo Koon, Gao Peggy, et al. and for the **ONTARGET and TRANSCEND Investigators**, **Renin-angiotensin system blockade** and cognitive function in patients at high risk of cardiovascular disease: analysis of data from the ONTARGET and TRANSCEND studies, *The Lancet Neurology*, Volume 10, Issue 1, January 2011, Pages 43-53, ISSN 1474-4422, DOI: 10.1016/S1474-4422(10)70250-7. (no clear benefits)
- Anticholinergic Cognitive Burden (ACB) scale** <http://www.indydiscoverynetwork.org/AnticholinergicCognitiveBurdenScale.html>
- Axona** (Accera) Medical Letter June 29, 2009. (Medical food containing medium-chain triglycerides –insufficient evidence.
- Balasa M., Gelpi E., Antonell A., et al. and For the Neurological Tissue Bank/University of Barcelona/Hospital Clínic NTB/UB/HC Collaborative Group. Clinical features and APOE genotype of pathologically proven **early-onset Alzheimer** disease *Neurology* May 17, 2011 76:1720-1725. (1/3 present with atypical features)
- Baldi I et al. Neurobehavioral effects of long-term exposure to **pesticides**: Results from the 4-year follow-up of the PHYTONER Study. *Occup Environ Med* 2010 Nov 22
- Ball J et al. **Mild cognitive impairment** in high-risk patients with **chronic atrial fibrillation**: A forgotten component of clinical management? *Heart* 2013 Jan 12.
- Ballard C, Waite J. The effectiveness of **atypical antipsychotics** for the treatment of **aggression and psychosis in Alzheimer's disease**. *Cochrane Database Syst Rev*. 2006 Jan 25;(1):CD003476.
- Ballard C, Hanney ML, Theodoulou M, et al; the **DART-AD** investigators. The dementia antipsychotic withdrawal trial (DART-AD): long-term follow-up of a randomised placebo-controlled trial. *Lancet Neurol*. 2009 Jan 8. [Epub ahead of print] There is an increased long-term risk of mortality in patients with AD who are prescribed antipsychotic medication; these results further highlight the need to seek less harmful alternatives for the long-term treatment of neuropsychiatric symptoms in these patients.
- Ballard C, Gauthier S, Corbett A, et al. **Alzheimer's** disease. *Lancet*. 2011 Mar 19;377(9770):1019-31.
- Ballard C, Corbett A. Management of **neuropsychiatric symptoms** in people with dementia. *CNS Drugs*. 2010 Sep 1;24(9):729-39. doi:10.2165/11319240-000000000-00000.
- Banerjee S, Hellier J, Dewey M, et al. **Sertraline** (150mg/day) or **mirtazapine** (45mg/day) for depression in dementia (**HTA-SADD**): a randomised, multicentre, double-blind, placebo-controlled trial. *Lancet* 2011; July 18.
- Barak Y, Plopsi I, Tadger S, et al. **Escitalopram** versus **risperidone** for the treatment of behavioral and psychotic symptoms associated with Alzheimer's disease: a randomized double-blind pilot study. *Int Psychogeriatr*. 2011 Apr 15:1-5.
- Barnes DE, Covinsky KE, Whitmer RA, Kuller LH, Lopez OL, Yaffe K. Predicting risk of dementia in older adults. The **late-life dementia risk index**. *Neurology*. 2009 May 13. [Epub ahead of print]
- Barnes Deborah E, Yaffe Kristine, The projected effect of **risk factor reduction** on Alzheimer's disease prevalence, *The Lancet Neurology*, online 19 July 2011
- Barnes DE, Yaffe K, Byers AL, et al. **Midlife vs Late-Life Depressive Symptoms** and Risk of Dementia: Differential Effects for Alzheimer Disease and Vascular Dementia. *Arch Gen Psychiatry*. 2012 May;69(5):493-8.
- Barnes DE, Santos-Modesitt W, Poelke G, et al. The **Mental Activity and eXercise (MAX)** Trial: a randomized controlled trial to enhance cognitive function in older adults [online April 1, 2013]. *JAMA Intern Med*.
- Barthel H, Gertz HJ, Dresel S, et al. for the **Florbetaben** Study Group. Cerebral amyloid-β PET with florbetaben ((18)F) in patients with Alzheimer's disease and healthy controls: a multicentre phase 2 diagnostic study. *Lancet Neurol*. 2011 Apr 8.
- Bartorelli L, et al.; Upgrade Study Group. Effects of **switching** from an AChE inhibitor to a dual AChE-BuChE inhibitor in patients with Alzheimer's disease. *Curr Med Res Opin*. 2005 Nov;21(11):1809-18.
- Barzilay Joshua I.; Gao Peggy; O'Donnell Martin; et al. for the ONTARGET and TRANSCEND Investigators. **Albuminuria and Decline in Cognitive Function**: The ONTARGET/TRANSCEND Studies. *Arch Intern Med*. 2011;171(2):142-150.
- Bateman RJ, Xiong C, Benzinger TL, et al; the Dominantly Inherited Alzheimer Network. Clinical and **Biomarker** Changes in Dominantly Inherited Alzheimer's Disease. *N Engl J Med*. 2012 Jul 11.
- Bayer-Carter JL, Green PS, Montine TJ, et al. **Diet intervention** and cerebrospinal fluid biomarkers in amnesic mild cognitive impairment. *Arch Neurol*. 2011 Jun;68(6):743-52.
- Beckett LT, Webb RL, Niedowicz DM, et al. Postmortem **Pittsburgh Compound B (PiB)** Binding Increases with Alzheimer's Disease Progression. *J Alzheimers Dis*. 2012 Jul 5.
- Belle SH, et al. Resources for Enhancing Alzheimer's Caregiver Health (**REACH**) II Investigators. Enhancing the quality of life of dementia caregivers from different **ethnic or racial groups**: a randomized, controlled trial. *Ann Intern Med*. 2006 Nov 21;145(10):727-38.



Bergh S, Selbæk G, Engedal K. **Discontinuation of antidepressants** in people with dementia and neuropsychiatric symptoms (DESEP study): double blind, randomised, parallel group, placebo controlled trial. *BMJ*. 2012 Mar 9;344:e1566.

Bergman J, Dworkatzky T, Brettholz I, Lerner V. Beneficial effect of **donepezil** in the treatment of elderly patients with **tardive movement** disorders. *J Clin Psychiatry*. 2005 Jan;66(1):107-10.

Bergeron N, Dubois MJ, Dumont M, Dial S, Skrobik Y. Intensive care **delirium** screening checklist: evaluation of a new **screening tool**. *Intensive Care Med* 2001;27:859-64.

Bernick C, Cummings J, Raman R, et al. **Age and Rate of Cognitive Decline** in Alzheimer Disease: Implications for Clinical Trials. *Arch Neurol*. 2012 Mar 19.

Berthier ML, et al. A randomized, placebo-controlled study of **donepezil** in **poststroke aphasia**. *Neurology*. 2006 Nov 14;67(9):1687-9. n=16

Bettens K, Slegers K, Van Broeckhoven C. **Genetic insights** in Alzheimer's disease. *Lancet Neurol*. 2013 Jan;12(1):92-104.

Billioti de Gage S, Bégaud B, Bazin F, Verdoux H, et al. **Benzodiazepine use** and risk of dementia: prospective population based study. *BMJ*. 2012 Sep 27;345:e6231.

Birks J, Harvey RJ. **Donepezil** for dementia due to Alzheimer's disease. *Cochrane Database Syst Rev* 2006; 1: CD001190.

Birks J, Grimley Evans J, Iakovidou V, Tsolaki M, Holt FE. **Rivastigmine** for Alzheimer's disease. *Cochrane Database Syst Rev*. 2009 Apr 15;(2):CD001191.

Black SE, Doody R, Li H, et al. **Donepezil** preserves cognition and global function in patients with **severe Alzheimer disease**. *Neurology*. 2007 Jul 31;69(5):459-69.

Blennow K, Zetterberg H, Rinne JO, et al. Effect of Immunotherapy With **Bapineuzumab** on Cerebrospinal Fluid Biomarker Levels in Patients With Mild to Moderate Alzheimer Disease. *Arch Neurol*. 2012 Apr 2.

Boxer AL, Knopman DS, Kaufer DI, et al. **Memantine** in patients with **frontotemporal lobar degeneration**: a multicentre, randomised, double-blind, placebo-controlled trial. *Lancet Neurol*. 2012 Dec 28.

Boyle PA, Buchman AS, Wilson RS, et al. Effect of **purpose in life** on the relation between Alzheimer disease pathologic changes on cognitive function in advanced age. *Arch Gen Psychiatry*. 2012 May;69(5):499-504.

Breen DA, Breen DP, Moore JW, Breen PA, O'Neill D. **Driving and dementia**. *BMJ*. 2007 Jun 30;334(7608):1365-9.

Breitbart W, Alici Y. Agitation and **delirium** at the end of life: "We couldn't manage him". *JAMA*. 2008 Dec 24;300(24):2898-910, E1.

Breitbart W, et al. A double-blind trial of **haloperidol**, chlorpromazine, and lorazepam in the treatment of **delirium** in hospitalized AIDS patients. *Am J Psychiatry*. 1996 Feb;153(2):231-7.

Briesacher BA et al. **Antipsychotic use among nursing home residents**. *JAMA* 2013 Feb 6; 309:440.

Brodaty H, Ames D, Snowden J, et al. **Risperidone** for psychosis of Alzheimer's disease and mixed dementia: results of a double-blind, placebo-controlled trial. *Int J Geriatr Psychiatry*. 2005 Dec;20(12):1153-7.

Brodaty H, Arasaratnam C. Meta-analysis of **nonpharmacological interventions** for neuropsychiatric symptoms of dementia. *Am J Psychiatry*. 2012 Sep 1;169(9):946-53.

Brown Jeremy, Pengas George. Self administered cognitive **screening test (TYM)** for detection of Alzheimer's disease: cross sectional study. *BMJ* 2009;338:b2030, doi: 10.1136/bmj.b2030 (Published 9 June 2009) <http://www.bmj.com/cgi/data/bmj.b2030/DC1/1>

Buchhave P, Minthon L, Zetterberg H, et al. **Cerebrospinal Fluid Levels of  $\beta$ -Amyloid 1-42**, but Not of Tau, Are Fully Changed Already 5 to 10 Years Before the Onset of Alzheimer Dementia. *Arch Gen Psychiatry*. 2012 Jan;69(1):98-106.

Buchman AS, Boyle PA, Yu L, Shah RC, Wilson RS, Bennett DA. Total **daily physical activity** and the risk of AD and cognitive decline in older adults. *Neurology* 2012;78: 1323-1329.

Bullain SS, Corrada MM, Shah BA, et al. Poor **Physical Performance** and Dementia in the Oldest Old: The **90+ Study**. *Arch Neurol*. 2012 Oct 22:1-7.

Burns A, Bernabei R, Bullock R, et al. Safety and efficacy of **galantamine** (Reminyl) in severe Alzheimer's disease (the SERAD study): a randomised, placebo-controlled, double-blind trial. *Lancet Neurol*. 2008 Nov 28.

Galantamine can be started and used safely in elderly patients with severe AD. Galantamine improved cognitive function but failed to significantly improve the co-primary parameter of overall activities of daily living.

Burns A, Iliffe S. **Dementia**. *BMJ*. 2009 Feb 5;338:b75. doi: 10.1136/bmj.b75.

Burns A, Iliffe S. **Alzheimer's disease**. *BMJ*. 2009 Feb 5;338:b158. doi: 10.1136/bmj.b158.

Burrell JR, Hornberger M, Carpenter RH, et al. **Saccadic abnormalities** in frontotemporal dementia. *Neurology*. 2012 Jun 5;78(23):1816-23.

Callahan CM, et al. Effectiveness of **collaborative care** for older adults with Alzheimer disease in primary care: a randomized controlled trial. *JAMA*. 2006 May 10;295(18):2148-57.

Campbell NL, Boustani MA, Lane KA, et al. Use of **anticholinergics** and the risk of **cognitive impairment** in an African American population. *Neurology*. 2010 Jul 13;75(2):152-9.

**Canadian Coalition for Seniors' Mental Health (CCSMH)** National Guidelines for **Delirium & Depression** Mental Health 2006: <http://www.ccsmh.ca/en/default.cfm> <http://www.ccsmh.ca/pdf/final%20supplement.pdf>

Canessa N, Ferini-Strambi L. **Sleep-disordered breathing** and cognitive decline in older adults. *JAMA*. 2011 Aug 10;306(6):654-5.

Cardarelli R, Kertesz A, Knebl JA. **Frontotemporal dementia**: a review for primary care physicians. *Am Fam Physician*. 2010 Dec 1;82(11):1372-7.

Cardiovascular and Cerebrovascular Events in the Randomized, Controlled **Alzheimer's Disease Anti-Inflammatory Prevention Trial (ADAPT)**. *PLoS Clin Trials*. 2006 Nov 17;1(7):e33 [Epub ahead of print] For celecoxib,

ADAPT data do not show the same level of risk as those of the APC trial. The data for **naproxen**, although not definitive, are suggestive of increased cardiovascular and cerebrovascular risk. (Nissen SE. ADAPT: The Wrong Way to Stop a Clinical Trial. *PLoS Clin Trials*. 2006 Nov 17;1(7):e35 [Epub ahead of print])

Carson S, McDonagh MS, Peterson K. A systematic review of the efficacy and safety of atypical antipsychotics in patients with psychological and behavioral symptoms of dementia. *J Am Geriatr Soc*. 2006 Feb;54(2):354-61.

Carrière I, Fournier-Reglat A, Dartigues JF, et al. Drugs with **anticholinergic** properties, cognitive decline, and dementia in an elderly general population: the 3-city study. *Arch Intern Med*. 2009 Jul 27;169(14):1317-24.

Caselli RJ, Dueck AC, Osborne D, et al. Longitudinal modeling of age-related memory decline and the **APOE epsilon4** effect. *N Engl J Med*. 2009 Jul 16;361(3):255-63.

Caselli RJ, Dueck AC, Locke DE, et al. Cerebrovascular risk factors and preclinical memory decline in healthy **APOE {varepsilon}4 homozygotes**. *Neurology*. 2011 Mar 22;76(12):1078-84.

Chan KY, Wang W, Wu JJ, et al; Global Health Epidemiology Reference Group (GHERG). Epidemiology of Alzheimer's disease and other forms of **dementia in China**, 1990-2010: a systematic review and analysis. *Lancet*. 2013 Jun 8;381(9882):2016-23.

Chen Yong; Briesacher Becky A.; Field Terry S.; et al. Unexplained Variation Across US Nursing Homes in **Antipsychotic Prescribing Rates**. *Arch Intern Med*. 2010;170(1):89-95.

Chertkow H. **Diagnosis and treatment of dementia: introduction**. Introducing a series based on the **Third Canadian Consensus** Conference on the Diagnosis and Treatment of Dementia. (CCCDTD3) *CMAJ*. 2008 Jan 29;178(3):316-21.

Chertkow H, Massoud F, Nasreddine Z, et al. Diagnosis and treatment of dementia: 3. **Mild cognitive impairment and cognitive impairment without dementia**. *CMAJ*. 2008 May 6;178(10):1273-85.

Chi NF, Chien LN, Ku HL, et al. Alzheimer disease and **risk of stroke**: A population-based cohort study. *Neurology*. 2013 Feb 19;80(8):705-711.

Child A, Clarke A, Fox C, Maidment I. A **pharmacy led program** to review **anti-psychotic prescribing for people with dementia**. *BMC Psychiatry*. 2012 Sep 25;12:155.

Clark Christopher M., Schneider Julie A., Bedell Barry J., et al., for the AV45-A07 Study Group. Use of **Florbetapir-PET for Imaging  $\beta$ -Amyloid Pathology**. *JAMA*. 2011;305(3):275-283.doi:10.1001/jama.2010.2008

Clark CM, Pontecorvo MJ, Beach TG, et al; for the AV-45-A16 Study Group. **Cerebral PET with florbetapir** compared with neuropathology at autopsy for detection of neuritic amyloid- $\beta$  plaques: a prospective cohort study. *Lancet Neurol*. 2012 Jun 27.

Clegg A, Young JB. Which medications to avoid in people at risk of delirium: a systematic review. *Age Ageing*. 2011 Jan;40(1):23-9. (opiates and benzos)

Cohen-Bittan J, Boddaert J, Guettrot-Imbert G, et al. **Atypical dementia**. *Lancet*. 2010 Aug 21;376(9741):656.

Cooper C, Selwood A, Blanchard M, Walker Z, Blizard R, Livingston G. **Abuse of people** with dementia by family carers: representative cross sectional survey. *BMJ*. 2009 Jan 22;338:b155. doi: 10.1136/bmj.b155.

Cooper C, Katona C, Lyketos K, et al. A Systematic Review of Treatments for **Refractory Depression in Older People**. *Am J Psychiatry*. 2011 Mar 31.

da Silva J, Gonçalves-Pereira M, Xavier M, Mukaetova-Ladinska EB. **Affective disorders (depression, bipolar) and risk of developing dementia**: systematic review. *Br J Psychiatry*. 2013 Mar;202:177-86.

