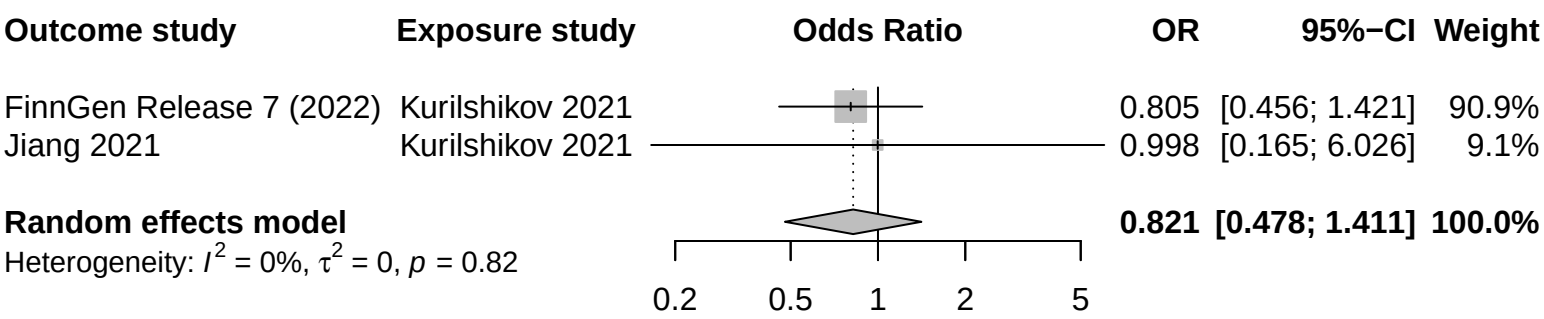
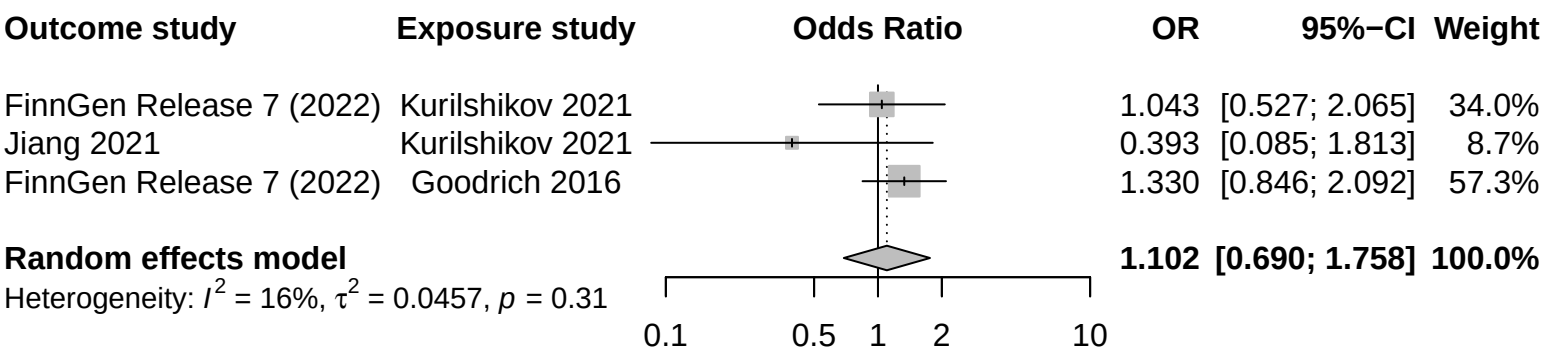
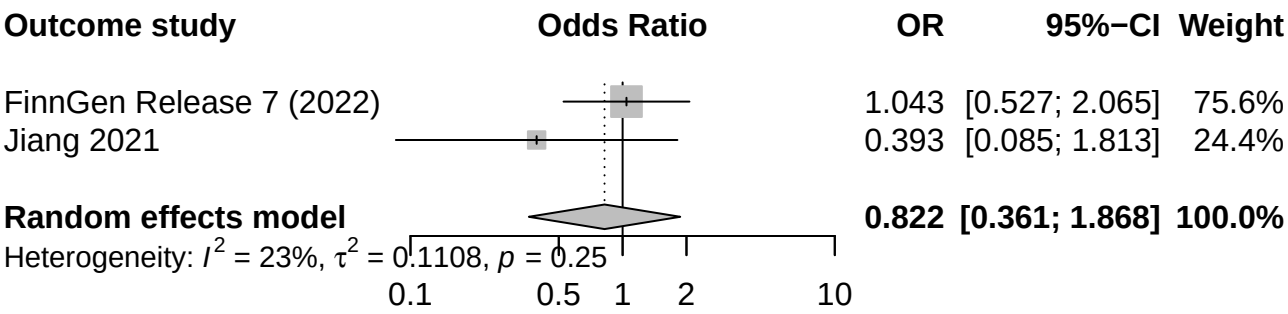
Acidaminococcaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



Actinobacteria (Class) on Optic nerve swelling in Kangcheng Liu 2022



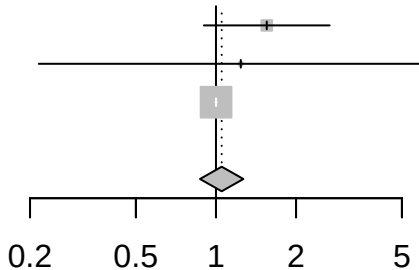
Actinobacteria (Class) on Optic nerve swelling in Kangcheng Liu 2022



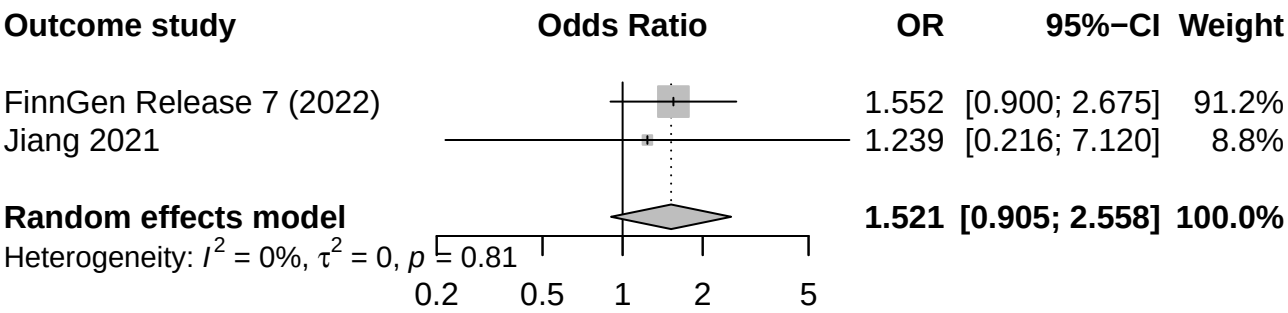
Actinobacteria (Phylum) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.552	[0.900; 2.675]	10.5%
Jiang 2021	Kurilshikov 2021		1.239	[0.216; 7.120]	1.1%
FinnGen Release 7 (2022)	Goodrich 2016		1.001	[0.996; 1.006]	88.4%
Random effects model			**1.051**	**[0.871; 1.268]**	**100.0%**

Heterogeneity: I^2 = 22%, τ^2 = 0.0104, p = 0.28



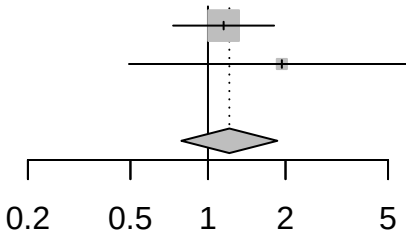
Actinobacteria (Phylum) on Optic nerve swelling in Kangcheng Liu 2022



Actinomyces (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.150	[0.732; 1.806]	90.2%
Jiang 2021	Kurilshikov 2021		1.936	[0.494; 7.591]	9.8%
Random effects model			**1.211**	**[0.789; 1.858]**	**100.0%**

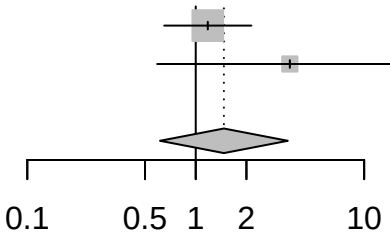
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.48



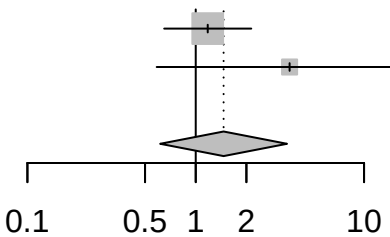
Actinomycetaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.179	[0.650; 2.139]	80.3%
Jiang 2021	Kurilshikov 2021		3.620	[0.590; 22.199]	19.7%
Random effects model			**1.470**	**[0.614; 3.521]**	**100.0%**

Heterogeneity: I^2 = 25%, τ^2 = 0.1549, p = 0.25



Actinomycetales (Order) on Optic nerve swelling in Kangcheng Liu 2022



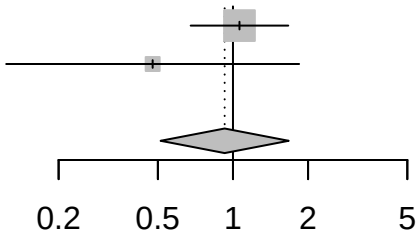
Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	1.179	[0.650; 2.139]	80.6%
Jiang 2021	Kurilshikov 2021	3.612	[0.586; 22.247]	19.4%
Random effects model		**1.464**	**[0.615; 3.486]**	**100.0%**

Heterogeneity: I^2 = 24%, τ^2 = 0.1505, p = 0.25

Adlercreutzia (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.062	[0.677; 1.666]	82.9%
Jiang 2021	Kurilshikov 2021		0.476	[0.123; 1.841]	17.1%
Random effects model			**0.926**	**[0.513; 1.672]**	**100.0%**

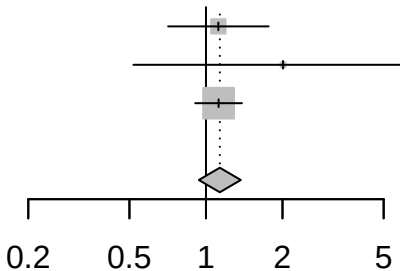
Heterogeneity: I^2 = 18%, τ^2 = 0.0568, p = 0.27



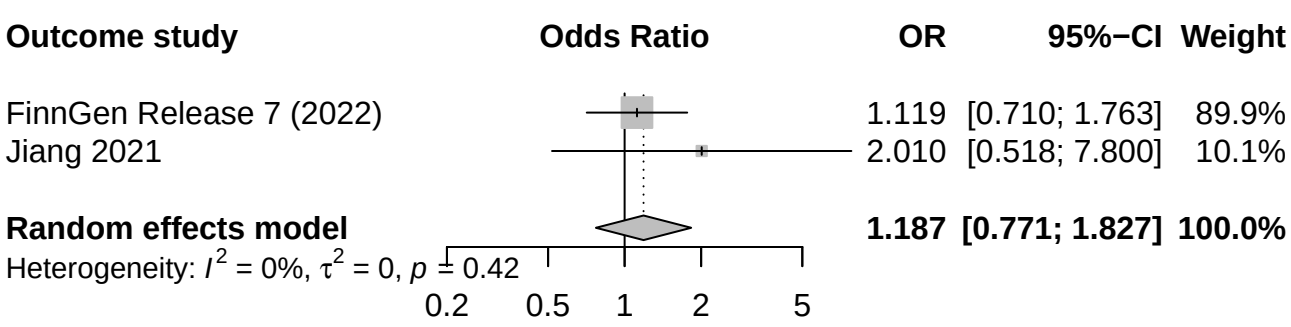
Akkermansia (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.119	[0.710; 1.763]	17.5%
Jiang 2021	Kurilshikov 2021		2.010	[0.518; 7.800]	2.0%
FinnGen Release 7 (2022)	Goodrich 2016		1.121	[0.907; 1.386]	80.6%
Random effects model			**1.134**	**[0.937; 1.371]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.70



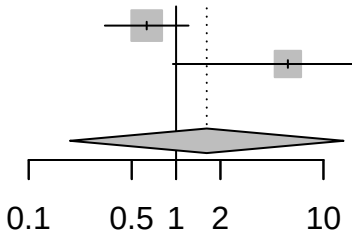
Akkermansia (Genus) on Optic nerve swelling in Kangcheng Liu 2022



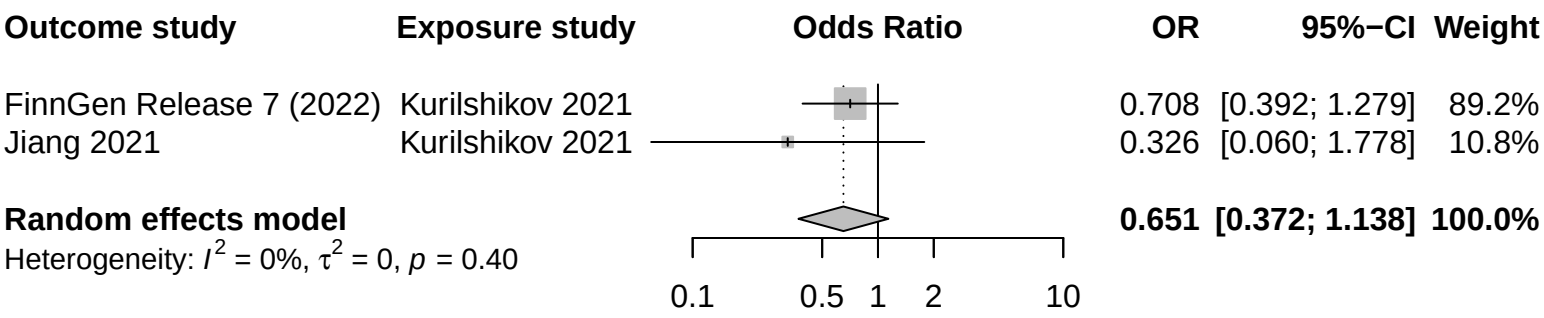
Alcaligenaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.632	[0.329; 1.215]	57.5%
Jiang 2021	Kurilshikov 2021		5.737	[0.952; 34.573]	42.5%
Random effects model			**1.614**	**[0.190; 13.682]**	**100.0%**

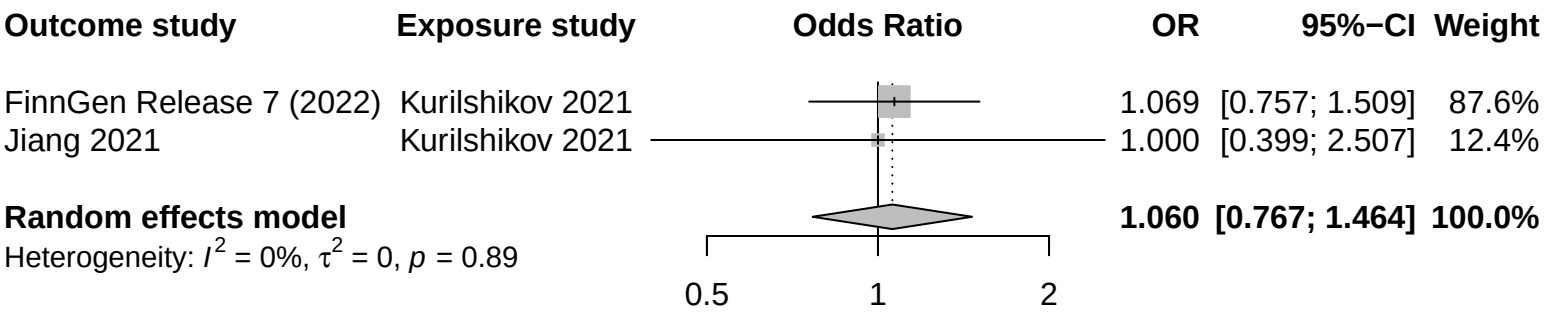
Heterogeneity: I^2 = 80%, τ^2 = 1.9572, p = 0.02



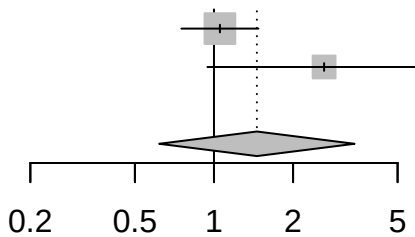
Alistipes (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Allisonella (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Alloprevotella (Genus) on Optic nerve swelling in Kangcheng Liu 2022



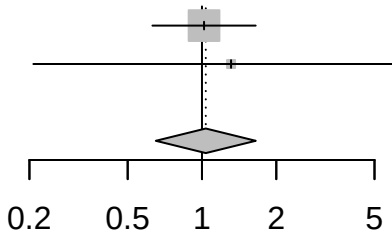
Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	1.054	[0.751; 1.477]	64.5%
Jiang 2021	Kurilshikov 2021	2.625	[0.944; 7.298]	35.5%
Random effects model		**1.456**	**[0.619; 3.428]**	**100.0%**

Heterogeneity: I^2 = 64%, τ^2 = 0.2659, p = 0.10

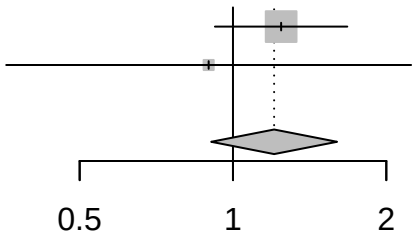
Alphaproteobacteria (Class) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.020	[0.630; 1.650]	93.6%
Jiang 2021	Kurilshikov 2021		1.312	[0.207; 8.292]	6.4%
Random effects model			**1.036**	**[0.650; 1.651]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.80



Anaerofilum (Genus) on Optic nerve swelling in Kangcheng Liu 2022



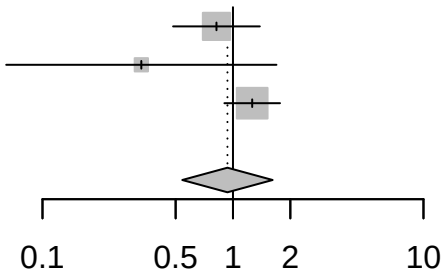
Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	1.243	[0.922; 1.677]	90.3%
Jiang 2021	Kurilshikov 2021	0.896	[0.359; 2.237]	9.7%
Random effects model		**1.204**	**[0.906; 1.601]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.50

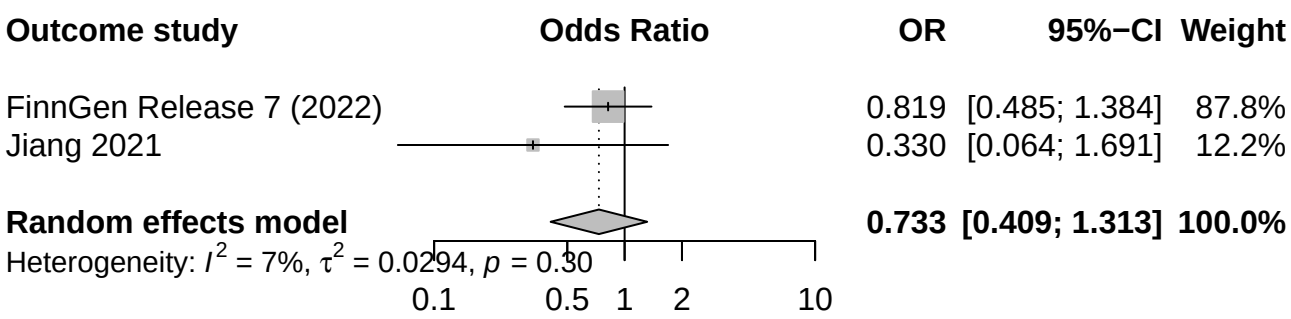
Anaerostipes (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.819	[0.485; 1.384]	39.8%
Jiang 2021	Kurilshikov 2021		0.330	[0.064; 1.691]	9.5%
FinnGen Release 7 (2022)	Goodrich 2016		1.262	[0.901; 1.766]	50.7%
Random effects model			**0.936**	**[0.542; 1.615]**	**100.0%**

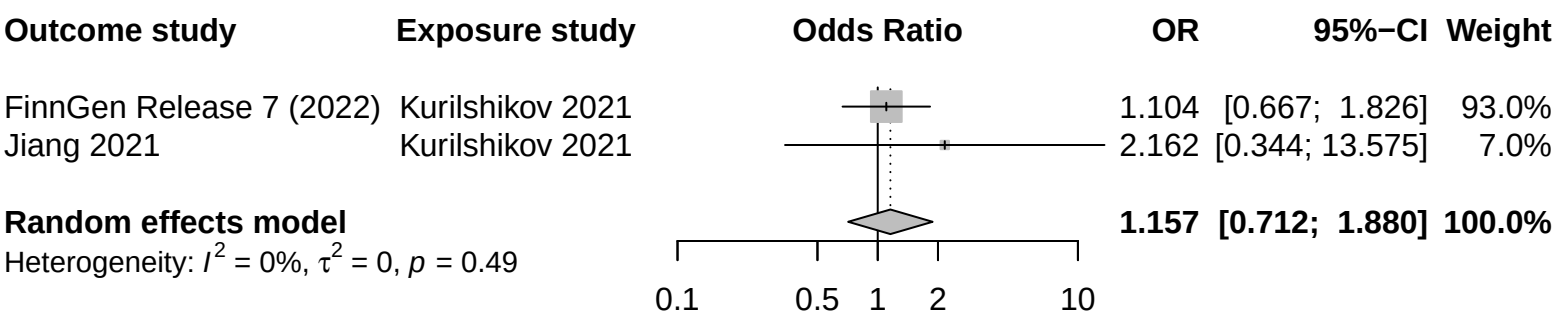
Heterogeneity: I^2 = 49%, τ^2 = 0.1236, p = 0.14



Anaerostipes (Genus) on Optic nerve swelling in Kangcheng Liu 2022



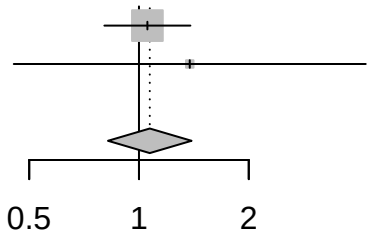
Anaerotruncus (Genus) on Optic nerve swelling in Kangcheng Liu 2022



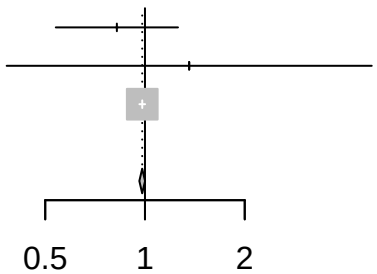
Bacillales (Order) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.055	[0.804; 1.384]	94.4%
Jiang 2021	Kurilshikov 2021		1.378	[0.454; 4.187]	5.6%
Random effects model			**1.071**	**[0.822; 1.394]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.65



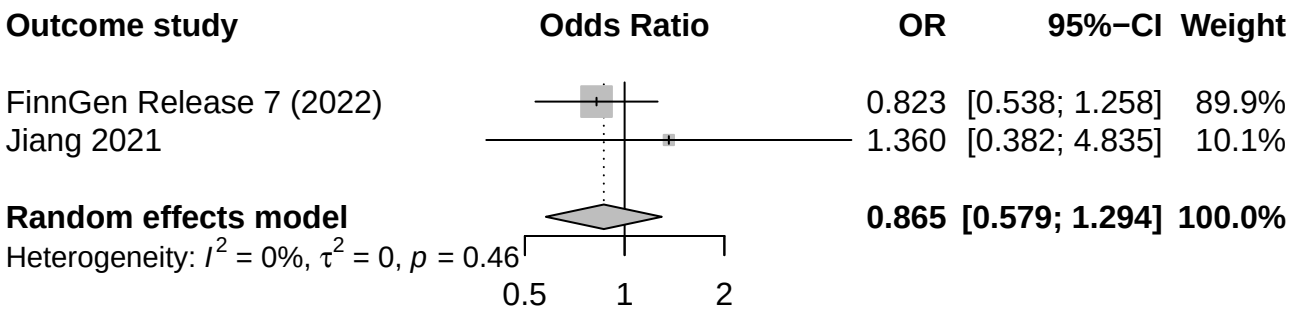
Bacilli (Class) on Optic nerve swelling in Kangcheng Liu 2022



Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	0.823	[0.538; 1.258]	0.2%
Jiang 2021	Kurilshikov 2021	1.360	[0.382; 4.835]	0.0%
FinnGen Release 7 (2022)	Goodrich 2016	0.981	[0.962; 1.001]	99.8%
Random effects model		**0.981**	**[0.962; 1.001]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.63

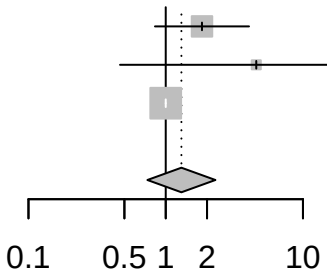
Bacilli (Class) on Optic nerve swelling in Kangcheng Liu 2022



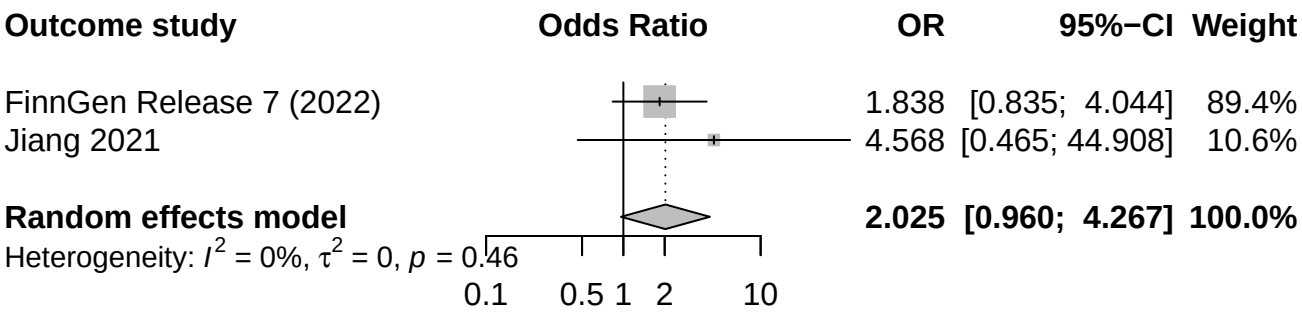
Bacteroidaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.838	[0.835; 4.044]	29.0%
Jiang 2021	Kurilshikov 2021		4.568	[0.465; 44.908]	5.7%
FinnGen Release 7 (2022)	Goodrich 2016		1.000	[0.999; 1.002]	65.3%
Random effects model			**1.301**	**[0.735; 2.302]**	**100.0%**

Heterogeneity: I^2 = 50%, τ^2 = 0.1298, p = 0.14



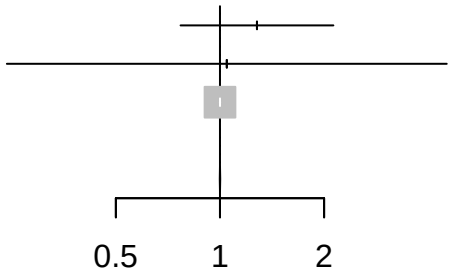
Bacteroidaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



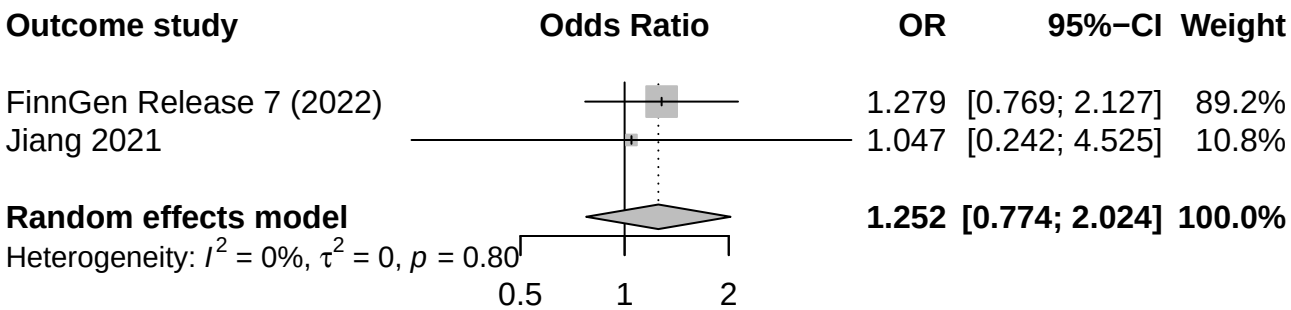
Bacteroidales (Order) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.279	[0.769; 2.127]	0.0%
Jiang 2021	Kurilshikov 2021		1.047	[0.242; 4.525]	0.0%
FinnGen Release 7 (2022)	Goodrich 2016		1.000	[0.999; 1.002]	100.0%
Random effects model			**1.000**	**[0.999; 1.002]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.64



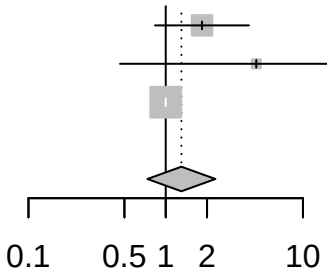
Bacteroidales (Order) on Optic nerve swelling in Kangcheng Liu 2022



