

**Figure S1.** Funnel Plot for assessment of publications bias based on primary outcome (CDR-SB) effect sizes

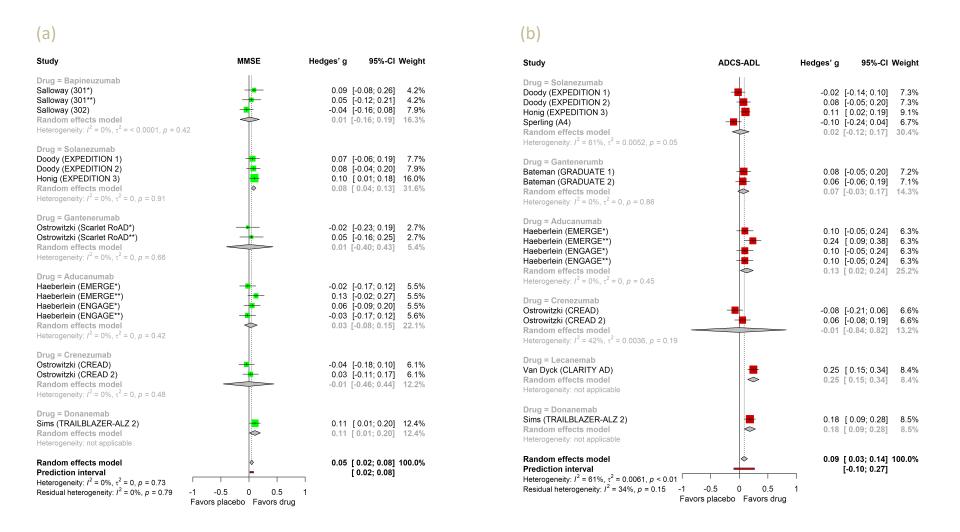
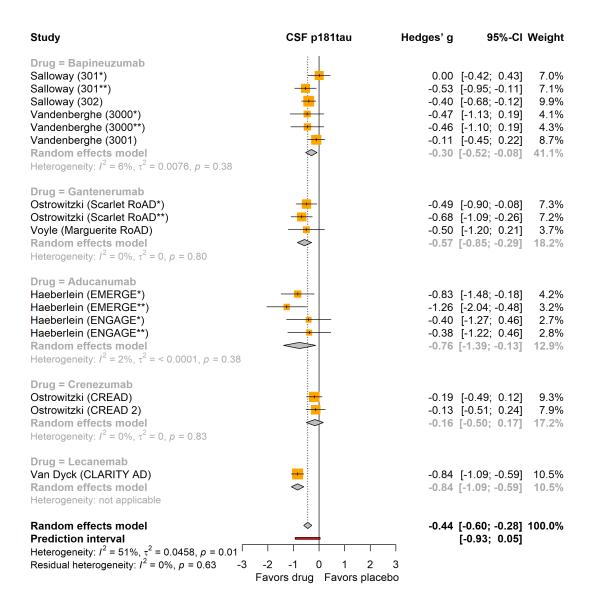


Figure S2. Forest plots of (a) Mini Mental State Examination (MMSE) and (b) Alzheimer's Disease Cooperative Study
- Activities of Daily Living (ADCS-ADL) meta-analyses with subgroup analyses by drug