Dangour AD et al. Effect of 2-y n-3 long-chain **polyunsaturated fatty acid supplementation** on cognitive function in older people: A randomized, double-blind, controlled trial. *Am J Clin Nutr* 2010 Apr 21.

Dartigues JF, Féart C. **Risk factors** for Alzheimer disease: Aging beyond age? *Neurology*. 2011 Jul 19;77(3):206-7.

Davies NM, Kehoe PG, Ben-Shlomo T, Martin RM. Associations of anti-hypertensive treatments (**ARBs**) with **Alzheimer's disease**, vascular dementia, and other dementias. *J Alzheimer's Dis* 2011; 26:699-708.

Daviglius ML, Plassman BL, Pirzada A, et al. **Risk Factors and Preventive Interventions** for Alzheimer Disease: State of the Science. *Arch Neurol*. 2011 May 9.

De Deyn P, Jeste DV, Swanink R, Kostic D, Breder C, Carson WH, Iwamoto T. **Aripiprazole** for the treatment of psychosis in patients with Alzheimer's disease: a randomized, placebo-controlled study. *J Clin Psychopharmacol*. 2005 Oct;25(5):463-7.

De Deyn PP, Drenth AF, Kremer BP, Oude Voshaar RC, Van Dam D. **Aripiprazole** in the treatment of Alzheimer's disease. *Expert Opin Pharmacother*. 2013 Jan 28.

De Meyer Geert; Shapiro Fred; Vanderstichele Hugo; et al.; for the Alzheimer's Disease Neuroimaging Initiative. Diagnosis-Independent Alzheimer **Disease Biomarker** Signature in Cognitively Normal Elderly People. *Arch Neurol*. 2010;67(8):949-956.

Declercq T, Petrovic M, Azermi M, Vander Stichele R, De Sutter AIM, van Driel ML, Christiaens T. **Withdrawal versus continuation of chronic antipsychotic drugs for behavioural and psychological symptoms in older people with dementia**. *Cochrane Database of Systematic Reviews* 2013, Issue 3. Art. No.: CD007726. DOI: 10.1002/14651858.CD007726.pub2. Our findings suggest that many older people with Alzheimer's dementia and

NPS can be withdrawn from chronic antipsychotic medication without detrimental effects on their behaviour. It remains uncertain whether withdrawal is beneficial for cognition or psychomotor status, but the results of this review suggest that discontinuation programmes could be incorporated into routine practice. However, two studies of people whose agitation or psychosis had previously responded well to antipsychotic treatment found an increased risk of relapse or shorter time to relapse after discontinuation. Two other studies suggest that people with more severe NPS at baseline could benefit from continuing their antipsychotic medication. In these people, withdrawal might not be recommended.

Defina LF, Willis BL, Radford NB, et al. The association between **midlife cardiorespiratory fitness** levels and later-life dementia: a cohort study. *Ann Intern Med.* 2013 Feb 5;158(3):162-8.

Dekosky ST, Williamson JD, Fitzpatrick AL, et al.; for the Ginkgo Evaluation of Memory (GEM) Study Investigators. Ginkgo biloba for Prevention of Dementia: A Randomized Controlled Trial. *JAMA.* 2008 Nov 19;300(19):2253-2262. (n=3,069 6.1yrs) In this study, G biloba at 120 mg twice a day was not effective in reducing either the overall incidence rate of dementia or AD incidence in elderly individuals with normal cognition or those with MCI.

Delbanco T. A 76-Year-Old Woman With **Delirium Following Surgery**. *JAMA.* 2012 Jun 6:1-2.

Deramecourt V, Slade JY, Oakley AE, et al. **Staging and natural history of cerebrovascular pathology** in dementia. *Neurology* 2012;78:1043–1050.

Derby CA, Burns LC, Wang C, et al. **Screening for predementia AD**: time-dependent operating characteristics of episodic memory tests. *Neurology* 2013;80:1307–1314.

Desideri G, Kwik-Urbe C, Grassi D, et al. Benefits in cognitive function, blood pressure, and insulin resistance through **cocoa flavanol consumption** in elderly subjects with mild cognitive impairment: The Cocoa, Cognition, and Aging (CoCoA) study. *Hypertension* 2012.

Devanand DP, Schupf N, Stern Y, et al. Plasma A $\beta$  and **PET PiB binding** are inversely related in mild cognitive impairment. *Neurology.* 2011 Jul 12;77(2):125-31.

Devanand DP, Pelton GH, Cunqueiro K, Sackeim HA, Marder K. A 6-month, randomized, double-blind, placebo-controlled pilot **discontinuation trial following response to haloperidol** treatment of psychosis and agitation In Alzheimer's disease. *Int J Geriatr Psychiatry.* 2011 Sep;26(9):937-43.

Devanand DP et al. **Relapse risk after discontinuation of risperidone** in Alzheimer's disease. *N Engl J Med* 2012 Oct 18; 367:1497.

Devlin JW, Roberts RJ, Fong JJ, et al. Efficacy and safety of **quetiapine** in critically ill patients with **delirium**: a prospective, multicenter, randomized, double-blind, placebo-controlled pilot study. *Crit Care Med.* 2010 Feb;38(2):419-27. In ICU patients with delirium, the addition of scheduled quetiapine to as-needed haloperidol results in faster resolution of delirium, decreased time spent in delirium, and less agitation. This study was too small to detect significant differences in adverse events, if they exist. (LOE = 1b)

Devore EE, Grodstein F, van Rooij FJ, et al. **Dietary antioxidants** and long-term risk of dementia. *Arch Neurol.* 2010 Jul;67(7):819-25.

Devore EE, Kang JH, Breteler MM, Grodstein F. **Dietary intakes of berries and flavonoids** in relation to cognitive decline. *Ann Neurol.* 2012 Apr 26.

Dickerson BC, Stoub TR, Shah RC, et al. **Alzheimer-signature MRI biomarker** predicts AD dementia in cognitively normal adults. *Neurology.* 2011 Apr 19;76(16):1395-402.

Dickerson BC, Wolk DA. **MRI cortical thickness biomarker** predicts AD-like CSF and cognitive decline in normal adults. *Neurology* 2012;78:84–90.

Dichgans M, Markus HS, et al. Donepezil in patients with subcortical vascular cognitive impairment: a randomised double-blind trial in CADASIL. *Lancet Neurol.* 2008 Feb 22; [Epub ahead of print]

Donepezil had no effect on the primary endpoint, the V-ADAS-cog score in CADASIL patients with cognitive impairment. Improvements were noted on several measures of executive function, but the clinical relevance of these findings is not clear.

Dhillon S. Spotlight on **rivastigmine transdermal patch**: in dementia of the Alzheimer's type. *Drugs Aging.* 2011 Nov 1;28(11):927-30.

Dobbs AR. Accuracy of the **DriveABLE cognitive assessment** to determine cognitive fitness to drive. *Can Fam Physician.* 2013 Mar;59(3):e156-61.

Dodge HH, Zitzelberger T, Oken BS, et al. A randomized placebo-controlled trial of ginkgo biloba for the prevention of cognitive decline. *Neurology.* 2008 Feb 27; [Epub ahead of print] n=118 42 month In unadjusted analyses, **ginkgo biloba** extract (GBE) neither altered the risk of progression from normal to Clinical Dementia Rating (CDR) = 0.5, nor protected against a decline in memory function. Secondary analysis taking into account medication adherence showed a protective effect of GBE on the progression to CDR = 0.5 and memory decline.

Dodel R, Rominger A, et al. **Intravenous immunoglobulin** for treatment of mild-to-moderate Alzheimers Disease: a phase 2, randomised, double-blind, placebo-controlled dose-finding trial. *Lancet Neurol* 2013; online Jan 31.

Dodge HH, Mattek NC, Austin D, et al. **In-home walking speeds** and variability trajectories associated with mild cognitive impairment. *Neurology.* 2012 Jun12;78(24):1946-52.

Dolder Christian R, Davis Lauren Nicole, McKinsey Jonathan. Use of **Psychostimulants in Patients with Dementia** . Ahead of Print on 1 Oct2010, DOI 10.1345/aph.1P341.

Ann Pharmacother ;44:1624-1632.

Doraiswamy PM, Sperling RA, Coleman RE, et al; For the AV45-A11 Study Group. Amyloid- $\beta$  assessed by **florbetapir F 18 PET** and 18-month cognitive decline: A multicenter study. *Neurology.* 2012 Jul 11.

Dorothee G, Botlaender M, Moukari E, et al. Distinct **Patterns of Anti-amyloid- $\beta$  Antibodies** in Typical and Atypical Alzheimer Disease Distinct Patterns of Anti-A $\beta$  Antibodies and AD. *Arch Neurol.* 2012 Jun18:1-5.

Dorsey E, Ray; Rabbani Atouq; Gallagher Sarah A.; et al. Impact of **FDA Black Box Advisory** on Antipsychotic Medication Use. *Arch Intern Med.* 2010;170(1):96-103.

Driver JA, Beiser A, Au R, Kreger BE, Splansky GL, Kurth T, et al. **Inverse association between cancer and Alzheimer's disease**: results from the Framingham Heart Study. *BMJ* 2012;344:e1442.

**Drugs for Cognitive Loss and Dementia**. Treatment Guidelines from the Medical Letter. Feb 2007 & revised **Mar 2010**.

Dubois B, Feldman HH, Jacova C, Dekosky ST, Barberger-Gateau P, Cummings J, Delacourte A, Galasko D, Gauthier S, Jicha G, Meguro K, O'brien J, Pasquier F, Robert P, Rossor M, Salloway S, Stern Y, Visser PJ, Scheltens P.

Research criteria for the **diagnosis of Alzheimer's disease**: revising the NINCDS-ADRDA criteria. *Lancet Neurol.* 2007 Aug;6(8):734-46. These new criteria are centred on a clinical core of early and significant episodic memory impairment. They stipulate that there must also be at least one or more abnormal biomarkers among structural neuroimaging with MRI, molecular neuroimaging with PET, and cerebrospinal fluid analysis of amyloid beta or tau proteins.

Dubois B, Feldman HH, Jacova C, Cummings JL, Dekosky ST, et al. Revising the **definition of Alzheimer's disease**: a new lexicon. *Lancet Neurol.* 2010 Oct 8.

Dubois B, Tolosa E, Katzschlager R, et al. **Donepezil in Parkinson's disease dementia**: A randomized, double-blind efficacy and safety study. *Mov Disord.* 2012 Sep 1;27(10):1230-8.

Ehlenbach William J.; Hough Catherine L.; Crane Paul K.; et al. Association Between Acute Care and Critical Illness **Hospitalization and Cognitive Function** in Older Adults. *JAMA.* 2010;303(8):763-770.

Ely EW, Margolin R, Francis J, May L, Truman B, Dittus R, et al. Evaluation of **delirium** in critically ill patients: validation of the confusion assessment method for the Intensive Care Unit (**CAM-ICU**). *Crit Care Med* 2001;29:1370-9.

Emre M, Tsolaki M, Bonuccelli U et al; 11018 Study Investigators. **Memantine** for patients with **Parkinson's disease dementia** or dementia with **Lewy bodies**: a randomised, double-blind, placebo-controlled trial. *Lancet Neurol.* 2010 Oct;9(10):969-77.

Espeland MA, Tindle HA, Bushnell CA, et al. for the Women's Health Initiative Memory Study. Brain Volumes, Cognitive Impairment, and **Conjugated Equine Estrogens**. *J Gerontol A Biol Sci Med Sci.* 2009 Sep 3.

Etgen Thorleif; Sander Dirk; Huntgeburth Ulrich; et al. **Physical Activity** and Incident Cognitive Impairment in Elderly Persons: The INVADE Study. *Arch Intern Med.* 2010;170(2):186-193.

Ewers M, Insel PS, Stern Y, Weiner MW, for the Alzheimer's Disease Neuroimaging Initiative (ADNI). Cognitive reserve associated with **FDG-PET in preclinical Alzheimer** disease. *Neurology* 2013;80:1194–1201.

Farlow M, Salloway S, Tariot P, et al. Effectiveness & tolerability of **high-dose (23 mg/d)** versus standard-dose (10 mg/d) **donepezil** in moderate to severe Alzheimer's disease: 24-week, randomized, double-blind study. *Clin Ther.* 2010Jul;32(7):1234-1251.

FDA Aug/11 Antidepressant **citalopram** (*Celexa*, Forest Laboratories) should not be used in doses higher than 40 mg per day because of concerns that it can cause potentially fatal changes in heart rhythm (eg.  $\uparrow$  QT )

FDA Apr/12 approved **Amyvid (florbetapir F 18 injection)** which binds to beta-amyloid plaques in patients' brains, an active diagnostic for detection of the tell-tale sign of Alzheimer's disease.

Féart C, Samieri C, Rondeau V, Amieva H, Portet F, Dartigues JF, Scarmeas N, Barberger-Gateau P. Adherence to a **Mediterranean diet**, cognitive decline, and risk of dementia. *JAMA.* 2009 Aug 12;302(6):638-48.

Feldman HH, Jacova C, Robillard A, et al. **Diagnosis and treatment of dementia**: 2. Diagnosis. *CMAJ.* 2008 Mar 25;178(7):825-36.

Ferrara N, Corbi G, Capuano A, Filippelli A, Rossi F. **Memantine-induced hepatitis** with cholestasis in a very elderly patient. *Ann Intern Med.* 2008 Apr 15;148(8):631-2.

Ferri CP, Prince M, Brayne C, Brodaty H, et al.; Alzheimer's Disease International. **Global prevalence of dementia**: a Delphi consensus study. *Lancet.* 2006 Dec 17;366(9503):2112-7.

Fialova D, et al. R; AdHOC Project Research Group. Potentially **inappropriate medication** use among elderly home care patients in Europe. *JAMA.* 2005 Mar 16;293(11):1348-58.

Fillit HM, Doody RS, Binaso K, et al. Recommendations for **best practices** in the treatment of Alzheimer's disease in managed care. *Am J Geriatr Pharmacother.* 2006;4 Suppl A:S9-S24; quiz S25-S28.

Flaherty JH, Gonzales JP, Dong B. **Antipsychotics in the treatment of delirium** in older hospitalized adults: a systematic review. *J Am Geriatr Soc.* 2011 Nov;59 Suppl 2:S269-76.

Fleisher AS, Chen K, et al. Using Positron Emission Tomography and **Florbetapir F 18** to Image Cortical Amyloid in Patients With Mild Cognitive Impairment or Dementia Due to Alzheimer Disease. *Arch Neurol*. 2011 Jul 11.

Fleisher AS, Truran D, Mai JT, et al. For the Alzheimer's Disease Cooperative Study. Chronic **divalproex** sodium use and brain atrophy in Alzheimer disease. *Neurology*. 2011 Sep 27;77(13):1263-1271.

Fleisher AS, Chen K, et al. **Florbetapir PET analysis** of amyloid- $\beta$  deposition in the presenilin 1 E280A autosomal dominant Alzheimers disease kindred: a cross-sectional study. *Lancet Neurol* 2012; online Nov 6.

Fong TG et al. **Delirium accelerates** cognitive decline in Alzheimer disease. *Neurology* 2009 May 5; 72:1570.

Fong Tamara G.; Jones Richard N.; Rudolph James L.; et al. Development and Validation of a Brief **Cognitive Assessment Tool: The Sweet 16**. *Arch Intern Med*. 2010;0(2010):archinternmed.2010.423. <http://hospitalelderlifeprogram.org>

Fong TG, Jones RN, Marcantonio ER, et al. **Adverse outcomes after hospitalization and delirium** in persons with Alzheimer disease. *Ann Intern Med*. 2012 Jun 19;156(12):848-56.

Forlenza OV, Diniz BS, Radanovic M, et al. Disease-modifying properties of long-term **lithium treatment for amnesic mild cognitive impairment**: randomised controlled trial. *Br J Psychiatry*. 2011 May;198:351-6.

Fossey J, et al. Effect of enhanced **psychosocial care** on antipsychotic use in nursing home residents with severe dementia: cluster randomised trial. *BMJ*. 2006 Apr 1;332(7544):756-61. Epub 2006 Mar 16. Erratum in: *BMJ*. 2006 Apr 1;332(7544):61.

Fox C, Richardson K, Maidment ID, et al. **Anticholinergic Medication Use** and Cognitive Impairment in the Older Population: The Medical Research Council Cognitive Function and Ageing Study. *J Am Geriatr Soc*. 2011 Jun 24

Frank Christopher, Feldman Sid, Schulz Mary. Resources for people with dementia: The Alzheimer Society and beyond (**First Link**). *Can Fam Physician* December 2011 57: 1387-1391.

Frisoni GB. **PET and (18)F ligands** in the diagnosis of Alzheimer's disease. *Lancet Neurol*. 2011 Apr 8.

Fuchs A, Wiese B, Altiner A, Wollny A, Pentzek M. Cued recall and other cognitive tasks to facilitate dementia recognition in primary care (**VAT-Visual Association Test**). *J Am Geriatr Soc*. 2012 Jan;60(1):130-5.

Galasko DR, Peskind E, Clark CM, et al. the Alzheimer's Disease Cooperative Study. **Antioxidants** for Alzheimer Disease: A Randomized Clinical Trial With Cerebrospinal Fluid Biomarker Measures. *Arch Neurol*. 2012 Mar 19.