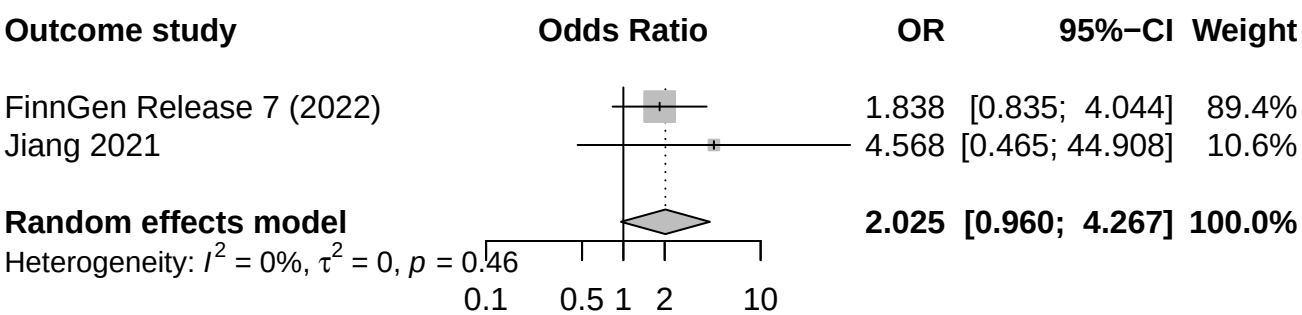
Bacteroides (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.838	[0.835; 4.044]	29.0%
Jiang 2021	Kurilshikov 2021		4.568	[0.465; 44.908]	5.7%
FinnGen Release 7 (2022)	Goodrich 2016		1.000	[0.999; 1.002]	65.3%
Random effects model			**1.301**	**[0.735; 2.302]**	**100.0%**

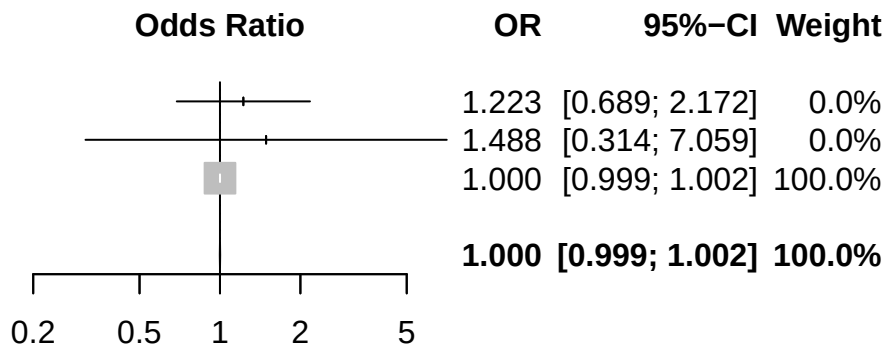
Heterogeneity: I^2 = 50%, τ^2 = 0.1298, p = 0.14



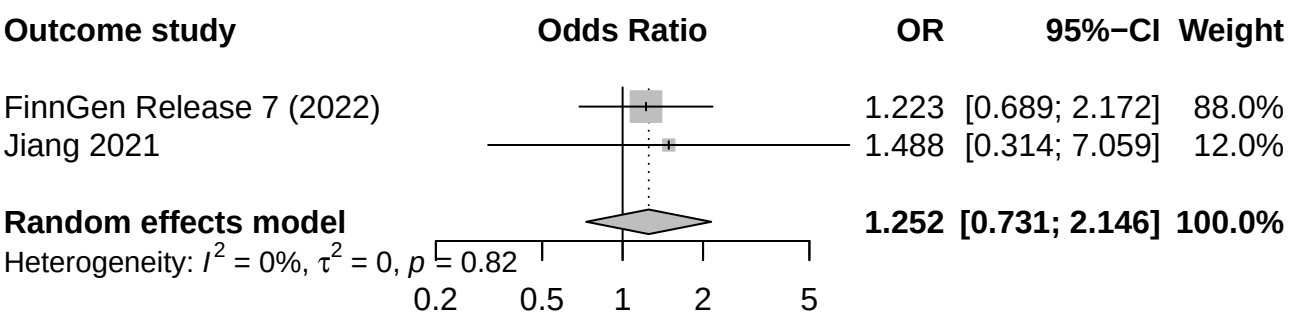
Bacteroides (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Bacteroidetes (Phylum) on Optic nerve swelling in Kangcheng Liu 2022



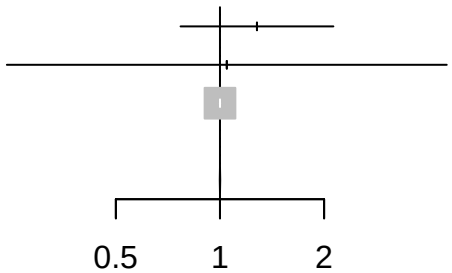
Bacteroidetes (Phylum) on Optic nerve swelling in Kangcheng Liu 2022



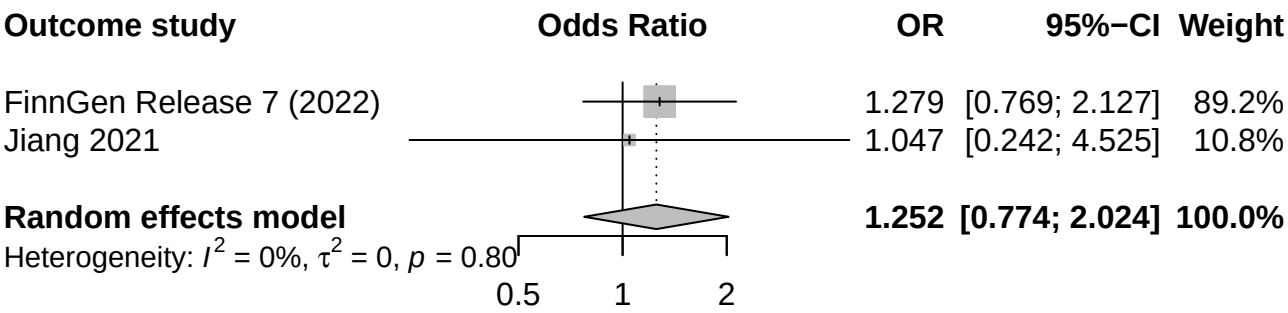
Bacteroidia (Class) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.279	[0.769; 2.127]	0.0%
Jiang 2021	Kurilshikov 2021		1.047	[0.242; 4.525]	0.0%
FinnGen Release 7 (2022)	Goodrich 2016		1.000	[0.999; 1.002]	100.0%
Random effects model			**1.000**	**[0.999; 1.002]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.64



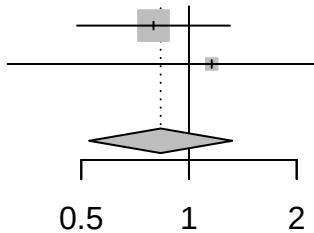
Bacteroidia (Class) on Optic nerve swelling in Kangcheng Liu 2022



Barnesiella (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.796	[0.487; 1.301]	87.7%
Jiang 2021	Kurilshikov 2021		1.157	[0.311; 4.304]	12.3%
Random effects model			**0.833**	**[0.526; 1.321]**	**100.0%**

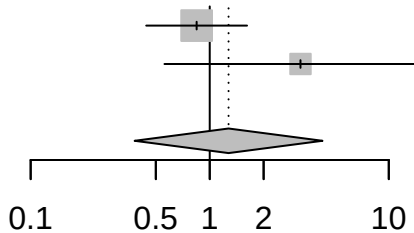
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.60



Betaproteobacteria (Class) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	0.845	[0.442; 1.616]	69.3%
Jiang 2021	Kurilshikov 2021	3.213	[0.559; 18.474]	30.7%
Random effects model		**1.274**	**[0.381; 4.263]**	**100.0%**

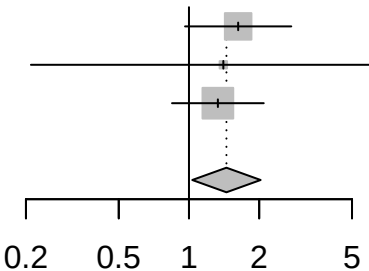
Heterogeneity: I^2 = 49%, τ^2 = 0.4388, p = 0.16



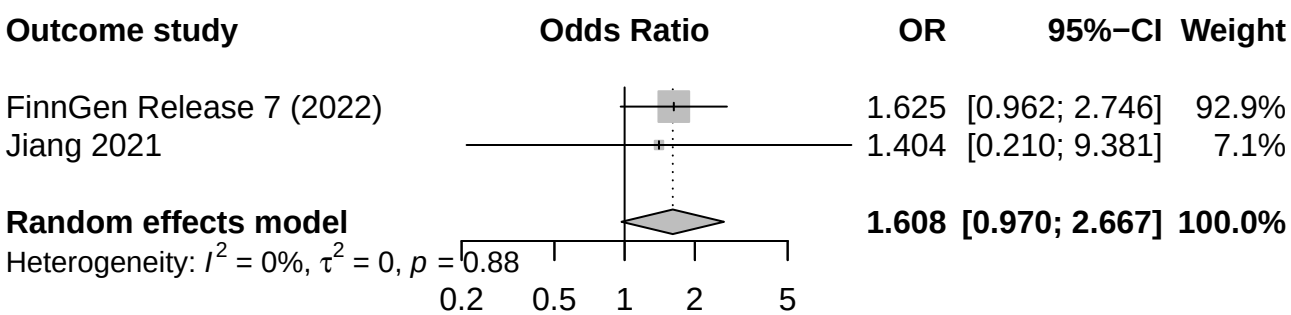
Bifidobacteriaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.625	[0.962; 2.746]	41.4%
Jiang 2021	Kurilshikov 2021		1.404	[0.210; 9.381]	3.2%
FinnGen Release 7 (2022)	Goodrich 2016		1.330	[0.846; 2.092]	55.5%
Random effects model			**1.448**	**[1.033; 2.028]**	**100.0%**

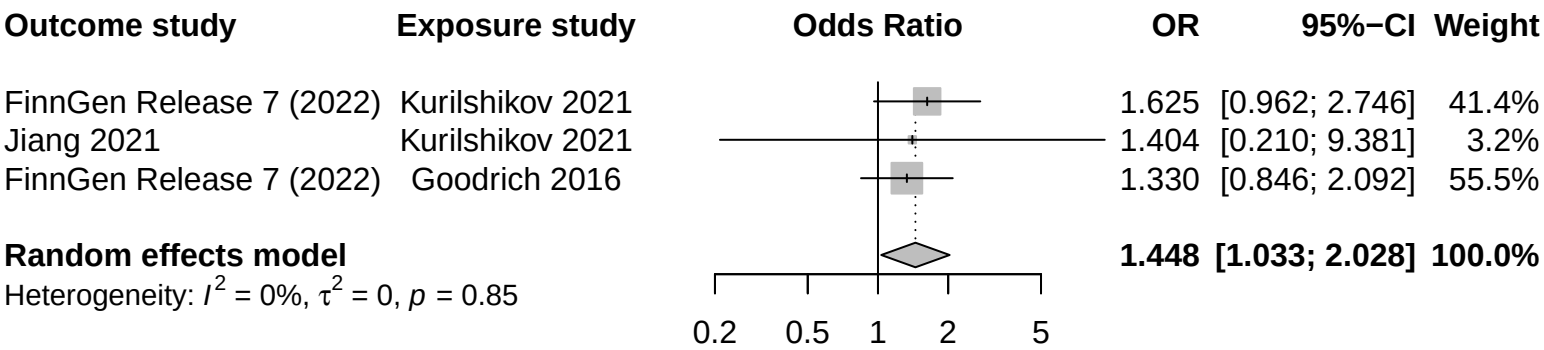
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.85



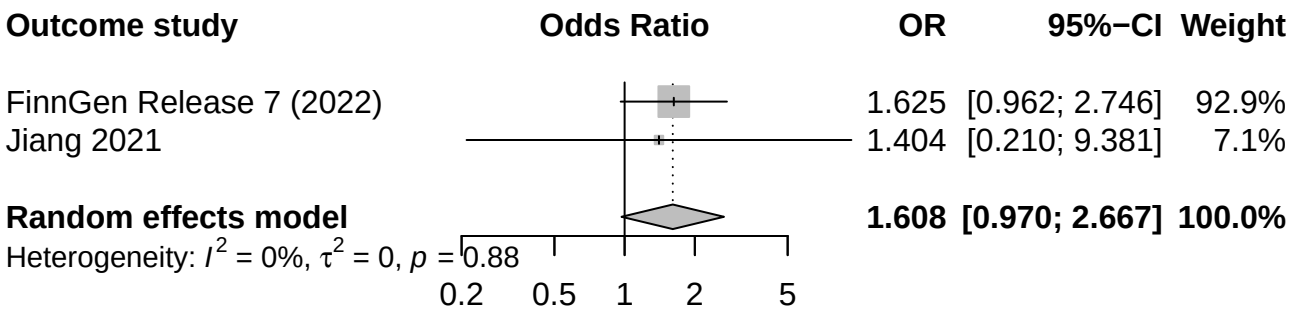
Bifidobacteriaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



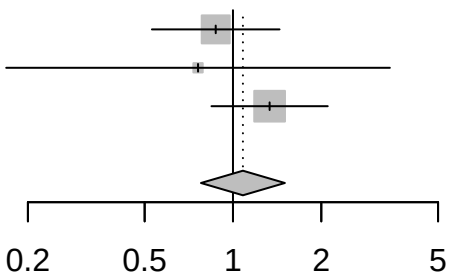
Bifidobacteriales (Order) on Optic nerve swelling in Kangcheng Liu 2022



Bifidobacteriales (Order) on Optic nerve swelling in Kangcheng Liu 2022



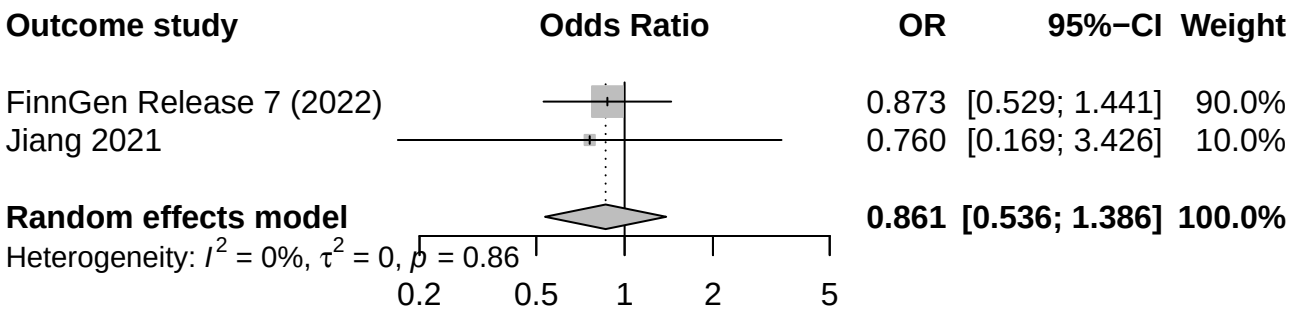
Bifidobacterium (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	0.873	[0.529; 1.441]	43.2%
Jiang 2021	Kurilshikov 2021	0.760	[0.169; 3.426]	4.8%
FinnGen Release 7 (2022)	Goodrich 2016	1.333	[0.845; 2.104]	52.0%
Random effects model		**1.081**	**[0.778; 1.503]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.42

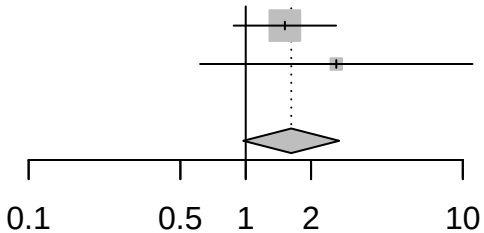
Bifidobacterium (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Bilophila (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	1.515	[0.880; 2.608]	87.6%
Jiang 2021	Kurilshikov 2021	2.614	[0.616; 11.082]	12.4%
Random effects model		**1.621**	**[0.975; 2.695]**	**100.0%**

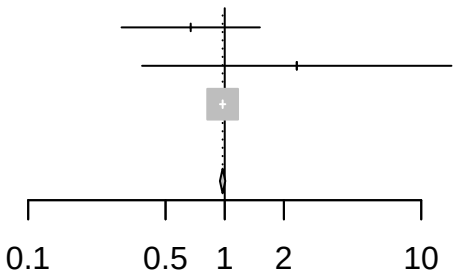
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.49



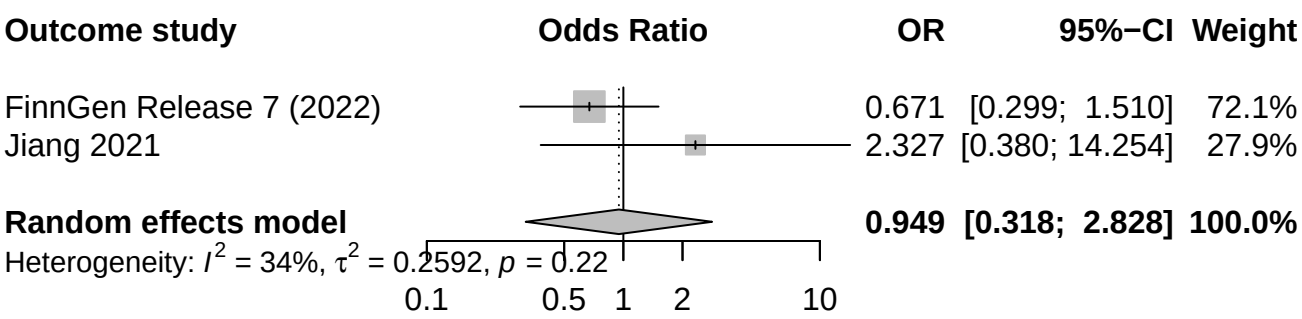
Blautia (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.671	[0.299; 1.510]	0.2%
Jiang 2021	Kurilshikov 2021		2.327	[0.380; 14.254]	0.0%
FinnGen Release 7 (2022)	Goodrich 2016		0.976	[0.946; 1.007]	99.8%
Random effects model			**0.976**	**[0.946; 1.007]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.43



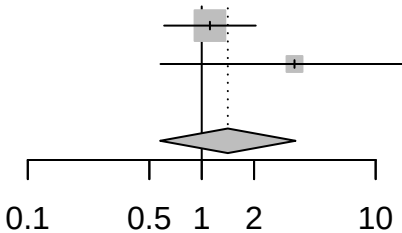
Blautia (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Burkholderiales (Order) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	1.115	[0.608; 2.044]	78.9%
Jiang 2021	Kurilshikov 2021	3.415	[0.580; 20.123]	21.1%
Random effects model		**1.413**	**[0.577; 3.459]**	**100.0%**

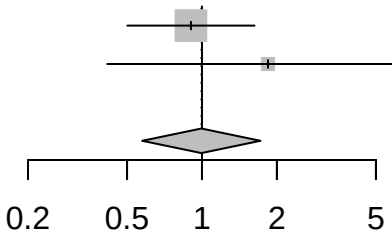
Heterogeneity: I^2 = 27%, τ^2 = 0.1691, p = 0.24



Butyricicoccus (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.903	[0.502; 1.625]	86.5%
Jiang 2021	Kurilshikov 2021		1.841	[0.416; 8.148]	13.5%
Random effects model			**0.994**	**[0.575; 1.718]**	**100.0%**

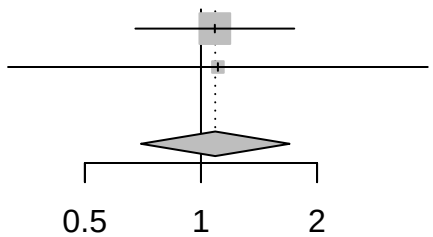
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.38



Butyricimonas (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.086	[0.676; 1.746]	87.5%
Jiang 2021	Kurilshikov 2021		1.106	[0.316; 3.873]	12.5%
Random effects model			**1.089**	**[0.699; 1.697]**	**100.0%**

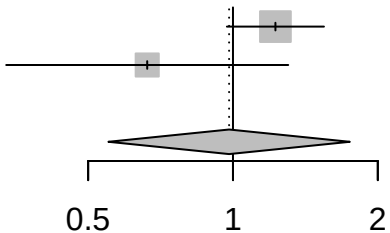
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.98



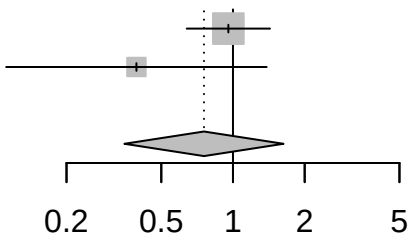
Butyrivibrio (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.225	[0.971; 1.546]	63.9%
Jiang 2021	Kurilshikov 2021		0.663	[0.338; 1.303]	36.1%
Random effects model			**0.982**	**[0.551; 1.749]**	**100.0%**

Heterogeneity: I^2 = 65%, τ^2 = 0.1220, p = 0.09



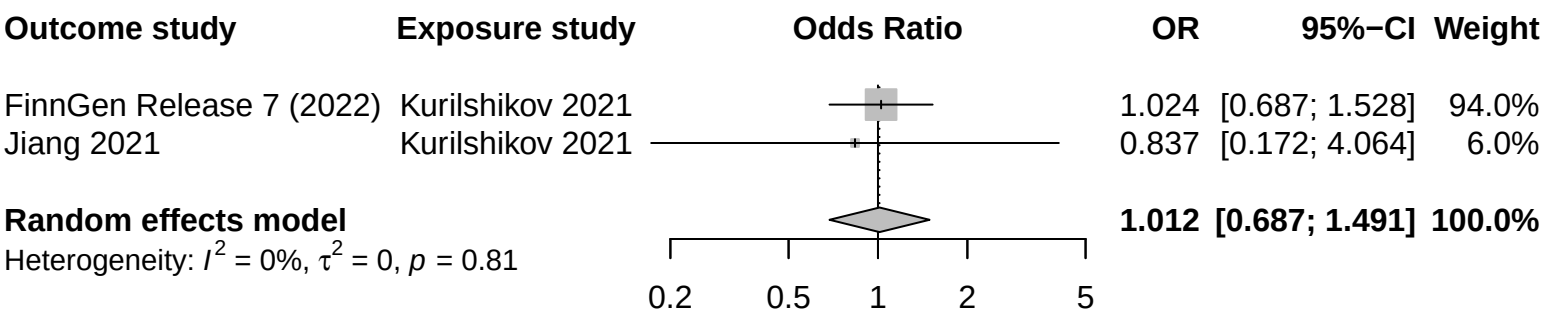
Candidatus Soleaferrea (Genus) on Optic nerve swelling in Kangcheng Liu 2022



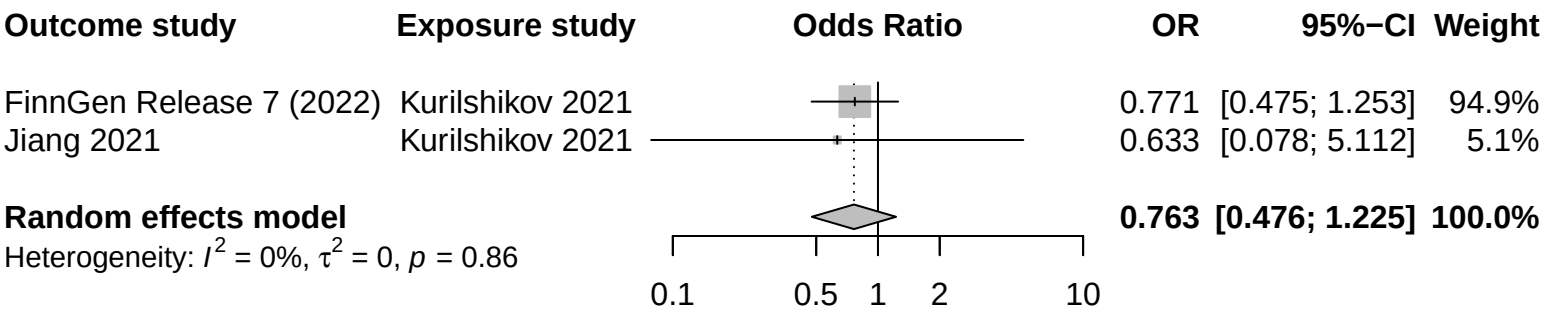
Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	0.956	[0.639; 1.430]	73.5%
Jiang 2021	Kurilshikov 2021	0.393	[0.112; 1.385]	26.5%
Random effects model		**0.755**	**[0.350; 1.630]**	**100.0%**

Heterogeneity: I^2 = 42%, τ^2 = 0.1674, p = 0.19

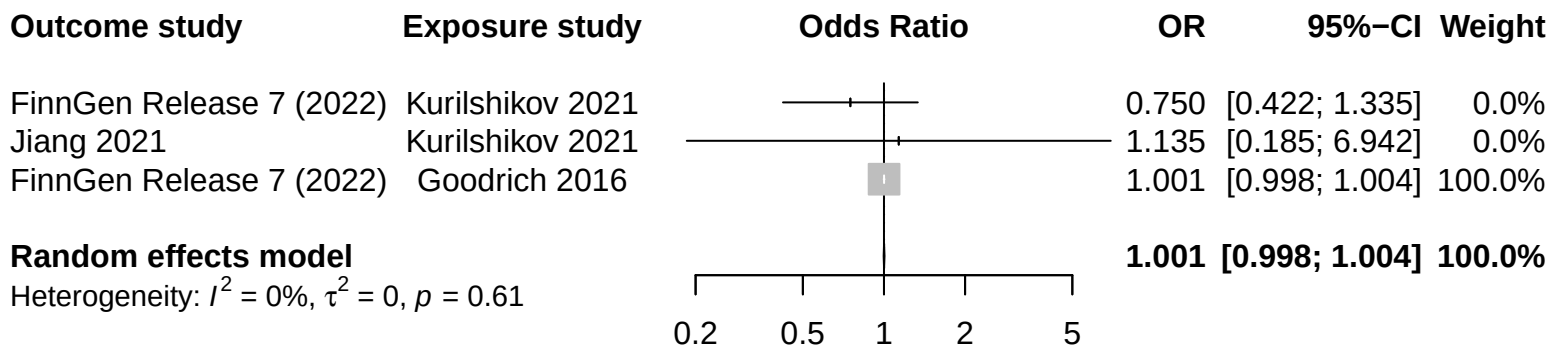
Catenibacterium (Genus) on Optic nerve swelling in Kangcheng Liu 2022



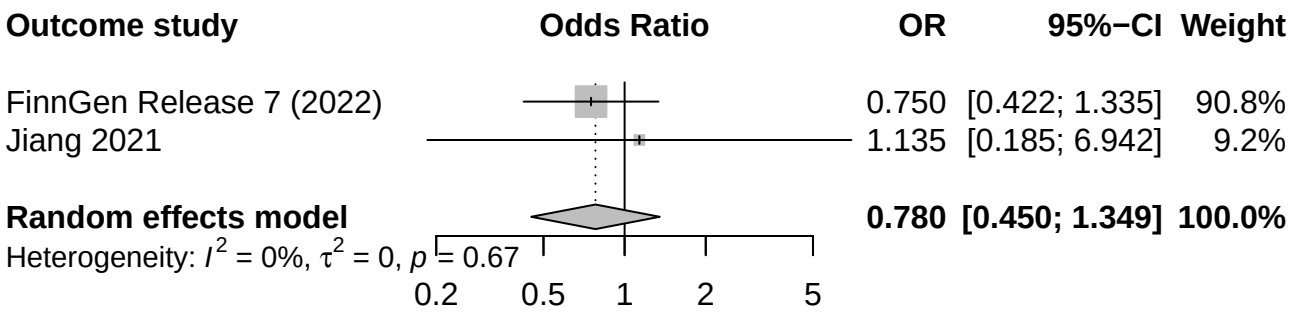
Christensenellaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



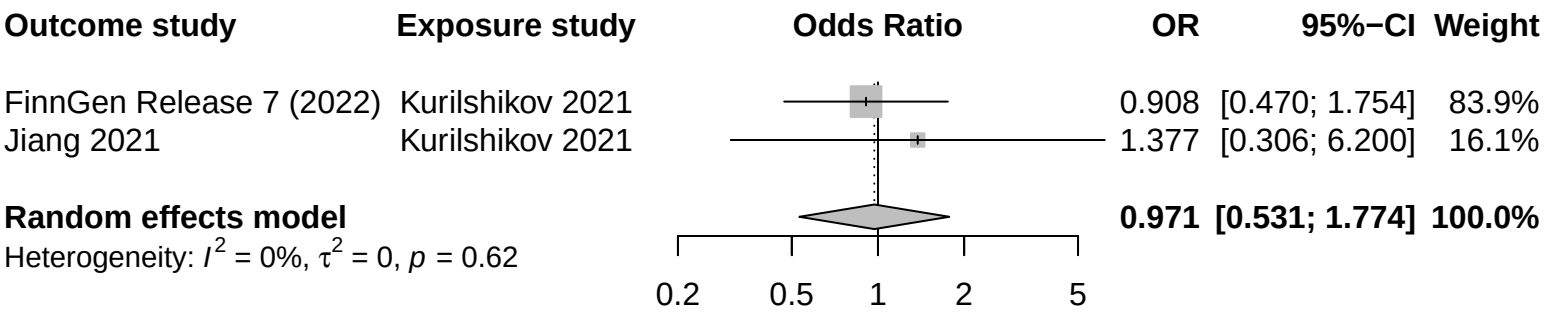
Clostridia (Class) on Optic nerve swelling in Kangcheng Liu 2022