**Figure S3.** Forest plot of CSF p181-tau meta-analysis with subgroup analysis by drug

		mAbs		Placebo				Std. Mean Difference	Std. Mean Difference	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI	
1.6.1 Aducanumab										
Haeberlein (EMERGE*)	148.48	127.64	33	-30.34	127.21	14	7.5%	1.38 [0.69, 2.07]		
Haeberlein (EMERGE**)	287.52	121.76	17	-30.34	127.21	14	6.5%	2.49 [1.52, 3.46]		
Haeberlein (ENGAGE*)	95.76	154.65	19	8.55	144.81	8	7.0%	0.56 [-0.29, 1.40]	+	
Haeberlein (ENGAGE**) <b>Subtotal (95% CI)</b>	206.87	157.5	17 <b>86</b>	8.55	144.81	7 <b>43</b>	6.6% <b>27.7%</b>	1.24 [0.28, 2.20] <b>1.39 [0.66, 2.13]</b>	•	
Heterogeneity: Tau² = 0.37; 0 Test for overall effect: Z = 3.7		,	P = 0.03	3); $I^2 = 66$	5%					
1.6.2 Crenezumab										
Ostrowitzki (CREAD)	294.4	139.58	17	16.16	155.64	23	7.3%	1.83 [1.07, 2.58]		
Ostrowitzki (CREAD 2) <b>Subtotal (95% CI)</b>	321.94	129.69	33 <b>50</b>	13.67	135.01	26 <b>49</b>	7.6% <b>14.9%</b>	2.30 [1.63, 2.97] <b>2.09 [1.59, 2.60</b> ]	•	
Heterogeneity: Tau² = 0.00; 0 Test for overall effect: Z = 8.			P = 0.30	$5); I^2 = 0\%$	ó					
1.6.3 Gantenerumab										
Ostrowitzki (Scarlet RoAD*)	11.64	34.94	64	23.76	61.58	35	8.4%	-0.26 [-0.67, 0.15]	<del></del>	
Ostrowitzki (Scarlet RoAD**)	77.79	77.8	65	23.76	61.58	34	8.3%	0.74 [0.31, 1.17]	<del></del>	
Marguerite RoAD Subtotal (95% CI)	32.34	117.61	12 <b>141</b>	-19.9	74.37	23 <b>92</b>	7.5% <b>24.1%</b>	0.56 [-0.15, 1.27] <b>0.33 [-0.36, 1.02]</b>		
Heterogeneity: Tau² = 0.30; ( Test for overall effect: Z = 0.9		,	(P = 0.0)	003); I <sup>2</sup> =	83%					
1.6.4 Lecanemab										
Van Dyck (CLARITY AD) Subtotal (95% CI)	281.22	282.5	101 <b>101</b>	-5.95	271.83	97 <b>97</b>	8.6% <b>8.6%</b>	1.03 [0.73, 1.33] <b>1.03 [0.73, 1.33]</b>	<del>-</del>	
Heterogeneity: Not applicable										
Test for overall effect: $Z = 6.3$		0001)								
1.6.5 Solanezumab										
Doody (EXPEDITION 1)	471.4	1,938.83	20	-242.3	2,185.31	25	7.9%	0.34 [-0.26, 0.93]	+	
Doody (EXPEDITION 2)	726.6	780.36	44	323.8	659.15	32	8.2%	0.54 [0.08, 1.01]	<del></del>	
Honig (EXPEDITION 3) Subtotal (95% CI)	510.29	302.29	131 <b>195</b>	-46.72	199.28	127 <b>184</b>	8.6% <b>24.7%</b>	2.16 [1.85, 2.47] 1.03 [-0.23, 2.29]		
Heterogeneity: Tau² = 1.19; ( Test for overall effect: Z = 1.0			(P < 0.0	00001); I <sup>2</sup>	= 96%					
Total (95% CI)			573			465	100.0%	1.12 [0.64, 1.61]	•	
Heterogeneity: $Tau^2 = 0.68$ ; (	hi <sup>2</sup> = 130	50. df = 1		0.00001)	$I^2 = 91\%$					
Test for overall effect: $Z = 4.1$			(, \	2.0001)	, . 31/0			4	· - '2	

Figure S4. Forest plot of CSF  $A\beta_{42}\,meta\mbox{-}analysis$  with subgroup analysis by drug