Gallacher J, Ilubaera V, Ben-Shlomo Y, et al. **Auditory threshold**, phonologic demand, and incident dementia. *Neurology*. 2012 Oct 9;79(15):1583-90.

Galvin JE, Roe CM, Powlishta KK, Coats MA, Muich SJ, Grant E, Miller JP, Storandt M, Morris JC. The **AD8**: a brief informant **interview to detect dementia**. *Neurology*. 2005 Aug 23;65(4):559-64.

Ganguli M, Snitz BE, Saxton JA, et al. Outcomes of **mild cognitive impairment** by definition: a population study. *Arch Neurol*. 2011 Jun;68(6):761-7.

Gardner DM, Baldessarini RJ, Waraich P. Modern antipsychotic drugs: a critical overview. *CMAJ*. 2005 Jun 21;172(13):1703-11.

Gauthier S, et al. International Psychogeriatric Association Expert Conference on mild cognitive impairment. **Mild cognitive impairment**. *Lancet*. 2006 Apr 15;367(9518):1262-70.

Gauthier S, Herrmann N, Ferreri F, Agboku C. Use of **memantine** to treat Alzheimer's disease. *CMAJ*. 2006 Aug 29;175(5):501-2.

Gauthier S, et al. EXTEND Investigators. A large, naturalistic, **community-based study of rivastigmine** in mild-to-moderate AD: the **EXTEND** Study. *Curr Med Res Opin*. 2006 Nov;22(11):2251-65.

Gauthier S, Patterson C, Chertkow H, et al. Soucy JP. Recommendations of the **4th Canadian Consensus Conference on the Diagnosis and Treatment of Dementia (CCCDTD4)**. *Can Geriatr J*. 2012 Dec;15(4):120-6.

Gill Sudeep S; et al. **Syncope** and Its Consequences in Patients With Dementia Receiving Cholinesterase Inhibitors: A Population-Based Cohort Study *Arch Intern Med*. 2009;169(9):867-873.

Gitlin Laura N.; Winter Laraine; et al. A **Biobehavioral Home-Based Intervention** and the Well-being of Patients With Dementia and Their Caregivers: The **COPE** Randomized Trial. *JAMA*. 2010;304(9):983-991.

Gitlin LN, Kales HC, Lyketsos CG. **Nonpharmacologic management of behavioural symptoms in dementia**. *JAMA*. 2012 Nov 21;308(19):2020-9.

Givens Jane L.; Jones Richard N.; Shaffer Michele L.; et al. Survival and Comfort After **Treatment of Pneumonia** in Advanced Dementia. *Arch Intern Med*. 2010;170(13):1102-1107.

Godin O, Tzourio C, Maillard P, et al. **Antihypertensive Treatment** and Change in Blood Pressure Are Associated With the Progression of White Matter Lesion Volumes: The Three-City (3C)-Dijon Magnetic Resonance Imaging Study. *Circulation*. 2011 Jan 25;123(3):266-73.

Goldfeld Keith S.; Stevenson David G.; Hamel Mary Beth; et al. **Medicare Expenditures Among Nursing Home Residents** With Advanced Dementia. *Arch Intern Med*. 2011;171(9):824-830.

Gorelick PB, Scuteri A, Black SE et al. **Vascular contributions** to cognitive impairment and dementia: a statement for healthcare professionals from the American Heart Association-AHA/American Stroke Association-ASA. *Stroke*. 2011 Sep;42(9):2672-713.

Gottesman RF et al. **Delirium after coronary artery bypass graft surgery** and late mortality. *Ann Neurol* 2010 Mar; 67:338.

Gow AJ, Bastin ME, Maniega SM, Valdés Hernández MC, Morris Z, Murray C, et al. **Neuroprotective lifestyles** and the aging brain: activity, atrophy, and white matter integrity. *Neurology* 2012;79:1802-8.

Gozalo P, Teno JM, Mitchell SL, et al. **End-of-life transitions** among nursing home residents with cognitive issues. *N Engl J Med*. 2011 Sep 29;365(13):1212-21.

Graff MJ, Adang EM, Vernooij-Dassen MJ, et al. Community **occupational therapy** for older patients with dementia and their care givers: cost effectiveness study. *BMJ*. 2008 Jan 19;336(7636):134-8. Epub 2008 Jan 2.

Community occupational therapy intervention for patients with dementia and their care givers is successful and cost effective, especially in terms of informal care giving.

Green RC, Roberts JS, Cupples LA, et al.; REVEAL Study Group. Disclosure of **APOE genotype** for risk of Alzheimer's disease. *N Engl J Med*. 2009 Jul 16;361(3):245-54.

Green RC.; Schneider LS.; et al. the Tarenflurbil Phase 3 Study Group. Effect of **Tarenflurbil** on Cognitive Decline and Activities of Daily Living in Patients With Mild Alzheimer Disease: A Randomized Controlled Trial. *JAMA*. 2009;302(23):2557-2564.

Gross AL, Jones RN, Habtemariam DA, et al. Delirium and Long-term **Cognitive Trajectory** Among Persons With Dementia. *Arch Intern Med*. 2012 Aug 20:1-8.

Growdon JH, Hyman BT. **Plasma {beta}-Amyloid** Linked to Cognitive Decline. *Arch Neurol*. 2011 Jun;68(6):799-801.

Gu Y, Schupf N, Cosentino SA, et al. **Nutrient intake** ( $\omega$ -3 PUFA) and plasma  $\beta$ -amyloid. *Neurology*. 2012 Jun 5;78(23):1832-40.

Guerreiro R, Wojtas A, Bras J, et al. **TREM2 variants** in Alz hei mer's disease. *N Engl J Med* 2012. DOI: 10.1056/NEJMoa1211851.

Gupta VB, Laws SM, Villemagne VL, et al; For the AIBL Research Group. Plasma **apolipoprotein E** and Alzheimer disease risk: The **AIBL** study of aging. *Neurology*. 2011 Mar 22;76(12):1091-1098.

Haan M, Espeland MA, Klein BE, et al. Cognitive function and **retinal** and ischemic **brain** changes: the Women's Health Initiative (WHI). *Neurology* 2012;78:942-949.

Haddad P. **Weight** change with atypical antipsychotics in the treatment of schizophrenia. *J Psychopharmacol*. 2005 Nov;19(6 Suppl):16-27.

Hajjar I, Brown L, Mack WJ, Chui H. Impact of **Angiotensin Receptor Blockers** on Alzheimer Disease Neuropathology in a Large Brain Autopsy Series. *Arch Neurol*. 2012 Sep 10:1-7.

Hakim SM, Othman AI, Naoum DO. Early treatment with **risperidone** for **subsyndromal delirium** after on-pump cardiac surgery in the elderly: a randomized trial. *Anesthesiology*. 2012 May;116(5):987-97.

Han L, Agostini JV, Allore HG. **Cumulative anticholinergic exposure** is associated with poor memory and executive function in older men. *J Am Geriatr Soc*. 2008 Dec;56(12):2203-10. Cumulative anticholinergic exposure across multiple medications over 1 year may negatively affect verbal memory and executive function in older men. Prescription of drugs with anticholinergic effects in older persons deserves continued attention to avoid deleterious adverse effects.

Hanney M, Prasher V, Williams N, et al, on behalf of the **MEADOWS** trial researchers. **Memantine** for dementia in adults older than 40 years with **Down's syndrome** (MEADOWS): randomised, double-blind, placebo-controlled trial. *Lancet* 2012; Jan 10.

Hanson LC, Ersek M, Gilliam R, et al. **Oral feeding** options for people with dementia: a systematic review. *J Am Geriatr Soc*. 2011 Mar;59(3):463-72. doi: 10.1111/j.1532-5415.2011.03320.x.

Hashimoto K. Can **Minocycline** Prevent the Onset of Alzheimer's Disease? *Annals of Neurology*. 2011; 1-4 [online].

Hayden KM, Norton MC, Darcey D, et al. Cache County Study Investigators. Occupational exposure to **pesticides** increases the risk of incident AD: the Cache County study. *Neurology*. 2010 May 11;74(19):1524-30.

Head D, Bugg JM, Goate AM, et al. **Exercise** Engagement as a Moderator of the Effects of APOE Genotype on Amyloid Deposition. *Arch Neurol*. 2012 Jan 9.

Health Canada May/10: Novartis, in consultation with Health Canada, is informing healthcare providers and consumers that serious adverse events including **death** were associated with errors/misuse of the **Exelon Patch**.

Hebert LE, Weuve J, Scherr PA, Evans DA. **Alzheimer disease in the United States (2010-2050) estimated** using the 2010 census. *Neurology*. 2013 May 7;80(19):1778-83.

Heister D, Brewer JB, Magda S, et al; For the Alzheimer's Disease Neuroimaging Initiative. **Predicting MCI** outcome with clinically available **MRI and CSF biomarkers**. *Neurology*. 2011 Oct 25;77(17):1619-1628.

Helmer C et al. **Chronic kidney disease**, cognitive decline, and incident dementia:The 3C Study. *Neurology*. 2011 Dec 6;77(23):2043-51.

Hernandez RK, Farwell W, Cantor MD, Lawler EV. Cholinesterase Inhibitors and Incidence of **Bradycardia** in Patients with Dementia in the Veterans Affairs New England Healthcare System. *J Am Geriatr Soc*. 2009 Sep 28.

Henderson VW, St John JA, Hodis HN, et al; For the **WISH** Research Group. Long-term **soy isoflavone** supplementation and cognition in women: A randomized, controlled trial. *Neurology*. 2012 Jun 5;78(23):1841-1848.

Herrmann N, Rapoport MJ, Sambrook R, et al. Canadian Outcomes Study in Dementia (COSID) Investigators. Predictors of **driving cessation** in mild-to-moderate dementia. *CMAJ*. 2006 Sep 12;175(6):591-5.

Herrmann N, Lanctôt KL. Pharmacologic management of **neuropsychiatric symptoms of Alzheimer disease**. *Can J Psychiatry*. 2007 Oct;52(10):630-46.

Herrmann N Md, Gauthier S Md. Diagnosis and treatment of dementia: 6. Management of **severe Alzheimer disease**. *CMAJ*. 2008 Dec 2;179(12):1279-1287.

Herrmann N, Black SE, Chow T, Cappell J, Tang-Wai DF, Lanctôt KL. **Serotonergic Function** (citalopram) and Treatment of Behavioral and Psychological Symptoms of **Frontotemporal Dementia**. *Am J Geriatr Psychiatry*. 2011 Aug 27.

Herrmann N, Black SE, Li A, Lanctôt KL. **Discontinuing cholinesterase inhibitors**: results of a survey of Canadian dementia experts. *Int Psychogeriatr* 2011;23:539-45.



Herrmann N, Gauthier S, et al. A randomized, double-blind, placebo-controlled trial of **memantine in a behaviorally enriched sample** of patients with moderate-to-severe Alzheimer's disease. *Int Psychogeriatr*. 2013 Mar 8;1-9.

Herholz Karl, Ebmeier Klaus. Clinical **amyloid imaging** in Alzheimer's disease. *The Lancet Neurology* 1 July 2011 (Volume 10 Issue 7 Pages 667-670 DOI: 10.1016/S1474-4422(11)70123-5)

Hindin SB, Zelinski EM. **Extended practice and aerobic exercise interventions** benefit untrained cognitive outcomes in older adults: a meta-analysis. *J Am Geriatr Soc*. 2012 Jan;60(1):136-41.

Hogan DB, Bailey P, Black S, Carswell A, Chertkow H, Clarke B, Cohen C, Fisk JD, Forbes D, Thorpe L et al. Diagnosis and treatment of dementia: 4. Approach to management of **mild to moderate dementia**. *CMAJ*. 2008 Oct 7;179(8):787-93.

Hogan DB, Bailey P, Black S, Carswell A, Chertkow H, Clarke B, Cohen C, Fisk JD, Forbes D, Man-Son-Hing M, Lanctôt K, Morgan D, Thorpe L. Diagnosis and treatment of dementia: 5. **Nonpharmacologic and pharmacologic therapy for mild to moderate dementia**. *CMAJ*. 2008 Nov 4;179(10):1019-26.

Holmes C, Cunningham C, Zotova E, et al. Proinflammatory **cytokines**, sickness behavior, and Alzheimer disease. *Neurology*. 2011 Jul 19;77(3):212-8.

Holroyd-Leduc JM, Khandwala F, Sink KM. How can **delirium** best be prevented and managed in older patients in hospital? *CMAJ*. 2009 Aug 17. [Epub ahead of print]

Holmes C, Wilkinson D, Dean C, et al. The efficacy of **donepezil** in the treatment of neuropsychiatric symptoms in Alzheimer disease. *Neurology* 2004;63:214-9.

Holsinger T, Deveau J, Boustani M, Williams JW Jr. **Does this patient have dementia?** *JAMA*. 2007 Jun 6;297(21):2391-404.

Holsinger T, Plassman BL, Stechuchak KM, et al. **Screening for cognitive impairment**: comparing the performance of four instruments in primary care. *J Am Geriatr Soc*. 2012 Jun;60(6):1027-36.

Hort J, O'Brien JT, Gainotti G, Pittirla T, Popescu BO, Rektorova I, Sorbi S, Scheltens P, EFNS Scientist Panel on Dementia. **EFNS guidelines for the diagnosis and management of Alzheimer's disease**. *Eur J Neurol* 2010 Oct;17(10):1236-48.

Howard RJ, et al. **Donepezil** for the treatment of agitation in Alzheimer's disease. (**CALM-AD**) *N Engl J Med*. 2007 Oct 4;357(14):1382-92. In this 12-week trial, **donepezil was not more effective than placebo in treating agitation** in patients with Alzheimer's disease.

Howard R et al. **Donepezil and memantine** for moderate-to-severe Alzheimer's disease. (**DOMINO**) *N Engl J Med* 2012 Mar 8; 366:893.

Hu WT, Holtzman DM, Fagan AM, et al. **Plasma multianalyte profiling** in mild cognitive impairment and Alzheimer disease. *Neurology* 2012;79:897-905.

Hurd MD, Martorell P, Delavande A, et al. **Monetary costs of dementia** in the United States. *N Engl J Med*. 2013 Apr 4;368(14):1326-34.

Husebo BS, Ballard C, Aarsland D. **Pain treatment of agitation** in patients with dementia: a systematic review. *Int J Geriatr Psychiatry*. 2011 Oct;26(10):1012-8. doi: 10.1002/gps.2649.

Husebo BS, Ballard C, Sandvik R, Nilsen OB, Aarsland D. Efficacy of **treating pain** to reduce behavioural disturbances in residents of nursing homes with dementia: cluster randomised clinical trial. *BMJ* 2011;343:d4065.

Huybrechts KF, Rothman KJ, Silliman RA., et al. **Risk of death and hospital admission** for major medical events after initiation of psychotropic medications in older adults admitted to nursing homes. *CMAJ* 2011 0: cmaj.101406

Hyde C, Peters J, Bond M, et al. Evolution of the evidence on the effectiveness and **cost-effectiveness of acetylcholinesterase inhibitors and memantine** for Alzheimer's disease: systematic review and economic model. *Age Ageing*. 2013 Jan;42(1):14-20.

Hyman BT. **Amyloid-Dependent and Amyloid-Independent Stages of Alzheimer Disease**. *Arch Neurol*. 2011 Apr 11.

Iliffe S, Pealing L. **Subjective memory problems**. *BMJ*. 2010 Mar 19;340:c1425.

Inouye SK. **Delirium in older persons**. *N Engl J Med*. 2006 Mar 16;354(11):1157-65.

Inzitari M, Pozzi C, Ferrucci L, Chiarantini D, Rinaldi LA, Baccini M, Pini R, Masotti G, Marchionni N, Di Bari M. **Subtle neurological abnormalities** as risk factors for cognitive and functional decline, cerebrovascular events, and mortality in older community-dwelling adults. *Arch Intern Med*. 2008 Jun 23;168(12):1270-6. In this sample of older community-dwelling persons without overt neurological diseases, multiple SNAs were associated with cognitive and functional decline and independently predicted mortality and CVEs.

Iranzo A, Tolosa E, Gelpi E, et al. Neurodegenerative disease status and post-mortem pathology in idiopathic **rapid-eye-movement sleep behaviour disorder**: an observational cohort study. *Lancet Neurology* 2013.

Irwin DJ, McMillan CT, Toledo JB, et al. Comparison of **Cerebrospinal Fluid Levels of Tau and Aβ 1-42** in Alzheimer Disease and Frontotemporal Degeneration Using 2 Analytical Platforms. *Arch Neurol*. 2012 Apr 9.

Isik AT, Babacan Yildiz G, Bozoglu E, Yay A, Aydemir E. **Cardiac safety of donepezil** in elderly patients with Alzheimer disease. *Intern Med*. 2012;51(6):575-8.

Iverson DJ, Gronseth GS, Reger MA, et al. Practice parameter update: evaluation and management of **driving risk** in dementia: report of the Quality Standards Subcommittee of the American Academy of Neurology. *Neurology*. 2010 Apr 20;74(16):1316-24. <http://www.neurology.org/cgi/rapidpdf/WNL.0b013e3181da3b0fV1.pdf>

Iwashyna Theodore J.; Ely E. Wesley; Smith Dylan M.; et al. Long-term Cognitive Impairment and Functional Disability Among Survivors of **Severe Sepsis**. *JAMA*. 2010;304(16):1787-1794.