Clostridia (Class) on Optic nerve swelling in Kangcheng Liu 2022



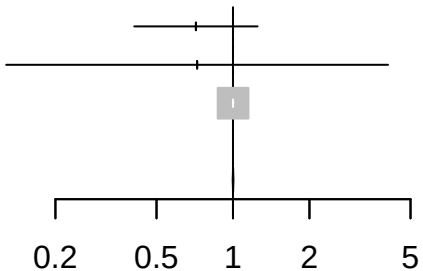
Clostridiaceae1 (Family) on Optic nerve swelling in Kangcheng Liu 2022



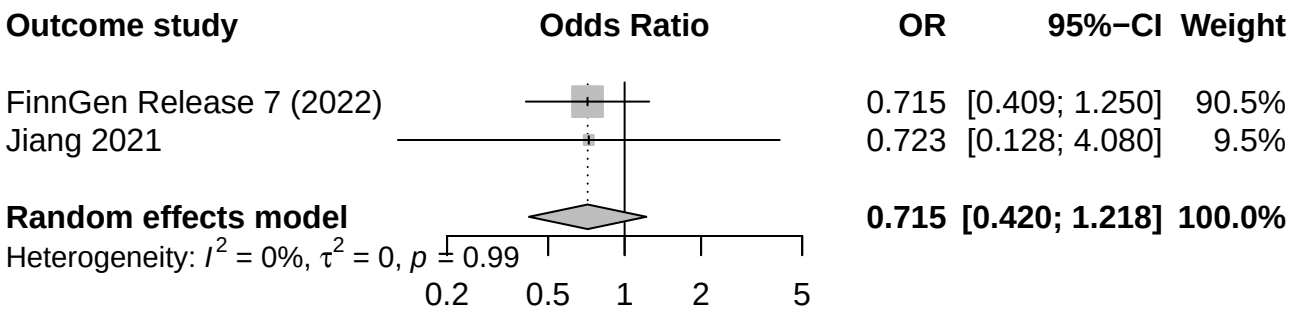
Clostridiales (Order) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.715	[0.409; 1.250]	0.0%
Jiang 2021	Kurilshikov 2021		0.723	[0.128; 4.080]	0.0%
FinnGen Release 7 (2022)	Goodrich 2016		1.001	[0.998; 1.004]	100.0%
Random effects model			**1.001**	**[0.998; 1.004]**	**100.0%**

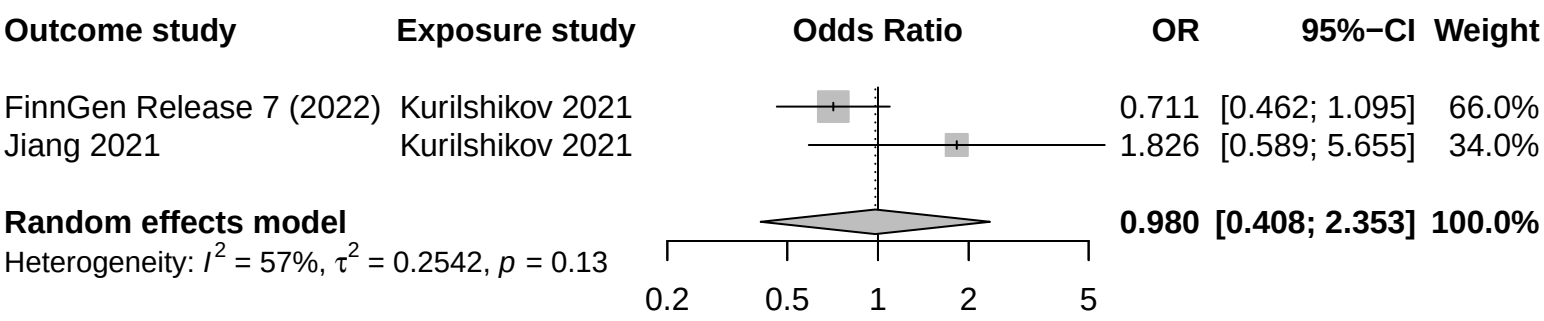
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.46



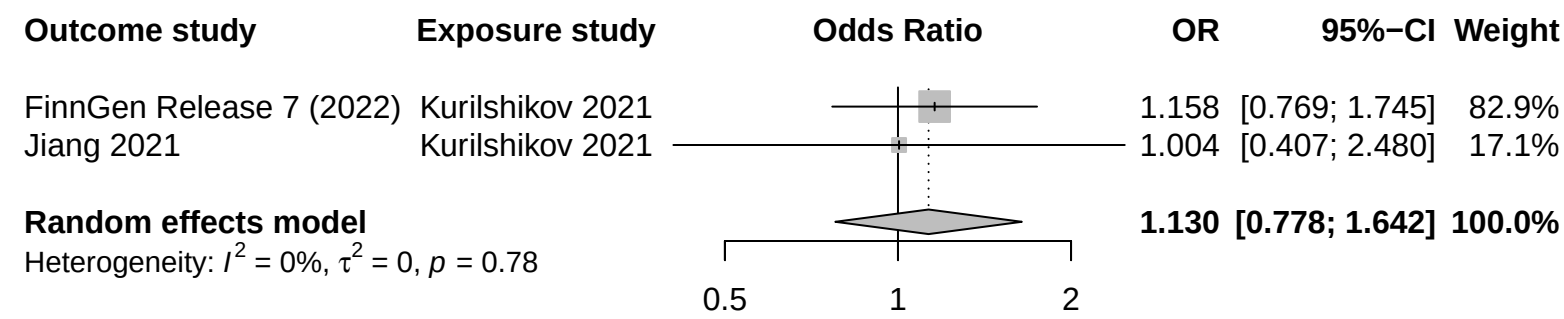
Clostridiales (Order) on Optic nerve swelling in Kangcheng Liu 2022



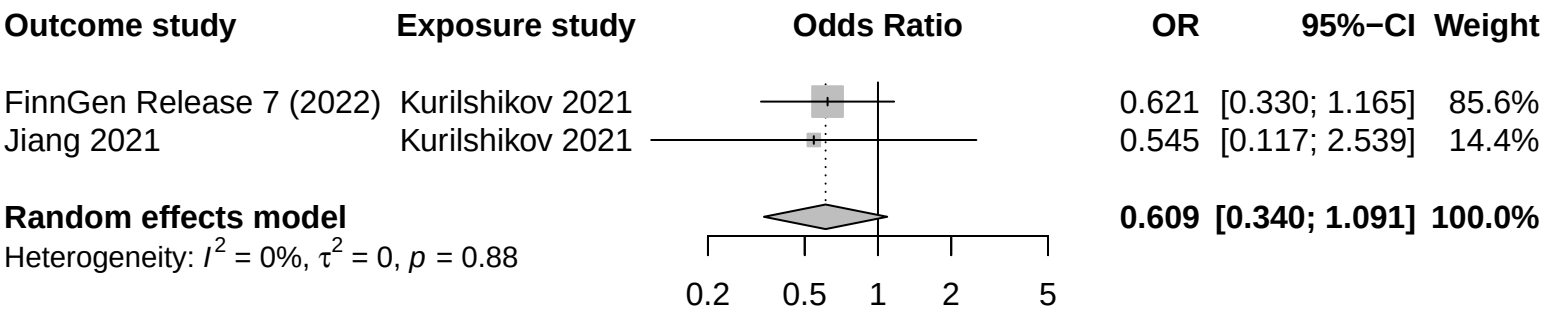
diales vadin BB60 Group (Family in Clostridiales Order) on Optic nerve swelling in Kangcheng Li



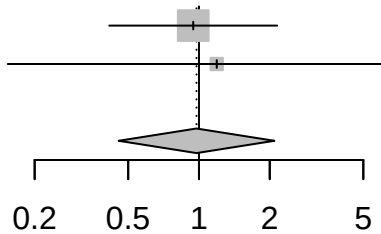
idium innocuum Group (Species in Clostridium Genus) on Optic nerve swelling in Kangcheng Liu



Clostridium sensu stricto1 (Genus) on Optic nerve swelling in Kangcheng Liu 2022



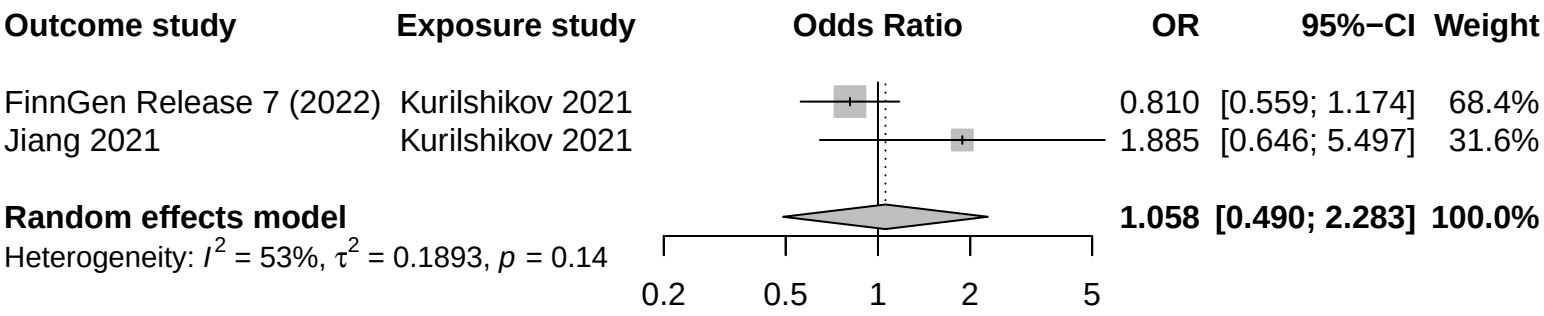
Collinsella (Genus) on Optic nerve swelling in Kangcheng Liu 2022



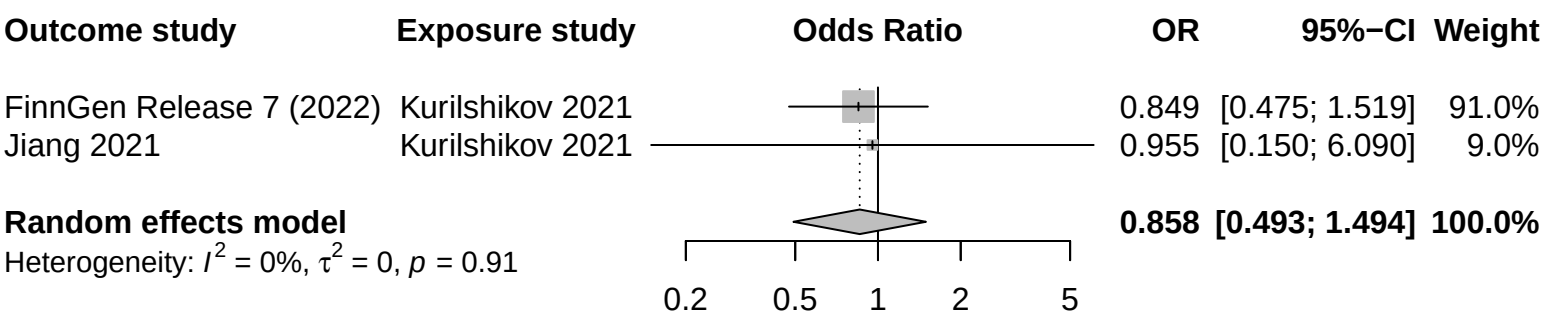
Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	0.945	[0.416; 2.150]	86.1%
Jiang 2021	Kurilshikov 2021	1.190	[0.154; 9.216]	13.9%
Random effects model		**0.976**	**[0.455; 2.092]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.84

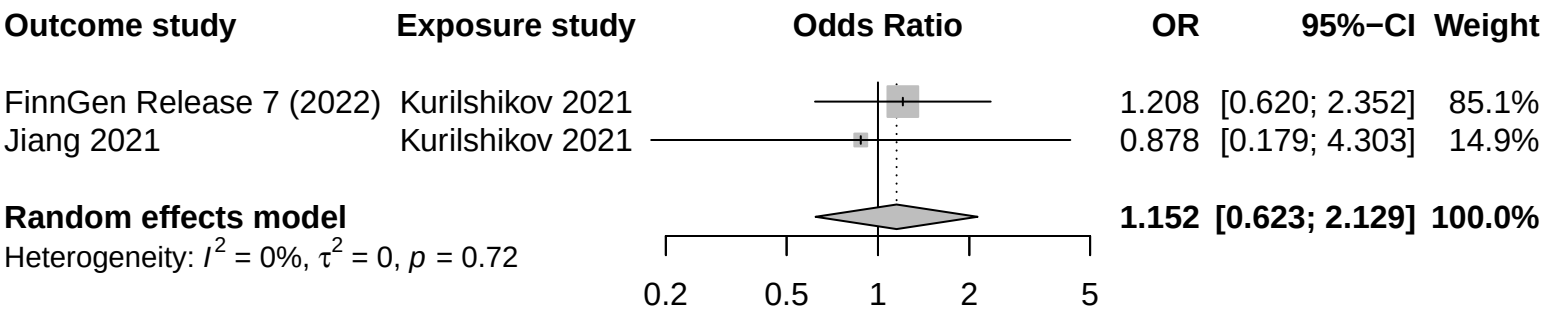
Coprobacter (Genus) on Optic nerve swelling in Kangcheng Liu 2022



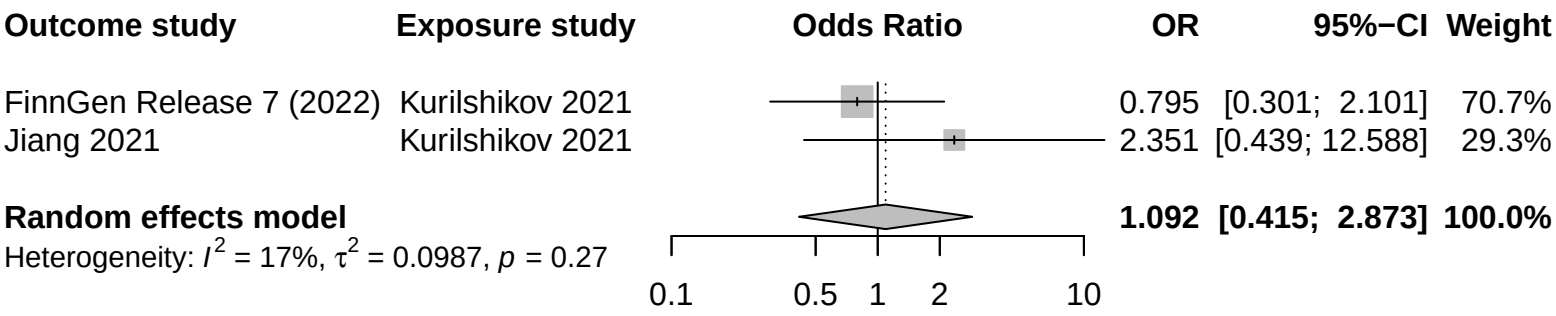
Coprococcus1 (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Coprococcus2 (Genus) on Optic nerve swelling in Kangcheng Liu 2022



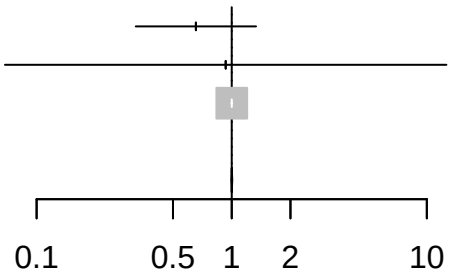
Coprococcus3 (Genus) on Optic nerve swelling in Kangcheng Liu 2022



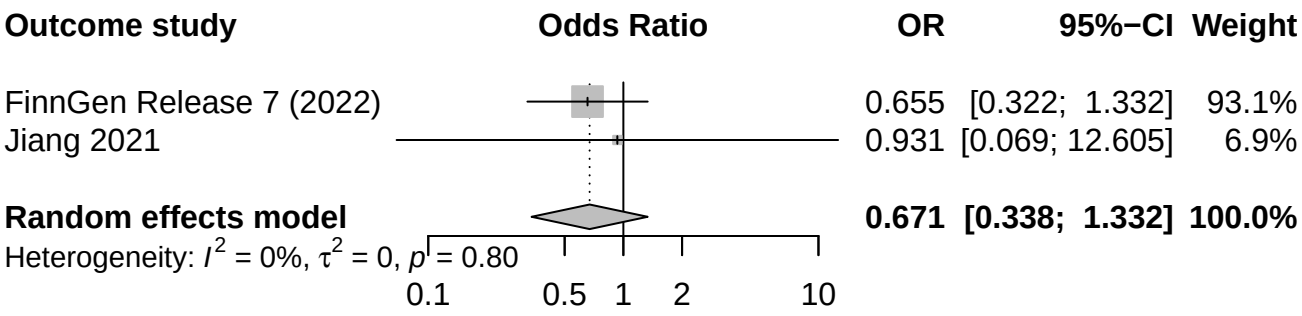
Coriobacteriaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.655	[0.322; 1.332]	0.0%
Jiang 2021	Kurilshikov 2021		0.931	[0.069; 12.605]	0.0%
FinnGen Release 7 (2022)	Goodrich 2016		1.001	[0.996; 1.006]	100.0%
Random effects model			**1.001**	**[0.996; 1.006]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.50



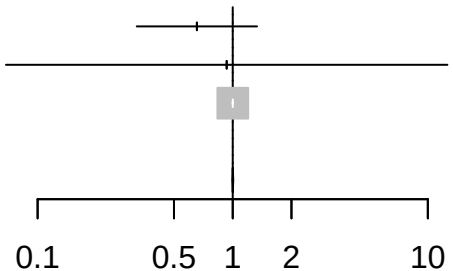
Coriobacteriaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



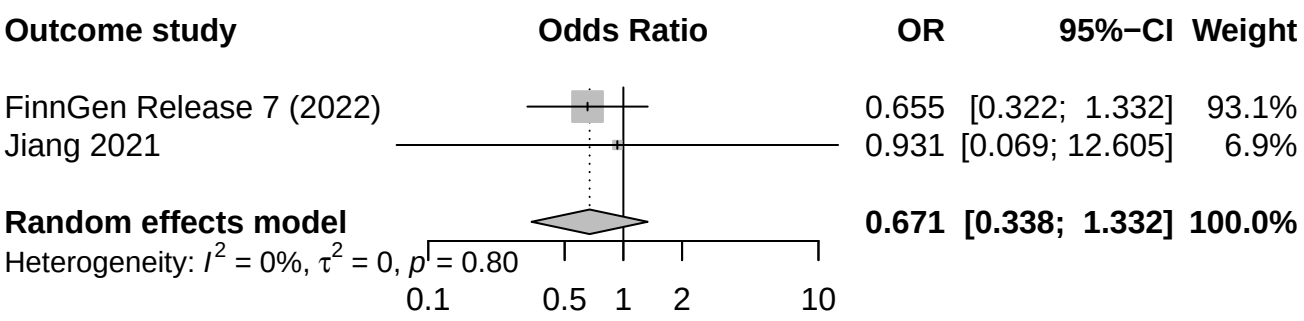
Coriobacteriales (Order) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.655	[0.322; 1.332]	0.0%
Jiang 2021	Kurilshikov 2021		0.931	[0.069; 12.605]	0.0%
FinnGen Release 7 (2022)	Goodrich 2016		1.001	[0.996; 1.006]	100.0%
Random effects model			**1.001**	**[0.996; 1.006]**	**100.0%**

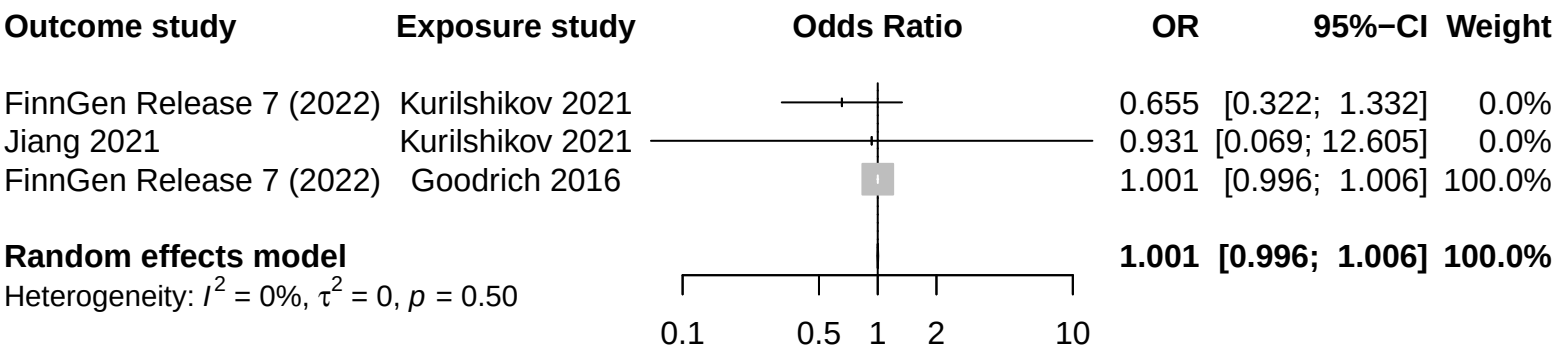
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.50



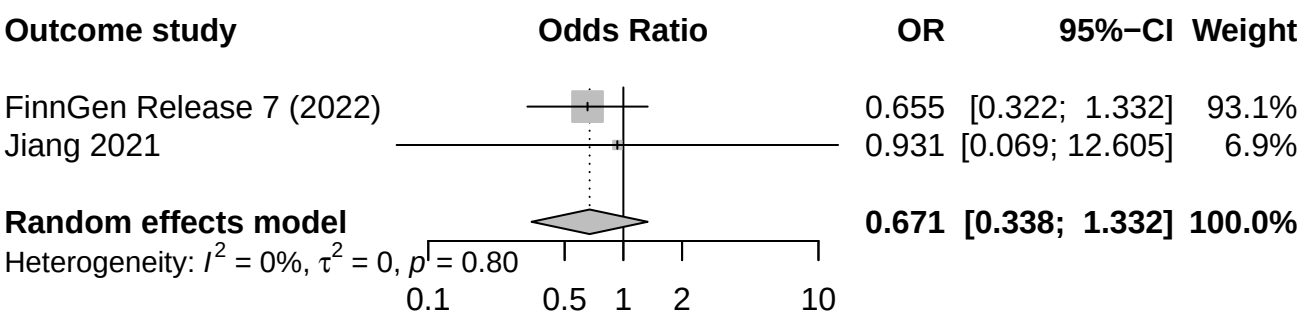
Coriobacteriales (Order) on Optic nerve swelling in Kangcheng Liu 2022



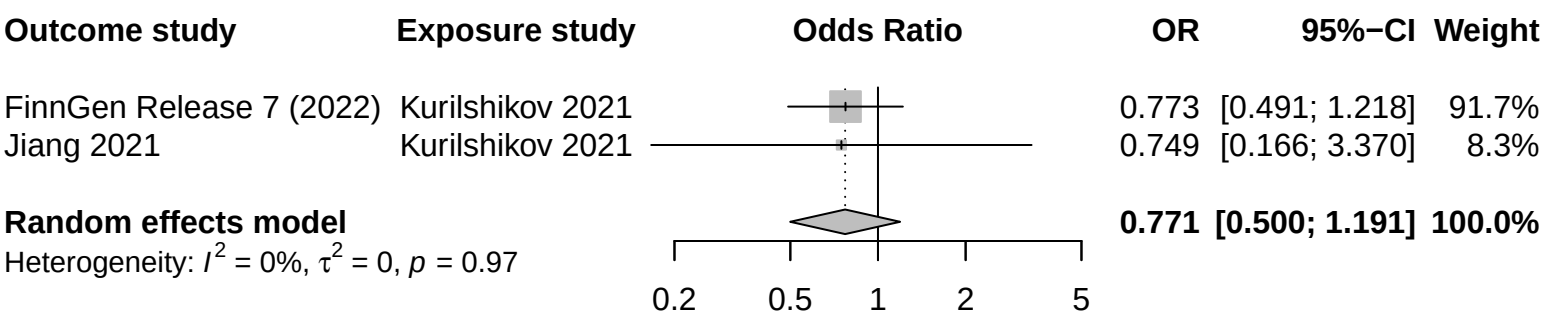
Coriobacteriia (Class) on Optic nerve swelling in Kangcheng Liu 2022



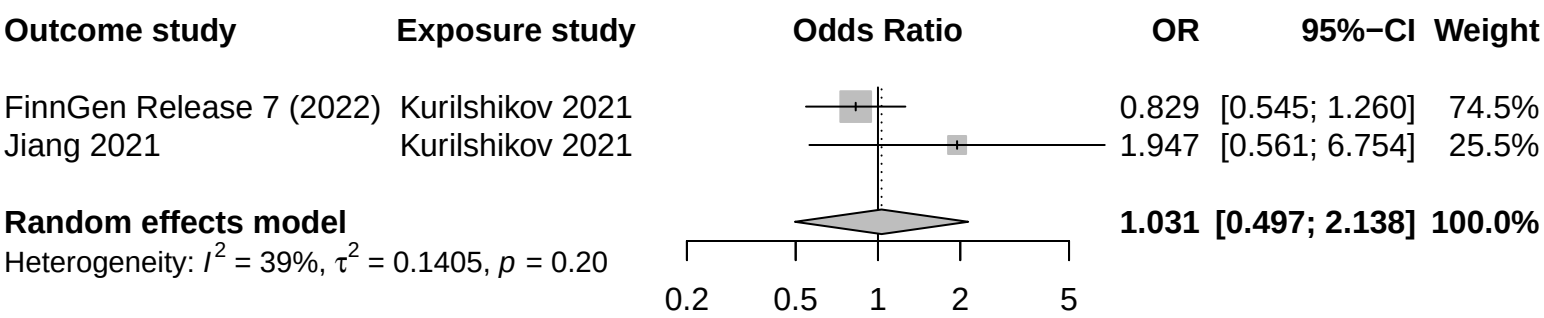
Coriobacteriia (Class) on Optic nerve swelling in Kangcheng Liu 2022



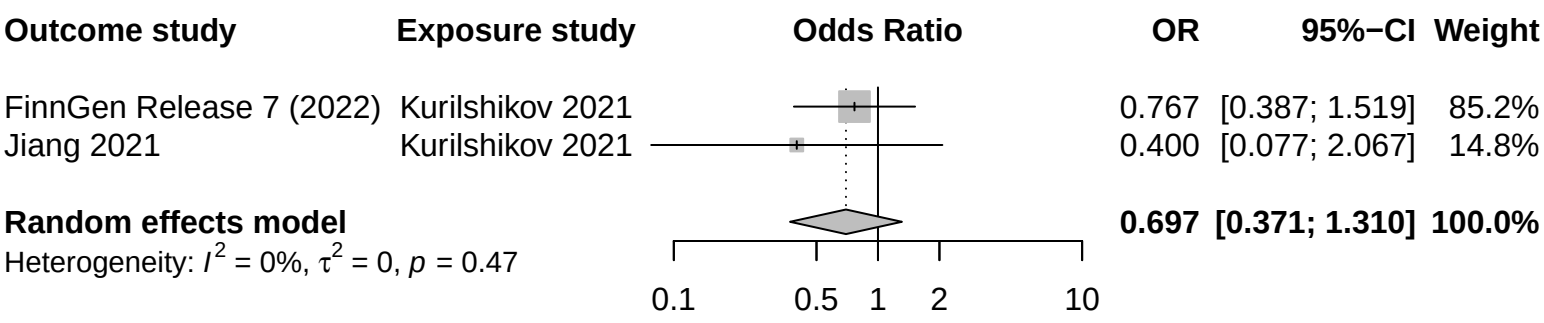
Cyanobacteria (Phylum) on Optic nerve swelling in Kangcheng Liu 2022



Defluviitaleaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



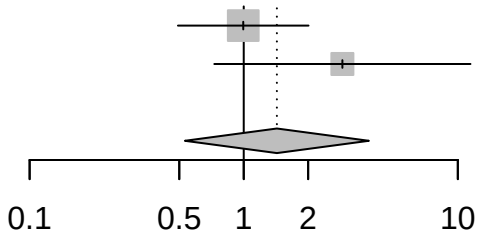
Deltaproteobacteria (Class) on Optic nerve swelling in Kangcheng Liu 2022



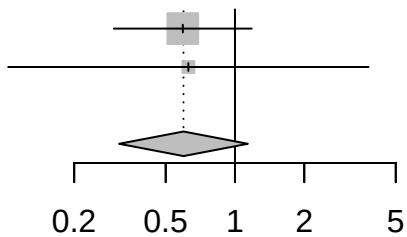
Desulfovibrio (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	0.995	[0.493; 2.008]	66.1%
Jiang 2021	Kurilshikov 2021	2.890	[0.729; 11.462]	33.9%
Random effects model		**1.428**	**[0.531; 3.842]**	**100.0%**

