

## SUPPLEMENTARY MATERIAL 1

### Search strategy

Medline (via Ovid) [Date of search: 22 Jan. 2018]

S.No.	Keywords	Hits
#1	exp Benzodiazepines/	28,734
#2	Benzodiazepines.ab,ti.	10,675
#3	(Alprazolam or Benzodiazepinones or Anthramycin or Bromazepam or Clonazepam or Devazepide or Diazepam or Flumazenil or Flunitrazepam or Flurazepam or Lorazepam or Nitrazepam or Oxazepam or Pirenzepine or Prazepam or Temazepam or Chlordiazepoxide or Clorazepate Dipotassium or Estazolam or Medazepam or Midazolam or Triazolam).ab,ti.	24,820
#4	#1 or #2 or #3	44,923
#5	exp Dementia/ or exp Dementia, Vascular/ or exp Frontotemporal Dementia/ or exp Dementia, Multi-Infarct/	110,121
#6	(Dementia or Cognitive Defect or Cognitive Impairment or Cognition Impairment).ab,ti.	101,718
#7	(Dementias or Amentia or Amentias or Senile Paranoid Dementia or Dementias, Senile Paranoid or Paranoid Dementia, Senile or Paranoid Dementias, Senile or Senile Paranoid Dementias or Familial Dementia or Dementia, Familial or Dementias, Familial or Familial Dementias).ab,ti.	3,643
#8	#5 or #6 or #7	162,896
#9	exp Risk/ or exp Logistic Models/ or exp Protective Factors/ or exp Risk Assessment/ or exp Adverse Outcome Pathways/ or exp Risk Factors/ or exp Odds Ratio/	896,188
#10	(Risk or Logistic Models or Protective Factors or Risk Assessment or Adverse Outcome Pathways or Risk Factors or Odds Ratio).ab,ti.	1,561,857
#11	(Odds Ratios or Cross-Product Ratio or Cross Product Ratio or Cross-Product Ratios or Ratio, Cross-Product or Ratios, Cross-Product or Relative Odds or Odds, Relative or Risk Ratio or Ratio, Risk or Ratios, Risk or Risk Ratios or Hazard or Increased Risk or Decreased Risk or Higher Risk or Lower Risk or Reduced Risk or Significant Risk).ab,ti.	414,172
#12	#9 or #10 or #11	1,948,853
#13	#4 and #8 and #12	344
#14	limit #13 to (english language and humans)	256

## Search strategy

Embase (Via Embase.com) [Date of search: 22 Jan. 2018]