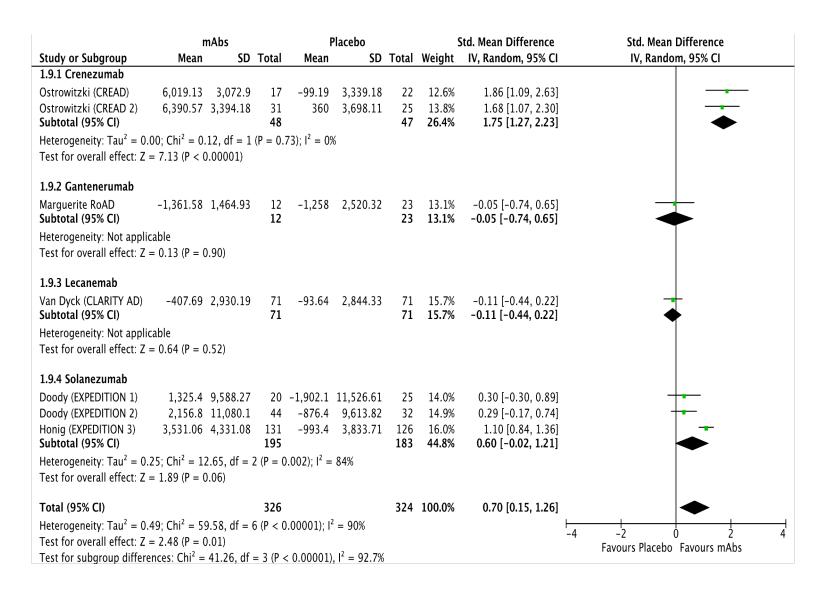
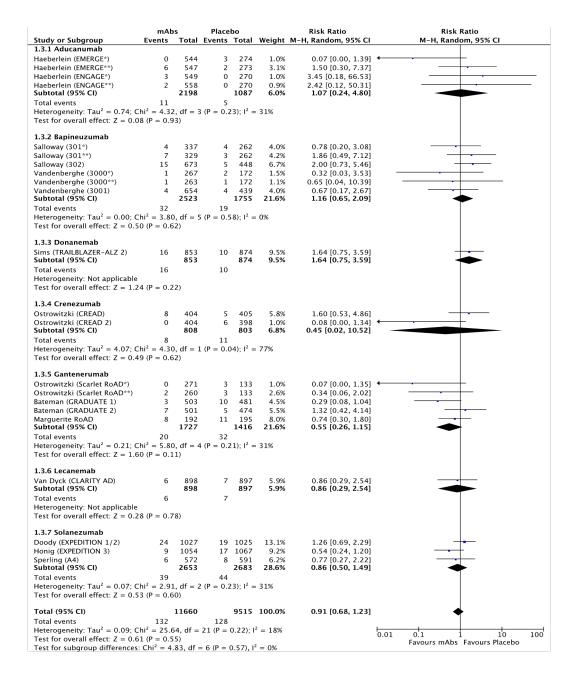


Figure S5. Forest plot of CSF  $A\beta_{40}$  meta-analysis with subgroup analysis by drug



**Figure S6.** Forest plot of all-cause mortality meta-analysis with subgroup analysis by drug

(a) (b)