Irizarry M, Jin S; He F et al. Incidence of **New-Onset Seizures** in Mild to Moderate Alzheimer Disease *Arch Neurol*. 2012;69(3):368-372.

Jack CR Jr, Vemuri P, Wiste HJ, et al. for the Alzheimer's Disease Neuroimaging Initiative. Evidence for Ordering of **Alzheimer Disease Biomarkers**. *Arch Neurol*. 2011 Aug 8.

Jack CR Jr, Knopman DS, Jagust WJ, et al. **Tracking pathophysiological processes** in Alzheimer's disease: an updated hypothetical model of dynamic biomarkers. *Lancet Neurol*. 2013 Feb;12(2):207-16.

Jagust WJ. **Amyloid Imaging**: Liberal or Conservative? Let the Data Decide. *Arch Neurol*. 2011 Jul 11.

Jagust W. Tracking brain **amyloid-β** in presymptomatic Alzheimer's disease. *Lancet Neurol*. 2012 Nov 5.

Jaturapattorn D, Isaac MG, McCreery J, et al. **Aspirin, steroidal and non-steroidal anti-inflammatory drugs** for the treatment of Alzheimer's disease. *Cochrane Database Syst Rev*. 2012 Feb 15;2:CD006378. Based on the studies carried out so far, the efficacy of aspirin, steroid and NSAIDs (traditional NSAIDs and COX-2 inhibitors) is **not proven**. Therefore, these drugs cannot be recommended for the treatment of AD.

Jochimsen HM, Muller M, Visseren FL, et al; for the SMART Study Group. **Blood Pressure** and Progression of Brain Atrophy: The SMART-MR Study. *JAMA Neurol*. 2013 Jun 10:1-7.

Jokinen H, Gouw AA, Madureira S, et al. On behalf of the LADIS Study Group. Incident **lacunes** influence cognitive decline: The LADIS study. *Neurology*. 2011 May 31;76(22):1872-1878.

Jonsson T, Stefansson H, Steinberg S, et al. **Variant of TREM2** associated with the risk of Alzheimer's disease. *N Engl J Med*. 2012. DOI: 10.1056/NEJMoa1211103.

Ju YE, McLeland JS, Toedebusch CD, et al. **Sleep Quality** and Preclinical Alzheimer Disease. *JAMA Neurol*. 2013 Mar 11:1-7.

Kaffashian S, Dugravot A, Elbaz A, et al. Predicting cognitive decline: A **dementia risk score vs the Framingham vascular risk scores**. *Neurology*. 2013 Apr 2;80(14):1300-6.

Kales HC, Zivin K, Kim HM, Valenstein M, Chiang C, Ignacio R, Ganoczy D, Cunningham F, Schneider LS, Blow FC. Trends in **antipsychotic use in dementia** 1999-2007. *Arch Gen Psychiatry*. 2011 Feb;68(2):190-7.

Kales HC, Kim HM, Zivin K, Valenstein M, Seyfried LS, Chiang C, Cunningham F, Schneider LS, Blow FC. Risk of **mortality among individual antipsychotics** in patients with dementia. *Am J Psychiatry* 2011; 168:71-79.

Kalishvaart KJ, de Jonghe JF, Bogaards MJ, Vreeswijk R, Egberts TC, Burger BJ, Eikelenboom P, van Gool WA. **Haloperidol** prophylaxis for elderly hip-surgery patients at risk for **delirium**: a randomized placebo-controlled study. *J Am Geriatr Soc*. 2005 Oct;53(10):1658-66. (InfoPOEMS: Low-dose haloperidol was no more effective than placebo in preventing delirium in elderly patients undergoing hip surgery. However, when delirium occurred, it was milder and shorter in patients receiving haloperidol. Furthermore, haloperidol shortened the hospital length of stay among patients who became delirious. (**LOE = 1b-**))

Kamble P, Chen H, et al. Use of **antipsychotics among elderly nursing home residents** with dementia in US: an analysis of National Survey Data. *Drugs Aging*. 2009;26(6):483-92. doi:10.2165/00002512-200926060-00005.

Kantarci K, Lowe V, Przybelski SA, et al. **APOE modifies the association between AB load and cognition** in cognitively normal older adults. *Neurology* 2012;78:232-240.

Kapusta Peter, Regier Loren, Bareham Julia, et al. **RxFiles: Behaviour management in dementia**. *Can Fam Physician* December 2011 57: 1420-1422.

Katan M, Moon YP, Paik MC, et al. **Infectious burden** (herpes simplex virus...) and cognitive function: the Northern Manhattan Study. *Neurology* 2013;80:1209-1215.

Katila H, et al. Randomized, Double-Blind Study of the Efficacy and Tolerability of **Extended Release Quetiapine Fumarate** (Quetiapine XR) Monotherapy in Elderly Patients With Major **Depressive Disorder**. *Am J Geriatr Psychiatry*. 2012 Jun 7.

Kennedy J, Deberdt W, Siegal A, et al. **Olanzapine does not enhance cognition** in non-agitated and non-psychotic patients with mild to moderate Alzheimer's dementia. *Int J Geriatr Psychiatry*. 2005 Nov;20(11):1020-7.

Kern S, Skoog I, Östling S, et al. Does low-dose **acetylsalicylic acid prevent cognitive decline** in women with high cardiovascular risk? A 5-year follow-up of a non-demented population-based cohort of Swedish elderly women. *BMJ Open* 2012.

Khachaturian et al. **Antihypertensive Medication Use and Incident Alzheimer Disease**: The Cache County Study. *Arch Neurol*. 2006 Mar 13; [Epub ahead of print]

Kim DH, Brown RT, Ding EL, et al. Dementia medications and risk of falls, **syncope**, and related adverse events: meta-analysis of randomized controlled trials. *J Am Geriatr Soc*. 2011 Jun;59(6):1019-31.(syncope for ChEIs)

Kirby J, et al. A systematic review of the clinical and cost-effectiveness of **memantine** in patients with moderately severe to severe Alzheimer's disease. *Drugs Aging*. 2006;23(3):227-40.

Klassen BT, Hentz JG, Shill HA, et al. **Quantitative EEG** as a predictive biomarker for Parkinson disease dementia. *Neurology*. 2011 Jul 12;77(2):118-24.

Knopman DS, Penman AD, Catellier DJ, et al. **Vascular risk factors** and longitudinal changes on brain MRI: The ARIC study. *Neurology*. 2011 May 31;76(22):1879-85.

Knopman DS, Jack CR Jr, Wiste HJ, et al. Short-term clinical outcomes for stages of **NIA-AA preclinical Alzheimer disease**. *Neurology*. 2012 May 15;78(20):1576-82.

Koepsell TD, Monsell SE. **Reversion** from mild cognitive impairment to normal or near-normal cognition: **Risk factors and prognosis**. *Neurology*. 2012 Oct 9;79(15):1591-8.

Koivunen J, Scheinin N, Virta JR, et al. **Amyloid PET imaging** in patients with mild cognitive impairment: A 2-year follow-up study. *Neurology*. 2011 Mar 22;76(12):1085-90.

Kolanowski A, Litaker M, Buettner L, et al. A randomized clinical trial of **theory-based activities** for the behavioral symptoms of dementia in nursing home residents. *J Am Geriatr Soc*. 2011 Jun;59(6):1032-41.

Köpke S, Mühlhauser I, Gerlach A, et al. Effect of a guideline-based **multicomponent intervention on use of physical restraints** in nursing homes: a randomized controlled trial. *JAMA*. 2012 May 23;307(20):2177-84.

Koyama A, Okereke OI, Yang T, et al. **Plasma Amyloid- $\beta$**  as a Predictor of Dementia and Cognitive Decline: A Systematic Review and Meta-analysis. *Arch Neurol*. 2012 Mar 26.

Krupp LB, Christodoulou C, Melville P, et al. Multicenter randomized clinical trial of **donepezil** for memory impairment in multiple sclerosis. *Neurology*. 2011 Apr 26;76(17):1500-7. (not work)

Kwok CS, Loke YK, Hale R, et al. **Atrial fibrillation** and incidence of dementia: A systematic review and meta-analysis. *Neurology* 2011; 76:914-922.

LaFerla FM. **Preclinical success** against Alzheimer's disease with an **old drug (bexarotene)** *N Engl J Med*. 2012 Aug 9;367(6):570-2.

Landau Susan M.; Marks Shawn M.; Mormino Elizabeth C.; et al. Association of **Lifetime Cognitive Engagement** and Low [beta]-Amyloid Deposition. *Arch Neurol*. 2012

Larson EB, Wang L, Bowen JD, McCormick WC, Teri L, Crane P, Kukull W. **Exercise** is associated with reduced risk for incident dementia among persons 65 years of age and older. *Ann Intern Med*. 2006 Jan 17;144(2):73-81.

Lautenschlager NT, et al. Effect of **physical activity** on cognitive function in older adults at risk for Alzheimer disease: a randomized trial. *JAMA*. 2008 Sep 3;300(9):1027-37. In this study of adults with subjective memory impairment, a 6-month program of physical activity provided a modest improvement in cognition over an 18-month follow-up period.

Lee JH, Kim SH, Kim GH, et al. Identification of pure **subcortical vascular dementia** using 11C-Pittsburgh compound B. *Neurology*. 2011 Jul 5;77(1):18-25.

Lee L, Weston WW, Heckman G, et al. **Structured approach to patients with memory difficulties** in family practice. *Can Fam Physician*. 2013 Mar;59(3):249-54.

Leonard R, Tinetti ME, Allore HG, Drickamer MA. Potentially **modifiable resident characteristics** that are associated with physical or verbal aggression among nursing home residents with dementia. *Arch Intern Med*. 2006 Jun 26;166(12):1295-300. If the associations we have estimated are causal, then treatment of **depression, delusions, hallucinations, and constipation** may reduce physical aggression among nursing home residents.

Llewellyn David J.; Lang Iain A.; Langa Kenneth M.; et al. **Vitamin D** and Risk of Cognitive Decline in Elderly Persons *Arch Intern Med*. 2010;170(13):1135-1141. Conclusion: Low levels of vitamin D were associated with substantial cognitive decline in the elderly population studied over a 6-year period, which raises important new possibilities for treatment and prevention.

Li NC, Lee A, Whitmer RA, et al. Use of **angiotensin receptor blockers** and risk of dementia in a predominantly male population: prospective cohort analysis. *BMJ*. 2010 Jan 12;340:b5465. doi:10.1136/bmj.b5465.

Li J, Wang YJ, Zhang M, et al. On behalf of the Chongqing Ageing Study Group. **Vascular risk factors** promote conversion from mild cognitive impairment to Alzheimer disease. *Neurology*. 2011 Apr 26;76(17):1485-1491.

Lieb Wolfgang; Beiser Alexa S.; Vasan Ramachandran S.; et al. Association of Plasma **Leptin** Levels With Incident Alzheimer Disease and MRI Measures of Brain Aging. *JAMA*. 2009;302(23):2565-2572.

Lim WS, Gammack JK, Van Niekerk J, Dangour AD. **Omega 3 fatty acid** for the prevention of dementia. *Cochrane Database Syst Rev*. 2006 Jan 25;(1):CD005379.

Lin FR, Metter EJ, O'Brien RJ, Resnick SM, Zonderman AB, Ferrucci L. **Hearing loss** and incident dementia. *Arch Neurol*. 2011 Feb;68(2):214-20.

Lin FR, Yaffe K, Xia J, et al; for the Health ABC Study Group. **Hearing Loss** and Cognitive Decline in Older Adults. *JAMA Intern Med*. 2013 Jan 21:1-7.

Liperoti R, Pedone C, Lapane KL, et al. **Venous Thromboembolism** Among Elderly Patients Treated With **Atypical** and Conventional Antipsychotic Agents. *Arch Intern Med*. 2005 Dec 12;165(22):2677-2682.

Liu-Ambrose Teresa; Nagamatsu Lindsay S.; Graf Peter; et al. **Resistance Training** and Executive Functions: A 12-Month Randomized Controlled Trial. *Arch Intern Med*. 2010;170(2):170-178.

Livingston G, et al. Old Age Task Force of the World Federation of Biological Psychiatry. **Systematic review of psychological approaches** to the management of neuropsychiatric symptoms of dementia. *Am J Psychiatry*. 2005 Nov;162(11):1996-2021.

Lo RY, Hubbard AE, Shaw LM, et al. for the Alzheimer's Disease **Neuroimaging Initiative**. **Longitudinal Change of Biomarkers** in Cognitive Decline. *Arch Neurol*. 2011 Jun 13.

Lo RY, Jagust WJ, for the Alzheimer's Disease Neuroimaging Initiative. Predicting missing **biomarker data** in a longitudinal study of Alzheimer disease. *Neurology* 2012;78: 1376–1382.

Loneragan E, Luxenberg J, Areosa Sastre A, Wyller TB. **Benzodiazepines** for delirium. *Cochrane Database Syst Rev*. 2009 Jan 21;(1):CD006379. No adequately controlled trials could be found to support the use of benzodiazepines in the treatment of non-alcohol withdrawal related delirium among hospitalised patients, and at this time **benzodiazepines cannot be recommended** for the control of this condition. Because of the scarcity of trials with randomization of patients, placebo control, and adequate concealment of allocation of subjects, it is clear that further research is required to determine the role of benzodiazepines in the treatment of non-alcohol withdrawal related delirium.

Loneragan E, Luxenberg J, **Valproate** preparations for agitation in dementia. *Cochrane Database of Systematic Reviews* 2009; Issue 3.

Lopez OL, Becker JT, Chang YF, et al. Incidence of mild cognitive impairment in the Pittsburgh Cardiovascular Health Study-Cognition Study. *Neurology*. 2012 Oct 9;79(15):1599-606.

Loveman E, Green C, Kirby J, Takeda A, et al. The **clinical and cost-effectiveness of donepezil, rivastigmine, galantamine and memantine** for Alzheimer's disease. *Health Technol Assess*. 2006 Jan;10(1):1-176.

Lowe VJ, Peller PJ, Weigand SD, et al. Application of the National Institute on Aging-Alzheimer's Association **AD criteria to ADNI**. *Neurology*. 2013 May 3.

Loy C, Schneider L. **Galantamine** for Alzheimer's disease and mild cognitive impairment. *Cochrane Database Syst Rev* 2006; 1: CD001747.

Lu D, Song H, Hao Z, Wu T, McCleery J. **Naftidrofuryl** for dementia. *Cochrane Database of Systematic Reviews* 2011, Issue 12. Art. No.: CD002955. DOI: 10.1002/14651858.CD002955.pub4. Oral administration of naftidrofuryl is well-tolerated by patients with dementia. The low-quality evidence shows that, by use of naftidrofuryl, people with dementia may benefit on performance, behaviour, cognition, and mood. However, the benefit on global impression is inconsistent and unconvincing.

Lu PH, Masterman DA, Mulnard R, et al. Effects of Testosterone on Cognition and Mood in Male Patients With Mild **Alzheimer Disease** and Healthy Elderly Men. *Arch Neurol*. 2005 Dec 12; [Epub ahead of print]

Lu PH, Edland SD, Teng E, Tingus K, Petersen RC, Cummings JL; Alzheimer's Disease Cooperative Study Group. Donepezil delays progression to AD in MCI subjects with depressive symptoms. *Neurology*. 2009 Jun 16;72(24):2115-21.

Lyketsos CG, et al.; Task Force of **American Association for Geriatric Psychiatry**. Position statement of the American Association for Geriatric Psychiatry regarding principles of care for patients with dementia resulting from **Alzheimer disease**. *Am J Geriatr Psychiatry*. 2006 Jul;14(7):561-72.

Machulda MM, Jones DT, Vemuri P, et al. Effect of **APOE {varepsilon}4 Status** on Intrinsic Network Connectivity in Cognitively Normal Elderly Subjects. *Arch Neurol*. 2011 May 9.

Mackin P, Thomas SH. **Atypical antipsychotic drugs**. *BMJ*. 2011 Mar 4;342:d1126. doi: 10.1136/bmj.d1126.

Maher AR et al. Efficacy and comparative effectiveness of **atypical antipsychotic medications for off-label uses in adults**. *JAMA* 2011 Sep 28; 306:1359.

Maillard P, Seshadri S, Beiser A, et al. Effects of **systolic blood pressure on white-matter integrity** in young adults in the Framingham Heart Study: a cross-sectional study. *Lancet Neurol* 2012.

Malouf R, Grimley Evans J. **Folic acid with or without vitamin B12** for the prevention & treatment of healthy elderly and demented people. *Cochrane Database Syst Rev*. 2008 Oct 8;(4):CD004514. The small number of studies which have been done provide no consistent evidence either way that folic acid, with or without vitamin B12, has a beneficial effect on cognitive function of unselected healthy or cognitively impaired older people. In a preliminary study, folic acid was associated with improvement in the response of people with Alzheimer's disease to cholinesterase inhibitors. In another, long-term use appeared to improve the cognitive function of healthy older people with high homocysteine levels. More studies are needed on this important issue.

