

APPENDIX 1

SEARCH STRATEGIES USED FOR THE DYSPEPSIA GUIDELINE

Topic	Medline (Database: Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present>	Embase <1974 to present
Psychological therapy, from 2005 to 12 May 2016, Multi-file search, n=745	<p>1 exp Dyspepsia/ (7,888)</p> <p>2 eructation/ (328)</p> <p>3 flatulence/ (1,301)</p> <p>4 (dyspep* or "NUD" or "FD").mp. (20,895)</p> <p>5 (indigestion or indigestive).tw,kw. (799)</p> <p>6 1 or 2 or 3 or 4 or 5 (22,982)</p> <p>7 exp Psychotherapy/(167,526)</p> <p>8 psychotherap*.af. (103,197)</p> <p>9 ((animal assisted or aromatherapy or art or behavior or behaviour or color or colour or dance or feedback or music or narrative or person-centered or play or psychoanalytic* or psycholog*) adj5 (therap* or treat* or manag* or strategy*)).tw,kw. (67,724)</p> <p>10 ((horticultural or socioenvironmental or social environment or socio* environment or logotherap* or reality or gestalt) adj5 (therap* or treat* or manag* or strategy*)).tw,kw. (2,178)</p> <p>11 (autogenic training or (relaxation adj2 progressive) or bibliotherap* or hypnosis or hypnoses or hypnotherap* or hypnotism or mesmerism or abreaction or catharsis).tw,kw. (9,967)</p> <p>12 or/7-11 (254,628)</p> <p>13 6 and 12 (253)</p> <p>14 randomized controlled trial.pt. (416,221)</p> <p>15 controlled clinical trial.pt. (90,701)</p> <p>16 random*.mp. (1,046,809)</p> <p>17 placebo.ab. (171,882)</p> <p>18 trial.ab. (364,897)</p> <p>19 groups.ab. (1,579,013)</p> <p>20 or/14-19 (2,535,619)</p> <p>21 13 and 20 (78)</p> <p>22 limit 21 to yr="2005 -Current" (42)</p>	<p>1 exp Dyspepsia/ (28,265)</p> <p>2 eructation/ (983)</p> <p>3 flatulence/ (9,815)</p> <p>4 (dyspep* or "NUD" or "FD").mp. (42,121)</p> <p>5 (indigestion or indigestive).tw,kw. (1,203)</p> <p>6 1 or 2 or 3 or 4 or 5 (52,030)</p> <p>7 exp Psychotherapy/(209,526)</p> <p>8 psychotherap*.af. (139,519)</p> <p>9 ((animal assisted or aromatherapy or art or behavior or behaviour or color or colour or dance or feedback or music or narrative or person-centered or play or psychoanalytic* or psycholog*) adj5 (therap* or treat* or manag* or strategy*)).tw,kw. (95,906)</p> <p>10 ((horticultural or socioenvironmental or social environment or socio* environment or logotherap* or reality or gestalt) adj5 (therap* or treat* or manag* or strategy*)).tw,kw. (3,158)</p> <p>11 (autogenic training or (relaxation adj2 progressive) or bibliotherap* or hypnosis or hypnoses or hypnotherap* or hypnotism or mesmerism or abreaction or catharsis).tw,kw. (12,483)</p> <p>12 or/7-11 (332,259)</p> <p>13 6 and 12 (1,203)</p> <p>14 random*.mp. (1,250,429)</p> <p>15 clinical trial:.mp. (1,213,928)</p> <p>16 exp health care quality/ (2,307,441)</p> <p>17 double-blind:.mp. or placebo:.tw. or blind:.tw. (462,289)</p> <p>18 or/14-17 (4,013,838)</p> <p>19 13 and 18 (766)</p> <p>20 limit 19 to yr="2005 -Current" (602)</p>