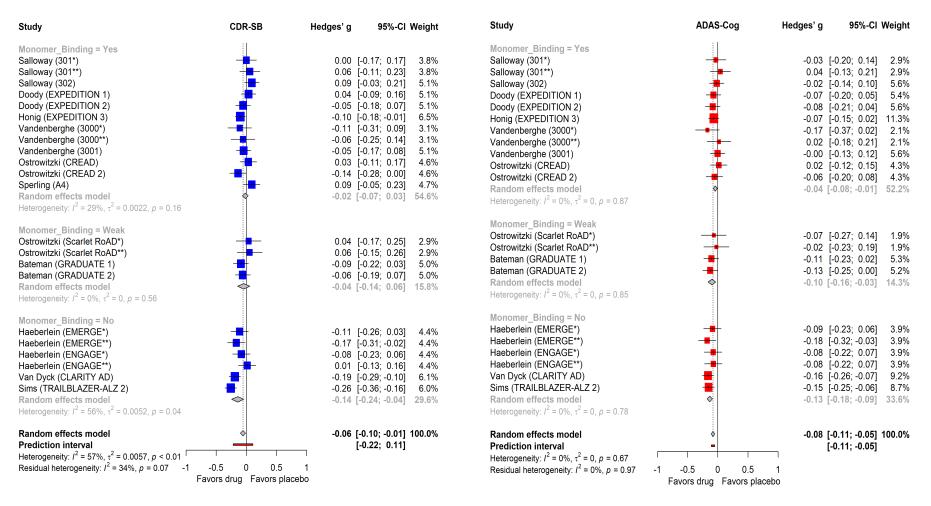
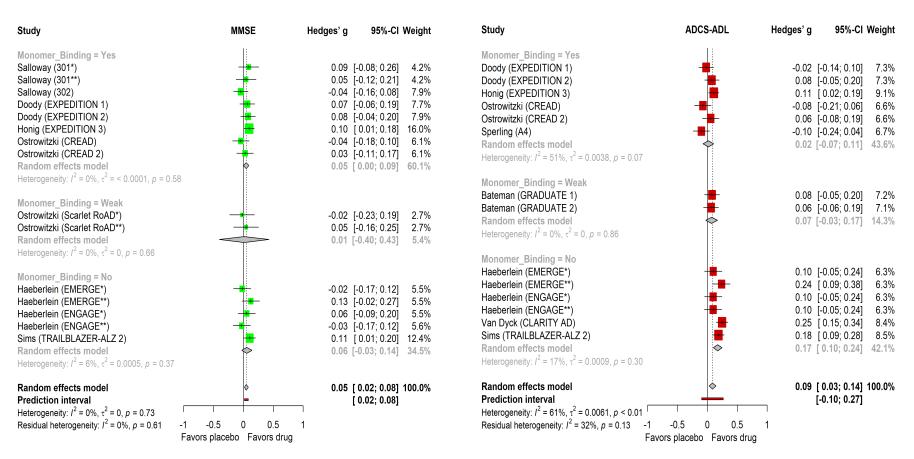
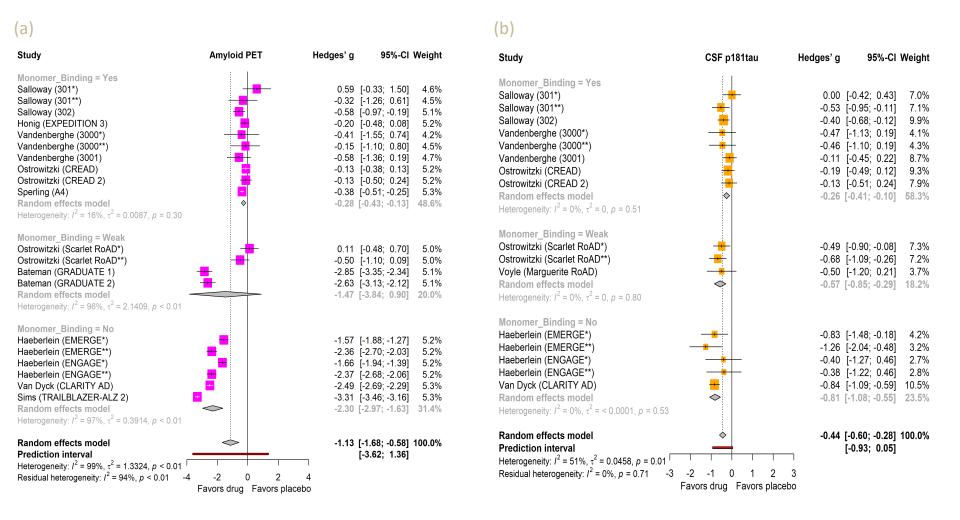


Figure S7. Forest plots of (a) Clinical Dementia Rating Scale Sum of Boxes (CDR-SB) and (b) AD Assessment Scale—Cognitive Subscale (ADAS-Cog) meta-analyses with with subgroup analyses by binding affinity to Aβ monomers