Mangialasche Francesca, Solomon Alina, Winblad Bengt et al; **Alzheimer's disease: clinical trials and drug development**, The Lancet Neurology, Volume 9, Issue 7, July 2010

Manly JJ, Schupf N, Stern Y, et al. **Telephone-based identification** of mild cognitive impairment and dementia in a multicultural cohort. *Arch Neurol*. 2011 May;68(5):607-14.

Marcantonio Edward R. In the Clinic: **Delirium**. *Ann Intern Med* June 7, 2011 154:ITC6-1; doi:10.1059/0003-4819-154-11-201106070-01006.

Marsh L. Treatment of **Lewy-body dementias and psychopathology**. *Lancet Neurol*. 2010 Oct;9(10):943-5. Epub 2010 Aug 20. PubMed PMID: 20729149.

Mattsson N, Rosén E, Hansson O, et al. Age and diagnostic performance of Alzheimer disease **CSF biomarkers**. *Neurology*. 2012 Feb 1.

Martin M, Clare L, Altgassen AM, Cameron MH, Zehnder F. **Cognition-based interventions** for healthy older people and people with mild cognitive impairment. *Cochrane Database of Systematic Reviews* 2011, Issue 1. Art. No.: CD006220. DOI: 10.1002/14651858.CD006220.pub2. There is evidence that cognitive interventions do lead to performance gains but none of the effects observed could be attributable specifically to cognitive training, as the improvements observed did not exceed the improvement in active control conditions. This does not mean that longer, more intense or different interventions might not be effective, but that those which have been reported thus far have only limited effect. We therefore suggest more standardized study protocols in order to maximize comparability of studies and to maximize the possibility of data pooling - also in other cognitive domains than memory.

Marzona I, O'Donnell M, Teo K, et al. Increased risk of cognitive and functional decline in patients with **atrial fibrillation**: results of the **ONTARGET** and **TRANSCEND** studies. *CMAJ* 2012

Matsuzaki T, Sasaki K, Tanizaki Y, et al. **Insulin resistance** is associated with the pathology of Alzheimer disease. The Hisayama Study. *Neurology*. 2010 Aug 25.

Matsuzaki T, Sasaki K, Hata J, et al. Association of Alzheimer disease pathology with **abnormal lipid metabolism**: The Hisayama Study. *Neurology*. 2011 Sep 13;77(11):1068-75.

Mattsson N, Zetterberg H, Hansson O, Andreassen N, Parnetti L, Jonsson M, ET AL. **CSF biomarkers** and incipient Alzheimer disease in patients with mild cognitive impairment. *JAMA*. 2009 Jul 22;302(4):385-93.

Mayeux R. Clinical practice. **Early Alzheimer's disease**. *N Engl J Med*. 2010 Jun 10;362(23):2194-201.

Mazza M, Capuano A, Bria P, Mazza S. **Ginkgo biloba and donepezil**: a comparison in the treatment of Alzheimer's dementia in a randomized placebo-controlled double-blind study. *Eur J Neurol*. 2006 Sep;13(9):981-5.

McCarten JR, Anderson P, Kuskowski MA et al. **Screening for cognitive impairment** in an elderly veteran population: acceptability and results using different versions of the Mini-Cog. *J Am Geriatr Soc*. 2011 Feb;59(2):309-13.

McGuinness B, Todd S, Passmore P, Bullock R. The effects of blood pressure lowering on development of cognitive impairment & dementia in patients without apparent prior cerebrovascular disease. *Cochrane Database Syst Rev*. 2006 Apr 19;(2):CD004034. There was no convincing evidence from the trials identified that blood pressure lowering prevents the development of dementia or cognitive impairment in hypertensive patients with no apparent prior cerebrovascular disease. There were significant

problems identified with analysing the data, however, due to the number of patients lost to follow-up and the number of placebo patients given active treatment. This introduced bias. More robust results may be obtained by analysing one year data to reduce differential drop-out or by conducting a meta-analysis using individual patient data.

McGuinness B, O'Hare J, Craig D, et al. **Statins for the treatment of dementia.** Cochrane Database Syst Rev. 2010 Aug 4;8:CD007514. There is insufficient evidence to recommend statins for the treatment of dementia. Analysis from the studies available, including one large RCT, indicate statins have no benefit on the outcome measures ADAS-Cog or MMSE. We need to await full results from CLASP 2008 before we can be certain.

McLeod PJ, Huang AR, Tamblyn RM, Gayton DC. Defining **inappropriate** practices in prescribing for elderly people: a national consensus panel. CMAJ. 1997 Feb 1;156(3):385-91.

McMahon JA, Green TJ, Skeaff CM, Knight RG, Mann JI, Williams SM. A controlled trial of **homocysteine** lowering and cognitive performance. N Engl J Med. 2006 Jun 29;354(26):2764-72.

McShane R, Areosa Sastre A, Minakaran N. **Memantine** for dementia. Cochrane Database Syst Rev 2006; 2: CD003154.

Medical Letter. Treatment Guidelines. **Drugs for Cognitive Loss and Dementia.** Mar 2010.

Meeuwse EJ, Melis RJ, Van Der Aa GC, et al. Effectiveness of dementia follow-up care by **memory clinics** or general practitioners: randomised controlled trial. BMJ. 2012 May 15;344:e3086.

Middleton LE, Manini TM, Simonsick EM, et al. **Activity energy expenditure** and incident cognitive impairment in older adults. (**Health ABC**) Arch Intern Med. 2011 Jul 25;171(14):1251-7.

Middleton LE, Grinberg LT, Miller B, et al. **Neuropathologic features** associated with Alzheimer disease diagnosis: Age matters. Neurology. 2011 Nov 8;77(19):1737-44.

Mielke MM, Zandi PP, Shao H, et al. The 32-year relationship between **cholesterol and dementia** from midlife to late life. Neurology. 2010 Nov 10.

Mielke MM, Bandaru VV, Haughey NJ, et al. **Serum ceramides** increase the risk of Alzheimer disease: The Women's Health and Aging Study II. Neurology. 2012 Aug 14;79(7):633-41.

Mielke MM, Wiste HJ, Weigand SD, et al. Indicators of **amyloid burden** in a population-based study of cognitively normal elderly. Neurology. 2012 Oct 9;79(15):1570-7.

Mintzer JE, Tune LE, Breder CD, et al. **Aripiprazole** for the treatment of psychoses in institutionalized patients with Alzheimer dementia: a multicenter, randomized, double-blind, placebo-controlled assessment of three fixed doses. Am J Geriatr Psychiatry. 2007 Nov;15(11):918-31.

Mitchell SL. A **93-year-old man with advanced dementia and eating problems.** JAMA. 2007 Dec 5;298(21):2527-36. Epub 2007 Nov 6.

Mitchell SL et al. The clinical course of **advanced dementia.** N Engl J Med 2009 Oct 15; 361:1529.

Mitchell AJ, Shiri-Feshki M. Rate of **progression of mild cognitive impairment to dementia**--meta-analysis of 41 robust inception cohort studies. Acta Psychiatr Scand. 2009 Apr;119(4):252-65.

Mitchell SL, Black BS, Ersek M, et al. Advanced Dementia: **State of the Art and Priorities** for the Next Decade. Ann Intern Med. 2012 Jan 3;156(1\_Part\_1):45-51.

Mintzer J, et al. **Risperidone** in the treatment of psychosis of Alzheimer disease: results from a prospective clinical trial. Am J Geriatr Psychiatry. 2006 Mar;14(3):280-91. (Negative trial)

Mittelman MS, Haley WE, Clay OJ, Roth DL. Improving **caregiver** well-being delays nursing home placement of patients with Alzheimer disease. Neurology. 2006 Nov 14;67(9):1592-9.

Mitchell SL, Kiely DK, Hamel MB, Park PS, Morris JN, Fries BE. **Estimating prognosis** for nursing home residents with advanced dementia. JAMA. 2004 Jun 9;291(22):2734-40.

Mitchell Susan L.; Miller Susan C.; Teno Joan M.; et al. **Prediction of 6-Month Survival** of Nursing Home Residents With Advanced Dementia Using ADEPT vs Hospice Eligibility Guidelines. JAMA. 2010;304(17):1929-1935.

Moghekar A, Goh J, Li M, et al. **Cerebrospinal fluid Aβ and tau** level fluctuation in an older clinical cohort. Arch Neurol. 2012 Feb;69(2):246-50.

Molnar, Frank J., Simpson, Christopher S. Approach to assessing **fitness to drive** in patients with cardiac and cognitive conditions. Can Fam Physician 2010 56: 1123-1129. (See also www.mocatest.org)

Moncada LV. Management of **falls in older persons**: a prescription for prevention. Am Fam Physician. 2011 Dec 1;84(11):1267-76.

Moniz Cook ED, Swift K, et al. **Functional analysis-based interventions** for challenging behaviour in dementia. Cochrane Database of Systematic Reviews 2012, Issue 2. Art. No.: CD006929. DOI: 10.1002/14651858.CD006929.pub2. The delivery of FA has been incorporated within wide ranging multi-component programmes and study designs have varied according to setting - i.e. family care, care homes and hospital, with surprisingly few studies located in care homes. Our findings suggest potential beneficial effects of multi-component interventions, which utilise FA. Whilst functional analysis for challenging behaviour in dementia care shows promise, it is too early to draw conclusions about its efficacy.

Montlahuc C, Soumaré A, Dufouil C, et al. **Self-rated health and risk of incident dementia**: a community-based elderly cohort, the 3C Study. Neurology 2011;77:1457-1464

Morandi A, McCurley J, Vasilevskis EE, et al. **Tools to detect delirium** superimposed on dementia: a systematic review. J Am Geriatr Soc. 2012 Nov;60(11):2005-13.

Mori E, Ikeda M, et al. **Donepezil for dementia with Lewy bodies**: A randomized, placebo-controlled trial. Annals of Neurology 2012.

Morrens M, Wezenberg E, Verkes RJ, Hulstijn W, Ruigt GS, Sabbe BG. Psychomotor and memory effects of haloperidol, olanzapine, and paroxetine in healthy subjects after short-term administration. J Clin Psychopharmacol. 2007 Feb;27(1):15-21. Short-term administration of olanzapine, and not of haloperidol, impeded several aspects of psychomotor function and verbal memory in healthy volunteers.

Morris MC, et al. Associations of **vegetable and fruit consumption** with age-related cognitive change. Neurology. 2006 Oct 24;67(8):1370-6.

Mukundan A, Faulkner G, Cohn T, Remington G. **Antipsychotic switching** for people with schizophrenia who have neuroleptic-induced **weight or metabolic problems.** Cochrane Database of Systematic Reviews 2010, Issue 12. Art. No.: CD006629. DOI: 10.1002/14651858.CD006629.pub2. Evidence from this review suggests that switching antipsychotic medication to one with lesser potential for causing weight gain or metabolic problems could be an effective way to manage these side effects, but the data were weak due to the limited number of trials in this area and small sample sizes. Poor reporting of data also hindered using some trials and outcomes. There was no difference in mental state, global state and other treatment related adverse events between switching to another medication and continuing on the previous one. When the three switching strategies were compared none of them had an advantage over the others in their effects on the primary outcomes considered in this review. Better designed trials with adequate power would provide more convincing evidence for using medication switching as an intervention strategy.

Murray ME, Graff-Radford NR, Ross OA, et al. **Neuropathologically defined subtypes of Alzheimer's disease** with distinct clinical characteristics: a retrospective study. Lancet Neurol. 2011 Sep;10(9):785-96.

Nelson JC, Devanand DP. A Systematic Review and Meta-Analysis of Placebo-Controlled **Antidepressant Studies in People with Depression and Dementia** J Am Geriatr Soc. 2011 Apr;59(4):577-85.

Newhouse P, Kellar K, Aisen P, et al. **Nicotine treatment** (transdermal 15mg/day) of mild cognitive impairment: A 6-month double-blind pilot clinical trial. Neurology. 2012 Jan 10;78(2):91-101.

**NHS CKS Dementia** Clinical Knowledge Summary 2010 [http://www.cks.nhs.uk/dementia/management/scenarios/screening\\_diagnosis\\_and\\_assessment/suspecting\\_dementia/early\\_recognition\\_of\\_dementia\\_is\\_a\\_challenge](http://www.cks.nhs.uk/dementia/management/scenarios/screening_diagnosis_and_assessment/suspecting_dementia/early_recognition_of_dementia_is_a_challenge)

NIA: Jack Clifford R., Albert Marilyn S., Knopman David S.. Introduction to the **recommendations** from the National Institute on Aging and the **Alzheimer's** Association workgroup on diagnostic guidelines for Alzheimer's disease. [http://www.alz.org/documents\\_custom/Intro\\_Diagnostic\\_Recommendations\\_Alz\\_proof.pdf](http://www.alz.org/documents_custom/Intro_Diagnostic_Recommendations_Alz_proof.pdf)

NIA:McKhann Guy M, Knopman David S., Chertkow Howard. The **diagnosis of dementia due to Alzheimer's disease**: Recommendations from the National Institute on Aging and the Alzheimer's Association workgroup. [http://www.alz.org/documents\\_custom/Diagnostic\\_Recommendations\\_Alz\\_proof.pdf](http://www.alz.org/documents_custom/Diagnostic_Recommendations_Alz_proof.pdf)

NIA: Albert Marilyn S., DeKosky Steven T., Dickson Dennis. The diagnosis of **mild cognitive impairment due to Alzheimer's disease**: Recommendations from the National Institute on Aging and Alzheimer's Association workgroup. [http://www.alz.org/documents\\_custom/Diagnostic\\_Recommendations\\_MCI\\_due\\_to\\_Alz\\_proof.pdf](http://www.alz.org/documents_custom/Diagnostic_Recommendations_MCI_due_to_Alz_proof.pdf)

NIA: Sperling Reisa A., Aisen Paul S., Beckett Laurel A. Toward defining the **preclinical stages of Alzheimer's disease**: Recommendations from the National Institute on Aging and the Alzheimer's Association workgroup. [http://www.alz.org/documents\\_custom/Diagnostic\\_Recommendations\\_Alz\\_Preclinical.pdf](http://www.alz.org/documents_custom/Diagnostic_Recommendations_Alz_Preclinical.pdf)

NIH: National Institutes of Health. State-of-the-Science Conference statement: **preventing Alzheimer's disease and cognitive decline.** April 26-28, 2010. National Institutes of Health <http://consensus.nih.gov/2010/alzstatement.htm> Accessed Aug 24, 2010.

NIH NATIONAL INSTITUTES OF HEALTH STATE-OF-THE-SCIENCE CONFERENCE STATEMENT NIH State-of-the-Science Conference: **Preventing Alzheimer's Disease** and Cognitive Decline April 26-28, 2010 [http://consensus.nih.gov/2010/docs/alz/alz\\_stmt.pdf](http://consensus.nih.gov/2010/docs/alz/alz_stmt.pdf)

NICE National Institute for Health and Clinical Excellence. **Donepezil, galantamine, rivastigmine (review) and memantine** for the treatment of Alzheimer's disease. London (UK): National Institute for Health and Clinical Excellence; 2006 Nov. 64 p. (Technology appraisal guidance; no. 111). <http://www.nice.org.uk/guidance/TA111/guidance/pdf/English>

NICE: National Collaborating Centre for Acute and Chronic Conditions. **Delirium: diagnosis, prevention and management.** London (UK): National Institute for Health and Clinical Excellence (NICE); 2010 Jul. 29 p. (Clinical guideline; no. 103). <http://www.nice.org.uk/nicemedia/live/13060/49913/49913.pdf>

NICE- **Delirium**: diagnosis, prevention and management. (Clinical guideline 103. ) 2010. <http://www.nice.org.uk/CG103>

NICE: Technical Appraisal Guidance 111 Mar 2011. **Donepezil, galantamine, rivastigmine and memantine** for the treatment of Alzheimer's disease <http://www.nice.org.uk/nicemedia/live/13419/53619/53619.pdf> Donepezil, galantamine and rivastigmine are now recommended as options for managing **mild as well as moderate Alzheimer's disease**, and Memantine is now recommended as an option for managing **moderate Alzheimer's disease** for people who cannot take acetylcholinesterase (AChE) inhibitors, and as an option for managing **severe Alzheimer's disease**.

Nordström P, Religa D, Wimo A, Winblad B, et al. The use of **cholinesterase inhibitors** and the risk of **myocardial infarction and death**: a nationwide cohort study in subjects with Alzheimers disease. Eur Heart J 4 Jun 2013.

Nourhashemi Fati, Andrieu Sandrine, Gillette-Guyonnet Sophie, et al., on behalf of the PLASA Group. Effectiveness of a **specific care plan** in patients with Alzheimer's disease: cluster randomised trial (PLASA study). BMJ 2010;340.

O'Kee e E, Mukhtar O, O'Kee e ST. **Orientation to time** as a guide to the presence and severity of cognitive impairment in older hospital patients. J Neurol Neurosurg Psychiatry. 2011;82:500-4.

Ohara T, Doi Y, Ninomiya T, et al. **Glucose tolerance status** and risk of dementia in the community: The Hisayama Study. Neurology. 2011 Sep 20;77(12):1126-34.



