Figure 1: Forest plot of comparison: Obesity, outcome: Dementia NOS

Figure 2: Forest plot of comparison: Obesity, outcome: Alzheimer's

Figure 3: Forest Plot of comparison: Smoker, outcome: Dementia NOS

Figure 4: Forest plot of comparison: Smoker, outcome: Alzheimer's

Figure 5: Forest plot of comparison: Depression, outcome: Dementia NOS

Figure 6: Forest plot of comparison: Depression, outcome: Alzheimer's

Figure 7: Forest plot of comparison: Ischaemic Heart Disease, outcome: Dementia NOS

Figure 8: Forest Plot of comparison: Hypertension, outcome: Dementia NOS

Figure 9: Forest plot of comparison: Hypertension, outcome: Alzheimer's

Figure 10: Forest plot of comparison: Stroke, outcome: Dementia NOS

Figure 11: Forest plot of comparison: Dyslipidaemia, outcome: Dementia NOS

Figure 12: Forest plot of comparison: Dyslipidaemia, outcome: Alzheimer's NOS

Figure 13: Forest plot of comparison: Atrial Fibrillation, outcome: Dementia NOS

Figure 14: Forest plot of comparison: Heart Failure, outcome: Dementia NOS

Figure 15: Forest plot of comparison: Diabetes, outcome: Dementia NOS.

Figure 16: Forest plot of comparison: Diabetes, outcome: Alzheimer's

Figure 17: Forest plot of comparison: Inflammatory conditions, incl bowel, outcome: Dementia NOS

Figure 18: Forest plot of comparison: Lipid lowering drugs + statins, outcome: Dementia NOS

Figure 19: Forest plot of comparison: Anti-hypertensive drugs, outcome: Dementia NOS

Figure 1: Forest plot of comparison: Obesity, outcome: Dementia NOS

	Case	es	Cont	rols		Odds Ratio	Odds Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Booker 2016	717	11956	717	11956	15.5%	1.00 [0.90, 1.11]	+
Dregan Chow 2015	6224	56242	33561	350661	15.7%	1.18 [1.14, 1.21]	•
lmfeld 2015 benzos	1003	11524	1520	11524	15.6%	0.63 [0.58, 0.68]	•
lmfeld 2016 influenza	5	59	55	221	8.2%	0.28 [0.11, 0.73]	
Imfeld Pernus 2013	3169	26459	4132	26459	15.7%	0.74 [0.70, 0.77]	•
Jick 2000	32	284	214	1080	13.6%	0.51 [0.35, 0.76]	
Seshadri 2001	1184	19463	3157	19463	15.6%	0.33 [0.31, 0.36]	•
Total (95% CI)		125987		421364	100.0%	0.63 [0.42, 0.94]	•
Total events	12334		43356				
Heterogeneity: Tau² = 0.	26; Chi²=	1255.37	, df = 6 (F	< 0.0000	11); I ² = 10	00%	0.01 0.1 1 10 100
Test for overall effect: Z:	= 2.27 (P =	= 0.02)					Higher in Controls Higher in Cases

Figure 2: Forest plot of comparison: Obesity, outcome: Alzheimer's

	Case	es	Con	trol		Odds Ratio		Odds	Ratio		
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI		M-H, Rando	om, 95% CI		
Dregan Chow 2015	3114	31083	33561	350661	22.0%	1.05 [1.01, 1.09]			•		
Imfeld 2015 benzos	1832	16823	2686	16823	22.0%	0.64 [0.60, 0.69]		•			
Imfeld 2016 influenza	1184	19463	3157	19463	22.0%	0.33 [0.31, 0.36]		•			
Imfeld Pernus 2013	564	7086	970	7086	21.8%	0.55 [0.49, 0.61]		-			
Seshadri 2001	5	59	55	221	12.2%	0.28 [0.11, 0.73]					
Total (95% CI)		74514		394254	100.0%	0.54 [0.33, 0.90]		•			
Total events	6699		40429								
Heterogeneity: Tau² = 0.	30; Chi²=	864.58	, df = 4 (F	o.0000	01); I ^z = 100	0%	N1 N2	0.5		+	10
Test for overall effect: Z:	= 2.38 (P	= 0.02)							Higher in case	S S	10