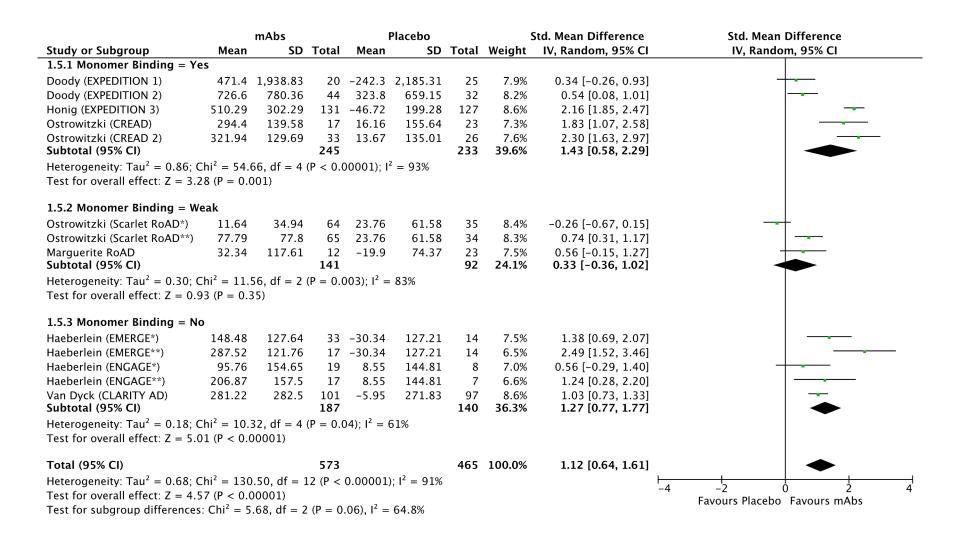




**Figure S8.** Forest plots of (a) Mini Mental State Examination (MMSE) and (b) Alzheimer's Disease Cooperative Study - Activities of Daily Living (ADCS-ADL) meta-analyses with subgroup analyses by binding affinity to Aβ monomers



**Figure S9.** Forest plots of (a) Amyloid PET and (b) CSF p181-tau meta-analyses with subgroup analyses by binding affinity to Aβ monomers



**Figure S10**. Forest plot of CSF  $A\beta_{42}$  meta-analysis with subgroup analysis by monomer binding affinity

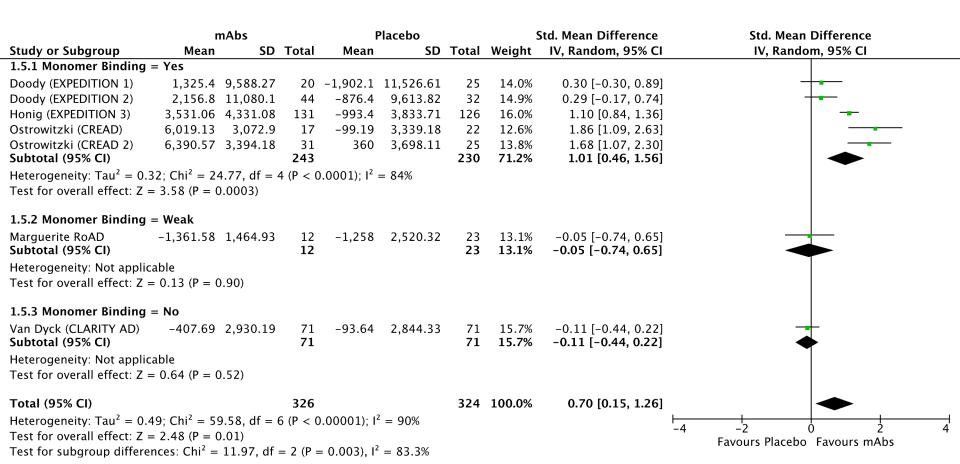


Figure S11. Forest plot of CSF  $A\beta_{40}$  meta-analysis with subgroup analysis by monomer binding affinity