Heterogeneity: I^2 = 45%, τ^2 = 0.2573, p = 0.18



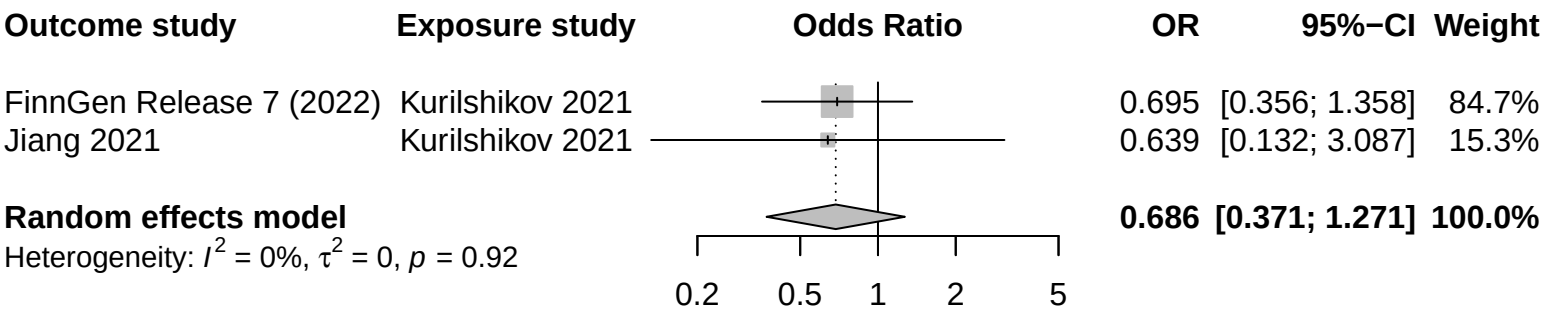
Desulfovibrionaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



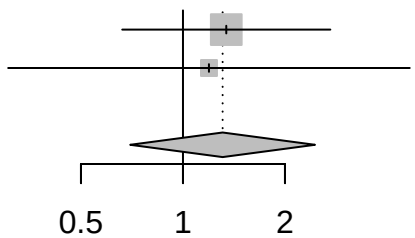
Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.593	[0.298; 1.182]	87.2%
Jiang 2021	Kurilshikov 2021		0.627	[0.103; 3.806]	12.8%
Random effects model			**0.597**	**[0.314; 1.138]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.95

Desulfovibrionales (Order) on Optic nerve swelling in Kangcheng Liu 2022



Dialister (Genus) on Optic nerve swelling in Kangcheng Liu 2022



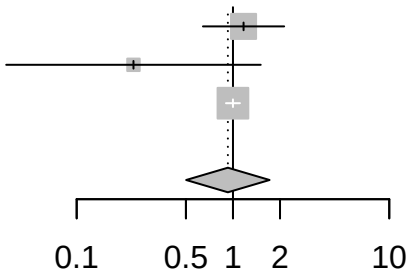
Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.342	[0.662; 2.722]	78.8%
Jiang 2021	Kurilshikov 2021		1.193	[0.305; 4.670]	21.2%
Random effects model			**1.309**	**[0.699; 2.453]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.88

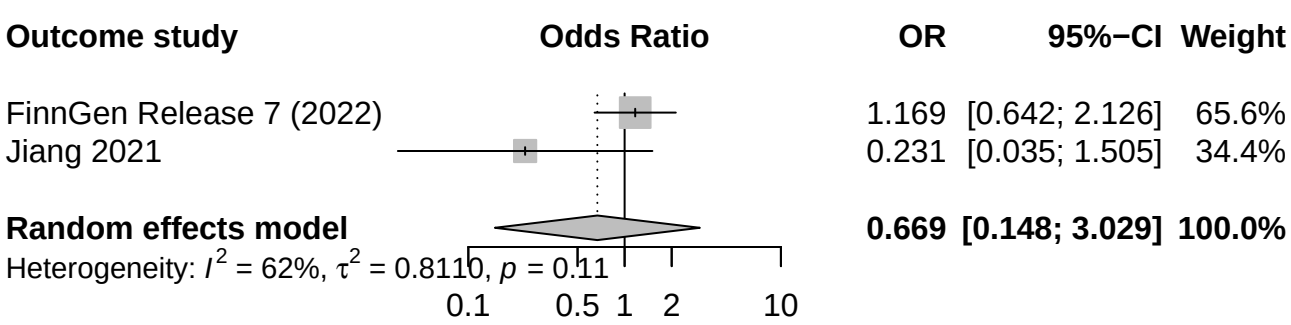
Dorea (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.169	[0.642; 2.126]	36.4%
Jiang 2021	Kurilshikov 2021		0.231	[0.035; 1.505]	9.0%
FinnGen Release 7 (2022)	Goodrich 2016		1.000	[0.902; 1.109]	54.7%
Random effects model			**0.927**	**[0.502; 1.714]**	**100.0%**

Heterogeneity: I^2 = 23%, τ^2 = 0.1769, p = 0.27



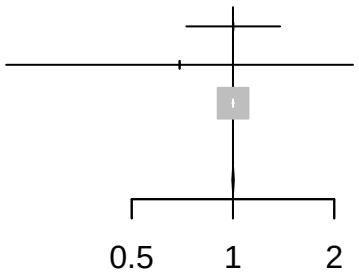
Dorea (Genus) on Optic nerve swelling in Kangcheng Liu 2022



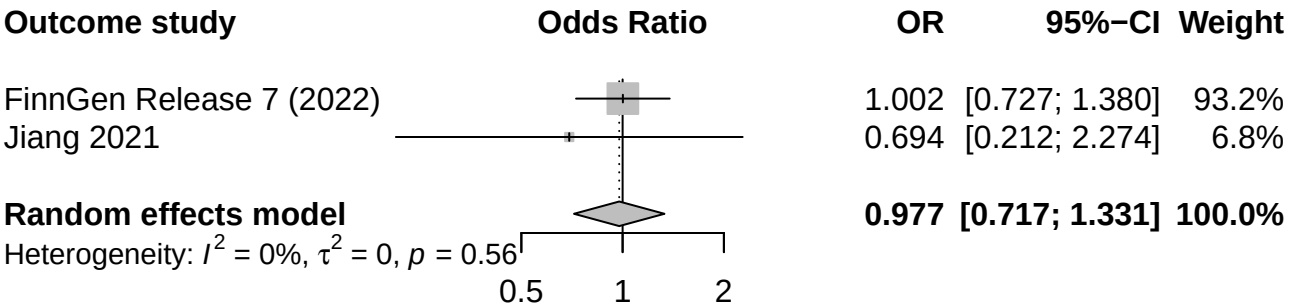
Eggerthella (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.002	[0.727; 1.380]	0.0%
Jiang 2021	Kurilshikov 2021		0.694	[0.212; 2.274]	0.0%
FinnGen Release 7 (2022)	Goodrich 2016		1.001	[0.996; 1.006]	100.0%
Random effects model			**1.001**	**[0.996; 1.006]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.83



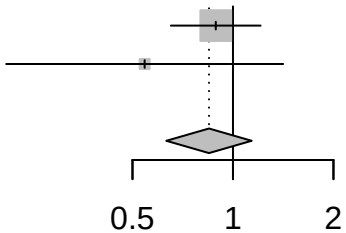
Eggerthella (Genus) on Optic nerve swelling in Kangcheng Liu 2022



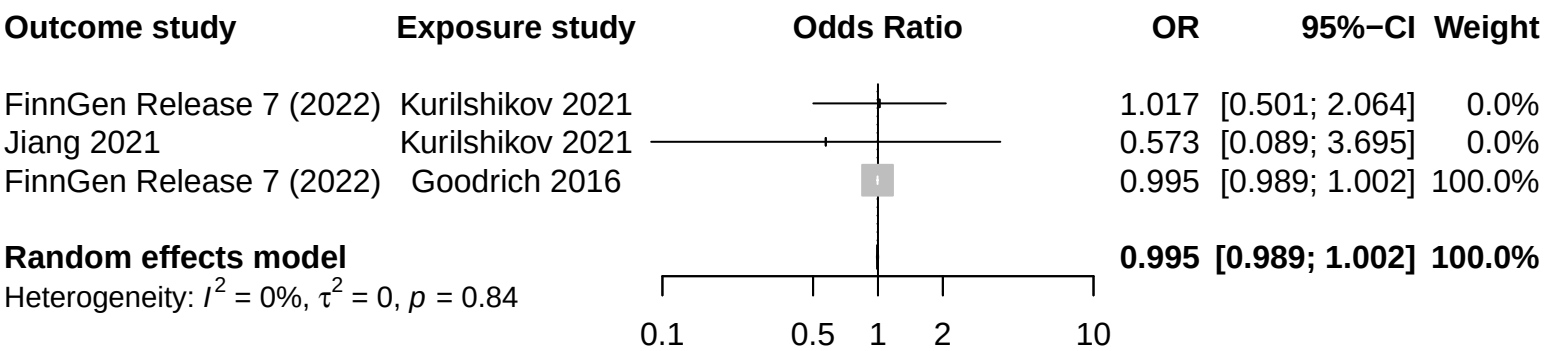
Eisenbergiella (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.888	[0.652; 1.210]	90.5%
Jiang 2021	Kurilshikov 2021		0.544	[0.209; 1.413]	9.5%
Random effects model			**0.848**	**[0.631; 1.138]**	**100.0%**

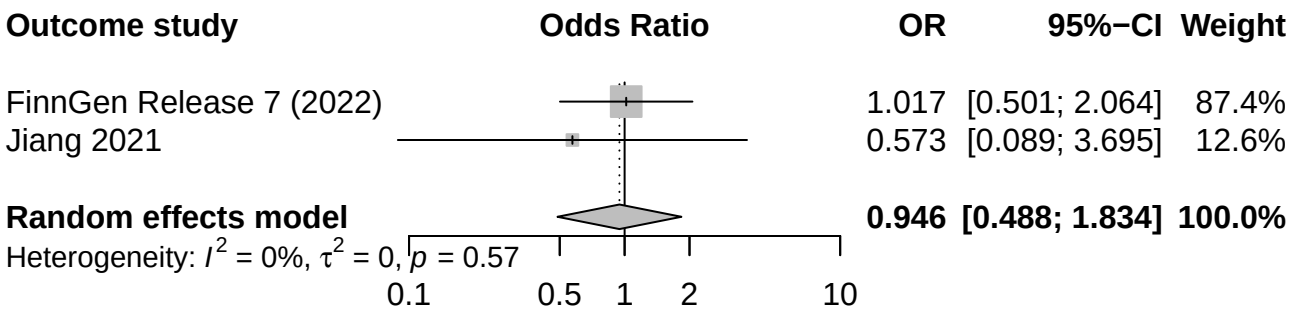
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.34



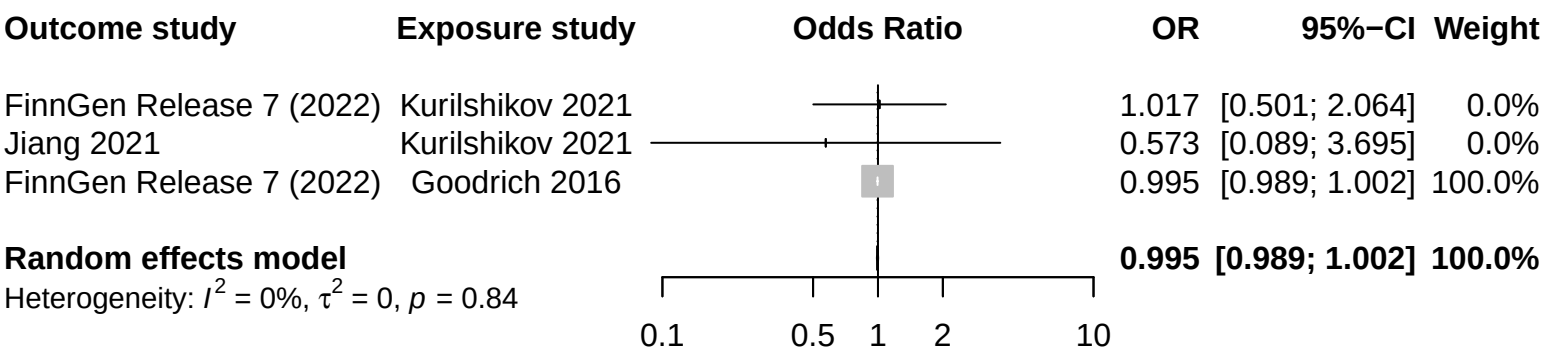
Enterobacteriaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



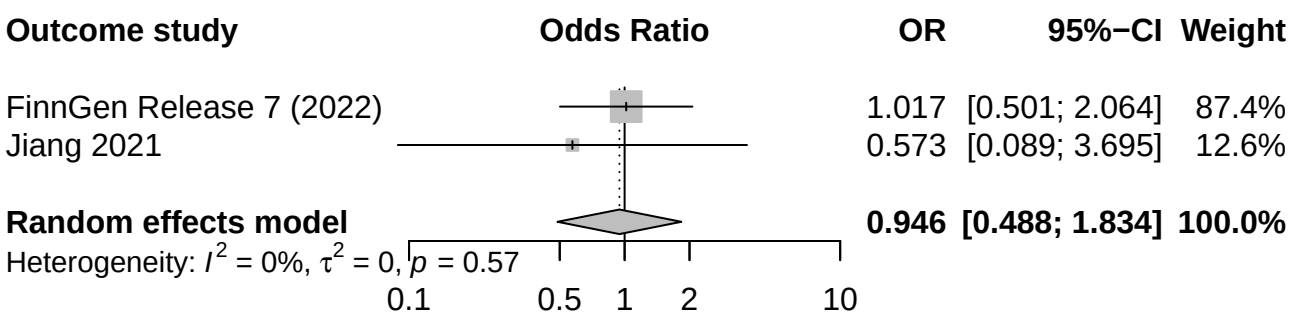
Enterobacteriaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



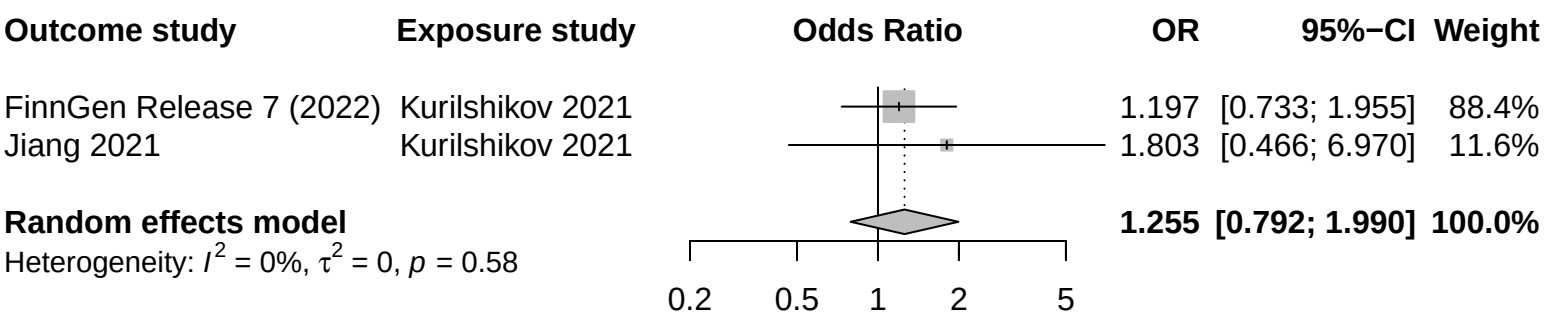
Enterobacteriales (Order) on Optic nerve swelling in Kangcheng Liu 2022



Enterobacteriales (Order) on Optic nerve swelling in Kangcheng Liu 2022



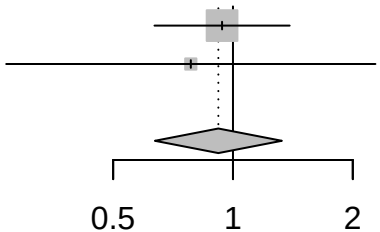
Enterorhabdus (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Erysipelatoclostridium (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.939	[0.635; 1.388]	88.2%
Jiang 2021	Kurilshikov 2021		0.784	[0.269; 2.280]	11.8%
Random effects model			**0.919**	**[0.637; 1.327]**	**100.0%**

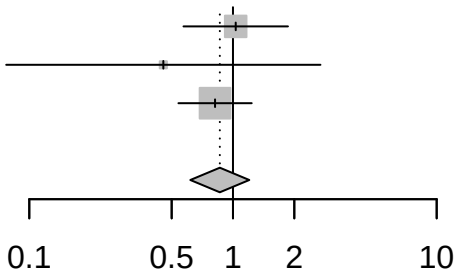
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.76



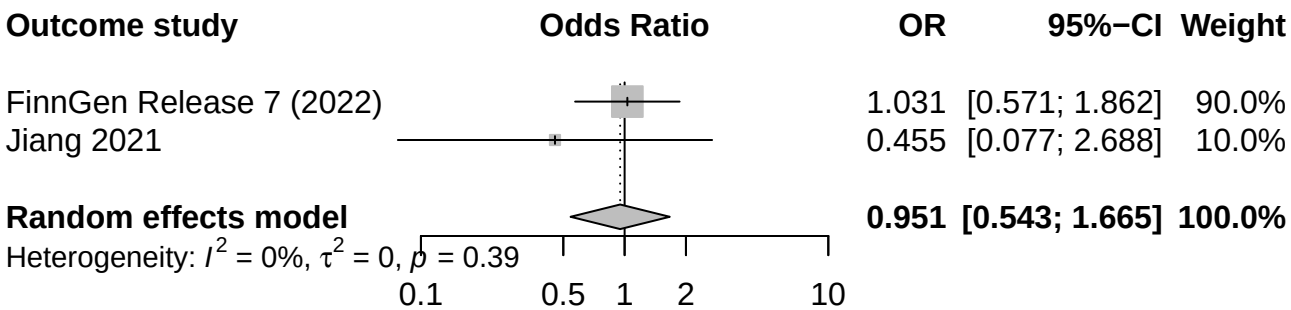
Erysipelotrichaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.031	[0.571; 1.862]	31.8%
Jiang 2021	Kurilshikov 2021		0.455	[0.077; 2.688]	3.5%
FinnGen Release 7 (2022)	Goodrich 2016		0.817	[0.540; 1.236]	64.6%
Random effects model			**0.862**	**[0.618; 1.203]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.63



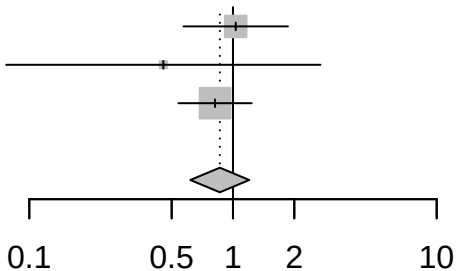
Erysipelotrichaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



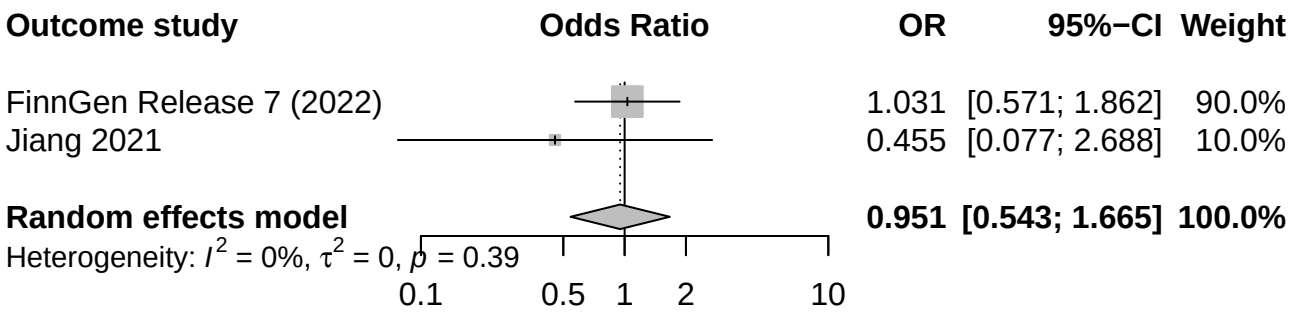
Erysipelotrichales (Order) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.031	[0.571; 1.862]	31.8%
Jiang 2021	Kurilshikov 2021		0.455	[0.077; 2.688]	3.5%
FinnGen Release 7 (2022)	Goodrich 2016		0.817	[0.540; 1.236]	64.6%
Random effects model			**0.862**	**[0.618; 1.203]**	**100.0%**

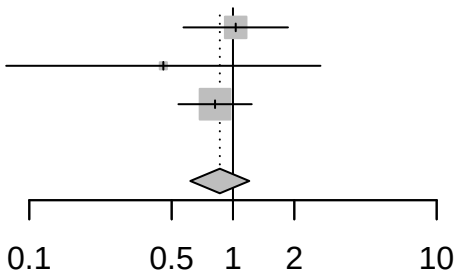
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.63



Erysipelotrichales (Order) on Optic nerve swelling in Kangcheng Liu 2022



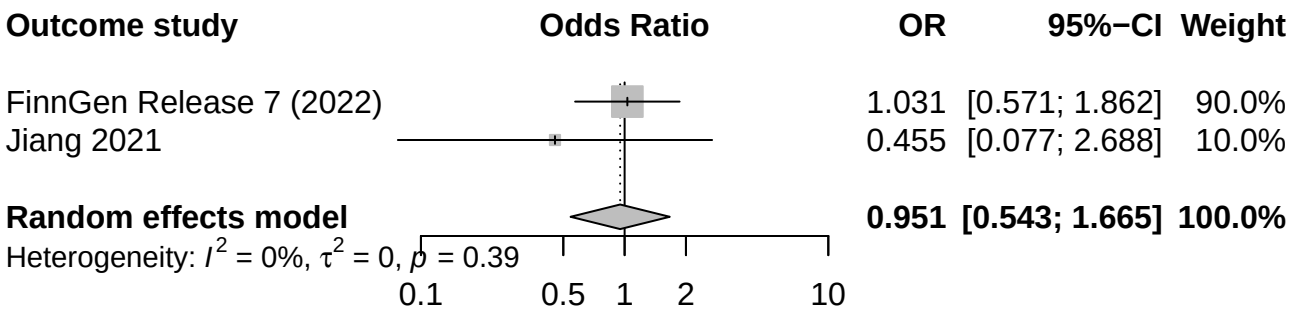
Erysipelotrichia (Class) on Optic nerve swelling in Kangcheng Liu 2022



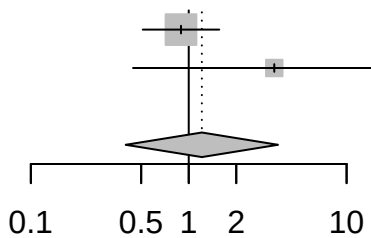
Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	1.031	[0.571; 1.862]	31.8%
Jiang 2021	Kurilshikov 2021	0.455	[0.077; 2.688]	3.5%
FinnGen Release 7 (2022)	Goodrich 2016	0.817	[0.540; 1.236]	64.6%
Random effects model		**0.862**	**[0.618; 1.203]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.63

Erysipelotrichia (Class) on Optic nerve swelling in Kangcheng Liu 2022



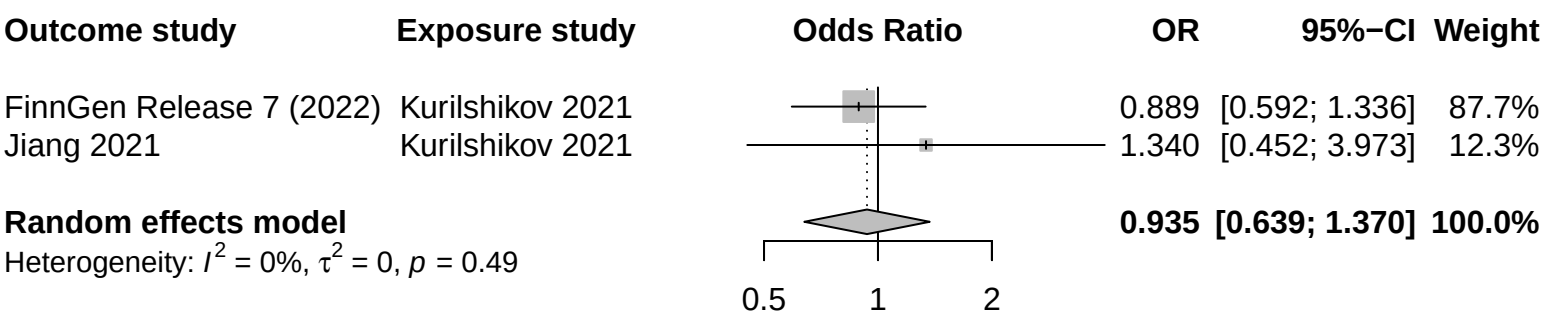
Escherichia Shigella (Genus) on Optic nerve swelling in Kangcheng Liu 2022



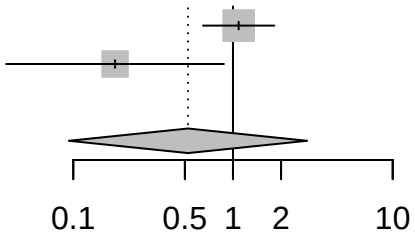
Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	0.894	[0.512; 1.561]	77.7%
Jiang 2021	Kurilshikov 2021	3.482	[0.444; 27.311]	22.3%
Random effects model		**1.211**	**[0.399; 3.676]**	**100.0%**

Heterogeneity: I^2 = 36%, τ^2 = 0.3323, p = 0.21

cterium brachy Group (Species in Eubacterium Genus) on Optic nerve swelling in Kangcheng Liu



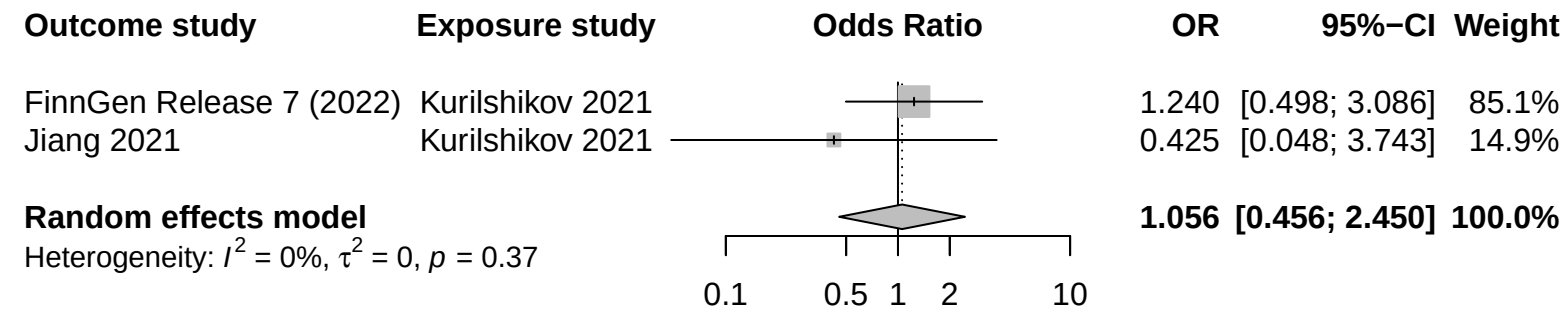
n coprostanoligenes Group (Species in Eubacterium Genus) on Optic nerve swelling in Kangche



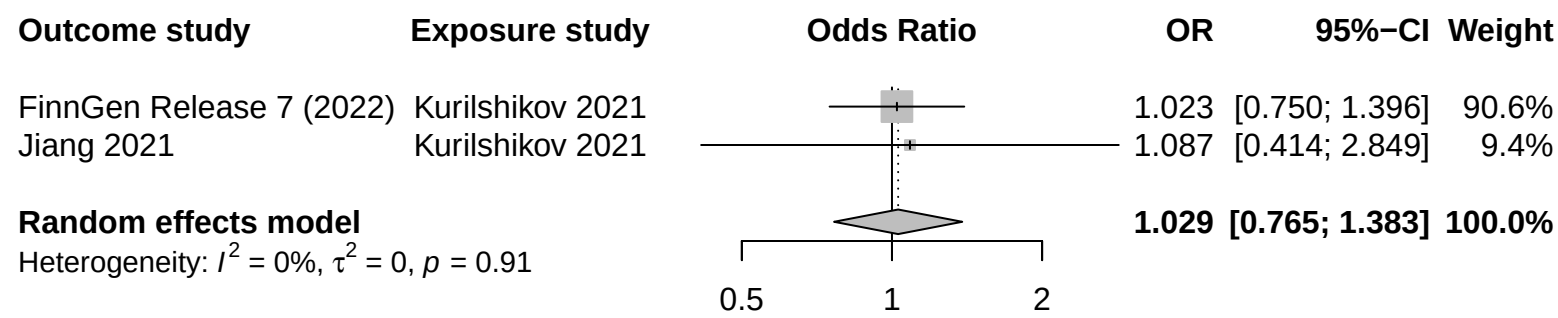
Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.085	[0.649; 1.815]	59.0%
Jiang 2021	Kurilshikov 2021		0.183	[0.038; 0.877]	41.0%
Random effects model			**0.523**	**[0.094; 2.912]**	**100.0%**

Heterogeneity: I^2 = 78%, τ^2 = 1.2320, p = 0.03

cterium eligens Group (Species in Eubacterium Genus) on Optic nerve swelling in Kangcheng Liu



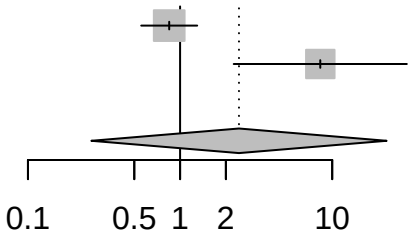
erium fissicatena Group (Species in Eubacterium Genus) on Optic nerve swelling in Kangcheng L