Figure 3: Forest Plot of comparison: Smoker, outcome: Dementia NOS

	Cas	es	Con	trol		Odds Ratio	Odds Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Dregan Chow 2015	6314	56242	33181	350661	14.3%	1.21 [1.18, 1.25]	•
Dunn 2005 Lithium	41	284	85	1080	10.0%	1.98 [1.33, 2.94]	- -
Imfeld 2015 benzos	2412	26459	2374	26459	14.2%	1.02 [0.96, 1.08]	†
Imfeld 2016 influenza	1518	19463	1652	19463	14.1%	0.91 [0.85, 0.98]	•
Imfeld Pernus 2013	1119	11524	1051	11524	14.0%	1.07 [0.98, 1.17]	•
Jick 2000	710	9954	395	9374	13.7%	1.75 [1.54, 1.98]	-
Seshadri 2001	10	59	32	221	5.4%	1.21 [0.55, 2.62]	
Walters 2016	1468	12172	154468	857334	14.2%	0.62 [0.59, 0.66]	•
Total (95% CI)		136157		1276116	100.0%	1.12 [0.89, 1.41]	•
Total events	13592		193238				
Heterogeneity: Tau² = 0.0	09; Chi² =	531.42,	df = 7 (P <	0.00001);	l² = 99%		0.01 0.1 1 10 100
Test for overall effect: Z=	= 0.98 (P =	= 0.33)					Higher in Controls Higher in Cases

Figure 4: Forest plot of comparison: Smoker, outcome: Alzheimer's

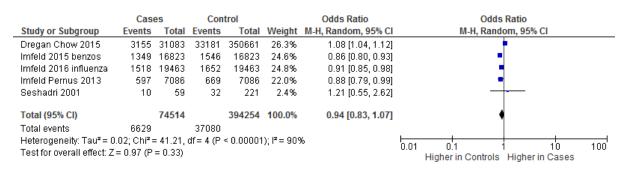


Figure 5: Forest plot of comparison: Depression, outcome: Dementia NOS

	Cas	es	Con	itrol		Odds Ratio	Odds Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Buntinx 1996	8	137	481	18966	1.7%	2.38 [1.16, 4.90]	
Burton 2013	41	400	67	1353	4.4%	2.19 [1.46, 3.29]	-
Dregan Chow 2015	14492	56242	61804	350661	17.8%	1.62 [1.59, 1.66]	•
Imfeld 2015 benzos	4668	26459	3491	26459	17.3%	1.41 [1.34, 1.48]	•
Imfeld 2016 influenza	3995	19463	2796	19463	17.1%	1.54 [1.46, 1.62]	•
Imfeld Pernus 2013	2648	11524	1716	11524	16.6%	1.71 [1.59, 1.82]	
Koehler 2015	58	1680	950	34111	7.7%	1.25 [0.95, 1.63]	 -
Seshadri 2001	0	0	0	0		Not estimable	
Walters 2016	2536	13121	98129	917274	17.4%	2.00 [1.91, 2.09]	•
Total (95% CI)		129026		1379811	100.0%	1.64 [1.49, 1.81]	♦
Total events	28446		169434				
Heterogeneity: Tau ² = 0.0	01; Chi ^z =	132.83,	df = 7 (P ·	< 0.00001)	; l² = 95%		
Test for overall effect: Z=				ŕ	•		0.01 0.1 1 10 100 Higher in Controls Higher in Cases

Figure 6: Forest plot of comparison: Depression, outcome: Alzheimer's

	Case	·s	Con	trol		Odds Ratio	Odds Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Dregan Chow 2015	7567	31083	61804	350661	27.6%	1.50 [1.46, 1.55]	•
Imfeld 2015 benzos	2970	16823	2301	16823	25.0%	1.35 [1.28, 1.44]	•
Imfeld 2016 influenza	3995	19463	2796	19463	25.6%	1.54 [1.46, 1.62]	•
Imfeld Pernus 2013	1257	7086	1080	7086	21.8%	1.20 [1.10, 1.31]	-
Total (95% CI)		74455		394033	100.0%	1.40 [1.29, 1.53]	•
Total events	15789		67981				
Heterogeneity: Tau ² = 0	.01; Chi ² =	33.26,	df = 3 (P	< 0.00001	l);	%	0.2 0.5 1 2 5
Test for overall effect: Z	= 7.67 (P <	< 0.0000	01)				0.2 0.5 1 2 5 Higher in Control Higher in Cases

Figure 7: Forest plot of comparison: Ischaemic Heart Disease, outcome: Dementia NOS