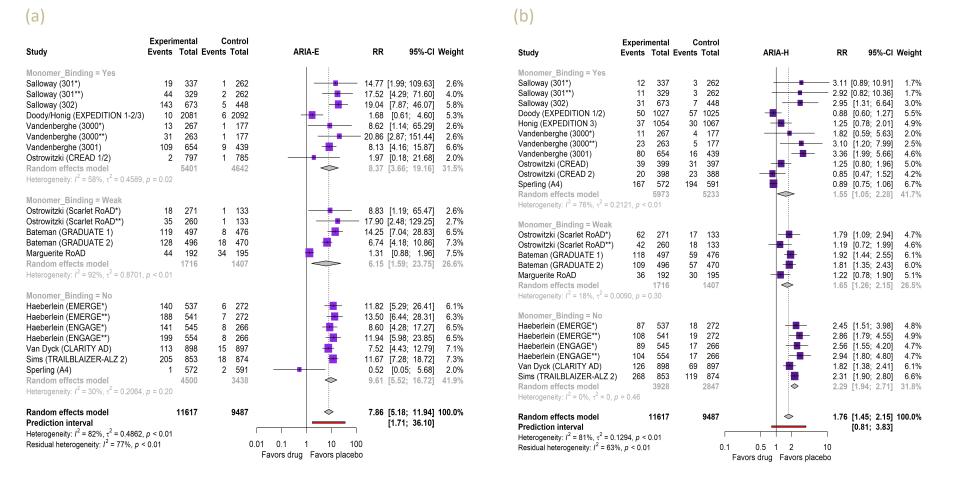
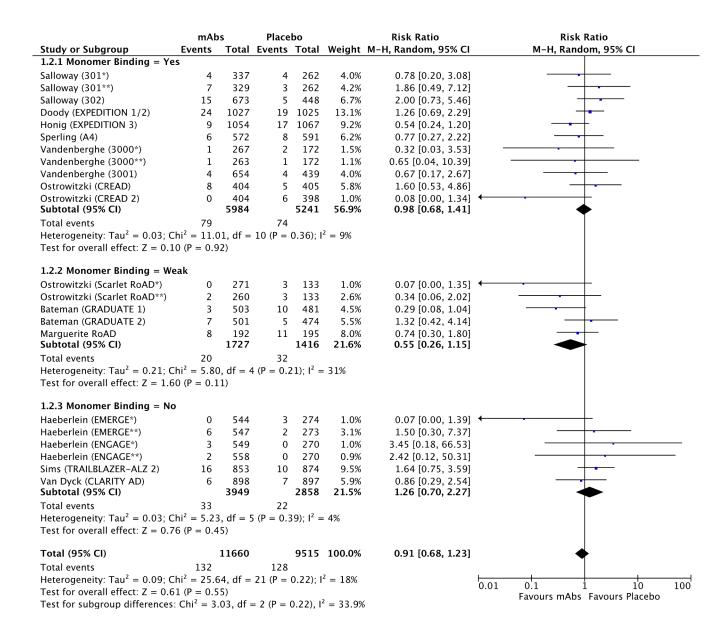


Figure S12. Forest plots of (a) Amyloid-Related Imaging Abnormalities with Edema/Effusion (ARIA-E) and (b) ARIA with microhemorrhages or superficial siderosis (ARIA-H) with subgroup analyses by binding affinity to  $A\beta$  monomers



**Figure S13.** Forest plot of all-cause mortality meta-analysis with subgroup analysis by monomer binding affinity

(a)

Test for subgroup differences:  $\chi_2^2 = 3.55$ , df = 2 (p = 0.17)