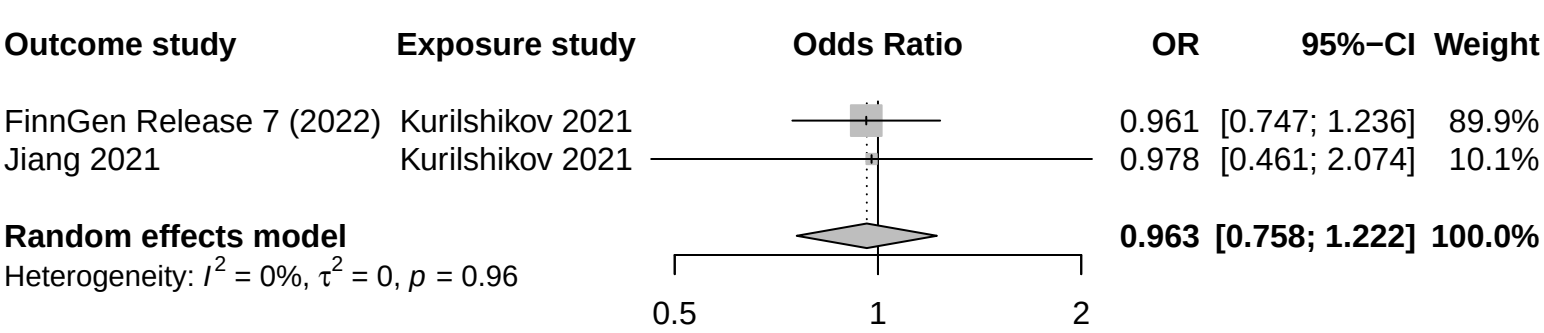
acterium hallii Group (Species in Eubacterium Genus) on Optic nerve swelling in Kangcheng Liu

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.848	[0.555; 1.296]	53.8%
Jiang 2021	Kurilshikov 2021		8.350	[2.252; 30.952]	46.2%
Random effects model			**2.438**	**[0.261; 22.779]**	**100.0%**

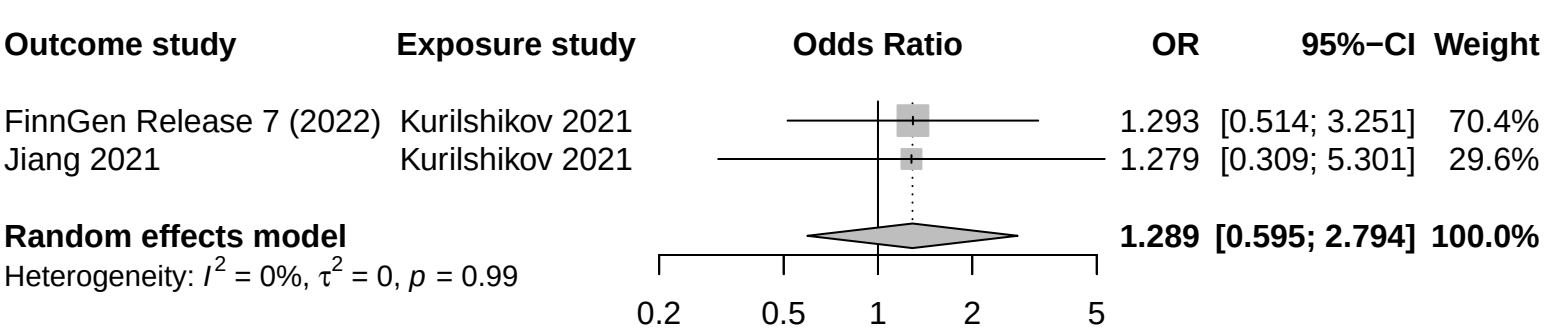
Heterogeneity: I^2 = 91%, τ^2 = 2.3680, p < 0.01



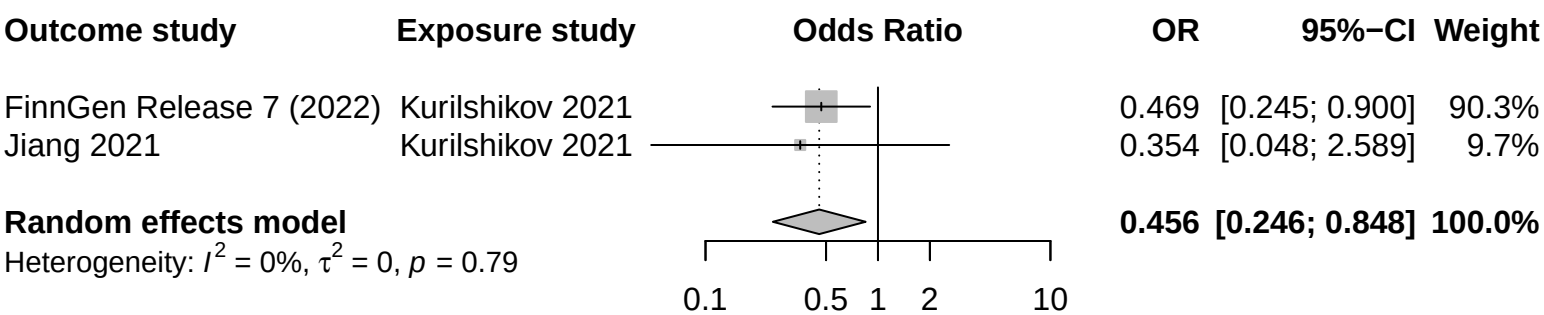
erium nodatum Group (Species in Eubacterium Genus) on Optic nerve swelling in Kangcheng Li



um oxidoreducens Group (Species in Eubacterium Genus) on Optic nerve swelling in Kangcheng



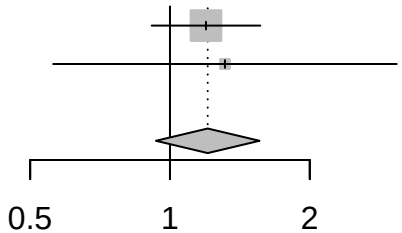
cterium rectale Group (Species in Eubacterium Genus) on Optic nerve swelling in Kangcheng Liu



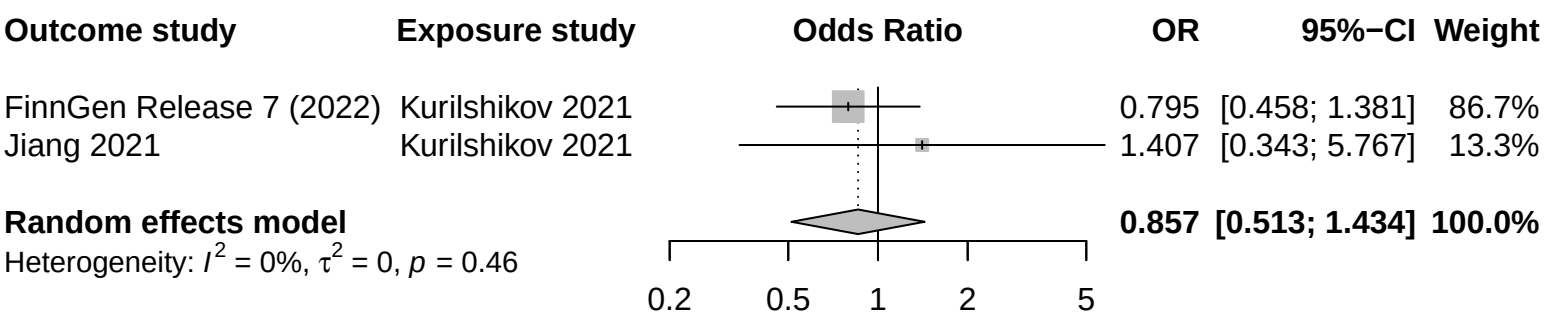
ium ruminantium Group (Species in Eubacterium Genus) on Optic nerve swelling in Kangcheng

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.195	[0.913; 1.565]	90.9%
Jiang 2021	Kurilshikov 2021		1.313	[0.560; 3.078]	9.1%
Random effects model			**1.206**	**[0.933; 1.559]**	**100.0%**

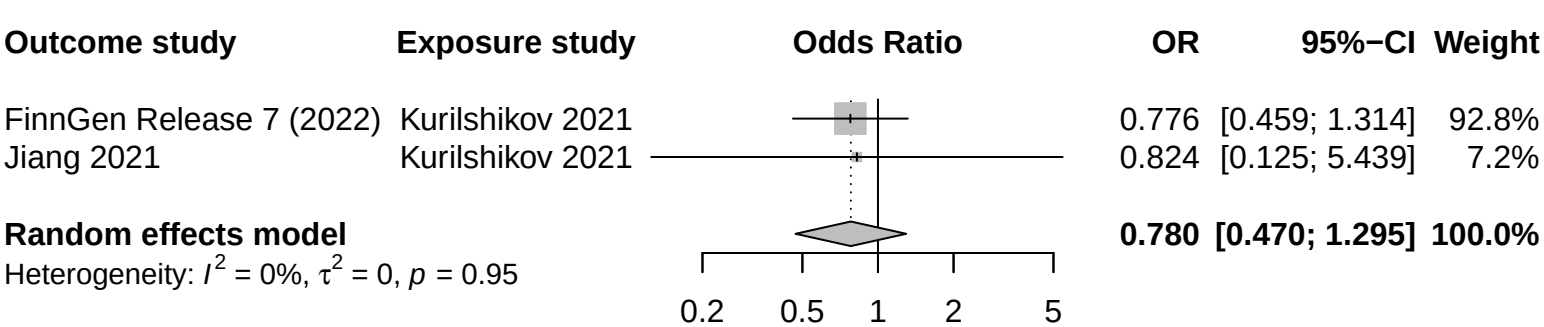
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.84



rium ventriosum Group (Species in Eubacterium Genus) on Optic nerve swelling in Kangcheng I



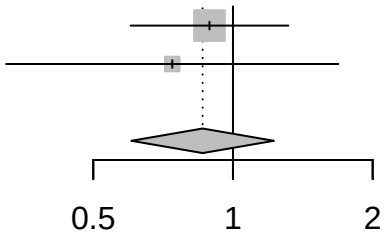
ium xylanophilum Group (Species in Eubacterium Genus) on Optic nerve swelling in Kangcheng



Euryarchaeota (Phylum) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.890	[0.602; 1.316]	81.6%
Jiang 2021	Kurilshikov 2021		0.740	[0.325; 1.687]	18.4%
Random effects model			**0.860**	**[0.604; 1.225]**	**100.0%**

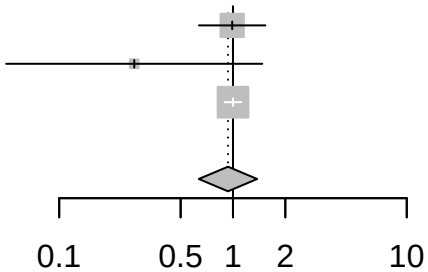
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.69



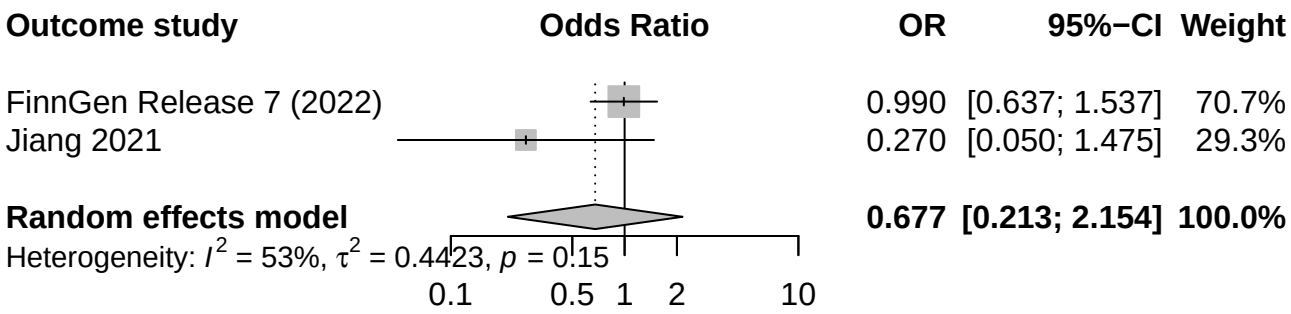
Faecalibacterium (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.990	[0.637; 1.537]	34.8%
Jiang 2021	Kurilshikov 2021		0.270	[0.050; 1.475]	4.8%
FinnGen Release 7 (2022)	Goodrich 2016		1.001	[0.897; 1.116]	60.4%
Random effects model			**0.936**	**[0.636; 1.378]**	**100.0%**

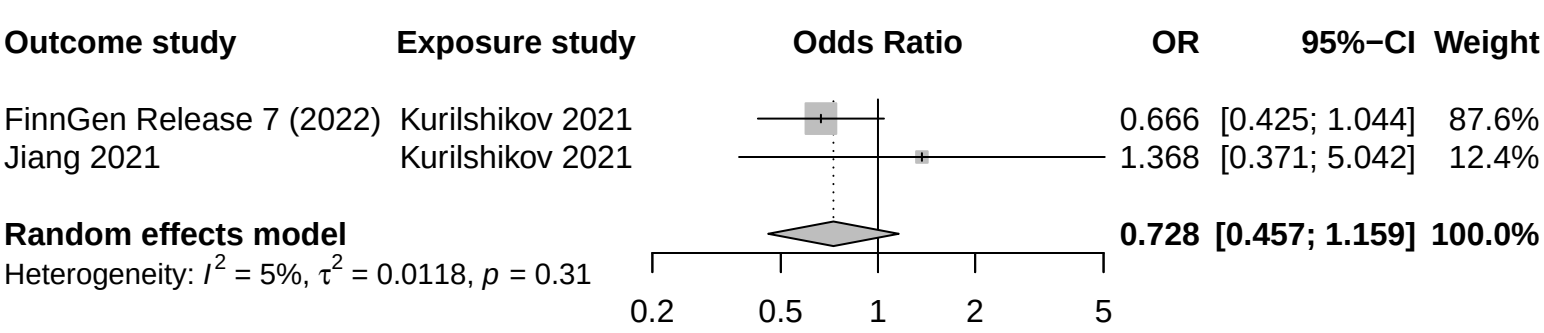
Heterogeneity: I^2 = 12%, τ^2 = 0.0614, p = 0.32



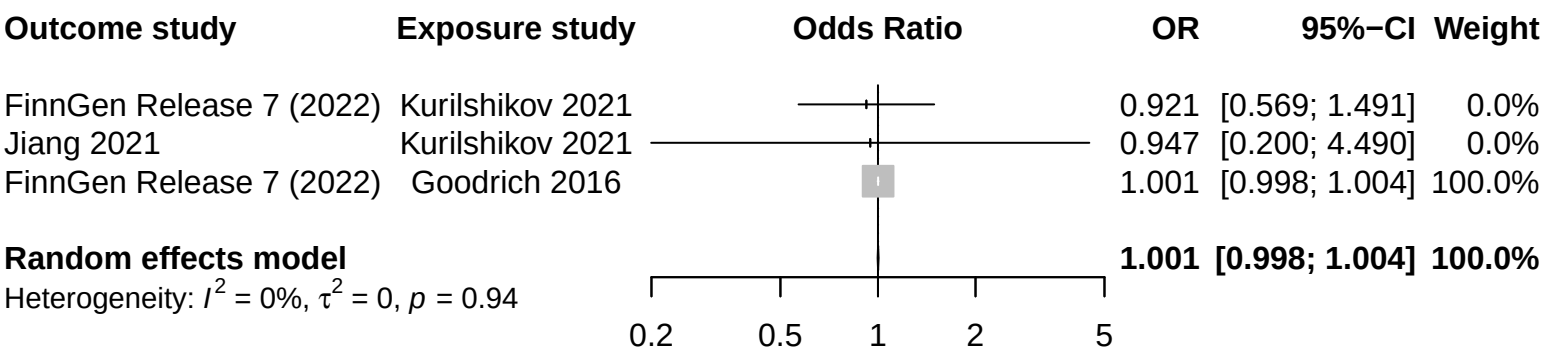
Faecalibacterium (Genus) on Optic nerve swelling in Kangcheng Liu 2022



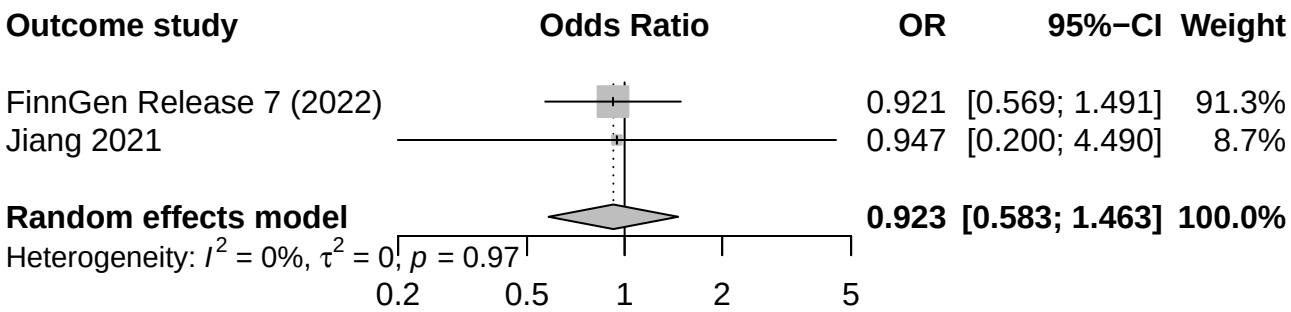
CS020 Group (Genus in Lachnospiraceae Family) on Optic nerve swelling in Kangcheng Liu 202



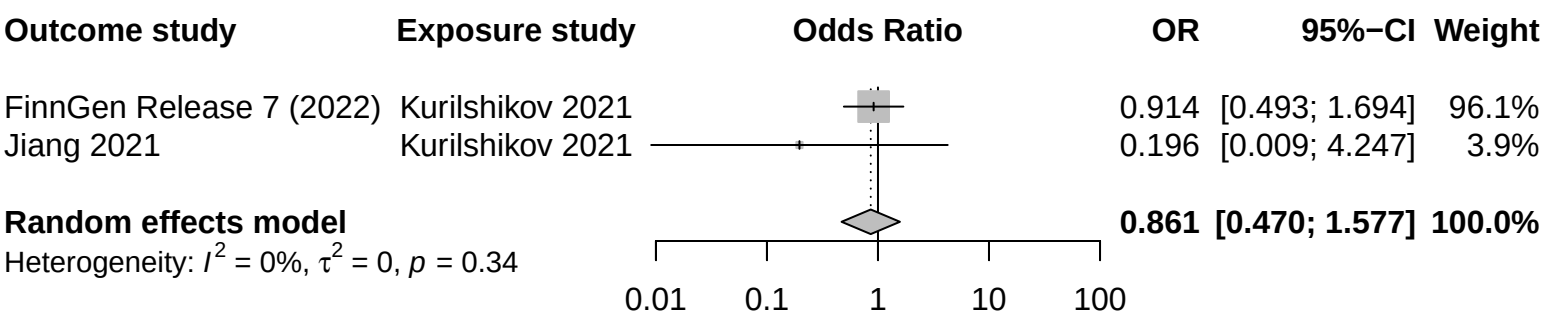
Firmicutes (Phylum) on Optic nerve swelling in Kangcheng Liu 2022



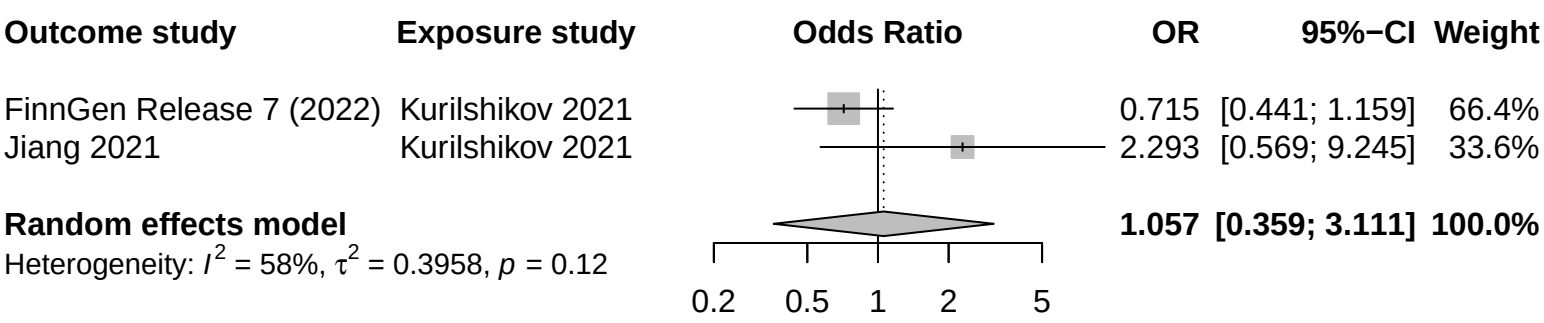
Firmicutes (Phylum) on Optic nerve swelling in Kangcheng Liu 2022



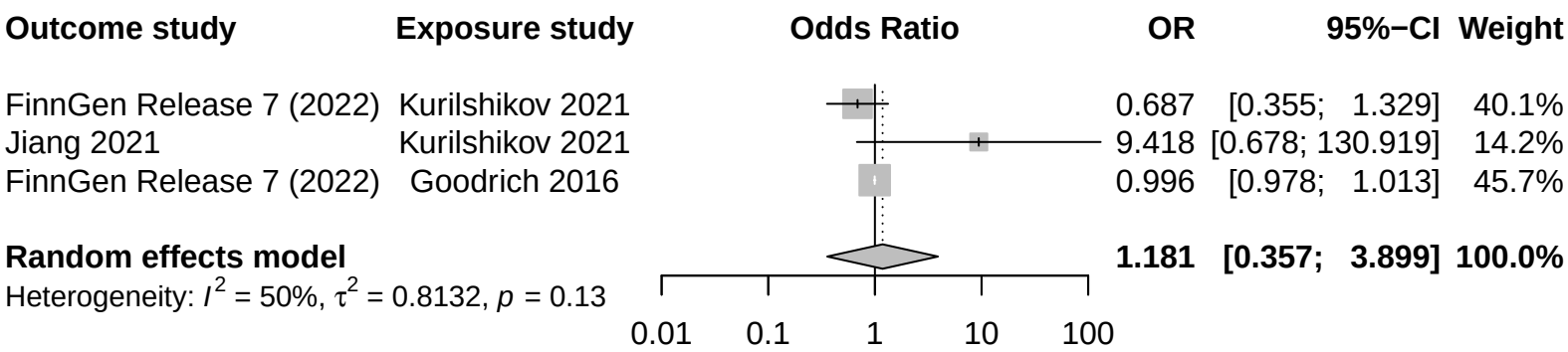
Flavonifractor (Genus) on Optic nerve swelling in Kangcheng Liu 2022



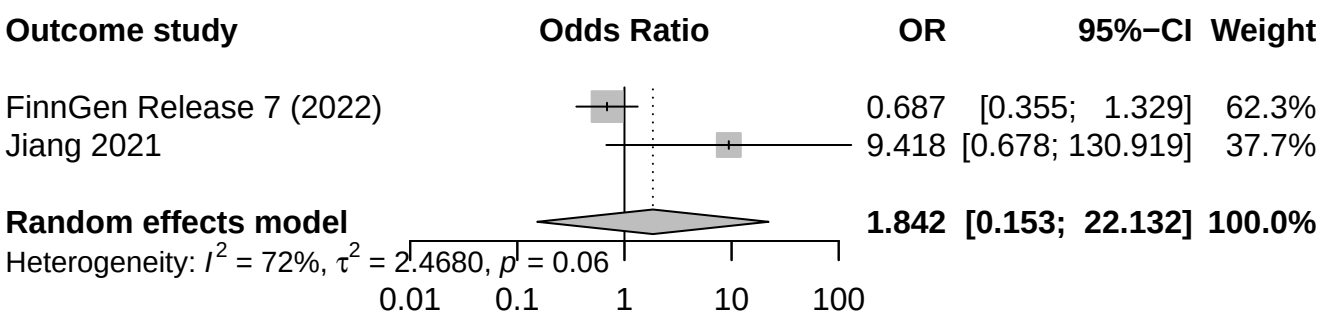
Fusicatenibacter (Genus) on Optic nerve swelling in Kangcheng Liu 2022



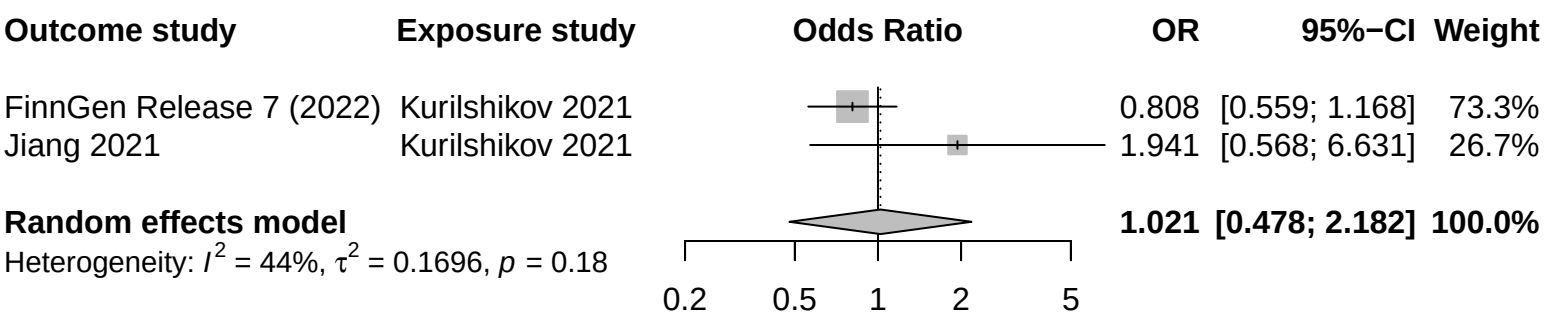
Gammaproteobacteria (Class) on Optic nerve swelling in Kangcheng Liu 2022



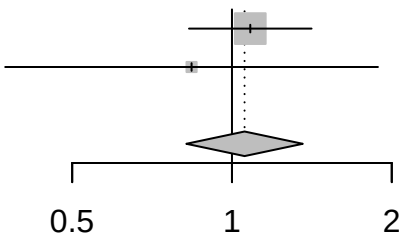
Gammaproteobacteria (Class) on Optic nerve swelling in Kangcheng Liu 2022



Gastranaerophilales (Order) on Optic nerve swelling in Kangcheng Liu 2022



Gordonibacter (Genus) on Optic nerve swelling in Kangcheng Liu 2022



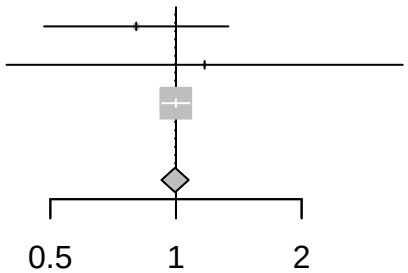
Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	1.083	[0.830; 1.412]	90.2%
Jiang 2021	Kurilshikov 2021	0.839	[0.374; 1.884]	9.8%
Random effects model		**1.056**	**[0.820; 1.359]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.56

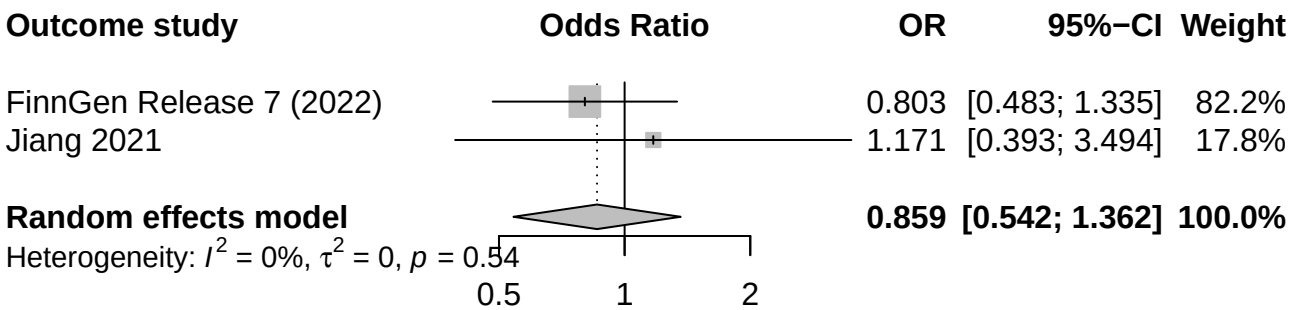
Haemophilus (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.803	[0.483; 1.335]	2.2%
Jiang 2021	Kurilshikov 2021		1.171	[0.393; 3.494]	0.5%
FinnGen Release 7 (2022)	Goodrich 2016		0.999	[0.926; 1.078]	97.3%
Random effects model			**0.995**	**[0.923; 1.073]**	**100.0%**