	Cas	es	Con	trol		Odds Ratio	Odds Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Booker 2016	3575	11956	3288	11956	14.8%	1.12 [1.06, 1.19]	•
Burton 2013	68	400	249	1353	9.9%	0.91 [0.68, 1.22]	
Davies 2011	3106	9197	12938	39166	14.9%	1.03 [0.99, 1.08]	•
Dregan Chow 2015	12087	56242	73387	350661	15.0%	1.03 [1.01, 1.06]	•
Imfeld Pernus 2013	2484	11524	2729	11524	14.7%	0.89 [0.83, 0.94]	•
Jick 2000	61	284	320	1080	9.5%	0.65 [0.48, 0.89]	
Ramakers 2007	16	74	30	125	3.9%	0.87 [0.44, 1.74]	
Seshadri 2001	6	59	20	221	2.3%	1.14 [0.44, 2.97]	
Walters 2016	2545	13121	119053	917274	14.9%	1.61 [1.54, 1.69]	•
Total (95% CI)		102857		1333360	100.0%	1.03 [0.88, 1.21]	•
Total events	23948		212014				
Heterogeneity: Tau ² =	0.04; Chi²	= 394.11	, df = 8 (P	< 0.00001); I ^z = 989	6	
Test for overall effect: 2	Z = 0.34 (F	P = 0.73	•				0.01 0.1 1 10 100 Higher in controls Higher in cases

Figure 8: Forest Plot of comparison: Hypertension, outcome: Dementia NOS

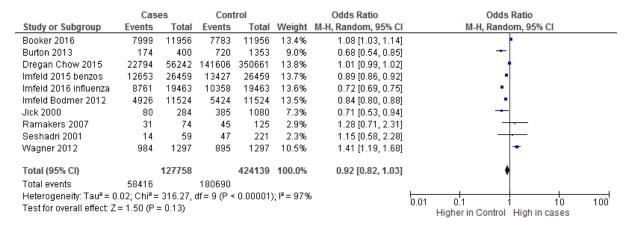


Figure 9: Forest plot of comparison: Hypertension, outcome: Alzheimer's

	Cas	es	Cont	rol		Odds Ratio		Odds	Ratio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI		M-H, Rando	om, 95% CI	
Dregan Chow 2015	12218	31083	141606	350661	24.0%	0.96 [0.93, 0.98]			ı	
Imfeld 2015 benzos	7277	16823	8456	16823	23.8%	0.75 [0.72, 0.79]		•		
lmfeld 2016 influenza	8761	19463	10358	19493	23.8%	0.72 [0.69, 0.75]		•		
Imfeld Bodmer 2012	2627	7086	3345	7086	23.3%	0.66 [0.62, 0.70]		•		
Seshadri 2001	14	59	47	227	5.1%	1.19 [0.60, 2.35]		_	•	
Total (95% CI)		74514		394290	100.0%	0.78 [0.66, 0.93]		•		
Total events	30897		163812							
Heterogeneity: Tau ² = 0.	.03; Chi ² :	= 244.62	, df = 4 (P	< 0.00001	1);	%	0.01	01	10	100
Test for overall effect: Z	= 2.76 (P	= 0.006)					0.01	U.1 Higher in Control		100

Figure 10: Forest plot of comparison: Stroke, outcome: Dementia NOS

	Cas	es	Con	trol		Odds Ratio	Odds	Ratio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Rando	om, 95% CI	
Booker 2016	2834	11956	1805	11956	17.0%	1.75 [1.64, 1.87]		•	
Burton 2013	66	400	127	1353	14.1%	1.91 [1.38, 2.63]		-	
Davies 2011	2415	9197	7091	39166	17.1%	1.61 [1.53, 1.70]		•	
Jick 2000	34	284	97	1080	12.6%	1.38 [0.91, 2.09]	+	-	
Ramakers 2007	13	74	14	125	7.1%	1.69 [0.75, 3.82]	+	-	
Wagner 2012	186	1297	104	1297	15.1%	1.92 [1.49, 2.47]		-	
Walters 2016	2145	13121	57052	917274	17.1%	2.95 [2.81, 3.09]		•	
Total (95% CI)		36329		972251	100.0%	1.87 [1.41, 2.49]		•	
Total events	7693		66290						
Heterogeneity: Tau² =				(P < 0.00	$001); I^2 = 9$	38%	0.01 0.1 1	10	100
Test for overall effect:	Z = 4.35	(P < 0.00	101)				Favours [experimental]		100