Prokinetics and FD from 2010 to 12 April 2016, Multi-file search, n=1,026	<p>1 exp Dyspepsia/7,859</p> <p>2 (dyspep* or "NUD" or "FD").tw,kw. 18,461</p> <p>3 (indigestion or indigestive).tw. 783</p> <p>4 or/1-3 20,884</p> <p>5 (prokinetic* or gastroprokinetic* or gastrokinetic* or gastro-kinetic*).tw,kw. 2,687</p> <p>6 (antiemetic* or anti-emetic).tw,kw. 7,327</p> <p>7 exp Benzamides/46,246</p> <p>8 (Benzoic Acid Amide or Amides or Phenyl Carboxamide or Benzamide* or Benzoylamide or benzoates).tw,kw. 13,430</p> <p>9 (Phenylcarboxamide or Phenylcarboxamide or Benzenecarboxamide or Amid kyseliny benzoove).tw,kw. 12</p> <p>10 exp Domperidone/1,623</p> <p>11 (domperidon* or domidon or Domperi or Domstal or evoxin or gastrocure or motilium or motilium).tw,kw. 2,103</p> <p>12 (motis or nauzelin or Motinorm Costi or Nomit or Brulium or Molax).tw,kw. 4</p> <p>13 exp Antiemetics/133,454</p> <p>14 exp Metoclopramide/4,630</p> <p>15 (Metoclopramide or cerucal or clopra or gastrese or gastrobid or gastroflux or gastromax or maxolon).tw,kw. 5,414</p> <p>16 (metaclopramide or metozolv or metramid or migravess or mygdalon or octamide or parmid).tw,kw. 45</p> <p>17 (primperan or reglan or reliveran or rimetin or Degan or Maxeran or Pylomid or Pramin).tw,kw. 115</p> <p>18 exp Cisapride/1,444</p> <p>19 (Cisapride or alimix or Propulsid or Propulsid).tw,kw. 1,675</p> <p>20 exp Cholinesterase Inhibitors/44,836</p>	<p>1 exp dyspepsia/28,132</p> <p>2 (dyspep* or "NUD" or "FD").tw,kw. 26,029</p> <p>3 (indigestion or indigestive).tw. 1,188</p> <p>4 or/1-3 42,564</p> <p>5 (prokinetic* or gastroprokinetic* or gastrokinetic* or gastro-kinetic*).tw,kw. 4,035</p> <p>6 (antiemetic* or anti-emetic).tw,kw. 10,216</p> <p>7 exp benzamide derivative/54,971</p> <p>8 (Benzoic Acid Amide or Amides or Phenyl Carboxamide or Benzamide* or Benzoylamide or benzoates).tw,kw. 16,902</p> <p>9 (Phenylcarboxamide or Phenylcarboxamide or Benzenecarboxamide or Amid kyseliny benzoove).tw,kw. 13</p> <p>10 exp domperidone/7,795</p> <p>11 (domperidon* or domidon or Domperi or Domstal or evoxin or gastrocure or motilium or motilium).tw,kw. 3,417</p> <p>12 (motis or nauzelin or Motinorm Costi or Nomit or Brulium or Molax).tw,kw. 16</p> <p>13 exp antiemetic agent/168,619</p> <p>14 exp metoclopramide/22,515</p> <p>15 (Metoclopramide or cerucal or clopra or gastrese or gastrobid or gastroflux or gastromax or maxolon).tw,kw. 7,192</p> <p>16 (metaclopramide or metozolv or metramid or migravess or mygdalon or octamide or parmid).tw,kw. 114</p> <p>17 (primperan or reglan or reliveran or rimetin or Degan or Maxeran or Pylomid or Pramin).tw,kw. 1,692</p> <p>18 exp cisapride/7,296</p> <p>19 (Cisapride or alimix or Propulsid or Propulsid).tw,kw. 2,729</p> <p>20 exp cholinesterase inhibitor/77,946</p>

Appendix Table 1 continued on following page

Topic	Medline (Database: Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present>	Embase <1974 to present