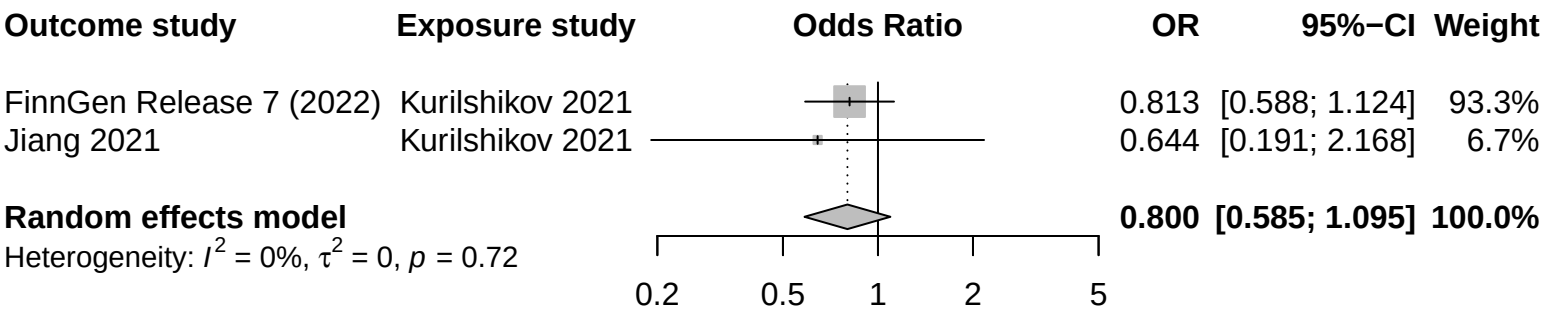
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.68



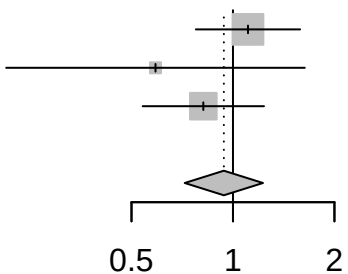
Haemophilus (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Holdemanella (Genus) on Optic nerve swelling in Kangcheng Liu 2022



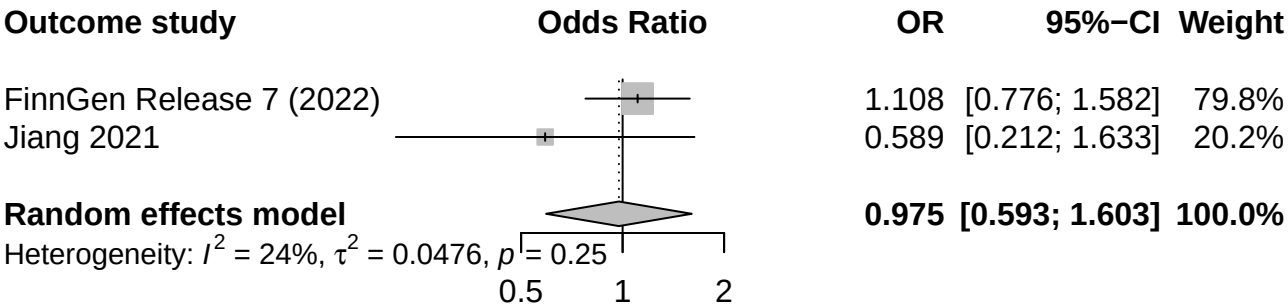
Holdemania (Genus) on Optic nerve swelling in Kangcheng Liu 2022



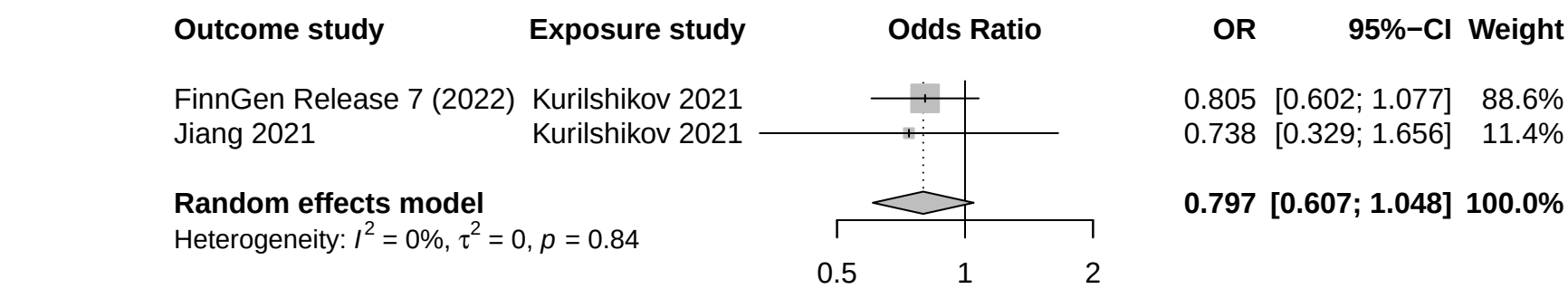
Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	1.108	[0.776; 1.582]	53.3%
Jiang 2021	Kurilshikov 2021	0.589	[0.212; 1.633]	6.8%
FinnGen Release 7 (2022)	Goodrich 2016	0.817	[0.540; 1.236]	39.9%
Random effects model		**0.940**	**[0.719; 1.227]**	**100.0%**

Heterogeneity: I^2 = 3%, τ^2 = 0.0019, p = 0.36

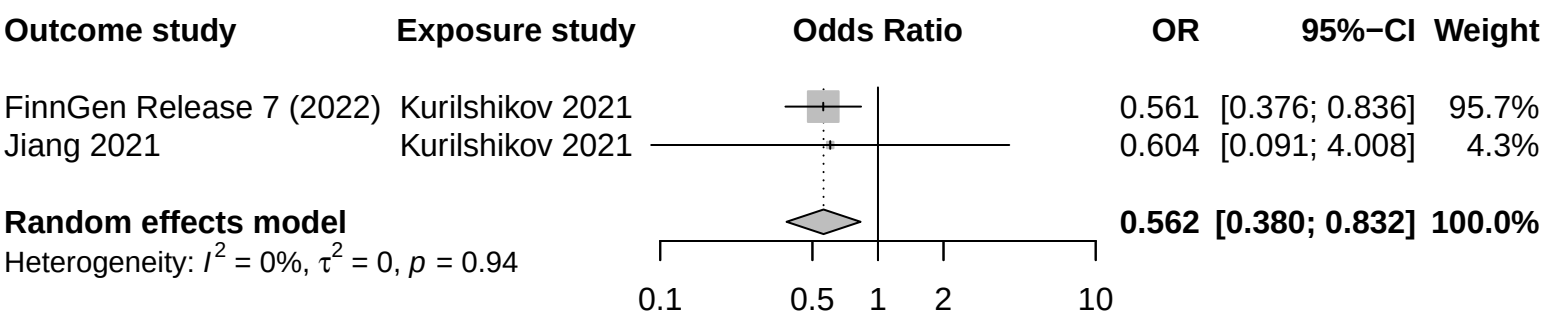
Holdemania (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Howardella (Genus) on Optic nerve swelling in Kangcheng Liu 2022



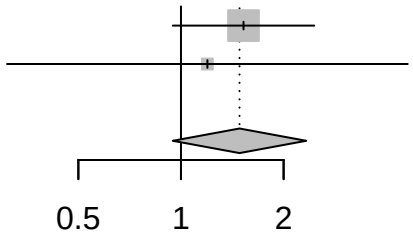
Hungatella (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Intestinibacter (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.526	[0.946; 2.460]	88.9%
Jiang 2021	Kurilshikov 2021		1.195	[0.309; 4.626]	11.1%
Random effects model			**1.485**	**[0.946; 2.330]**	**100.0%**

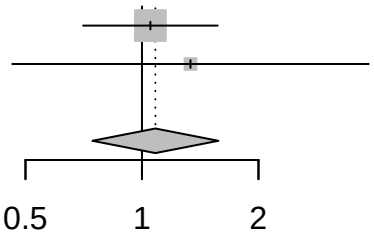
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.74



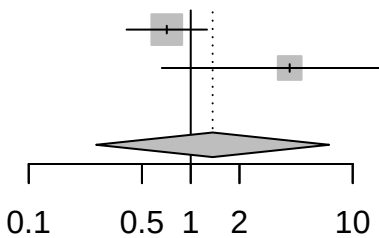
Intestinimonas (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.051	[0.705; 1.569]	87.5%
Jiang 2021	Kurilshikov 2021		1.335	[0.462; 3.855]	12.5%
Random effects model			**1.083**	**[0.745; 1.575]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.68



Lachnoclostridium (Genus) on Optic nerve swelling in Kangcheng Liu 2022



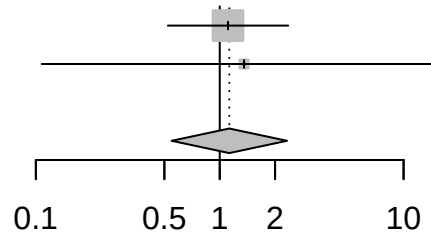
Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	0.712	[0.402; 1.260]	62.7%
Jiang 2021	Kurilshikov 2021	4.082	[0.664; 25.113]	37.3%
Random effects model		**1.366**	**[0.261; 7.152]**	**100.0%**

Heterogeneity: I^2 = 69%, τ^2 = 1.0536, p = 0.07

Lachnospira (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.109	[0.522; 2.358]	91.9%
Jiang 2021	Kurilshikov 2021		1.357	[0.108; 17.117]	8.1%
Random effects model			**1.128**	**[0.547; 2.323]**	**100.0%**

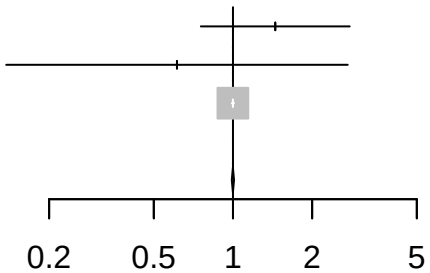
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.88



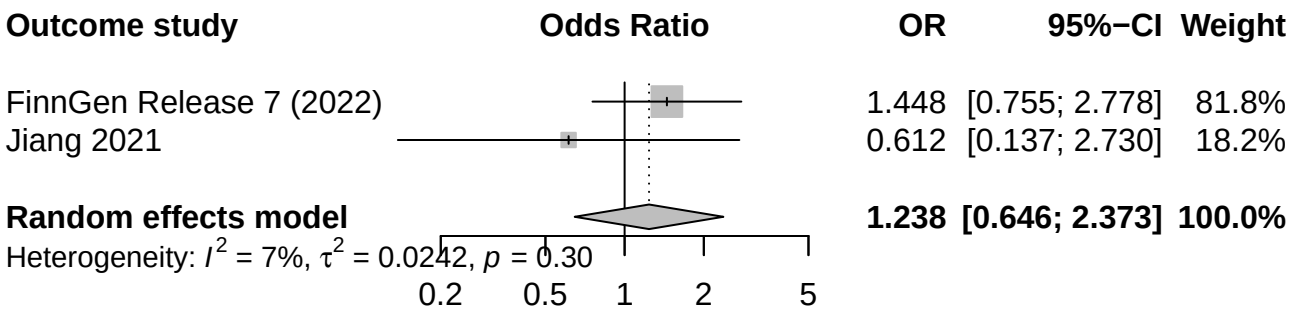
Lachnospiraceae (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.448	[0.755; 2.778]	0.0%
Jiang 2021	Kurilshikov 2021		0.612	[0.137; 2.730]	0.0%
FinnGen Release 7 (2022)	Goodrich 2016		0.999	[0.990; 1.009]	100.0%
Random effects model			**0.999**	**[0.990; 1.009]**	**100.0%**

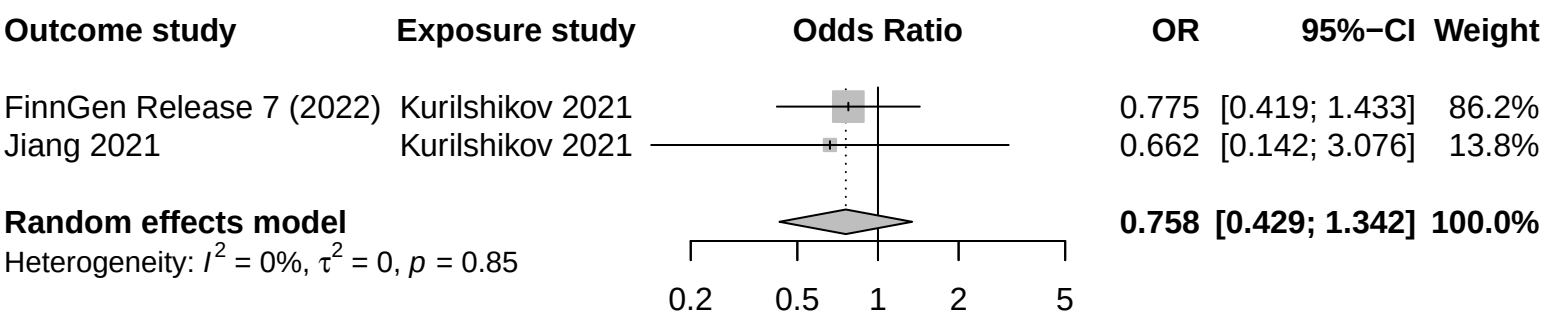
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.44



Lachnospiraceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



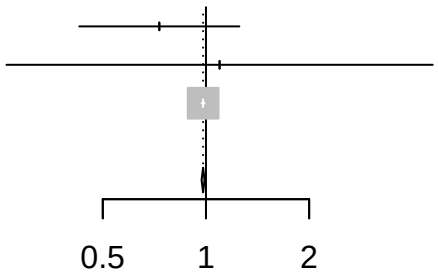
Lactobacillaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



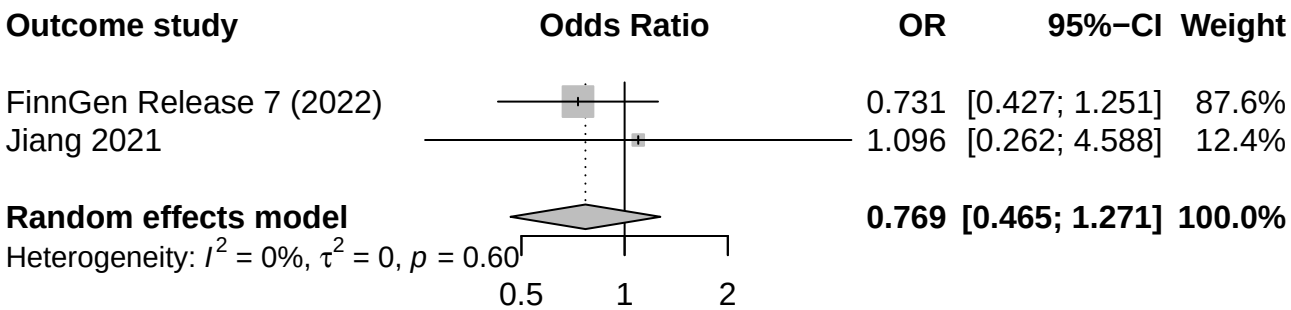
Lactobacillales (Order) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.731	[0.427; 1.251]	0.0%
Jiang 2021	Kurilshikov 2021		1.096	[0.262; 4.588]	0.0%
FinnGen Release 7 (2022)	Goodrich 2016		0.981	[0.971; 0.991]	100.0%
Random effects model			**0.981**	**[0.971; 0.991]**	**100.0%**

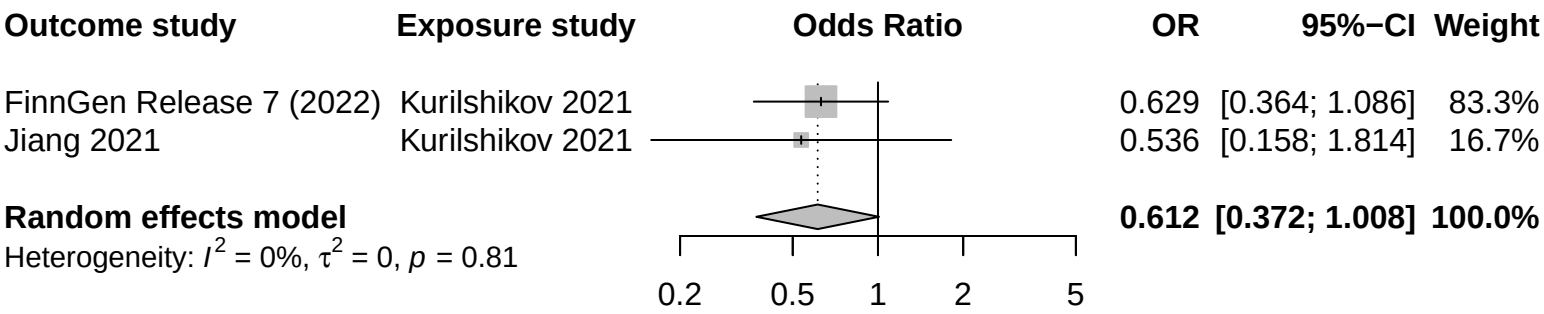
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.56



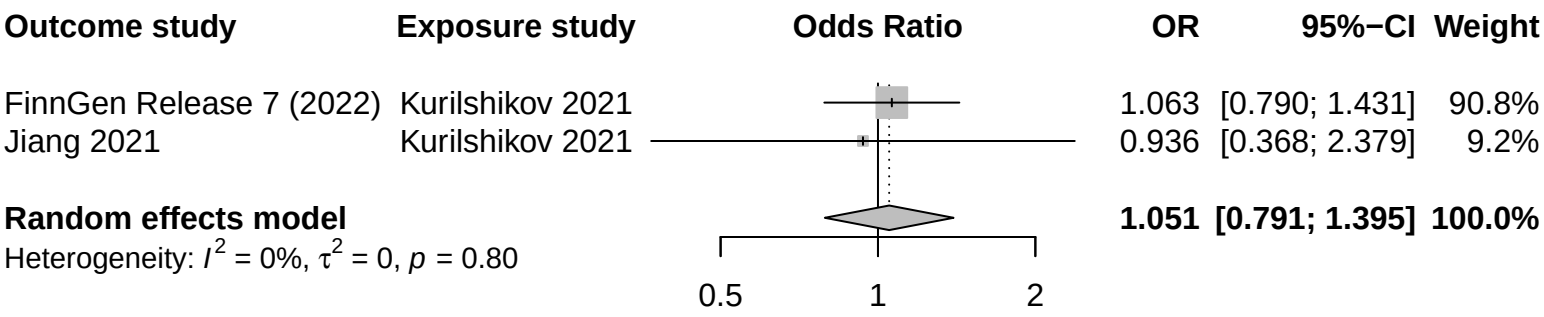
Lactobacillales (Order) on Optic nerve swelling in Kangcheng Liu 2022



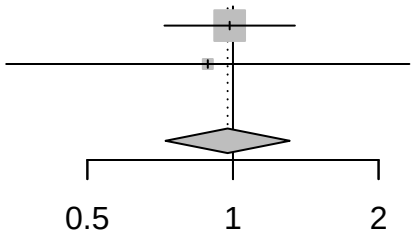
Lactobacillus (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Lactococcus (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Lentisphaerae (Phylum) on Optic nerve swelling in Kangcheng Liu 2022



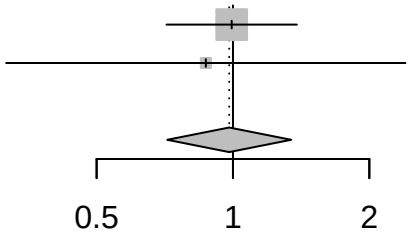
Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	0.984	[0.722; 1.343]	90.5%
Jiang 2021	Kurilshikov 2021	0.887	[0.340; 2.316]	9.5%
Random effects model		**0.975**	**[0.725; 1.310]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.84

Lentisphaeria (Class) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.994	[0.713; 1.384]	90.4%
Jiang 2021	Kurilshikov 2021		0.871	[0.316; 2.403]	9.6%
Random effects model			**0.981**	**[0.716; 1.344]**	**100.0%**

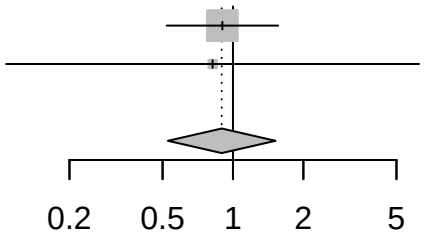
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.81



Marvinbryantia (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.901	[0.520; 1.560]	93.2%
Jiang 2021	Kurilshikov 2021		0.818	[0.107; 6.242]	6.8%
Random effects model			**0.895**	**[0.527; 1.521]**	**100.0%**

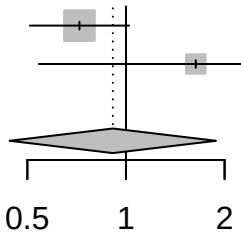
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.93



Melainabacteria (Phylum) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.721	[0.509; 1.022]	71.3%
Jiang 2021	Kurilshikov 2021		1.634	[0.542; 4.924]	28.7%
Random effects model			**0.912**	**[0.442; 1.883]**	**100.0%**

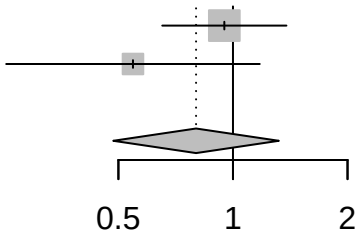
Heterogeneity: I^2 = 48%, τ^2 = 0.1602, p = 0.17



Methanobacteria (Class) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.949	[0.652; 1.382]	69.0%
Jiang 2021	Kurilshikov 2021		0.546	[0.254; 1.176]	31.0%
Random effects model			**0.800**	**[0.485; 1.320]**	**100.0%**

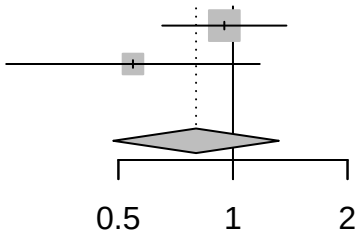
Heterogeneity: I^2 = 38%, τ^2 = 0.0579, p = 0.20



Methanobacteriaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.949	[0.652; 1.382]	69.0%
Jiang 2021	Kurilshikov 2021		0.546	[0.254; 1.176]	31.0%
Random effects model			**0.800**	**[0.485; 1.320]**	**100.0%**

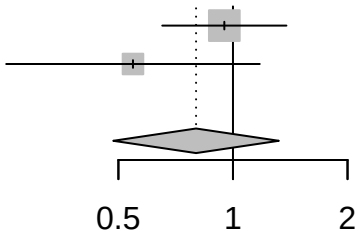
Heterogeneity: I^2 = 38%, τ^2 = 0.0579, p = 0.20



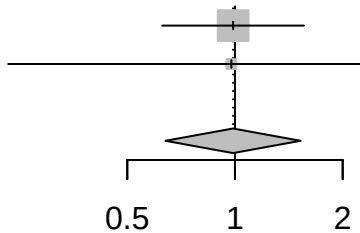
Methanobacteriales (Order) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.949	[0.652; 1.382]	69.0%
Jiang 2021	Kurilshikov 2021		0.546	[0.254; 1.176]	31.0%
Random effects model			**0.800**	**[0.485; 1.320]**	**100.0%**

Heterogeneity: I^2 = 38%, τ^2 = 0.0579, p = 0.20



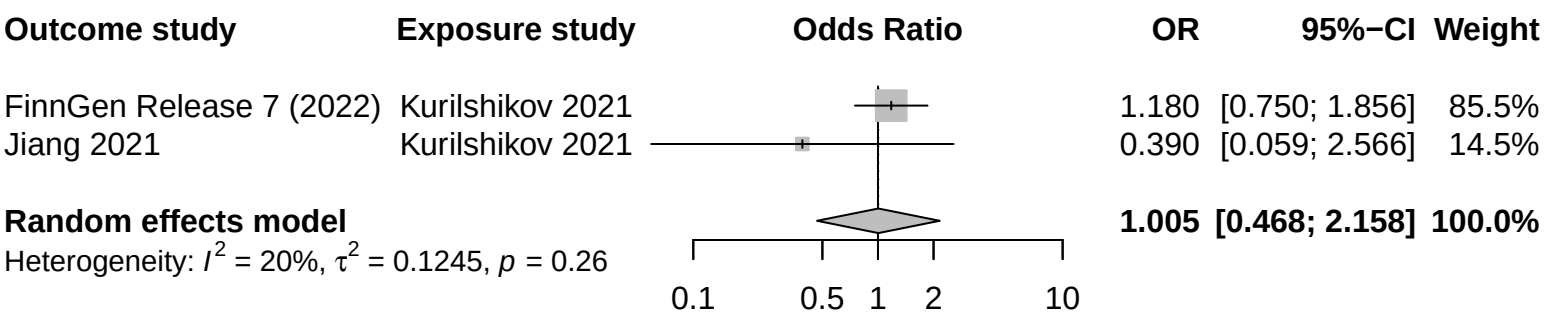
Methanobrevibacter (Genus) on Optic nerve swelling in Kangcheng Liu 2022



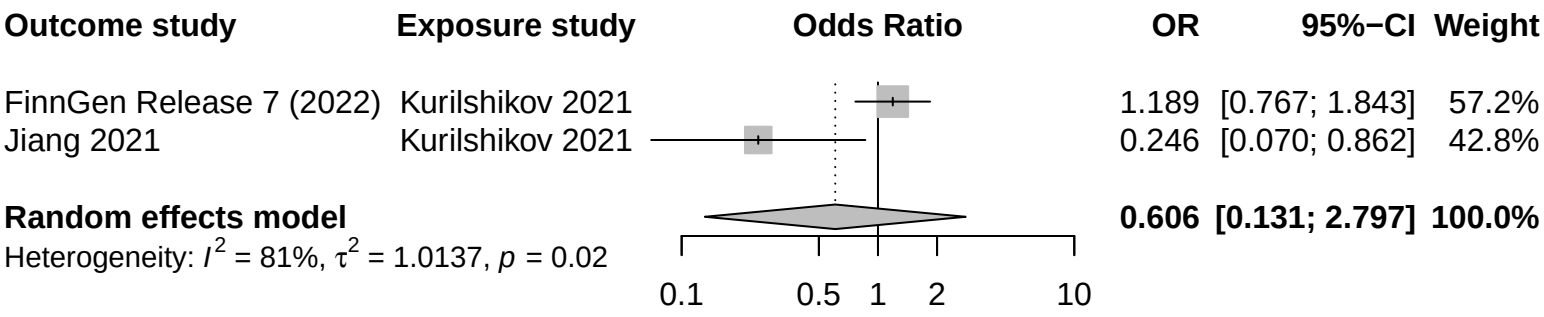
Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.988	[0.626; 1.560]	90.8%
Jiang 2021	Kurilshikov 2021		0.977	[0.232; 4.109]	9.2%
Random effects model			**0.987**	**[0.639; 1.525]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.99

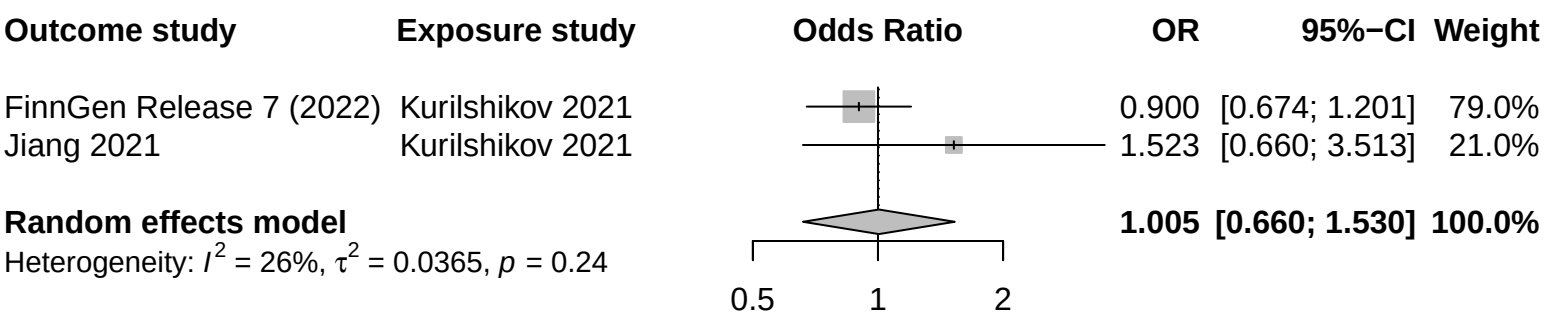
Mollicutes (Class) on Optic nerve swelling in Kangcheng Liu 2022



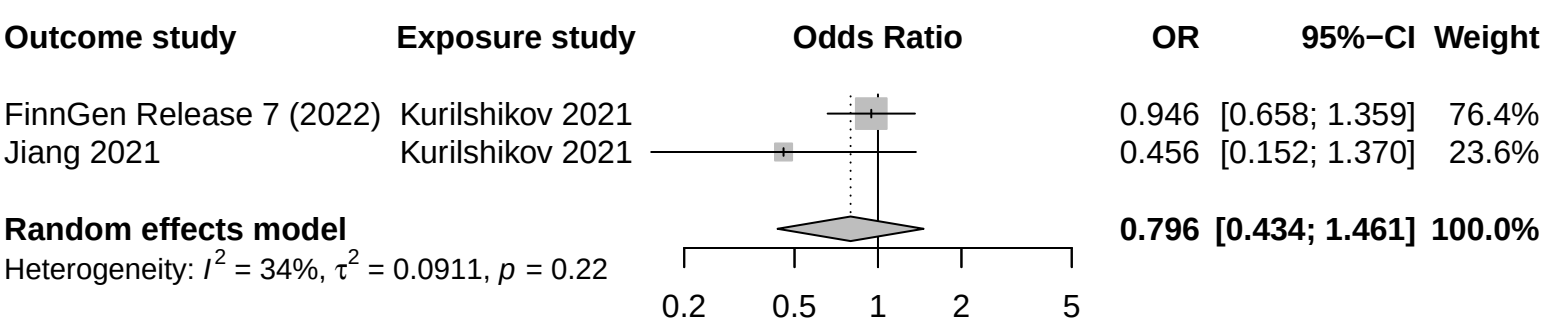
MollicutesRF9 (Order) on Optic nerve swelling in Kangcheng Liu 2022