S.No.	Keywords	Hits
#1	'dementia'/exp	301,758
#2	dementia: ab,ti	124,801
#3	'cognitive defect'/exp	405,463
#4	'cognitive defect': ab,ti	113
#5	'cognitive impairment': ab,ti	66,636
#6	'cognition impairment': ab,ti	328
#7	'alzheimer disease'/exp OR 'cadasil'/exp OR 'diffuse lewy body disease'/exp OR 'diffuse neurofibrillary tangles with calcification'/exp OR 'frontotemporal dementia'/exp OR 'hiv associated dementia'/exp OR 'huntington chorea'/exp OR 'kluber bucy syndrome'/exp OR 'mental deterioration'/exp OR 'mixed depression and dementia'/exp OR 'multiinfarct dementia'/exp OR 'neuronal ceroid lipofuscinosis'/exp OR 'pick presenile dementia'/exp OR 'presenile dementia'/exp OR 'prion disease'/exp OR 'pseudodementia'/exp OR 'rett syndrome'/exp OR 'senile dementia'/exp OR 'tauopathy'/exp	234,344
#8	'alzheimer disease': ab,ti OR 'cadasil': ab,ti OR 'diffuse lewy body disease': ab,ti OR 'diffuse neurofibrillary tangles with calcification': ab,ti OR 'frontotemporal dementia': ab,ti OR 'hiv associated dementia': ab,ti OR 'huntington chorea': ab,ti OR 'kluber bucy syndrome': ab,ti OR 'mental deterioration': ab,ti OR 'mixed depression and dementia': ab,ti OR 'multiinfarct dementia': ab,ti OR 'neuronal ceroid lipofuscinosis': ab,ti OR 'pick presenile dementia': ab,ti OR 'presenile dementia': ab,ti OR 'prion disease': ab,ti OR 'pseudodementia': ab,ti OR 'rett syndrome': ab,ti OR 'senile dementia': ab,ti OR 'tauopathy': ab,ti	44,994
#9	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8	429,519
#10	'arfendazam': ab,ti OR 'benzodiazepin 2 one derivative': ab,ti OR 'benzodiazepine': ab,ti OR 'bromazepam': ab,ti OR 'camazepam': ab,ti OR 'chlordiazepoxide': ab,ti OR 'cinolazepam': ab,ti OR 'clobazam': ab,ti OR 'clonazepam': ab,ti OR 'lorazepate': ab,ti OR 'clorazepate dipotassium': ab,ti OR 'clorazepate potassium': ab,ti OR 'dealkylflurazepam': ab,ti OR 'delorazepam': ab,ti OR 'demoxepam': ab,ti OR 'devazepide': ab,ti OR 'diazepam': ab,ti OR 'diazepam derivative': ab,ti OR 'doxefazepam': ab,ti OR 'ethyl loflazepate': ab,ti OR 'fludiazepam': ab,ti OR 'flunitrazepam': ab,ti OR 'flurazepam': ab,ti OR 'flutoprazepam': ab,ti OR 'fosazepam': ab,ti OR 'gidazepam': ab,ti OR 'girisopam': ab,ti OR 'halazepam': ab,ti OR 'loflazepate': ab,ti OR 'lorazepam': ab,ti OR 'lormetazepam': ab,ti OR 'lotrafiban': ab,ti OR 'meclonazepam': ab,ti OR 'medazepam': ab,ti OR 'metaclazepam': ab,ti OR 'midazolam': ab,ti OR 'nitrosochlordiazepoxide': ab,ti OR 'nastorazepide': ab,ti OR 'nerisopam': ab,ti OR 'netazepide': ab,ti OR 'nimetazepam': ab,ti OR 'nitrazepam': ab,ti OR 'norchlordiazepoxide': ab,ti OR 'norclobazam': ab,ti OR 'nordazepam': ab,ti OR 'norfludiazepam': ab,ti OR 'norflunitrazepam': ab,ti OR 'oxazepam': ab,ti OR 'phenazepam': ab,ti OR 'pinazepam': ab,ti OR 'prazepam': ab,ti OR 'quazepam': ab,ti OR 'talampanel': ab,ti OR 'talirine': ab,ti OR 'tampramine': ab,ti OR 'tarazepide': ab,ti OR 'temazepam': ab,ti OR 'tetrazepam': ab,ti OR 'tibezonium iodide': ab,ti OR 'tifluadom': ab,ti OR 'tofisopam': ab,ti OR 'tomaymycin': ab,ti OR 'tuclazepam': ab,ti OR 'uxepam': ab,ti	75,896
#11	'benzodiazepine derivative': ab,ti OR 'benzodiazepine derivative'/exp	201,769
#12	'benzodiazepines': ab,ti	24,293
#13	#10 OR #11 OR #12	214,421
#14	'risk'/exp OR 'logistic models'/exp OR 'protective factors'/exp OR 'risk assessment'/exp OR 'adverse outcome pathways'/exp OR 'risk factors'/exp OR 'odds ratio'/exp	2,477,596
#15	'risk': ab,ti OR 'logistic models': ab,ti OR 'protective factors': ab,ti OR 'risk assessment': ab,ti OR 'adverse outcome pathways': ab,ti OR 'risk factors': ab,ti OR 'odds ratio': ab,ti	2,500,907
#16	'odds ratios': ab,ti OR 'cross-product ratio': ab,ti OR 'cross product ratio': ab,ti OR 'cross-product ratios': ab,ti OR 'ratio, cross-product': ab,ti OR 'ratios, cross-product': ab,ti OR 'relative odds': ab,ti OR 'odds, relative': ab,ti OR 'risk ratio': ab,ti OR 'ratio, risk': ab,ti OR 'ratios, risk': ab,ti OR 'risk ratios': ab,ti OR 'hazard': ab,ti OR 'increased risk': ab,ti OR 'decreased risk': ab,ti OR 'higher risk': ab,ti OR 'lower risk': ab,ti OR 'reduced risk': ab,ti OR 'significant risk': ab,ti	650,837
#17	#14 OR #15 OR #16	3,571,541
#18	#9 AND #13 AND #17	2,884
#19	#9 AND #13 AND #17 AND [humans]/lim AND [english]/lim AND [embase]/lim	2,524

## Search strategy

Cochrane Library [Date of search: 22 Jan. 2018]

S.No.	Keywords	Hits
#1	MeSH descriptor: [Dementia] explode all trees	4,690
#2	MeSH descriptor: [Cognitive Dysfunction] explode all trees	395
#3	cognitive impairment	7,586
#4	declined cognition	306
#5	cognition impairment	3,669
#6	#1 or #2 or #3 or #4 or #5	12,095
#7	MeSH descriptor: [Benzodiazepines] explode all trees	8,005
#8	#6 and #7	217