Okonkwo OC, Xu G, Dowling NM, et al. **Family history of Alzheimer disease** predicts hippocampal atrophy in healthy middle-aged adults. *Neurology*. 2012 May 29;78(22):1769-76.

Oldenbeuving AW, de Kort PL, Jansen BP, et al. **Delirium in the acute phase after stroke**: Incidence, risk factors, and outcome. *Neurology*. 2011 Mar 15;76(11):993-9.

O'Mahony Rachel, Murthy Lakshmi, Akunne A, et al. , for the Guideline Development Group. Synopsis of the National Institute for Health (NIH) and Clinical Excellence Guideline for **Prevention of Delirium**. *Ann Intern Med* June 7, 2011 154:746-751.

Ostrowitzki S, Deptula D, Thurfjell L, et al. Mechanism of Amyloid Removal in Patients With Alzheimer Disease Treated With **Gantenerumab**. *Arch Neurol*. 2011 Oct 10.

Oveisgharan S, Hachinski V. **Hypertension**, executive dysfunction, and progression to dementia: the Canadian study of health and aging. *Arch Neurol* 2010; 67:187-192.

Pariente A, Fourrier-Réglat A, Ducruet T, Farrington P, et al. Antipsychotic use and **myocardial infarction** in older patients with treated dementia [ published online Mar 26, 2012]. *Arch Intern Med* doi:10.1001/archinternmed.2012.28.

Pariente A, Fourrier-Réglat A, Bazin F, et al. Effect of **treatment gaps** in elderly patients with dementia treated with **cholinesterase inhibitors**. *Neurology*. 2012 Mar 27;78(13):957-63. (not compromise outcome)

Parker C et al. **Antipsychotic drugs and risk of venous thromboembolism**: nested case-control study. *BMJ* 2010; 341: c4245

Patel BB, Holland NW. **Mild cognitive impairment**: Hope for stability, plan for progression. *Cleve Clin J Med*. 2012 Dec;79(12):857-64.

Patterson C, Feighner JW, Garcia A, Hsiung GY, MacKnight C, Sadovnick AD. Diagnosis and treatment of dementia: 1. **Risk assessment and primary prevention** of Alzheimer disease. *CMAJ*. 2008 Feb 26;178(5):548-56.

Peltz CB, Corrada MM, Berlau DJ, Kawas CH. **Incidence of dementia in oldest-old** with amnesic MCI and other cognitive impairments. *Neurology*. 2011 Nov 22;77(21):1906-12.

Pernecky R, Tsolakidou A, Arnold A, et al. **CSF soluble amyloid precursor proteins** in the diagnosis of incipient Alzheimer disease. *Neurology*. 2011 Jul 5;77(1):35-8.

Perras C, Shukla VK, Lessard C, et al. **Cholinesterase Inhibitors for Alzheimer's Disease: A Systematic Review of Randomized Controlled Trials** [Technology report no 58]. Ottawa: Canadian Coordinating Office for Health Technology Assessment; Sept 2005. 129pages. CCOHTA [https://www.ccohta.ca/publications/pdf/217\\_cholinesterase\\_tr\\_e.pdf](https://www.ccohta.ca/publications/pdf/217_cholinesterase_tr_e.pdf)

Peters R, Beckett N, Forette F, et al. **HYVET** investigators. Incident dementia and blood pressure lowering in the Hypertension in the Very Elderly Trial cognitive function assessment (**HYVET-COG**): a double-blind, placebo controlled trial. *Lancet Neurol*. 2008 Aug;7(8):683-9. Epub 2008 Jul 7. Antihypertensive treatment in elderly patients does not statistically reduce incidence of dementia. This negative finding might have been due to the short follow-up, owing to the early termination of the trial, or the modest effect of treatment. Nevertheless, the HYVET findings, when included in a meta-analysis, might support antihypertensive treatment to reduce incident dementia.

Petersen RC, Stevens JC, Ganguli M, Tangalos EG, Cummings JL, DeKosky ST. Practice parameter: early detection of dementia: mild cognitive impairment (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. *Neurology* 2001;56:1133-42.

Petersen RC. Clinical practice. **Mild cognitive impairment**. *N Engl J Med*. 2011 Jun 9;364(23):2227-34.

Petersen RC, Aisen P, Boeve BF, et al. Criteria for **mild cognitive impairment** due to Alzheimer's disease in the community. *Ann Neurol*. 2013 May 20.

Pharmacist's Letter Oct 2006. **Drug treatment of Dementia** due to Alzheimer's Disease.

Pharmacist's Letter. **Fall prevention in the elderly**. April 2010.

Phelan EA, Borson S, Grothaus L, Balch S, Larson EB. Association of **incident dementia with hospitalizations**. *JAMA*. 2012;307(2):165-172.

Phillips VL, Diwan S. The incremental effect of dementia-related problem **behaviors** on the time to nursing home placement in poor, frail, demented older people. *J Am Geriatr Soc*. 2003 Feb;51(2):188-93.

Piguet Olivier, Hornberger Michael, Mioshi Eneida, et al. **Behavioural-variant frontotemporal dementia**: diagnosis, clinical staging, and management, *The Lancet Neurology*, In Press, Corrected Proof, Available online 10 Dec 2010, ISSN 1474-4422

Pitkälä KH, Pöysti MM, Laakkonen ML, et al. Effects of the **Finnish Alzheimer Disease Exercise Trial (FINALEX)**: A Randomized Controlled Trial. *JAMA Intern Med*. 2013 Apr 15:1-8.

Plassman Brenda L., Williams, Jr John W., Burke, James R. et al. **NIH Conferences**: Systematic Review: Factors Associated With **Risk for and Possible Prevention of Cognitive Decline in Later Life**. *Ann Intern Med* August 3, 2010 153:182-193.

Poels MM, Ikram MA, van der Lugt A et al. **Cerebral microbleeds** are associated with worse cognitive function: The **Rotterdam Scan Study**. *Neurology*. 2012 Jan 31;78(5):326-33.

Pollock BG, Mulsant BH, et al. Double-blind comparison of **citalopram and risperidone** for the treatment of behavioural and psychotic symptoms associated with dementia. *Am J Geriatr Psychiatry* 2007; 15: 942-952.

Pollock, Bruce G., Mulsant, Benoit H. Between Scylla and Charybdis: **antipsychotic and other psychotropic medications** in older nursing home residents *CMAJ* 2011 183: 778-779.

Possin KL, Feigenbaum D, Rankin KP, et al. **Dissociable executive functions in behavioral variant frontotemporal and Alzheimer dementias**. *Neurology* 2013;80:2180–2185.

Pouryamout L, Dams J, Wasem J, Dodel R, Neumann A. Economic Evaluation of Treatment Options in Patients with Alzheimer's Disease: A **Systematic Review of Cost-Effectiveness** Analyses. *Drugs*. 2012 Apr 5.

Powell MR, et al. Cognitive measures predict pathologic Alzheimer disease. *Arch Neurol*. 2006 Jun;63(6):865-8. (InfoPOEMs: Baseline scores on the Mayo Cognitive Factor Scales (MCFS) are somewhat predictive of developing Alzheimer disease after 6 years. (LOE = 2b))

Prasad KM et al. Progressive gray matter loss and changes in cognitive functioning associated with exposure to **herpes simplex virus 1** in schizophrenia: A longitudinal study. *Am J Psychiatry* 2011 Jun 1

Prestia A, Caroli A, van der Flier WM, et al. **Prediction of dementia in MCI patients based on core diagnostic markers** for Alzheimer disease. *Neurology* 2013;80:1048–1056.

Prince M, Acosta D, Ferri CP, et al. Dementia incidence and mortality in middle-income countries, and associations with **indicators of cognitive reserve**: a 10/66 Dementia Research Group population-based cohort study. *Lancet* 2012; online May 23.

Pruss H, Hölzje M, Maier N, et al. **IgA NMDA receptor antibodies** are markers of synaptic immunity in slow cognitive impairment. *Neurology* 2012;78:1743–1753.

Purandare N, Burns A, Morris J, et al. Association of **cerebral emboli with accelerated cognitive deterioration** in Alzheimer's disease and vascular dementia. *Am J Psychiatry*. 2012 Mar;169(3):300-8.

Qaseem A, Snow V, Cross JT Jr, et al. **American College of Physicians/American Academy of Family Physicians Panel on Dementia**. Current pharmacologic treatment of dementia: a clinical practice guideline from the American College of Physicians and the American Academy of Family Physicians. *Ann Intern Med*. 2008 Mar 4;148(5):370-8.

Qiu C, von Strauss E, Bäckman L, et al. **Twenty-year changes** in dementia occurrence suggest decreasing incidence in central Stockholm, Sweden. *Neurology*. 2013 May 14;80(20):1888-94.

Querfurth HW, LaFerla FM. **Alzheimer's Disease-Mechanism of Disease**. *N Engl J Med* 2010 362: 329-344

Quinn JF.; Raman R, Thomas RG.; et al. **Docosahexaenoic Acid (DHA) Supplementation** and Cognitive Decline in Alzheimer Disease: A Randomized Trial. *JAMA*. 2010;304(17):1903-1911.

Rabinovici GD, Rosen HJ, Alkalay A, et al. **Amyloid vs FDG-PET** in the differential diagnosis of AD and FTLT. *Neurology*. 2011 Nov 30.

Rabins PV et al. Practice Guideline for the Treatment of patients with **Alzheimer's Disease and other Dementias**. **APA American 2007**  
[http://www.psych.org/psych\\_pract/treat/pg/AlzPG101007.pdf](http://www.psych.org/psych_pract/treat/pg/AlzPG101007.pdf)

Raffaitin C, Féart C, Le Goff M, et al. **Metabolic syndrome** and cognitive decline in French elders: The Three-City Study. *Neurology*. 2011 Feb 8;76(6):518-25.

Raffi MS, Walsh S, Little JT, et al. Alzheimer's Disease Cooperative Study. A phase II trial of **huperzine A** in mild to moderate Alzheimer disease. *Neurology*. 2011 Apr 19;76(16):1389-94. (not benefit)

Raina P, Santaguida P, Ismail A, et al. Effectiveness of **cholinesterase inhibitors and memantine** for treating dementia: evidence review for a clinical practice guideline. *Ann Intern Med*. 2008 Mar 4;148(5):379-97.

Rait G., Walters K., Bottomley C., Petersen I., Iliffe S., Nazareth I. **Survival** of people with clinical diagnosis of dementia in primary care: cohort study. *BMJ* 2010;341:c3584, doi: 10.1136/bmj.c3584 (Published 5 August 2010)

Raivio MM, Laurila JV, Strandberg TE, et al. **Neither atypical nor conventional antipsychotics increase mortality** or hospital admissions among elderly patients with dementia: a two-year prospective study. *Am J Geriatr Psychiatry*. 2007 May;15(5):416-24.

Rappaport SA, Marcus RN, Manos G, McQuade RD, Oren DA. A randomized, double-blind, placebo-controlled tolerability study of **intramuscular aripiprazole** in acutely agitated patients with Alzheimer's, vascular, or mixed dementia. *J Am Med Dir Assoc*. 2009 Jan;10(1):21-7.

Rapoport MJ, Herrmann N, Molnar FJ, et al. Sharing the responsibility for assessing the risk of the **driver** with dementia. *CMAJ*. 2007 Sep 11;177(6):599-601.

Raschetti R, Albanese E, Vanacore N, Maggini M. Cholinesterase inhibitors in **mild cognitive impairment**: a systematic review of randomised trials. *PLoS Med*. 2007 Nov 27;4(11):e338. The use of ChEIs in MCI was not associated with any delay in the onset of AD or dementia. Moreover, the safety profile showed that the risks associated with ChEIs are not negligible.

Ravona-Springer R, Schneider-Beeri M, Goldbourt U. **Body weight variability** in midlife and risk for dementia in old age. *Neurology*. 2013 Apr 30;80(18):1677-83.

Redelmeier DA, Thiruchelvam D, Daneman N. **Delirium** after elective surgery among elderly patients **taking statins**. CMAJ. 2008 Sep 23;179(7):645-52.

Reiman EM, Quiroz YT, Fleisher AS, et al. Brain **imaging and fluid biomarker** analysis in young adults at genetic risk for autosomal dominant Alzheimers disease in the presenilin 1 E280A kindred: a case-control study. Lancet Neurol 2012.

Reston JT, Schoelles KM. **In-facility delirium programs** as a patient safety strategy. A systematic review. Ann Intern Med. 2013;158:375-80.

Reynolds CF 3rd, Butters MA, Lopez O, et al. Maintenance treatment of depression in old age: a randomized, double-blind, placebo-controlled evaluation of the efficacy and safety of **donepezil** combined with antidepressant Pharmacotherapy. Arch Gen Psychiatry. 2011 Jan;68(1):51-60. (no clear benefit)

Richard E, Reitz C, Honig LH, et al. Late-Life **Depression**, Mild Cognitive Impairment, and Dementia. Arch Neurol. 2012 Dec 31:1-7.

Richter T, Meyer G, Möhler R, Köpke S. **Psychosocial interventions** for reducing antipsychotic medication in **care home residents**. Cochrane Database of Systematic Reviews 2012, Issue 12. Art. No.: CD008634. DOI: 10.1002/14651858.CD008634.pub2. There is evidence to support the effectiveness of psychosocial interventions for reducing antipsychotic medication in care home residents.

Ridgway GR, Lehmann M, Barnes J, et al. Early-onset Alzheimer disease clinical variants: Multivariate analyses of **cortical thickness**. Neurology. 2012 Jun 20.

Ringman John M. Setting the stage for **prevention of familial Alzheimer's disease**, The Lancet Neurology, Volume 10, Issue 3, March 2011, Pages 200-201, ISSN 1474-4422, DOI: 10.1016/S1474-4422(10)70328-8.

Rinne JO, et al. 11C-PiB PET assessment of change in fibrillar amyloid- $\beta$  load in patients with Alzheimer's disease treated with **batineuzumab**: a phase 2, double-blind, placebo-controlled, ascending-dose study. Lancet Neurol 2010; 9: 363–72.

Ritchie K., Carrière I., Ritchie C. Wet al. **Designing prevention programmes** to reduce incidence of dementia: prospective cohort study of modifiable risk factors. BMJ 2010;341:c3885, doi: 10.1136/bmj.c3885 (Published 5 August 2010)

Rizzo Matthew. **Impaired Driving From Medical Conditions**: A 70-Year-Old Man Trying to Decide if He Should Continue Driving. JAMA. 2011;305(10):1018-1026.

Roberts RO, Geda YE, Knopman DS, et al. The incidence of **MCI differs by subtype and is higher in men**: the Mayo Clinic Study of Aging. Neurology 2012;78:342–351.

Robinson DM, Keating GM. **Memantine**: a review of its use in Alzheimer's disease. Drugs. 2006;66(11):1515-34.

Rocca WA, Bower JH, Maragone DM, et al. Increased risk of cognitive impairment or dementia in women who underwent oophorectomy before menopause. Neurology. 2007 Sep 11;69(11):1074-83. Epub 2007 Aug 29. Both unilateral and bilateral **oophorectomy preceding the onset of menopause** are associated with an increased risk of cognitive impairment or dementia. The effect is age-dependent and suggests a critical age window for neuroprotection.

Rochon PA, Gruneir A, Gill SS, et al. **Older men with dementia** are at greater risk than women of **serious events** after initiating antipsychotic therapy. J Am Geriatr Soc. 2013 Jan;61(1):55-61.

Rodda J, Carter J. **Cholinesterase inhibitors and memantine** for symptomatic treatment of dementia. BMJ. 2012 May 1;344:e2986.

Rodrigue KM, Kennedy KM, Devous MD Sr, et al.  **$\beta$ -Amyloid burden in healthy aging**: Regional distribution and cognitive consequences. Neurology. 2012 Feb 7;78(6):387-95.

Rodrigue KM, Rieck JR, Kennedy KM, et al. **Risk Factors for  $\beta$ -Amyloid Deposition in Healthy Aging**: Vascular and Genetic Effects. JAMA Neurol. 2013 Mar 18:1-7.

Roe CM, Fagan AM, Williams MM, et al. Improving **CSF biomarker** accuracy in predicting prevalent and incident Alzheimer disease. Neurology. 2011 Feb 8;76(6):501-10.

Roe CM, Fagan AM, Grant EA, et al. **Cerebrospinal fluid biomarkers, education, brain volume**, and future cognition. Arch Neurol. 2011 Sep;68(9):1145-51.

Roe CM, Rentz DM. Alzheimer disease: **Before the diagnosis**. Neurology. 2013 Mar 26;80(13):e148-9.

Roe CM, Fagan AM, Grant EA, et al. **Amyloid imaging and CSF biomarkers** in predicting cognitive impairment up to 7.5 years later. Neurology. 2013 May 7;80(19):1784-1791.

Rolland Y, et al. **Exercise program** for nursing home residents with Alzheimer's disease: a 1-year randomized, controlled trial. J Am Geriatr Soc. 2007 Feb;55(2):158-65. A simple exercise program, 1 hour twice a week, led to significantly slower decline in ADL score in patients with AD living in a nursing home than routine medical care.