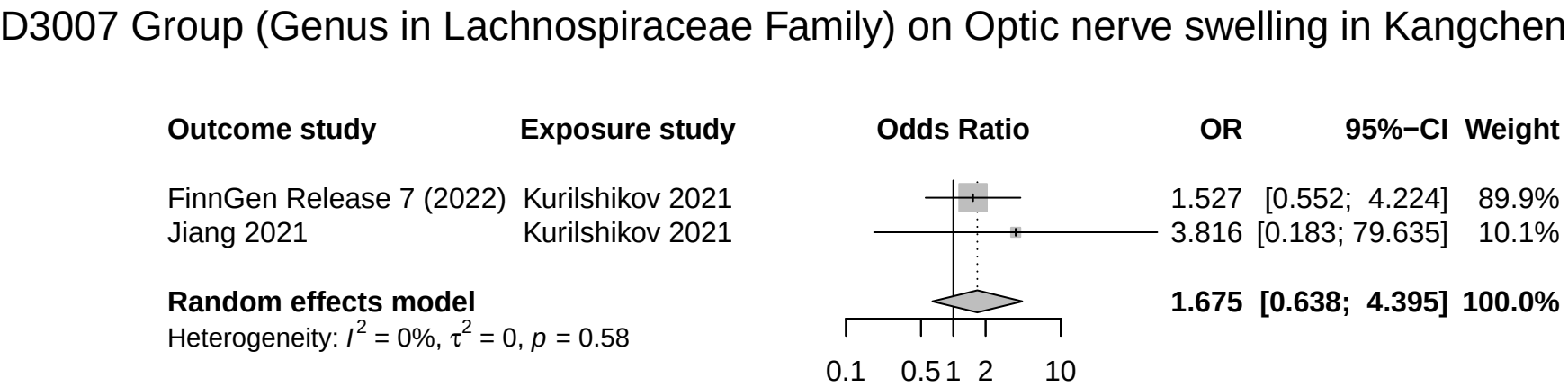
NB1n (Order) on Optic nerve swelling in Kangcheng Liu 2022



C2004 Group (Genus in Lachnospiraceae Family) on Optic nerve swelling in Kangcheng Liu 202



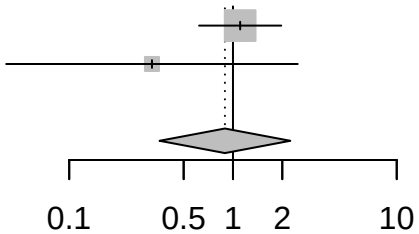
D3007 Group (Genus in Lachnospiraceae Family) on Optic nerve swelling in Kangcheng Liu 202



Negativicutes (Class) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.107	[0.621; 1.971]	82.7%
Jiang 2021	Kurilshikov 2021		0.320	[0.041; 2.485]	17.3%
Random effects model			**0.893**	**[0.356; 2.239]**	**100.0%**

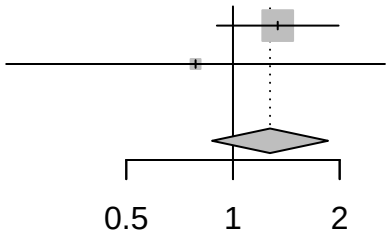
Heterogeneity: I^2 = 23%, τ^2 = 0.1790, p = 0.25



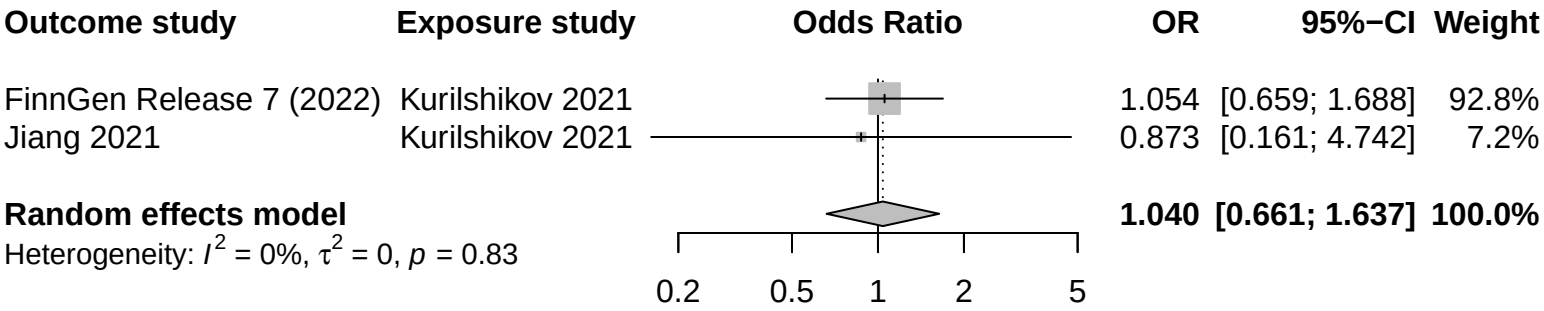
K4A136 Group (Genus in Lachnospiraceae Family) on Optic nerve swelling in Kangcheng Liu 20

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.337	[0.901; 1.986]	90.6%
Jiang 2021	Kurilshikov 2021		0.784	[0.229; 2.684]	9.4%
Random effects model			**1.272**	**[0.873; 1.854]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.42



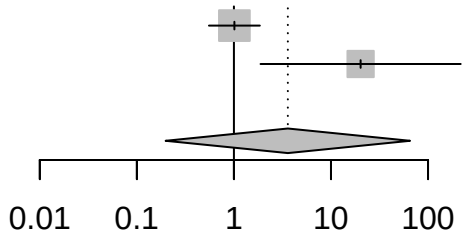
4A214 Group (Genus in Ruminococcaceae Family) on Optic nerve swelling in Kangcheng Liu 20



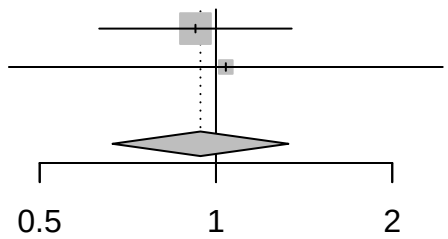
Odoribacter (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.011	[0.553; 1.850]	57.7%
Jiang 2021	Kurilshikov 2021		20.200	[1.880; 217.068]	42.3%
Random effects model			**3.594**	**[0.198; 65.307]**	**100.0%**

Heterogeneity: I^2 = 83%, τ^2 = 3.7018, p = 0.02



Olsenella (Genus) on Optic nerve swelling in Kangcheng Liu 2022



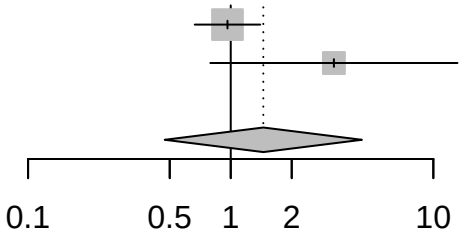
Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	0.922	[0.632; 1.347]	83.6%
Jiang 2021	Kurilshikov 2021	1.039	[0.443; 2.439]	16.4%
Random effects model		**0.941**	**[0.666; 1.329]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.80

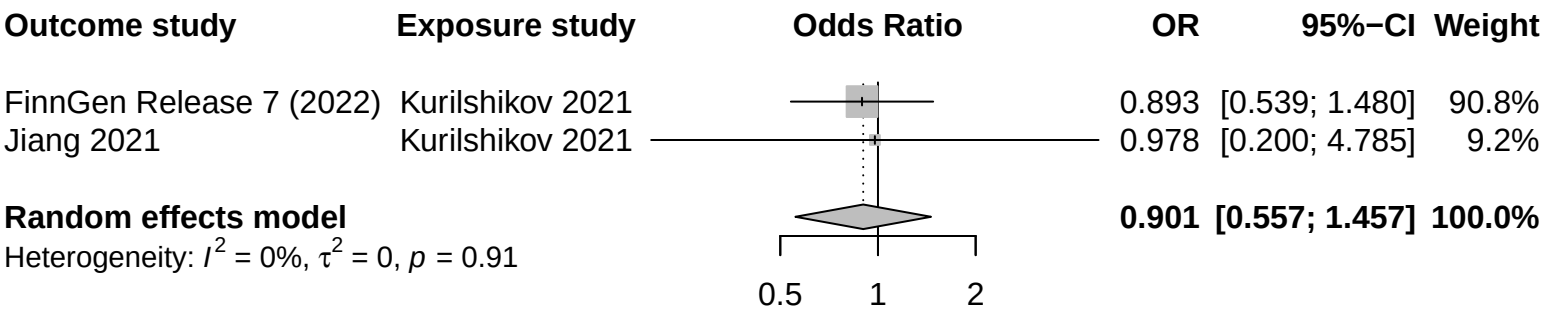
Oscillibacter (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.964	[0.664; 1.399]	66.3%
Jiang 2021	Kurilshikov 2021		3.230	[0.793; 13.156]	33.7%
Random effects model			**1.449**	**[0.473; 4.441]**	**100.0%**

Heterogeneity: I^2 = 62%, τ^2 = 0.4565, p = 0.10



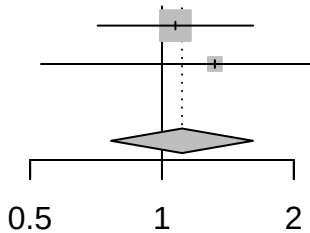
Oscillospira (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Oxalobacter (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.073	[0.713; 1.615]	83.3%
Jiang 2021	Kurilshikov 2021		1.320	[0.529; 3.293]	16.7%
Random effects model			**1.111**	**[0.765; 1.613]**	**100.0%**

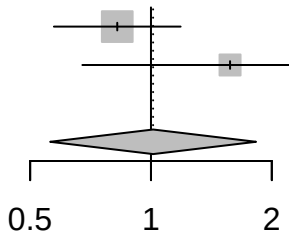
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.68



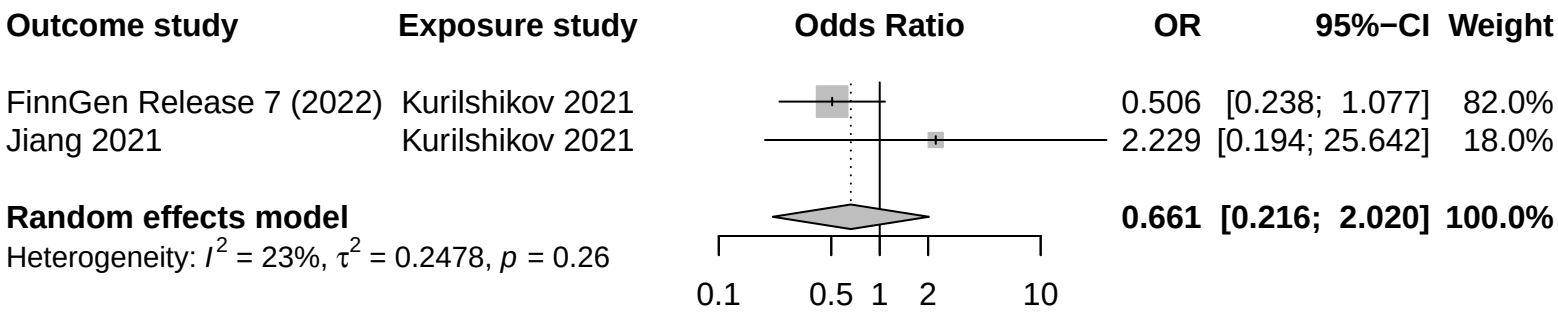
Oxalobacteraceae (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.824	[0.573; 1.185]	68.2%
Jiang 2021	Kurilshikov 2021		1.574	[0.675; 3.673]	31.8%
Random effects model			**1.012**	**[0.561; 1.827]**	**100.0%**

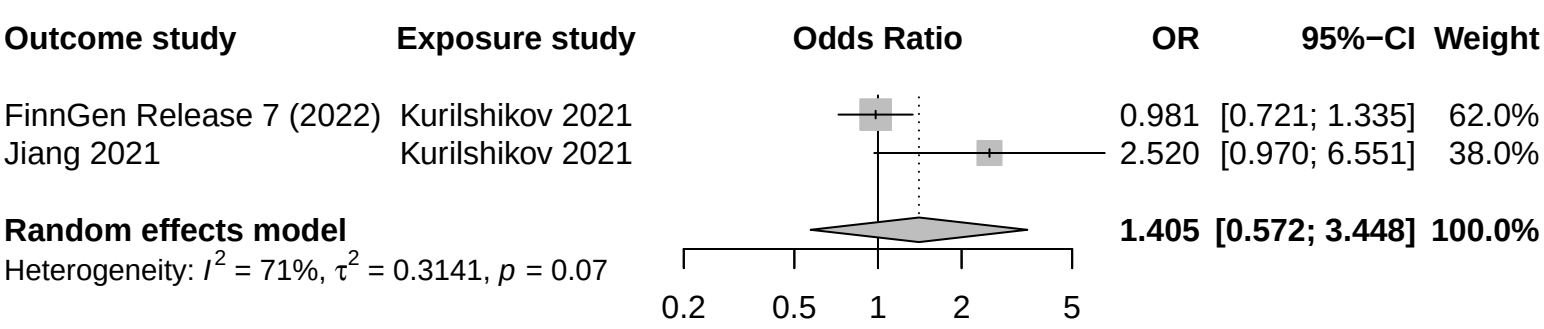
Heterogeneity: I^2 = 47%, τ^2 = 0.0987, p = 0.17



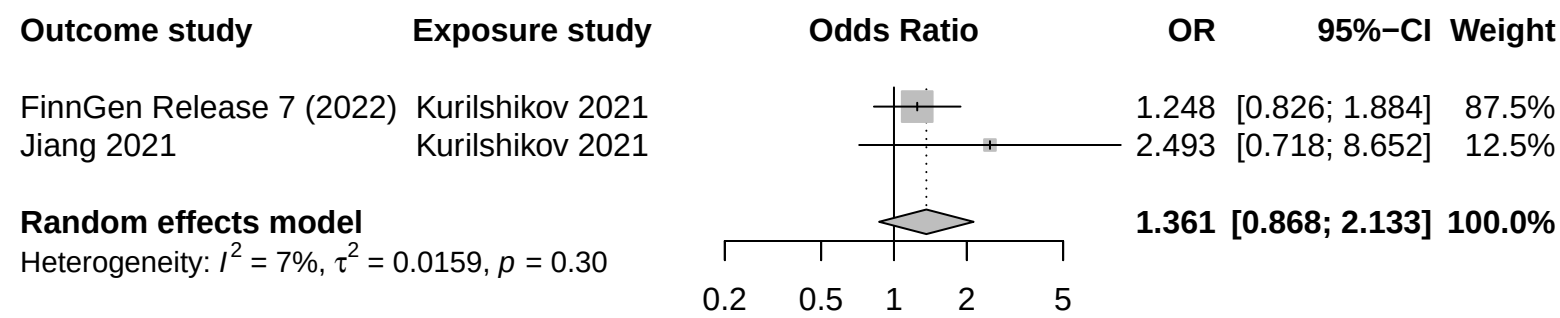
Parabacteroides (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Paraprevotella (Genus) on Optic nerve swelling in Kangcheng Liu 2022



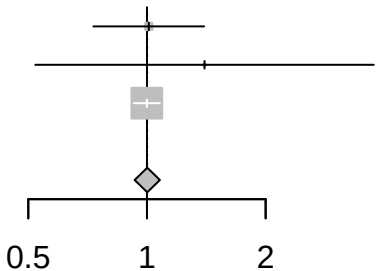
Parasutterella (Genus) on Optic nerve swelling in Kangcheng Liu 2022



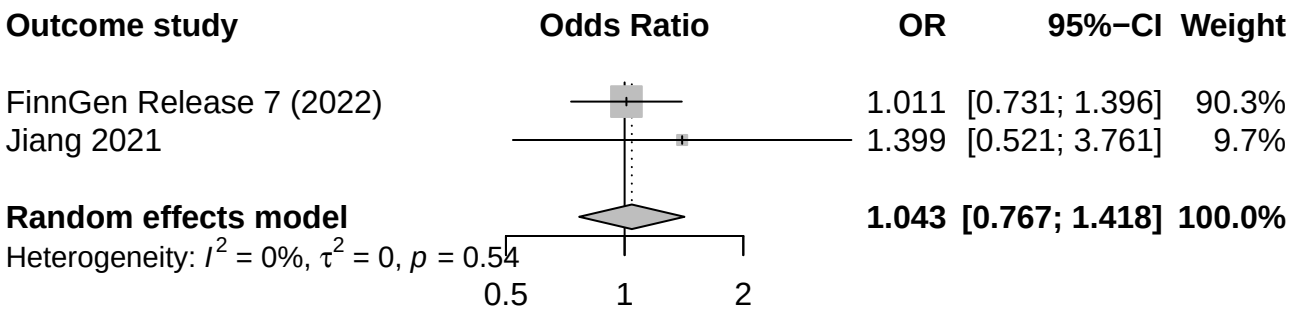
Pasteurellaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.011	[0.731; 1.396]	5.2%
Jiang 2021	Kurilshikov 2021		1.399	[0.521; 3.761]	0.6%
FinnGen Release 7 (2022)	Goodrich 2016		0.999	[0.926; 1.078]	94.2%
Random effects model			**1.002**	**[0.930; 1.078]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.80



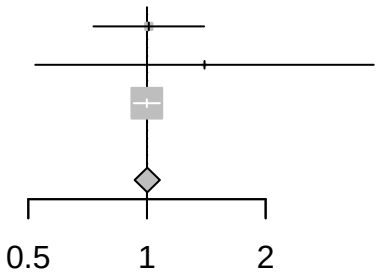
Pasteurellaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



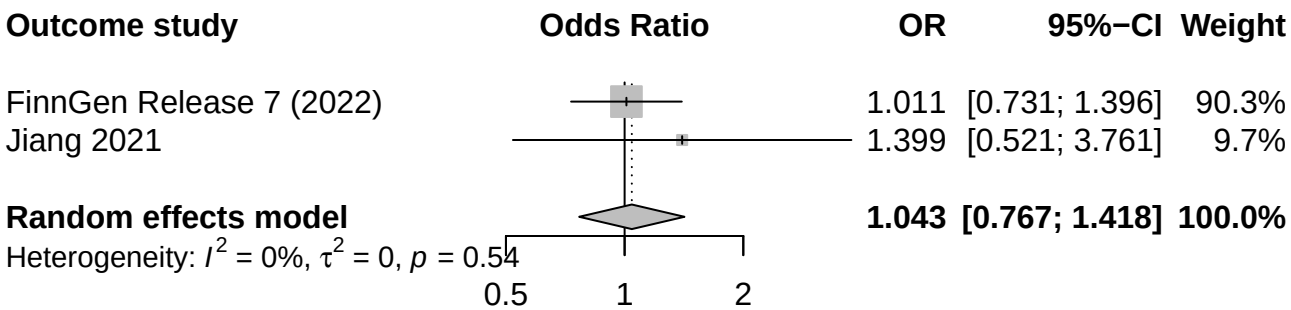
Pasteurellales (Order) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.011	[0.731; 1.396]	5.2%
Jiang 2021	Kurilshikov 2021		1.399	[0.521; 3.761]	0.6%
FinnGen Release 7 (2022)	Goodrich 2016		0.999	[0.926; 1.078]	94.2%
Random effects model			**1.002**	**[0.930; 1.078]**	**100.0%**

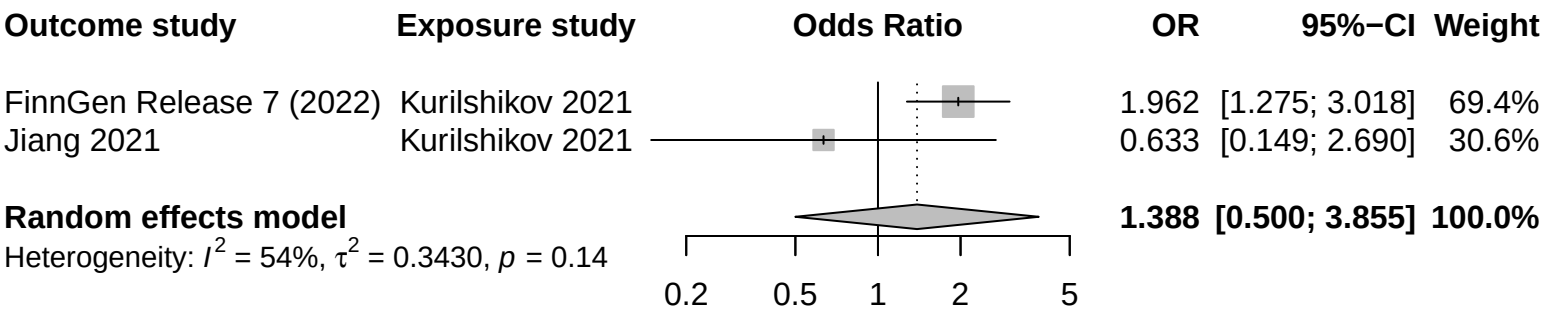
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.80



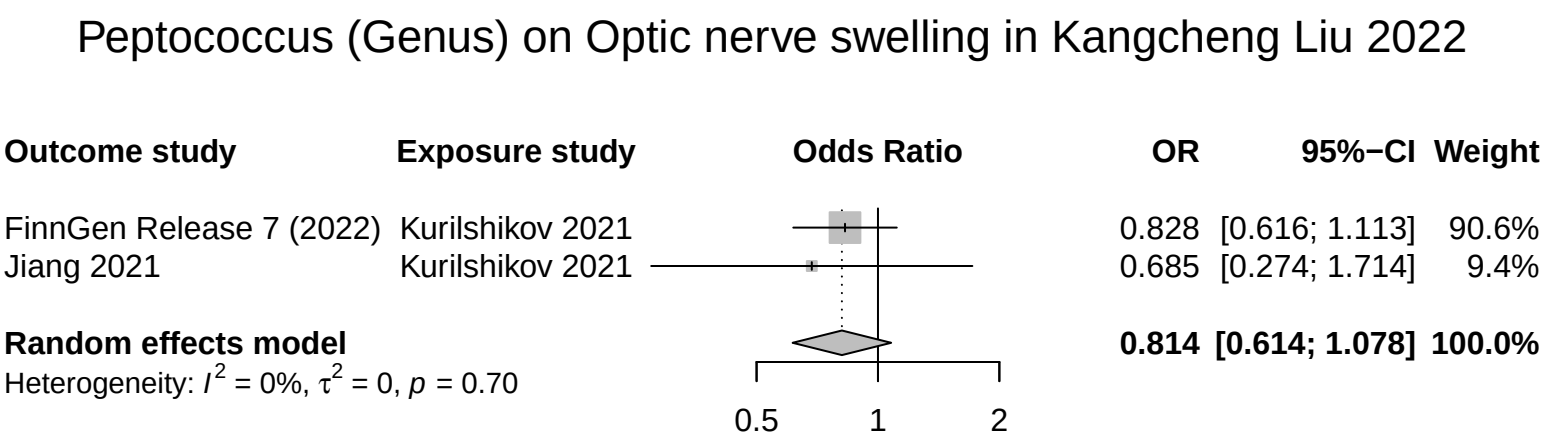
Pasteurellales (Order) on Optic nerve swelling in Kangcheng Liu 2022



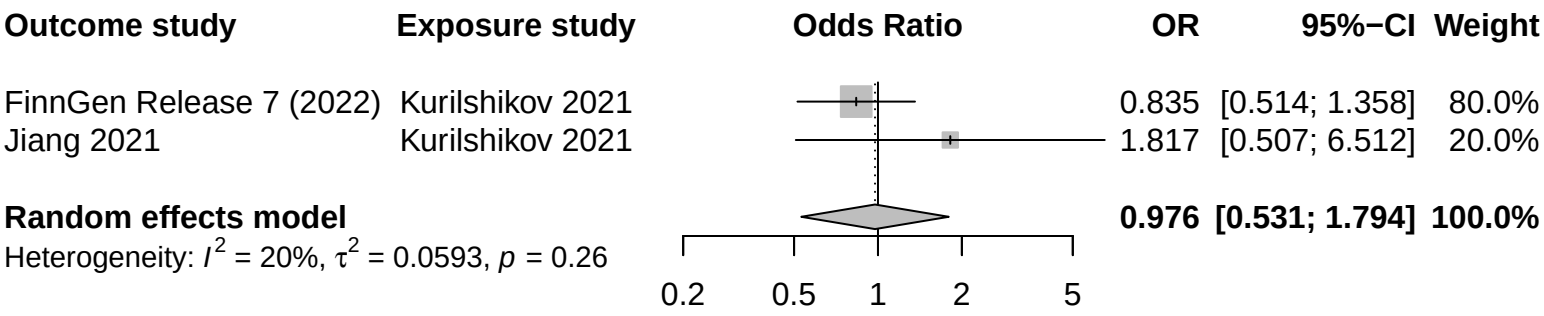
Peptococcaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



Peptococcus (Genus) on Optic nerve swelling in Kangcheng Liu 2022



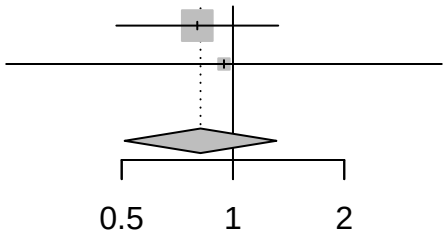
Peptostreptococcaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



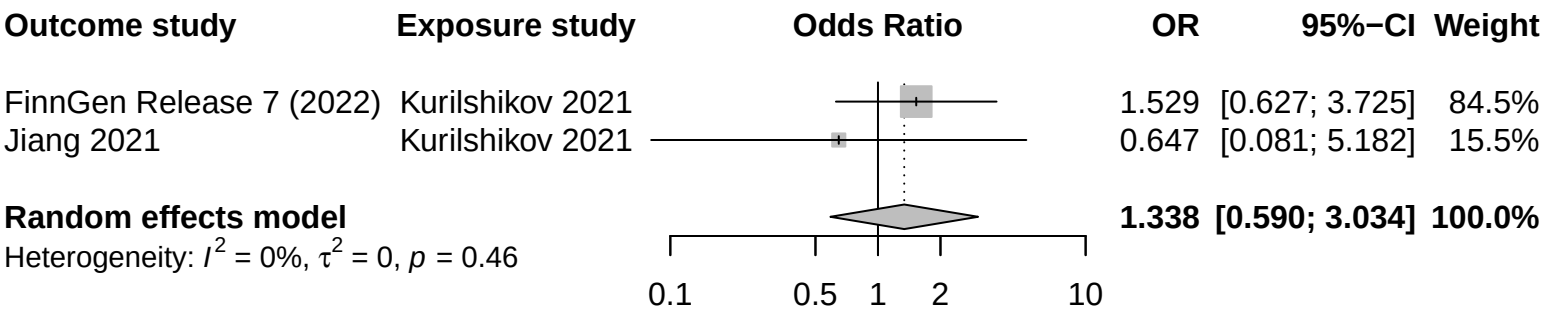
Phascolarctobacterium (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.801	[0.484; 1.326]	87.9%
Jiang 2021	Kurilshikov 2021		0.946	[0.244; 3.671]	12.1%
Random effects model			**0.817**	**[0.509; 1.311]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.82



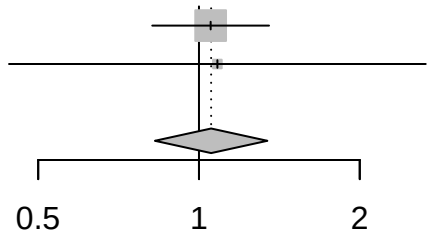
Porphyromonadaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



Prevotella7 (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.052	[0.818; 1.353]	92.7%
Jiang 2021	Kurilshikov 2021		1.083	[0.441; 2.658]	7.3%
Random effects model			**1.054**	**[0.827; 1.343]**	**100.0%**

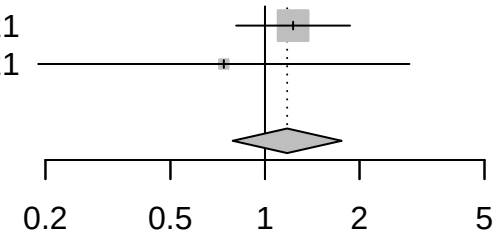
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.95