	<p>21 (ltopride or ganaton).tw,kw. 102 22 Mosapride.tw,kw. 262 23 exp Erythromycin/22,427 24 (erythromycin or aknemycin or emcin or emgel or emycin or eryderm or erygel or erymax).tw,kw. 18,745 25 (erymin or eryped or gallimycin or ilosene or ilosone or ilotycin or lauromicina or maracyn).tw,kw. 60 26 (monomycin or ornacyn or retcin or rommix or romycin or roymicin or staticin or stiemycin or theramycin or tiloryth or wyamycin).tw,kw. 275 27 (Motilin adj3 (receptor* or agonist*)).tw,kw. 369 28 ((5HT3 or 5HT 3 or 5-HT3 or 5-HT 3) adj3 antagonist*).tw,kw. 3,638 29 ((5HT or 5-HT or 5-hydroxytryptamine*) adj3 (agonist* or antagonist*)).tw,kw. 8,795 30 ((5-HT1A or 5HT1A or 5-HT 1A or 5HT 1A) adj3 agonist*).tw,kw. 4,069 31 exp Serotonin Antagonists/47,240 32 exp Serotonin 5-HT3 Receptor Antagonists/612 33 exp Serotonin 5-HT4 Receptor Agonists/224 34 exp Serotonin 5-HT1 Receptor Agonists/2,887 35 (serotonin adj3 receptor adj3 (agonist* or antagonist* or block*)).tw,kw. 2,068 36 (tegaserod or Zelnorm or Zelmec).tw,kw. 388 37 ABT-229.tw,kw. 22 38 (Tandospirone or Sediell or metanopirone or buspirone).tw,kw. 2,603 39 (aloseptron or Lotronex).tw,kw. 245 40 (Acotiamide or YM-443 or Z-338D).tw,kw. 40</p> <p>41 (acetylcholinesterase inhibitor* or cholinesterase Inhibitor* or anti-cholinesterase* or anticholinesterase*).tw,kw. 10,393 42 ((5HT-4 or 5HT4 or 5-HT 4 or 5-HT4) adj3 agonist*).tw,kw. 740 43 or/5-42 316,333</p> <p>44 4 and 43 1,331 45 randomized controlled trial.pt. 412,566 46 controlled clinical trial.pt. 90,495 47 random*.mp. 1,019,981 48 placebo.ab. 168,576 49 drug therapy.fs. 1,841,827 50 trial.ab. 354,331 51 groups.ab. 1,539,040 52 or/45-51 3,918,006 53 exp animals/ not humans.sh. 4,221,321 54 52 not 53 3,364,132 55 44 and 54 1,058 56 limit 55 to yr="2010 -Current" 221</p>	<p>21 (ltopride or ganaton).tw,kw. 226 22 exp mosapride/380 23 Mosapride.tw,kw. 469 24 exp erythromycin/66,403 25 (erythromycin or aknemycin or emcin or emgel or emycin or eryderm or erygel or erymax).tw,kw. 22,087 26 (erymin or eryped or gallimycin or ilosene or ilosone or ilotycin or lauromicina or maracyn).tw,kw. 275 27 (monomycin or ornacyn or retcin or rommix or romycin or roymicin or staticin or stiemycin or theramycin or tiloryth or wyamycin).tw,kw. 271 28 exp motilin receptor agonist/69,135 29 (Motilin adj3 (receptor* or agonist*)).tw,kw. 458 30 ((5HT3 or 5HT 3 or 5-HT3 or 5-HT 3) adj3 antagonist*).tw,kw. 4,824</p> <p>31 ((5HT or 5-HT or 5-hydroxytryptamine*) adj3 (agonist* or antagonist*)).tw,kw. 9,448</p> <p>32 ((5-HT1A or 5HT1A or 5-HT 1A or 5HT 1A) adj3 agonist*).tw,kw. 4,827 33 exp serotonin antagonist/120,230 34 exp serotonin 3 antagonist/3,440 35 exp serotonin 4 agonist/802 36 exp serotonin 1 agonist/610 37 (serotonin adj3 receptor adj3 (agonist* or antagonist* or block*)).tw,kw. 2,790 38 exp tegaserod/ 1,705 39 (tegaserod or Zelnorm or Zelmec).tw,kw. 737 40 ABT-229.tw,kw. 98 41 exp tandospirone/519 42 (Tandospirone or Sediell or metanopirone or buspirone).tw,kw. 3,272 43 exp aloseptron/1,233 44 (aloseptron or Lotronex).tw,kw. 541 45 exp