Roman GC, Salloway S, Black SE, et al. Randomized, placebo-controlled, clinical trial of **donepezil in vascular dementia**: differential effects by **hippocampal size**. Stroke. 2010 Jun;41(6):1213-21. Epub 2010 Apr 15.

Rosenberg PB, Drye LT, Martin BK, et al. DIADS-2 Research Group. **Sertraline** for the treatment of **depression in Alzheimer disease**. Am J Geriatr Psychiatry. 2010 Feb;18(2):136-45. CONCLUSIONS: **Sertraline not effective**.

Rosenberg RN. Treat Alzheimer disease **before it is symptomatic**. Arch Neurol. 2011 Oct;68(10):1237-8.

Rosenheck RA, Leslie DL, Sindelar JL, et al. Clinical Antipsychotic Trial of Intervention Effectiveness-Alzheimer's Disease (**CATIE-AD**) investigators. **Cost-benefit analysis** of second-generation antipsychotics and placebo in a randomized trial of the treatment of psychosis and aggression in Alzheimer disease. Arch Gen Psychiatry. 2007 Nov;64(11):1259-68. There were no differences in measures of effectiveness between initiation of active treatments or placebo (which represented watchful waiting) but the placebo group had significantly lower health care costs. Sultzer DL, Davis SM, Tariot PN, Dagerman KS, Lebowitz BD, Lyketsos CG, Rosenheck RA, Hsiao JK, Lieberman JA, Schneider LS; CATIE-AD Study Group. Clinical Symptom Responses to Atypical Antipsychotic Medications in Alzheimer's Disease: Phase 1 Outcomes From the CATIE-AD Effectiveness Trial. Am J Psychiatry. 2008 Jun 2. [Epub ahead of print] In this descriptive analysis of outpatients with Alzheimer's disease in usual care settings, some clinical symptoms improved with atypical antipsychotics. Antipsychotics may be more effective for particular symptoms, such as **anger, aggression, and paranoid ideas**. They do not appear to improve functioning, care needs, or quality of life.

Rossetti HC, Lacritz LH, Cullum CM, Weiner MF. **Normative data for the Montreal Cognitive Assessment (MoCA)** in a population-based sample. Neurology. 2011 Sep 27;77(13):1272-5.

Rossum RC, Rector TS, Lederle FA, et al. Are All Commonly Prescribed Antipsychotics Associated with Greater **Mortality** in Elderly Male Veterans with Dementia? J Am Geriatr Soc. 2010 May 7. Commonly prescribed doses of **haloperidol, olanzapine, and risperidone**, but not **quetiapine**, were associated with a **short-term increase in mortality**.

Rossum RC, Espeland MA, Manson JE, et al. **Calcium and vitamin D supplementation and cognitive impairment** in the women's health initiative (**WHI**). J Am Geriatr Soc. 2012 Dec;60(12):2197-205.

Rusanen Minna; Kivipelto Mia; Quesenberry Charles P. Jr; et al. Heavy **Smoking in Midlife** and Long-term Risk of Alzheimer Disease and Vascular Dementia. Arch Intern Med. 2011;171(4):333-339.

Russ TC, Morling JR. **Cholinesterase inhibitors for mild cognitive impairment**. Cochrane Database Syst Rev. 2012 Sep 12;9:CD009132. doi: 10.1002/14651858.CD009132.pub2. There is very little evidence that cholinesterase inhibitors affect progression to dementia or cognitive test scores in mild cognitive impairment. This weak evidence is overwhelmed by the increased risk of adverse events, particularly gastrointestinal. Cholinesterase inhibitors should **not be recommended for mild cognitive impairment**.

Sacchetti E, Turrina C, Valsecchi P. **Cerebrovascular accidents in elderly people treated with antipsychotic drugs**: a systematic review. Drug Saf. 2010 Apr 1;33(4):273-88. doi: 10.2165/11319120-000000000-00000.

Sachs GA, Carter R, Holtz LR, et al. **Cognitive impairment**: an independent predictor of **excess mortality**: a cohort study. Ann Intern Med. 2011 Sep 6;155(5):300-8.

Saczynski, J.S., Beiser, A., Seshadri, S., et al. **Depressive symptoms** and risk of dementia: The Framingham Heart Study. Neurology 2010 75: 35-41.

Saczynski JS, Marcantonio ER, Quach L, et al. Cognitive trajectories after **postoperative delirium**. N Engl J Med 2012; 367:30-39.

Sanders Robert D, Pandharipande Pratik P, Davidson Andrew J, et al. Anticipating and managing **postoperative delirium** and cognitive decline in adults. BMJ 2011;343:doi:10.1136/bmj.d4331 (Published 20 July 2011)

Sano M, Bell KL, Galasko D, et al. A randomized, double-blind, placebo-controlled trial of **simvastatin to treat Alzheimer disease**. Neurology. 2011 Aug 9;77(6):556-63. (**no benefit**)

Saposnik G, Cote R, Rochon PA, et al. On behalf of the Investigators of the Registry of the Canadian Stroke Network and the Stroke Outcome Research Canada (SORCan) Working Group. Care and outcomes in patients with **ischemic stroke** with and without preexisting dementia. Neurology. 2011 Nov 1;77(18):1664-1673.

Sarnak MJ, Tighiouart H, Scott TM, et al. Frequency of and risk factors for poor cognitive performance in **hemodialysis patients**. Neurology. 2013 Jan 29;80(5):471-80.

Scarmeas N, et al. **Physical activity, diet**, and risk of Alzheimer disease. JAMA. 2009 Aug 12;302(6):627-37. In this study, both higher **Mediterranean-type** diet adherence and higher **physical activity** were independently associated with reduced risk for AD.

Scarmeas N, Honig LS, Choi H, et al. **Seizures** in Alzheimer disease: who, when, and how common? Arch Neurol. 2009 Aug;66(8):992-7.

Schafer JH, et al. **Homocysteine** and cognitive function in a population-based study of older adults. J Am Geriatr Soc. 2005 Mar;53(3):381-8.

Schmidt C, Wolff M, Weitz M, et al. **Rapidly progressive Alzheimer disease**. Arch Neurol. 2011 Sep;68(9):1124-30.

Schneider LS, Dagerman K, Insel PS. Efficacy and adverse effects of **atypical antipsychotics** for dementia: meta-analysis of randomized, placebo-controlled trials. Am J Geriatr Psychiatry. 2006 Mar;14(3):191-210.

Schneider LS, Dagerman KS, Higgins JP, McShane R. **Lack of Evidence for the Efficacy of Memantine in Mild Alzheimer Disease**. Arch Neurol. 2011 Apr 11.

Schoonenboom NS, Reesink FE, Verwey NA, et al. **Cerebrospinal fluid markers** for differential dementia diagnosis in a large memory clinic cohort. Neurology. 2012 Jan 3;78(1):47-54.

Schrijvers Elisabeth M. C., Koudstaal Peter J., Hofman Albert, et al. **Plasma Clusterin** and the Risk of Alzheimer Disease. JAMA. 2011;305(13):1322-1326.doi:10.1001/jama.2011.381.

Schrijvers EMC, Verhaaren BFJ, Koudstaal PJ, Hofman A, Ikram MA, Breteler MMB. Is **dementia incidence declining?** Trends in dementia incidence since 1990 in the Rotterdam Study. Neurology 2012;78:1456–1463.

Schott JM, Warren JD, Barkhof F, Rossor MN, Fox NC. Suspected early dementia. BMJ. 2011 Sep 20;343:d5568. doi: 10.1136/bmj.d5568.

Seitz DP, Adunuri N, Gill SS, et al. **Antidepressants for agitation and psychosis** in dementia. Cochrane Database Syst Rev. 2011 Feb 16;2:CD008191. Currently there are relatively few studies of antidepressants for the treatment of agitation and psychosis in dementia. The SSRIs sertraline and citalopram were associated with a reduction in symptoms of agitation when compared to placebo in two studies. Both SSRIs and trazodone appear to be tolerated reasonably well when compared to placebo, typical antipsychotics and atypical antipsychotics.

Sessums LL, Zembrzuska H, Jackson JL. Does this patient have **medical decision-making capacity**? JAMA. 2011 Jul 27;306(4):420-7.

Seshadri Sudha; Fitzpatrick Annette L.; Ikram M. Arfan et al; for the CHARGE, GERAD1, and EADI1 Consortia Genome-wide Analysis of **Genetic Loci Associated With Alzheimer Disease**. JAMA. 2010;303(18):1832-1840.

Shah RC, Buchman AS, Wilson RS, et al. **Hemoglobin level** in older persons and incident Alzheimer disease: Prospective cohort analysis. Neurology. 2011 Jul 19;77(3):219-26.

Shao H, Breitner JCS, Whitmer RA, et al. **Hormone therapy and Alzheimer disease**: new findings from the **Cache County Study**. Neurology 2012;79:1846–1852.

Sheldon Tony. Study of **rivastigmine for delirium** in intensive care is stopped after **deaths**. BMJ 2010;340:c2895, doi: 10.1136/bmj.c2895 (Published 28 May 2010)

Silverman JM, Schmeidler J, Beeri MS, et al. **C-reactive protein** and familial risk for dementia: A phenotype for successful cognitive aging. Neurology. 2012 Sep 11;79(11):1116-23.

Simmons BB, Hartmann B, DeJoseph D. **Evaluation of Suspected Dementia**. Am Fam Physician. 2011 Oct 15;84(8):895-902.

Singh J, Kour K, Jayaram MB. **Acetylcholinesterase inhibitors for schizophrenia**. Cochrane Database of Systematic Reviews 2012, Issue 1. Art. No.: CD007967. DOI: 10.1002/14651858.CD007967.pub2.

The results seem to favour the use of acetylcholinesterase inhibitors in combination with antipsychotics on a few domains of mental state and cognition, but because of the various limitations in the studies as mentioned in the main text, the evidence is weak.

Singh-Manoux A, Kivimaki M, Glymour MM, Elbaz A, Berr C, et al. Timing of **onset of cognitive decline**: results from **Whitehall II** prospective cohort study. BMJ 2012;344:d7622. Evident in **middle age** (age 45-49).

Sink KM, Thomas J 3rd, Xu H, Craig B, et al. Dual Use of Bladder **Anticholinergics and Cholinesterase Inhibitors**: Long-Term Functional and Cognitive Outcomes. J Am Geriatr Soc. 2008 Apr 1. [Epub ahead of print] In higher-functioning NH residents, dual use of ChIs and bladder anticholinergics may result in greater rates of functional decline than use of ChIs alone. The MDS-COGS may not be sensitive enough to detect differences in cognition due to dual use.

Small GW, Siddarth P, Kepe V, et al. Prediction of cognitive decline by **positron emission tomography** of brain amyloid and tau. Arch Neurol. 2012 Feb;69(2):215-22.

Snowden M, Steinman L, Mochan K, et al. Effect of **Exercise on Cognitive Performance** in Community-Dwelling Older Adults: Review of Intervention Trials and Recommendations for Public Health Practice and Research. J Am Geriatr Soc. 2011 Apr;59(4):704-716.

Snowden JS et al. The **clinical diagnosis of early-onset dementias**: Diagnostic accuracy and clinicopathological relationships. Brain 2011 Aug 11

Soininen H, West C, Robbins J, Niculescu L. Long-Term Efficacy and Safety of **Celecoxib** in Alzheimer's Disease. Dement Geriatr Cogn Disord. 2006 Oct 26;23(1):8-21 [Epub ahead of print] Celecoxib 200 mg bid did not slow the progression of AD in this study, and the occurrence of adverse events was as expected for an elderly population with a complex chronic medical condition.

Sojkova J, Zhou Y, An Y, et al. Longitudinal Patterns of {beta}-**Amyloid Deposition in Nondemented Older Adults**. Arch Neurol. 2011 May;68(5):644-9.

Solomon PR, Murphy CA. Should we **screen for Alzheimer's disease**? A review of the evidence for and against screening Alzheimer's disease in primary care practice. Geriatrics. 2005 Nov;60(11):26-31.

Song X, Mitnitski A, Rockwood K. **Nontraditional risk factors** combine to predict Alzheimer disease and dementia. Neurology. 2011 Jul 19;77(3):227-34.

Sorbi S, Hort J, Erkinjuntti T, Fladby T, et al. EFNS Scientist Panel on Dementia and Cognitive Neurology. EFNS-ENS guidelines on the **diagnosis and management of disorders associated with dementia**. Eur J Neurol 2012 Sep;19(9):1159-79.

Spillantini MG, Goedert M. **Tau pathology** and neurodegeneration. Lancet Neurol. 2013 Jun;12(6):609-22.

Steinberg M, Lyketos CG. **Atypical antipsychotic use in patients with dementia**: managing safety concerns. Am J Psychiatry. 2012 Sep 1;169(9):900-6.

Streim JE, Porsteinsson AP, Breder CD, Swanink R, Marcus R, McQuade R, Carson WH. A randomized, double-blind, placebo-controlled study of **aripiprazole** (~9mg/d) for the treatment of psychosis in nursing home patients with Alzheimer disease. Am J Geriatr Psychiatry. 2008 Jul;16(7):537-50. n=256 10weeks. In nursing home residents with AD and psychosis, **aripiprazole did not confer specific benefits for the treatment of psychotic symptoms**; but psychological and behavioral symptoms, including agitation, anxiety, and depression, were improved with aripiprazole, with a low risk of AEs.

Sudeep S Gill, Paula A Rochon, Nathan Herrmann, et al. Atypical antipsychotic drugs and **risk of ischaemic stroke**: population based retrospective cohort study BMJ, doi:10.1136/bmj.38330.470486.8F (published 24 January 2005) CONCLUSION: Older adults with dementia who take atypical antipsychotics have a similar risk of ischaemic stroke to those taking typical antipsychotics.

Suh GH, Shah A. Effect of **antipsychotics on mortality** in elderly patients with dementia: a 1-year prospective study in a nursing home. Int Psychogeriatr. 2005 Sep;17(3):429-41.

Sultzer DL, Davis SM, Tariot PN, et al. CATIE-AD Group. Clinical **symptom responses** to atypical antipsychotic medications in Alzheimer's disease: phase 1 outcomes from the CATIE-AD effectiveness trial. Am J Psychiatry. 2008 Jul;165(7):844-54.

Sydenham E, Dangour AD, Lim WS. **Omega 3 fatty acid** for the prevention of cognitive decline and dementia. Cochrane Database of Systematic Reviews 2012, Issue 6. Art. No.: CD005379. Direct evidence on the effect of omega-3 PUFA on incident dementia is lacking. The available trials showed no benefit of omega-3 PUFA supplementation on cognitive function in cognitively healthy older people. Omega-3 PUFA supplementation is generally well tolerated with the most commonly reported side-effect being mild gastrointestinal problems.

Takeda A, Loveman E, Clegg A, et al. A systematic review of the clinical effectiveness of **donepezil, rivastigmine and galantamine** on cognition, quality of life and adverse events in Alzheimer's disease. Int J Geriatr Psychiatry. 2005 Dec 2;21(1):17-28

Tangney CC, Aggarwal NT, Li H, et al. **Vitamin B12**, cognition, and brain MRI measures: A cross-sectional examination. Neurology. 2011 Sep 27;77(13):1276-82.

Tariot PN, Farlow MR, Grossberg GT, Graham SM, McDonald S, Gergel I. **Memantine** treatment in patients with moderate to severe Alzheimer disease already receiving donepezil: a randomized controlled trial. JAMA 2004;291:317-24.

Tariot PN, Schneider L, Katz IR, et al. Quetiapine treatment of psychosis associated with dementia: a double-blind, randomized, placebo-controlled clinical trial. Am J Geriatr Psychiatry. 2006 Sep;14(9):767-76. Epub 2006 Aug 11.

Erratum in: Am J Geriatr Psychiatry. 2006 Nov;14(11):988. n=284 All treatment groups showed improvement in measures of psychosis without significant differences between them when planned comparisons were performed. Participants treated with quetiapine or haloperidol showed inconsistent evidence of improvement in agitation. Tolerability was better with quetiapine compared with haloperidol.

Teramura-Grönblad M, Muurinen S, Soini H, et al. Use of **anticholinergic drugs and cholinesterase inhibitors** and their association with psychological well-being among frail older adults in residential care facilities. Ann Pharmacother. 2011 May;45(5):596-602.

Teri L, Gibbons LE, McCurry SM, et al. **Exercise plus behavioral management** in patients with Alzheimer disease: a randomized controlled trial. JAMA. 2003 Oct 15;290(15):2015-22.

The American Geriatrics Society **2012 Beers Criteria Update** Expert Panel. American Geriatrics Society Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. J Am Geriatr Soc. 2012 Feb 29.

Thoonen H, Richard E, Bentham P, Gray R, et al. **Aspirin in Alzheimer's disease: increased risk of intracerebral hemorrhage**: cause for concern? Stroke. 2010 Nov;41(11):2690-2.

Tilly J, Reed P, editor(s). Dementia care practice recommendations for assisted living residences and nursing homes. Washington (DC): Alzheimer's Association; 2006 Sep. 28 p. <http://www.alz.org/documents/national/DementiaCarePracticeRecommendations.pdf>

Tolppanen AM, Lavikainen P, Solomon A, et al. **Incidence of stroke** in people with Alzheimer disease: A national register-based approach. Neurology. 2013 Jan 22;80(4):353-8.