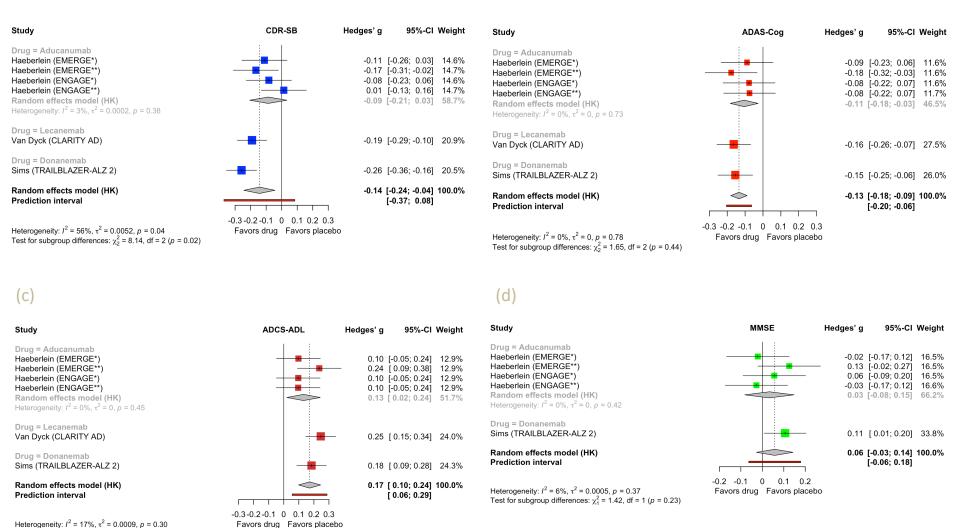
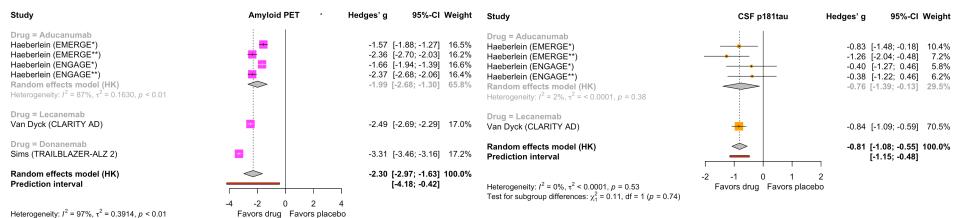


Figure S14. Forest plots of (a) Clinical Dementia Rating Scale Sum of Boxes (CDR-SB), (b) AD Assessment Scale—Cognitive Subscale (ADAS-Cog), (c) AD Cooperative Study – Activities of Daily Living (ADCS-ADL), (d) Mini Mental Examination State (MMSE) meta-analyses of FDA-approved monoclonal antibodies only with subgroup analyses by drug

(a)

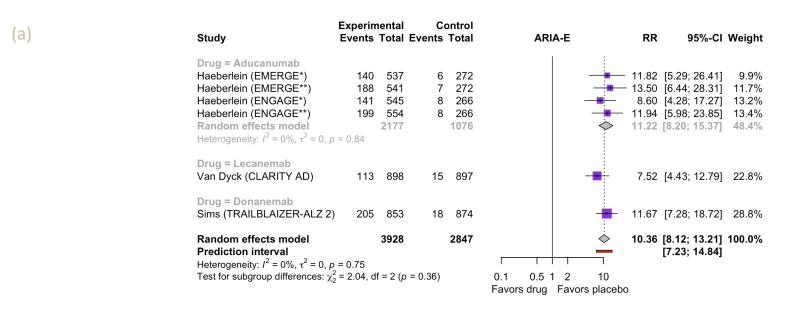
Favors drug Favors placebo

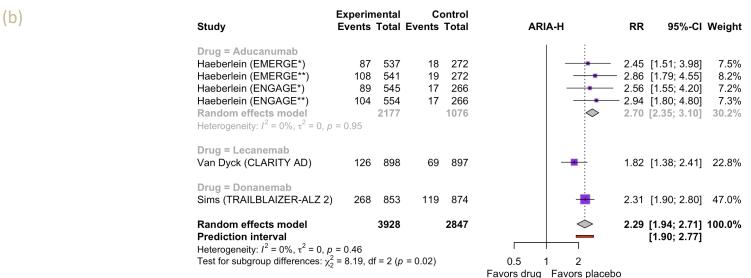
Test for subgroup differences:  $\chi_2^2 = 61.50$ , df = 2 (p < 0.01)