Figure 11: Forest plot of comparison: Dyslipidaemia, outcome: Dementia NOS

	Case	es	Cont	rol		Odds Ratio	Odds Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Booker 2016	4304	11956	3993	11956	20.9%	1.12 [1.06, 1.18]	•
Burton 2013	43	400	200	1353	4.0%	0.69 [0.49, 0.99]	
Imfeld 2015 benzos	4138	26459	3965	26459	21.4%	1.05 [1.00, 1.10]	•
Imfeld 2016 influenza	2998	19463	3096	19463	20.8%	0.96 [0.91, 1.02]	•
Imfeld Pernus 2013	1096	11524	1145	11524	17.9%	0.95 [0.87, 1.04]	-
Jick 2000	29	284	142	1080	2.9%	0.75 [0.49, 1.15]	
Seshadri 2001	3	29	7	221	0.3%	3.53 [0.86, 14.48]	
Wagner 2012	525	1297	475	1297	11.8%	1.18 [1.00, 1.38]	•
Total (95% CI)		71412		73353	100.0%	1.02 [0.94, 1.10]	•
Total events	13136		13023				
Heterogeneity: Tau ² = 0.	.01; Chi ^z =	32.05,	df = 7 (P ·	< 0.0001); $I^2 = 789$	6	10 10 10
Test for overall effect: Z	= 0.46 (P	= 0.65)					0.01 0.1 1 10 100 Higher in Controls Higher in Cases

Figure 12: Forest plot of comparison: Dyslipidaemia, outcome: Alzheimer's NOS

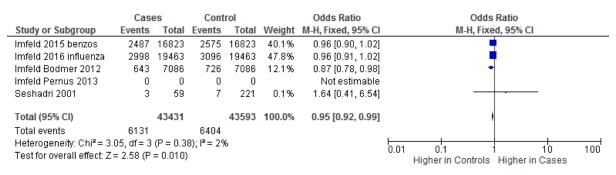


Figure 13: Forest plot of comparison: Atrial Fibrillation, outcome: Dementia NOS

	Cas	es	Con	trol		Odds Ratio		Odds	Ratio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI		M-H, Rand	lom, 95% CI	
Imfeld 2015 benzos	2413	26459	2397	26459	25.0%	1.01 [0.95, 1.07]			•	
Imfeld 2016 influenza	1615	19463	2157	19463	25.0%	0.73 [0.68, 0.78]				
Imfeld Pernus 2013	1331	11524	1244	11524	25.0%	1.08 [0.99, 1.17]			•	
Walters 2016	1241	13121	38040	917274	25.0%	2.41 [2.28, 2.56]			•	
Total (95% CI)		70567		974720	100.0%	1.18 [0.69, 2.01]		•	•	
Total events	6600		43838							
Heterogeneity: Tau² = 0.			, df = 3 (F	P < 0.0000	01); I² = 10	00%	0.01	0.1	1 10	100
Test for overall effect: Z	= 0.59 (P	= 0.56)					Favo	urs [experimental]	Favours [control]	

Figure 14: Forest plot of comparison: Heart Failure, outcome: Dementia NOS

	cases	Control		Odds Ratio	Odds Ratio
Study or Subgroup	Events Tota	l Events Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Imfeld 2015 benzos	1412 2645	3 1602 26459	25.7%	0.87 [0.81, 0.94]	•
Imfeld 2016 influenza	947 1946	3 1478 19463	25.5%	0.62 [0.57, 0.68]	•
Imfeld Pernus 2013	1048 1152	4 1142 11524	25.4%	0.91 [0.83, 0.99]	•
Wagner 2012	525 129	7 465 1297	23.4%	1.22 [1.04, 1.43]	*
Total (95% CI)	5874	3 58743	100.0%	0.88 [0.69, 1.10]	•
Total events	3932	4687			
Heterogeneity: Tau ² = 0.	.05; Chi ² = 73.29	, df = 3 (P < 0.000	01); I ² = 96	%	0.01 0.1 1 10 100
Test for overall effect: Z	= 1.13 (P = 0.26)			Favours [experimental] Favours [control]

Figure 15: Forest plot of comparison: Diabetes, outcome: Dementia NOS.