acotiamide/105 46 (Acotiamide or YM-443 or Z-338D).tw,kw. 77 47 (acetylcholinesterase inhibitor* or cholinesterase Inhibitor* or anti-cholinesterase* or anticholinesterase*).tw,kw. 13,960 48 ((5HT-4 or 5HT4 or 5-HT 4 or 5-HT4) adj3 agonist*).tw,kw. 1,013 49 or/5-48 452,852 50 4 and 49 3,919</p> <p>51 random*.mp. 1,239,350 52 placebo:.mp. 372,038 53 clinical trial:.mp. 1,207,584 54 double-blind:.mp. or blind:.tw. 354,000 55 or/51-54 2,210,439 56 exp animal/ not human/4,594,892</p> <p>57 55 not 56 2,042,185 58 50 and 57 2,204 59 remove duplicates from 58 2,189 60 limit 59 to yr="2010 -Current" 639</p>
HP eradication and HP from 2006 to 4 April 2016, Multi-file search, n=1,170	<p>1 randomized controlled trial.pt. (338,380) 2 controlled clinical trial.pt. (85,027) 3 random*.mp. (793,630) 4 placebo.ab. (139,962) 5 drug therapy.fs. (1,570,375) 6 trial.ab. (263,685) 7 groups.ab. (1,213,517) 8 1 or 2 or 3 or 4 or 5 or 6 or 7 (3,196,892) 9 exp animals/ not exp humans/(3,749,652)</p>	<p>1 clinical trial/ or (clin\$ adj2 (trial\$ or stud\$)).tw. 2 exp Randomized controlled trial/ 3 exp Randomization/ 4 Single-Blind Method/ 5 Double-Blind Method/ 6 Cross-Over Studies/ or (crossover\$ or cross-over\$).tw. 7 exp Random Allocation/ 8 RCT.tw. 9 ((single or double or treble or triple) adj3 (blind\$ or mask\$)).tw.</p>

Appendix Table 1 continued on following page

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	<p>10 8 not 9 (2,726,261) 11 exp Dyspepsia/ (6,867) 12 eructation/ (276) 13 flatulence/ (1,134) 14 (dyspep\$ or NUD or FD).mp. (17,100) 15 (indigestion or indigestive).tw. (626) 16 11 or 12 or 13 or 14 or 15 (18,878) 17 exp helicobacter/(27,791) 18 exp helicobacter infections/(23,015) 19 exp <i>helicobacter pylori</i>/(26,780) 20 (helicobacter or pylori or pyloridis or HP or Campylobacter).mp. (57,996) 21 17 or 18 or 19 or 20 (57,996) 22 16 and 21 (3,975)</p> <p>23 10 and 22 (2,030) 24 limit 23 to yr="2006 -Current" (500)</p>	<p>10 comparative study/ 11 controlled study/ 12 Prospective study/ 13 evaluation studies/ 14 random\$.mp. 15 placebo/ or placebo:.mp. 16 (control\$ or prospective\$ or volunteer\$).tw. 17 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 14 or 16 18 exp animal/not exp human/ 19 17 not 18 20 exp dyspepsia/ 21 eructation/ 22 flatulence/ 23 (dyspepsia or dyspeptic or NUD or FD).mp. 24 (indigestion or indigestive).tw. 25 20 or 21 or 22 or 23 or 24 26 exp Helicobacter/ 27 exp <i>Helicobacter pylori</i>/ 28 exp Helicobacter infection/ 29 (helicobacter or pylori or pyloridis or HP or Campylobacter).mp. 30 26 or 27 or 28 or 29 31 25 and 30 32 19 and 31 (3,551) 33 limit 32 to yr="2006 -Current" (1,237)</p>