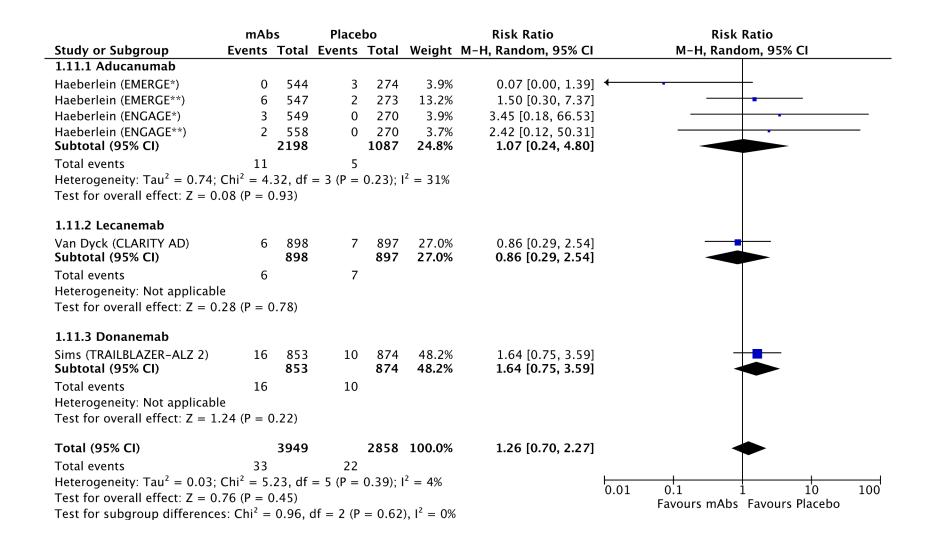
Study or Subgroup 1.10.1 Aducanumab	Mean		mAbs				2	Std. Mean Difference	Std. Mean Difference	
1.10.1 Aducanumab		SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI	
Haeberlein (EMERGE*)	148.48	127.64	33	-30.34	127.21	14	21.0%	1.38 [0.69, 2.07]	_ <del></del>	
Haeberlein (EMERGE**)	287.52	121.76	17	-30.34	127.21	14	15.1%	2.49 [1.52, 3.46]		
Haeberlein (ENGAGE*)	95.76	154.65	19	8.55	144.81	8	17.5%	0.56 [-0.29, 1.40]	<del>  • -</del>	
Haeberlein (ENGAGE**)	206.87	157.5	17	8.55	144.81	7	15.2%	1.24 [0.28, 2.20]	<del></del>	
Subtotal (95% CI)			86			43	68.8%	1.39 [0.66, 2.13]		
1.10.2 Lecanemab										
	201 22	202 5	101	F 0F	271 02	0.7	21 20/	1 02 [0 72 1 22]		
Van Dyck (CLARITY AD) <b>Subtotal (95% CI)</b>	281.22	282.5	101 <b>101</b>	-5.95	271.83	97 <b>97</b>	31.2% <b>31.2%</b>	1.03 [0.73, 1.33] <b>1.03 [0.73, 1.33</b> ]		
Heterogeneity: Not applica	able					٠.	3 1.2/0	1105 [0115, 1155]	_	
Test for overall effect: Z =	6.81 (P <	< 0.0000	)1)							
Total (95% CI)			187			140	100.0%	1.27 [0.77, 1.77]	•	
Heterogeneity: $Tau^2 = 0.1$	8; Chi <sup>2</sup> =	10.32, 0	df = 4	P = 0.04	$I); I^2 = 6$	1%		+	1 1 1	
Test for overall effect: Z =	5.01 (P <	< 0.0000	)1)					_2	Favours Placebo Favours mAb	

Figure S15. Forest plots of (a) Amyloid PET, (b) CSF p181-tau, (c) CSF  $A\beta_{42}$  meta-analyses of FDA-approved monoclonal antibodies only with subgroup analyses by drug





**Figure S16.** Forest plots of (a) Amyloid-Related Imaging Abnormalities with Edema/Effusion (ARIA-E) and (b) ARIA with microhemorrhages or superficial siderosis (ARIA-H) meta-analysis of FDA-approved antibodies only with subgroup analyses by drug



**Figure S17.** Forest plots of all-cause mortality meta-analysis of FDA-approved antibodies only with subgroup analyses by drug