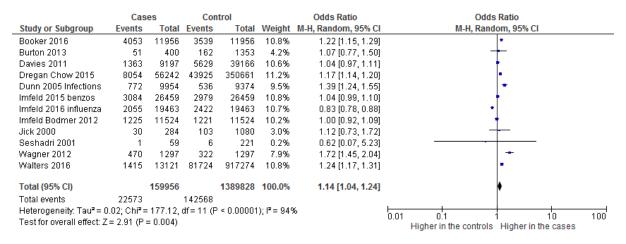


Figure 16: Forest plot of comparison: Diabetes, outcome: Alzheimer's

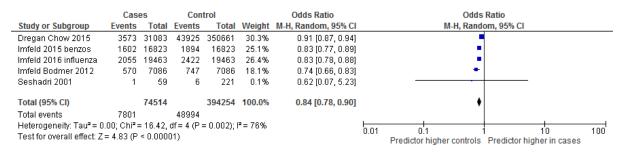


Figure 17: Forest plot of comparison: Inflammatory conditions, incl bowel, outcome: Dementia NOS

	Case	es	Con	trol		Odds Ratio	Odds Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Dregan Chow 2015	4096	56242	25581	350661	75.0%	1.00 [0.96, 1.03]	
Dregan, Armstrong 2015	1378	4183	152172	458210	21.1%	0.99 [0.93, 1.05]	•
Imfeld 2016 influenza	215	19463	219	19463	2.5%	0.98 [0.81, 1.19]	+
Imfeld Pernus 2013	124	11524	122	11524	1.4%	1.02 [0.79, 1.31]	+
Total (95% CI)		91412		839858	100.0%	1.00 [0.97, 1.03]	
Total events	5813		178094				
Heterogeneity: Chi² = 0.12,	df = 3 (P :	= 0.99);1	$l^2 = 0\%$				0.01 0.1 10 100
Test for overall effect: Z = 0	.27 (P = 0	.79)					Favours [experimental] Favours [control]

Figure 18: Forest plot of comparison: Lipid lowering drugs + statins, outcome: Dementia NOS

	Experimental		Control			Odds Ratio	Odds Ratio		
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI		
Booker 2016	4340	11956	4065	11956	15.8%	1.11 [1.05, 1.17]	•		
Dregan Chow 2015	17332	56242	79682	350661	16.0%	1.51 [1.49, 1.54]			
Imfeld 2015	7451	26459	7255	26459	15.9%	1.04 [1.00, 1.08]	•		
Imfeld Pernus 2013	2441	11524	2451	11524	15.8%	0.99 [0.93, 1.06]	•		
Jick 2000	12	284	100	1080	6.4%	0.43 [0.23, 0.80]			
Wagner 2012	343	1297	324	1297	14.2%	1.08 [0.91, 1.29]	+		
Walters 2016	2272	13121	165549	917274	15.9%	0.95 [0.91, 1.00]	1		
Total (95% CI)		120883		1320251	100.0%	1.04 [0.85, 1.27]	+		
Total events	34191		259426						
Heterogeneity: Tau ² =	0.06; Chi ²	2 = 671.42	, df = 6 (P	6	0.01 0.1 1 10 100				
Test for overall effect:	Z = 0.36 (I	P = 0.72)	0.01 0.1 1 10 100 Favours [experimental] Favours [control]						

Figure 19: Forest plot of comparison: Anti-hypertensive drugs, outcome: Dementia NOS

	Experimental		Control			Odds Ratio	Odds Ratio		
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Rand	M-H, Random, 95% CI	
Booker 2016	9971	11956	9660	11956	20.2%	1.19 [1.12, 1.28]		•	
Dregan Chow 2015	32926	56242	167660	350661	20.4%	1.54 [1.51, 1.57]		•	
Imfeld 2015	15537	26459	16676	26459	20.3%	0.83 [0.81, 0.86]	-		
Wagner 2012	336	1297	375	1297	18.8%	0.86 [0.72, 1.02]	-	4	
Walters 2016	5434	13121	327546	917274	20.3%	1.27 [1.23, 1.32]		•	
Total (95% CI)		109075		1307647	100.0%	1.11 [0.85, 1.46]		•	
Total events	64204		521917						
Heterogeneity: Tau² =	0.09; Chi ²	$^2 = 980.49$	3, df = 4 (P	0.01 0.1	1 10	100			
Test for overall effect:	Z = 0.79 (F	0.43)		Favours [experimental]		100			