PPI and FD from 2002 to 25 Feb 2016, Multi-file search, <i>n</i> =2,670 search in 11 April 2013, <i>n</i> =527 update search in 2016	<p>1. exp dyspepsia/ 2. (Dyspepsia or dyspeptic or NUD or FD).mp. 3. (indigestion or indigestive).tw.</p> <p>4. or/1-3 5. exp Proton Pump Inhibitors/ 6. ((proton adj2 pump adj2 inhibitor\$) or PPI or PPIs).tw. 7. Esomeprazole Sodium/ 8. (Esomeprazole or Nexium or Esotrex or Alenia or Escz or Esofag or Nexiam).tw. 9. Omeprazole/ 10. (omeprazole or losec or nexium or prilosec or rapinex or zegerid or acid or Lomac or Omepral or Omez).tw. 11. (pantoprazole or protium or protonix or Pantotab or Pantopan or Pantozol or Pantor or Pantoloc or Astropan or Controloc or Pantecta or Inipomp or Somac or Pantodac or Zurcal or Zentro).tw. 12. (rabeprazole or aciphex or dexrabeprazole or pariet or Zechin or Rabecid or Nzole-D or Rabeloc).tw. 13. (Dexlansoprazole or Kapidex or Dexilant).tw. 14. (lansoprazole or lanzoprazole or agopton or bamalite or Inhibitol or Levant or Lupizole or lanzor or monolitim or ogast or ogastro or opiren or prevacid or prezal or pro ulco or promeco or takepron or ulpax or zoton).tw. 15. or/5-14 16. 4 and 15 17. randomized controlled trial.pt. 18. controlled clinical trial.pt. 19. randomized.ab. 20. placebo.ab. 21. drug therapy.fs. 22. randomly.ab. 23. trial.ab. 24. groups.ab. 25. or/17-24 26. 16 and 25 27. exp animals/ not humans.sh. 28. 26 not 27</p>	<p>1. exp dyspepsia/ 2. (Dyspepsia or dyspeptic or NUD or FD).mp. 3. (indigestion or indigestive).tw.</p> <p>4. or/1-3 5. exp proton pump inhibitor/ 6. ((proton adj2 pump adj2 inhibitor\$) or PPI or PPIs).tw. 7. esomeprazole/ 8. (Esomeprazole or Nexium or Esotrex or Alenia or Escz or Esofag or Nexiam).tw. 9. omeprazole/ 10. (omeprazole or losec or nexium or prilosec or rapinex or zegerid or lomac or acid or Lomac or Omepral or Omez).tw. 11. pantoprazole/ 12. (pantoprazole or protium or protonix or Pantotab or Pantopan or Pantozol or Pantor or Pantoloc or Astropan or Controloc or Pantecta or Inipomp or Somac or Pantodac or Zurcal or Zentro).tw. 13. rabeprazole/ 14. (rabeprazole or aciphex or dexrabeprazole or pariet or Zechin or Rabecid or Nzole-D or Rabeloc).tw. 15. lansoprazole/ 16. (lansoprazole or lanzoprazole or agopton or bamalite or Inhibitol or Levant or Lupizole or lanzor or monolitim or ogast or ogastro or opiren or prevacid or prezal or pro ulco or promeco or takepron or ulpax or zoton).tw. 17. (Dexlansoprazole or Kapidex or Dexilant).tw. 18. or/5-17 19. 4 and 18</p> <p>20. random:.tw. or placebo:.mp. or double-blind:.tw. 21. 19 and 20</p>

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Initial management strategies for undiagnostic dyspepsia from 2004 to February 2016 Multi-file search, n=1,989 in 06 August 2014, update search n=414 in 09 February 2016	<p>1 exp dyspepsia/ (7,282) 2 (dyspep* or FD or NUD).ti,ab,kw. (10,750) 3 1 or 2 (12,551) 4 exp Proton Pump Inhibitors/ (14,111) 5 exp omeprazole/ (8,570)</p> <p>6 exp esomeprazole/(691) 7 exp lansoprazole/(1,848) 8 exp rabeprazole/(795) 9 (proton pump inhibitor* or PPI or PPIs or omeprazole or esomeprazole or lansoprazole or pantoprazole or rabeprazole).ti,ab,kw. (22,117) 10 or/4-9 (25,881) 11 exp Histamine H₂ Antagonists/(18,410) 12 exp ranitidine/(4,990) 