Tsvigoulis G, Alexandrov AV, Wadley VG, et al. Association of higher **diastolic blood pressure** levels with cognitive impairment. Neurology 2009; 73:589-595.

Tsvigoulis G, Judd S, Letter AJ, et al. Adherence to a **Mediterranean diet** and risk of incident cognitive impairment. Neurology. 2013 Apr 30;80(18):1684-1692.

Tsuang D, Leverenz JB, Lopez OL, et al. **GBA mutations** increase risk for Lewy body disease with and without Alzheimer disease pathology. Neurology 2012;79:1944–1950.

Tsvigoulis G, Judd S, Letter AJ, et al. Adherence to a **Mediterranean diet** and risk of incident cognitive impairment. Neurology. 2013 Apr 30;80(18):1684-1692.

Tuovinen S, Räikkönen K, Kajantie E, et al. **Hypertensive disorders** in pregnancy and cognitive decline in the offspring up to old age. Neurology. 2012 Oct 9;79(15):1578-1582.

Unverzagt FW, McClure LA, Wadley VG, et al. **Vascular risk factors** and cognitive impairment in a stroke-free cohort. Neurology. 2011 Nov 8;77(19):1729-36.

Van den Boogaard M, Pickkers P, Slooter AJC, et al. Development and validation of **PRE-DELIRIC** (PREdiction of DELIRium in ICU patients) **delirium prediction model** for intensive care patients: observational multicentre study. BMJ 2012;344:e420.

van der Flier WM, Pijnenburg YA, Fox NC, et al. **Early-onset versus late-onset Alzheimer's disease**: the case of the missing APOE E4 allele. Lancet Neurol. 2010 Dec 22.

van Eijk MM, Roes KC, Honing ML, et al. Effect of **rivastigmine** as an adjunct to usual care with **haloperidol** on duration of **delirium** and mortality in critically ill patients: a multicentre, double-blind, placebo-controlled randomised trial. Lancet. 2010 Nov 4.

van Himbergen TM, Beiser AS, et al. **Biomarkers for Insulin Resistance and Inflammation** and the Risk for All-Cause Dementia and Alzheimer Disease: Results From the Framingham Heart Study. Arch Neurol. 2012 Jan 2.

van Rossum IA, Vos SJ, Burns L, et al. **Injury markers** predict time to dementia in subjects with MCI and **amyloid pathology**. Neurology. 2012 Oct 23;79(17):1809-1816.



Varsaldi F, et al. Impact of the **CYP2D6** polymorphism on steady-state plasma concentrations and clinical outcome of **donepezil** in Alzheimer's disease patients. *Eur J Clin Pharmacol*. 2006 Jul 15; [Epub ahead of print]

Vellas B, Coley N, Ousset P-J, et al, for the GuidAge Study Group. Long-term use of standardised **ginkgo biloba extract** for the prevention of Alzheimer's disease (**GuidAge**): a randomised placebo-controlled trial. *Lancet Neurol* 2012; online Sept 6

Vercambre MN, Grodstein F, Manson JE, et al. **Physical activity** and cognition in women with vascular conditions. (**WACS**) *Arch Intern Med*. 2011 Jul 25;171(14):1244-50.

Verdelho A, Madureira S, Ferro JM, et al; on behalf of the LADIS Study. **Physical Activity** Prevents Progression for Cognitive Impairment and Vascular Dementia: Results From the **LADIS** (Leukoaraisosis and Disability) Study. *Stroke*. 2012 Nov 1.

Vergheze PB, Castellano JM, Holtzman DM. **Apolipoprotein E** in Alzheimer's disease and other neurological disorders. *Lancet Neurol*. 2011 Mar;10(3):241-52.

Verhey FR, Verkaaik M, Lousberg R. **Olanzapine versus Haloperidol** in the Treatment of Agitation in Elderly Patients with Dementia: Results of a Randomized Controlled Double-Blind Trial. *Dement Geriatr Cogn Disord*. 2005 Oct 21;21(1):1-8

Vernooij-Dassen M, Draskovic I, McCleery J, Downs M. **Cognitive reframing** for carers of people with dementia. *Cochrane Database of Systematic Reviews* 2011, Issue 11. Art. No.: CD005318. DOI: 10.1002/14651858.CD005318.pub2. Cognitive reframing for family carers of people with dementia seems to reduce psychological morbidity and subjective stress but without altering appraisals of coping or burden. The results suggest that it may be an effective component of individualised, multi-component interventions for carers.

Vickrey BG, et al. The effect of a **disease management intervention** on quality and outcomes of dementia care: a randomized, controlled trial. *Ann Intern Med*. 2006 Nov 21;145(10):713-26.

Vidal EI, Villas Boas PJ, Valle AP, et al. **Delirium in older adults**. *BMJ*. 2013 Apr 9;346:f2031.

Vidoni ED, Townley RA, Honea RA, Burns JM; For the Alzheimer's Disease Neuroimaging Initiative. **Alzheimer disease biomarkers** are associated with body mass index. *Neurology*. 2011 Nov 22;77(21):1913-1920.

Vigen CL, Mack WJ, Keefe RS, et al. **Cognitive Effects of Atypical Antipsychotic** Medications in Patients With Alzheimer's Disease: Outcomes From **CATIE-AD**. *Am J Psychiatry*. 2011 May 15.

Villemagne VL, Pike KE, Chételat G, et al. **Longitudinal assessment of Aβ** and cognition in aging and Alzheimer disease. *Ann Neurol*. 2011 Jan;69(1):181-92. doi: 10.1002/ana.22248.

Villemagne VL, Okamura N, Pejoska S, et al. In vivo assessment of **vesicular monoamine transporter** type 2 in dementia with lewy bodies and Alzheimer disease. *Arch Neurol*. 2011 Jul;68(7):905-12.

Villemagne VL, Burnham S, et al, for the Australian Imaging Biomarkers and Lifestyle Research Group. **Amyloid βdeposition**, neurodegeneration, and cognitive decline in sporadic Alzheimers disease: a prospective cohort study. *Lancet Neurol* 2013.

Voisin T, Vellas B. Diagnosis and treatment of patients with **severe Alzheimer's disease**. *Drugs Aging*. 2009;26(2):135-44. doi: 10.2165/0002512-200926020-00005.

Vos SJ, van Rossum IA, Verhey F, et al. **Prediction of Alzheimer** disease in subjects with amnesic and nonamnesic MCI. *Neurology*. 2013 Mar 19;80(12):1124-1132.

Waldemar G, Dubois B, Emre M, Georges J, McKeith IG, et al. **EFNS**. Recommendations for the **diagnosis and management of Alzheimer's disease** and other disorders associated with dementia: EFNS guideline. *Eur J Neurol* 2007 Jan;14(1):e1-26.

Waldorff FB, Buss DV, Eckermann A, et al. Efficacy of **psychosocial intervention** in patients with mild Alzheimer's disease: the multicentre, rater blinded, randomised Danish Alzheimer Intervention Study (DAISY). *BMJ*. 2012 Jul 17;345:e4693.

Wallin AK, Blennow K, Zetterberg H, Londos E, Minthon L, Hansson O. **CSF biomarkers** predict a more malignant outcome in Alzheimer disease. *Neurology*. 2010 May 11;74(19):1531-7.

Wang CZ, Du GJ, Zhen Z, Calway T, Yuan CS. Significant dose **differences in donepezil purchased from the United States and Canada**. *Ann Intern Med*. 2011 Aug 16;155(4):279-80.

Wang W, Li HL, Wang DX, et al. **Haloperidol prophylaxis decreases delirium** incidence in elderly patients after noncardiac surgery: a randomized controlled trial\*. *Crit Care Med*. 2012 Mar;40(3):731-9. For elderly patients who are admitted to the intensive care unit (ICU) after noncardiac surgery, the use of prophylactic continuous intravenous (0.5mg x 1 then 0.1mg/hr) haloperidol during the first 12 hours decreases the incidence of delirium.

Wei LA, Fearing MA, Sternberg EJ, Inouye SK. The **Confusion Assessment Method (CAM)** : a systematic review of current usage. *J Am Geriatr Soc* [Internet]. 2008 May [cited 2011 Oct 4];56(5):823-30.

Wergin R, Modrykamien A. **Cognitive impairment in ICU survivors**: Assessment and therapy. *Cleve Clin J Med*. 2012 Oct;79(10):705-712.

Westlye LT, Reinvang I, Rootwelt H, Espeseth T. Effects of **APOE** on brain white matter microstructure in healthy adults. *Neurology*. 2012 Nov 6;79(19):1961-9.

Weuve J, Puett RC, Schwartz J, Yanosky JD, Laden F, Grodstein F. Exposure to **particulate air pollution** and cognitive decline in older women. *Arch Intern Med*. 2012;172(3):219-227.

White RS, Lipton RB, Hall CB, Steinerman JR. **Nonmelanoma skin cancer** is associated with reduced Alzheimer disease risk. *Neurology*. 2013 May 21;80(21):1966-72.

Whitwell JL, Dickson DW, Murray ME, et al. **Neuroimaging** correlates of pathologically defined subtypes of Alzheimer's disease: a case-control study. *Lancet Neurol*. 2012 Aug 31.

Whitmer RA, Karter AJ, Yaffe K, et al. **Hypoglycemic episodes** and risk of dementia in older patients with type 2 diabetes mellitus. *JAMA*. 2009 Apr 15;301(15):1565-72.

Widera Eric, Steenpass Veronika, Marson Daniel, et al. **Finances in the Older Patient** With Cognitive Impairment: "He Didn't Want Me to Take Over." *JAMA*. 2011;305(7):698-706.doi:10.1001/jama.2011.164

Williams JW, Plassman BL, Burke J, et al. **Preventing Alzheimer's disease** and cognitive decline. *Evid Rep Technol Assess* (Summ). 2010 April;193:1-727.

Wilson RS, Hebert LE, Scherr PA, Barnes LL, Mendes de Leon CF, et al. **Educational attainment** and cognitive decline in old age. *Neurology*. 2009 Feb 3;72(5):460-5. The results suggest that education is robustly associated with level of cognitive function but not with rate of cognitive decline and that the former association primarily accounts for education's correlation with risk of dementia in old age.

Wilson RS, Hebert LE, Scherr PA, et al. **Cognitive decline after hospitalization** in a community population of older persons. *Neurology* 2012; 78:950 –956

Wilson RS, Segawa E, Boyle PA, Bennett DA. Influence of **late-life cognitive activity** on cognitive health. *Neurology*. 2012 Apr 10;78(15):1123-9.

Winblad B, et al. 3-Year Study of Donepezil Therapy in Alzheimer's Disease: Effects of **Early and Continuous** Therapy. *Dement Geriatr Cogn Disord*. 2006 Feb 27;21(5-6):353-363 [Epub ahead of print]

Winblad B, Kilander L, Eriksson S, et al. **Severe Alzheimer's Disease Study Group. Donepezil** in patients with severe Alzheimer's disease: double-blind, parallel-group, placebo-controlled study. *Lancet*. 2006 Apr 1;367(9516):1057-65.

Winblad B, Andreasen N, et al. Safety, tolerability, and antibody response of active **Aβ immunotherapy with CAD106** in patients with Alzheimer's disease: randomised, double-blind, placebo-controlled, first-in-human study. *Lancet Neurol* 2012.

Winslow BT, Onysko MK, Stob CM. **Treatment of Alzheimer Disease**. *Am Fam Physician*. 2011;83(12):1403-1412.

Witlox J, Eurelings LS, de Jonghe JF, et al. **Delirium** in elderly patients and the risk of **postdischarge mortality**, institutionalization, and dementia: a meta-analysis. *JAMA*. 2010 Jul 28;304(4):443-51.

Wong Camilla L.; Holroyd-Leduc Jayna; Simel DL.; Straus SE. **Does This Patient Have Delirium?**: Value of Bedside Instruments. *JAMA*. 2010;304(7):779-786. The **Confusion Assessment Method** is the most accurate tool for diagnosing delirium in adults that can be performed in less than 5 minutes. The Mini-Mental State Examination (MMSE) was the least useful diagnostic tool for delirium. (LOE = 3a)

Woods DL, Craven RF, Whitney J. The effect of therapeutic **touch** on behavioral symptoms of persons with dementia. *Altern Ther Health Med* 2005; 11:66-74. (InfoPOEMs: Short-duration therapeutic touch, a specific treatment modality often practiced by nurses, decreases behavioral symptoms in patients with dementia, especially vocalizing and manual manipulation of hands or objects. This simple intervention was administered twice daily for 5 minutes to 7 minutes by a trained practitioner. (LOE = 1b.)

Woods B, Aguirre E, Spector AE, Orrell M. **Cognitive stimulation** to improve cognitive functioning in people with dementia. *Cochrane Database of Systematic Reviews* 2012, Issue 2. Art. No.: CD005562. DOI: 10.1002/14651858.CD005562.pub2. There was consistent evidence from multiple trials that cognitive stimulation programmes benefit cognition in people with mild to moderate dementia over and above any medication effects.

Woon FL, Dunn CB, Hopkins RO. Predicting Cognitive Sequelae in Survivors of **Critical Illness with Cognitive Screening Tests**. *Am J Respir Crit Care Med*. 2012 Jun 14.

Whitwell JL, Shiung MM, Przybelski SA, Weigand SD, Knopman DS, Boeve BF, et al. **MRI** patterns of atrophy associated with progression to AD in amnesic mild cognitive impairment. *Neurology*. 2007 Sep 26.

Woods SW, Morgenstern H, Saksa JR, et al. Incidence of **tardive dyskinesia with atypical versus conventional antipsychotic** medications: a prospective cohort study. *J Clin Psychiatry*. 2010 Feb 9.

Xie J, Brayne C, Matthews FE; Medical Research Council Cognitive Function and Ageing Study collaborators. **Survival times** in people with dementia: analysis from population based cohort study with 14 year follow-up. *BMJ*. 2008 Feb 23;336(7638):258-62. Epub 2008 Jan 10. **Men will live a median 4.1 years and women a median of 4.6 years beyond a diagnosis of dementia**. Survival time is shorter in older people and in patients with disability. (LOE = 1b)

Xiong C, Roe CM, Buckles V, et al. Role of family history for Alzheimer **biomarker abnormalities** in the adult children study. *Arch Neurol*. 2011 Oct;68(10):1313-9.

Yaffe Kristine, Weston Andrea, Graff-Radford Neill R., et al. Original Contribution Association of **Plasma β-Amyloid Level and Cognitive Reserve** With Subsequent Cognitive Decline. *JAMA*. 2011;305(3):261- 266.

Yaffe K, Middleton LE, Lui LY, et al. **Mild cognitive impairment, dementia**, and their subtypes in **oldest old women**. *Arch Neurol*. 2011 May;68(5):631-6

Yaffe K, Laffan AM, Harrison SL, et al. **Sleep-disordered breathing**, hypoxia, and risk of mild cognitive impairment and dementia in older women. *JAMA*. 2011; 306(6):613-619.

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Yaffe K, Lindquist K, Schwartz AV, et al. **Advanced glycation end product level**, diabetes, and accelerated cognitive aging. *Neurology*. 2011 Oct 4;77(14):1351-6.

Yaffe K, Falvey C, Hamilton N, et al. **Diabetes, Glucose Control**, and 9-Year Cognitive Decline Among Older Adults Without Dementia Diabetes and Risk of Cognitive Decline. *Arch Neurol*. 2012 Jun 18:1-6.

Yaffe K, Falvey CM, Hamilton N, et al; for the Health ABC Study. Association Between **Hypoglycemia and Dementia** in a Biracial Cohort of Older Adults With Diabetes Mellitus. *JAMA Intern Med*. 2013 Jun 10:1-6.

Young J, Inouye SK. **Delirium in older people**. *BMJ*. 2007 Apr 21;334(7598):842-6.

Young John, Meagher David, MacLulich Alasdair. **Cognitive assessment of older people**. *BMJ* 2011;343:d5042 doi: 10.1136/bmj.d5042.

Zekry D, Gold G. Management of **mixed dementia**. *Drugs Aging*. 2010 Sep 1;27(9):715-28. doi: 10.2165/11538250-000000000-00000.

Zhan C, et al. Potentially **inappropriate** medication use in the community-dwelling elderly: findings from the 1996 Medical Expenditure Panel Survey.*JAMA*. 2001 Dec 12;286(22):2823-9.

Zhong KX, Tariot PN, Mintzer J, et al. **Quetiapine** to treat agitation in dementia: a randomized, double-blind, placebo-controlled study. *Curr Alzheimer Res*. 2007 Feb;4(1):81-93. n=333. The results of this study suggest that quetiapine 200mg/day was effective and well-tolerated for treating agitation associated with dementia. However, caution should be exercised given the concerns regarding increased mortality with atypical antipsychotics in this vulnerable patient population.

#### Useful Web sites:

Alzheimer Society Canada [www.alzheimer.ca](http://www.alzheimer.ca)

Alzheimer Association USA [www.alz.org](http://www.alz.org)

Alzheimer Society UK [www.alzheimers.org.uk](http://www.alzheimers.org.uk)