13 exp cimetidine/(9,164) 14 exp famotidine/(1,480) 15 exp nizatidine/(300) 16 ((histamine H₂ adj5 antagonist*) or H₂-receptor antagonist* or H₂RA or H₂RAs or H₂-RA or H₂-RAs or cimetidine or ranitidine or famotidine or nizatidine or roxatidine).ti,ab,kw. (18,135) 17 or/11-16 (23,248) 18 exp Helicobacter/ or exp <i>Helicobacter pylori</i>/ or exp Helicobacter infection/ (31,400) 19 (helicobacter or pylori or pyloridis or "HP" or Campylobacter).ti,ab,kw. (59,887)</p> <p>20 18 or 19 (62,395) 21 (test* adj3 (treat or manage* or therapy*)).ti,ab,kw. (10,129) 22 20 and 21 (369) 23 exp Endoscopy/(261,964) 24 (endoscop* or Gastroscop* or Duodenoscop*).ti,ab,kw. (59,007) 25 23 or 24 (286,034) 26 (initial adj3 (investigat* or manage* or procedure or strateg*)).ti,ab,kw. (9,656) 27 (empirical adj3 treat* or therap* or manage* or strateg*).ti,ab,kw. (5,343) 28 10 or 17 or 22 or 25 or 26 or 27 (340,111) 29 3 and 28 (4,280) 30 randomized controlled trial.pt. (379,756) 31 controlled clinical trial.pt. (889,20) 32 random\$.mp. (913,711) 33 placebo.ab. (156,611) 34 drug therapy.fs. (1,719,987) 35 trial.ab. (312,630) 36 groups.ab. (1,379,836) 37 or/30-36 (3,579,084) 38 29 and 37 (2,297) 39 exp animals/not humans/(3,972,902) 40 38 not 39 (2,292) 41 limit 40 to yr="2004 -Current" (955)</p>	<p>1 exp dyspepsia/ (25,632) 2 (dyspep* or FD or NUD).ti,ab,kw. (14,899) 3 1 or 2 (29,332) 4 exp proton pump inhibitor/ (52,191) 5 exp omeprazole/ (26,121)</p> <p>6 exp esomeprazole/(5,198) 7 exp lansoprazole/(8,781) 8 exp pantoprazole/(6,458) 9 exp rabeprazole/ (3,819) 10 (proton pump inhibitor* or PPI or PPIs or omeprazole or esomeprazole or lansoprazole or pantoprazole or rabeprazole).ti,ab,kw. (31,909) 11 or/4-10 (62,185) 12 exp histamine H₂-receptor antagonist/(61,484) 13 exp ranitidine/(21,483) 14 exp cimetidine/(30,685) 15 exp famotidine/(7,264) 16 exp nizatidine/ (1,928) 17 ((histamine H₂ adj5 antagonist*) or H₂-receptor antagonist* or H₂RA or H₂RAs or H₂-RA or H₂-RAs or cimetidine or ranitidine or famotidine or nizatidine or roxatidine).ti,ab,kw. (23,645) 18 or/12-17 (63,515) 19 exp Helicobacter/ or exp <i>Helicobacter pylori</i>/ or exp Helicobacter infection/ (50,719) 20 (helicobacter or pylori or pyloridis or "HP" or Campylobacter).ti,ab,kw. (74,711)</p> <p>21 (test* adj3 (treat or manage* or therapy*)).ti,ab,kw. (13,763) 22 (19 or 20) and 21 (471) 23 exp endoscopy/ (413,319) 24 (endoscop* or Gastroscop* or Duodenoscop*).ti,ab,kw. (88,994) 25 23 or 24 (436,324) 26 (initial adj3 (investigat* or manage* or procedure or strateg*)).ti,ab,kw. (12,734)</p> <p>27 (empirical adj3 treat* or therap* or manage* or strateg*).ti,ab,kw. (7,204) 28 11 or 18 or 22 or 25 or 26 or 27 (550,017) 29 3 and 28 (9,263) 30 random\$.mp. (1,036,938) 31 double-blind:.mp. or placebo:.tw. or blind:.tw. (399,530) 32 30 or 31 (1,218,944) 33 29 and 32 (1,833) 34 exp animal/ not human/ (4,408,333) 35 33 not 34 (1,831) 36 limit 35 to yr="2004 -Current" (1,048)</p>