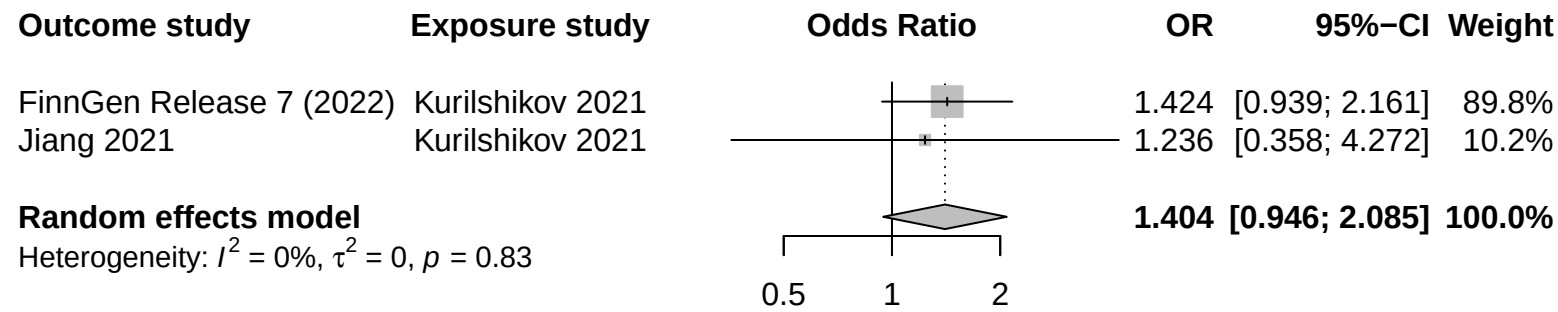
Prevotella9 (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.229	[0.810; 1.866]	91.4%
Jiang 2021	Kurilshikov 2021		0.740	[0.190; 2.884]	8.6%
Random effects model			**1.177**	**[0.789; 1.754]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.48



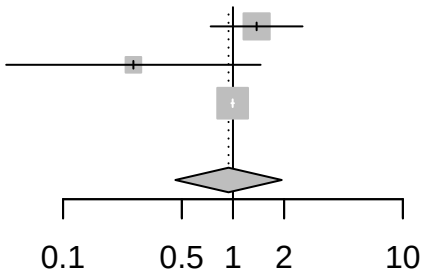
Prevotellaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



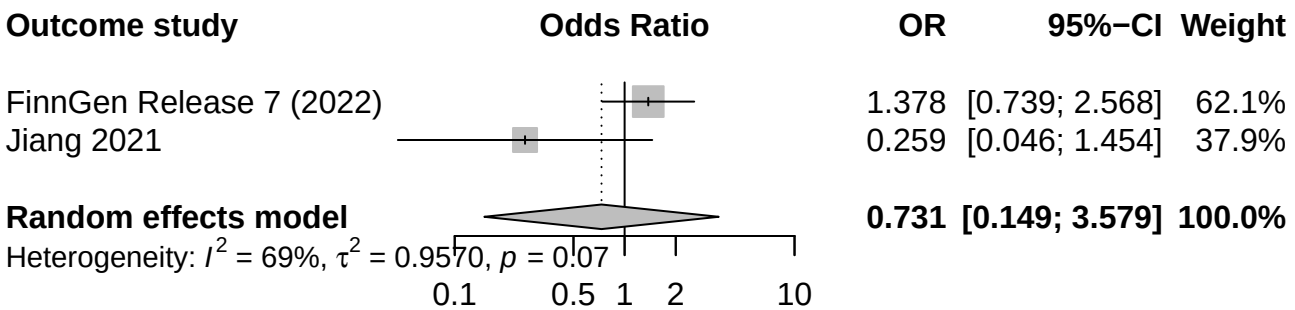
Proteobacteria (Phylum) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.378	[0.739; 2.568]	36.6%
Jiang 2021	Kurilshikov 2021		0.259	[0.046; 1.454]	13.0%
FinnGen Release 7 (2022)	Goodrich 2016		0.996	[0.978; 1.013]	50.4%
Random effects model			**0.942**	**[0.458; 1.936]**	**100.0%**

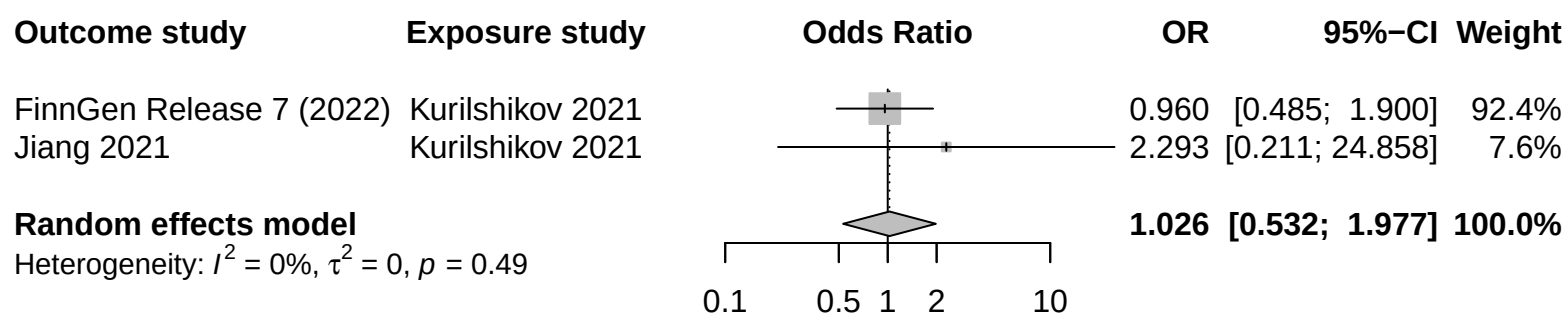
Heterogeneity: I^2 = 41%, τ^2 = 0.2680, p = 0.18



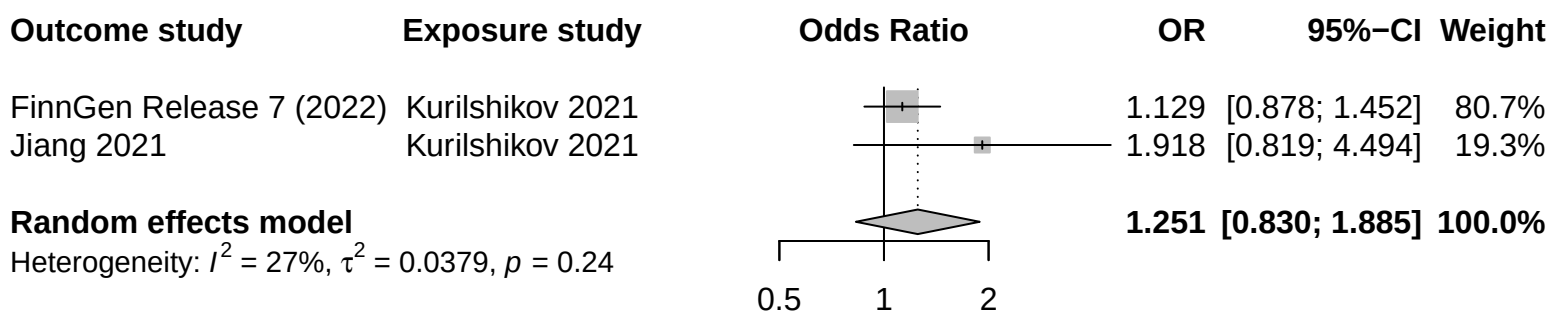
Proteobacteria (Phylum) on Optic nerve swelling in Kangcheng Liu 2022



R7 Group (Genus in Christensenellaceae Family) on Optic nerve swelling in Kangcheng Liu 2022



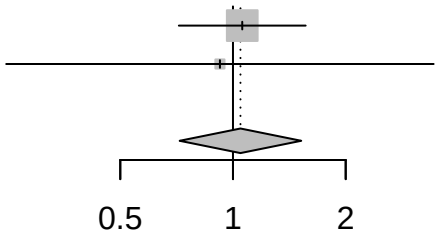
RC9 Gut Group (Genus in Rikenellaceae Family) on Optic nerve swelling in Kangcheng Liu 2022



Rhodospirillaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.059	[0.717; 1.564]	91.9%
Jiang 2021	Kurilshikov 2021		0.923	[0.248; 3.435]	8.1%
Random effects model			**1.047**	**[0.720; 1.522]**	**100.0%**

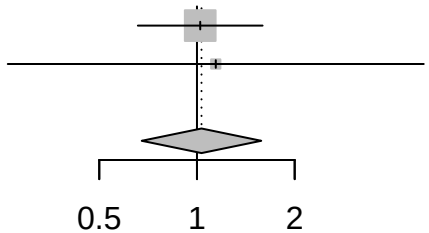
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.84



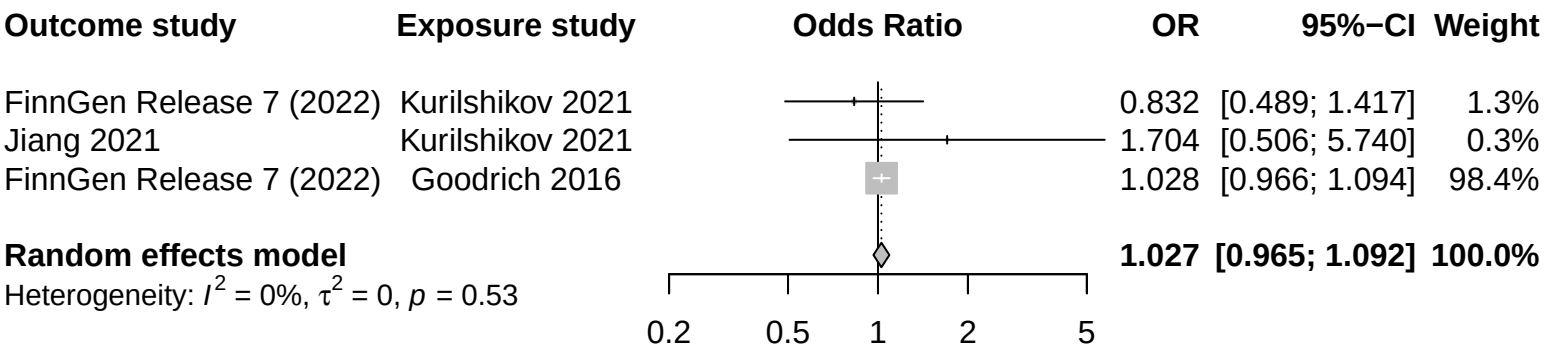
Rhodospirillales (Order) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.023	[0.657; 1.593]	91.7%
Jiang 2021	Kurilshikov 2021		1.143	[0.261; 4.996]	8.3%
Random effects model			**1.033**	**[0.676; 1.578]**	**100.0%**

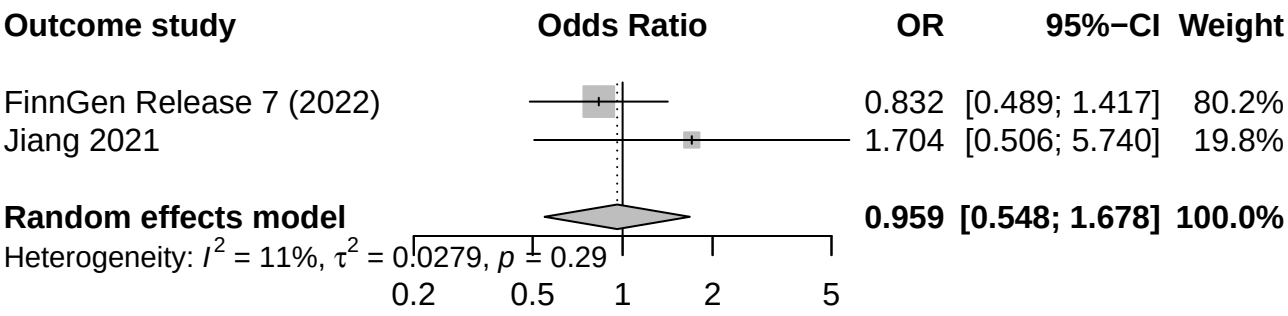
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.89



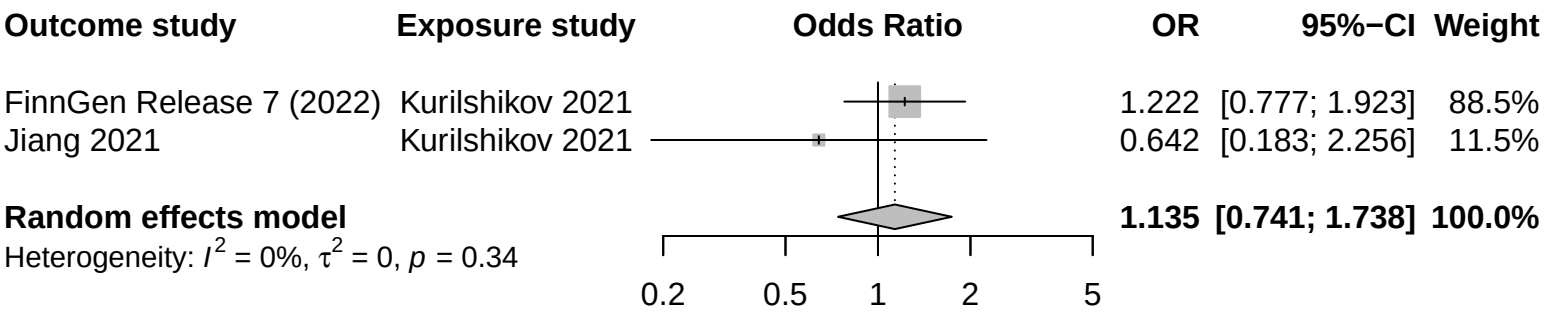
Rikenellaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



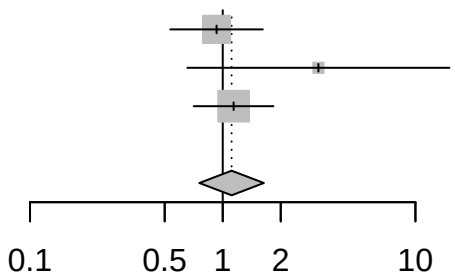
Rikenellaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



Romboutsia (Genus) on Optic nerve swelling in Kangcheng Liu 2022



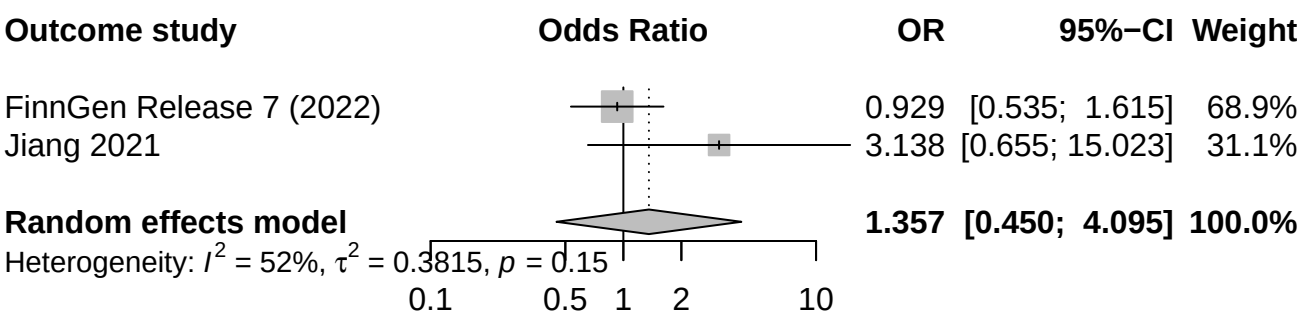
Roseburia (Genus) on Optic nerve swelling in Kangcheng Liu 2022



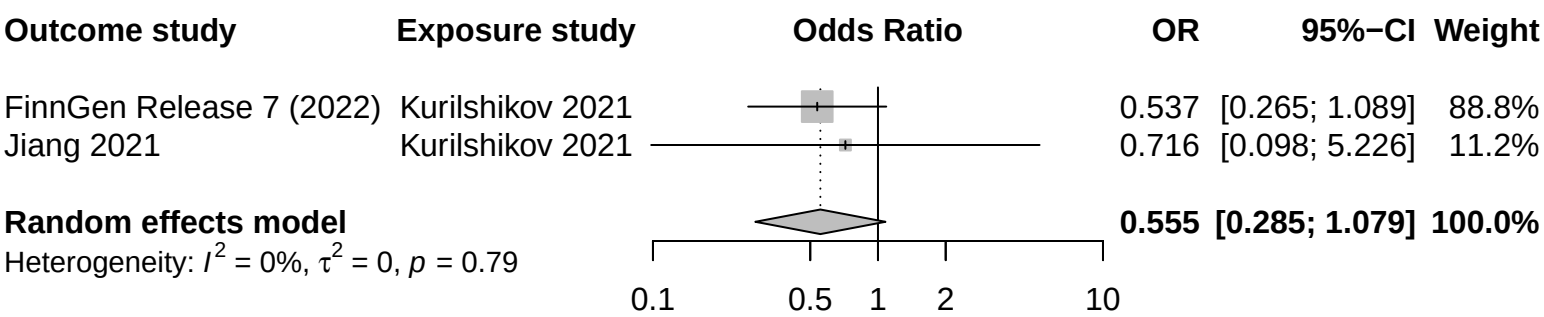
Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	0.929	[0.535; 1.615]	41.3%
Jiang 2021	Kurilshikov 2021	3.138	[0.655; 15.023]	5.9%
FinnGen Release 7 (2022)	Goodrich 2016	1.139	[0.707; 1.834]	52.8%
Random effects model		**1.112**	**[0.756; 1.635]**	**100.0%**

Heterogeneity: I^2 = 5%, τ^2 = 0.0143, p = 0.35

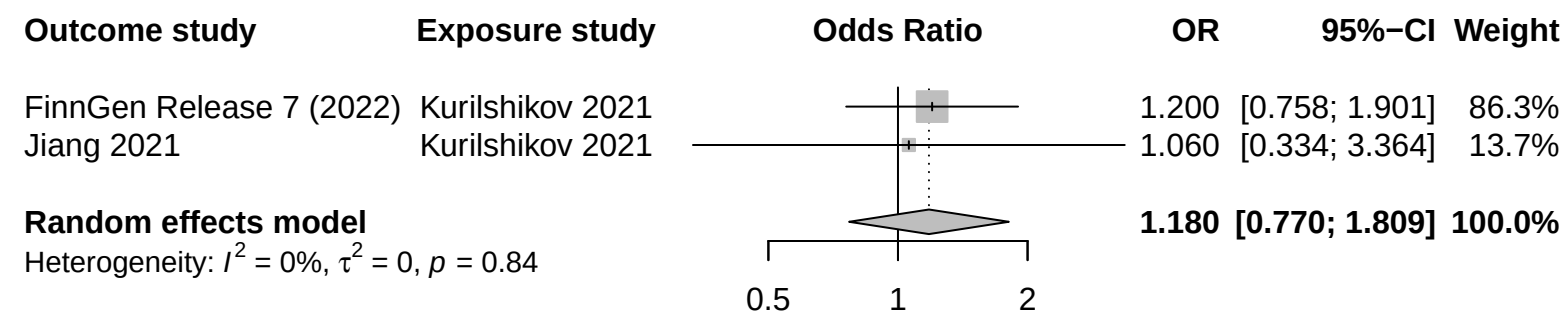
Roseburia (Genus) on Optic nerve swelling in Kangcheng Liu 2022



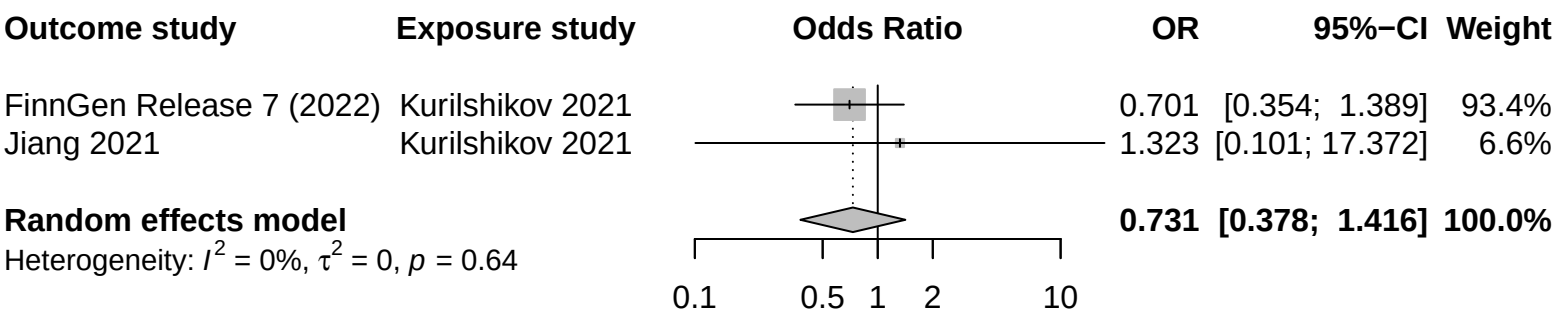
Ruminiclostridium5 (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Ruminiclostridium6 (Genus) on Optic nerve swelling in Kangcheng Liu 2022



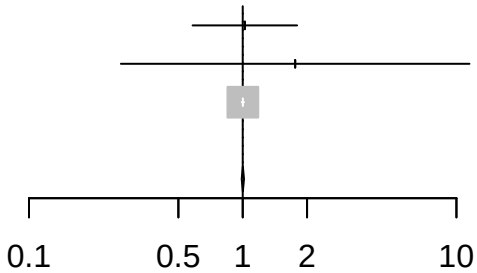
Ruminiclostridium9 (Genus) on Optic nerve swelling in Kangcheng Liu 2022



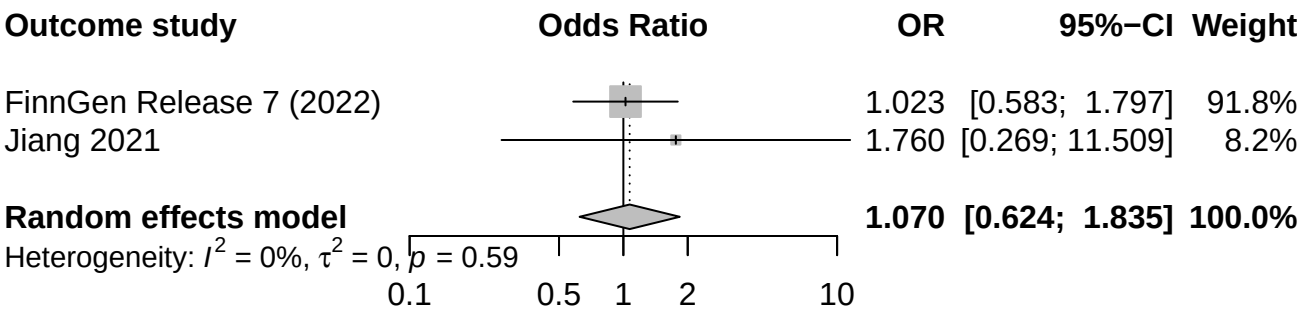
Ruminococcaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.023	[0.583; 1.797]	0.0%
Jiang 2021	Kurilshikov 2021		1.760	[0.269; 11.509]	0.0%
FinnGen Release 7 (2022)	Goodrich 2016		1.001	[0.989; 1.014]	99.9%
Random effects model			**1.001**	**[0.989; 1.014]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.84



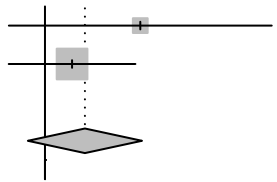
Ruminococcaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



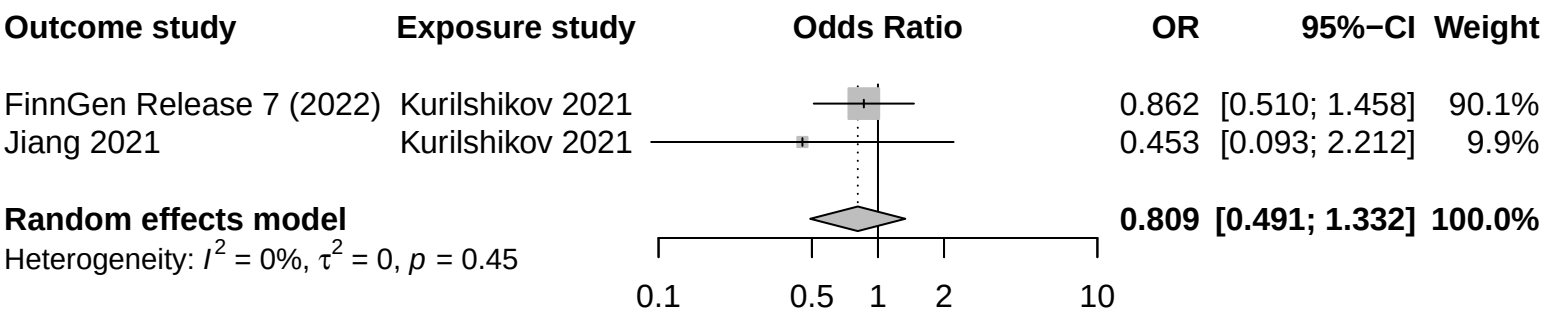
Ruminococcus (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Goodrich 2016		1.017	[0.994; 1.040]	18.8%
FinnGen Release 7 (2022)	Goodrich 2016		1.005	[0.994; 1.016]	81.2%
Random effects model			**1.007**	**[0.997; 1.017]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.36



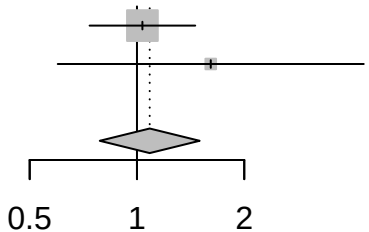
ccus gauvreauii Group (Species in Ruminococcus Genus) on Optic nerve swelling in Kangcheng



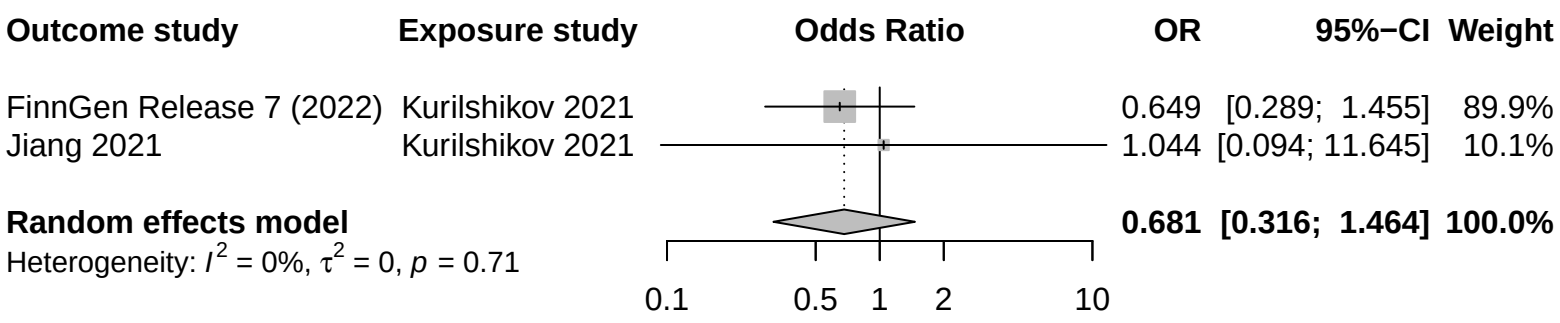
coccus gnavus Group (Species in Ruminococcus Genus) on Optic nerve swelling in Kangcheng

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.036	[0.736; 1.457]	89.4%
Jiang 2021	Kurilshikov 2021		1.611	[0.599; 4.328]	10.6%
Random effects model			**1.086**	**[0.786; 1.499]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.41



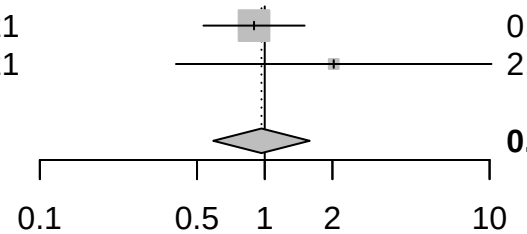
coccus torques Group (Species in Ruminococcus Genus) on Optic nerve swelling in Kangcheng



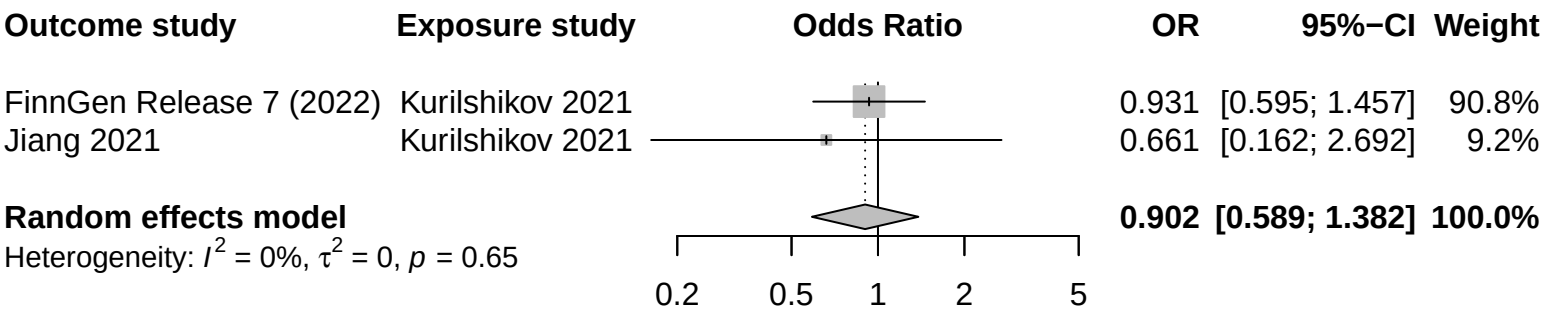
Ruminococcus1 (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	0.896	[0.534; 1.505]	90.7%
Jiang 2021	Kurilshikov 2021	2.027	[0.403; 10.197]	9.3%
Random effects model		**0.967**	**[0.591; 1.584]**	**100.0%**

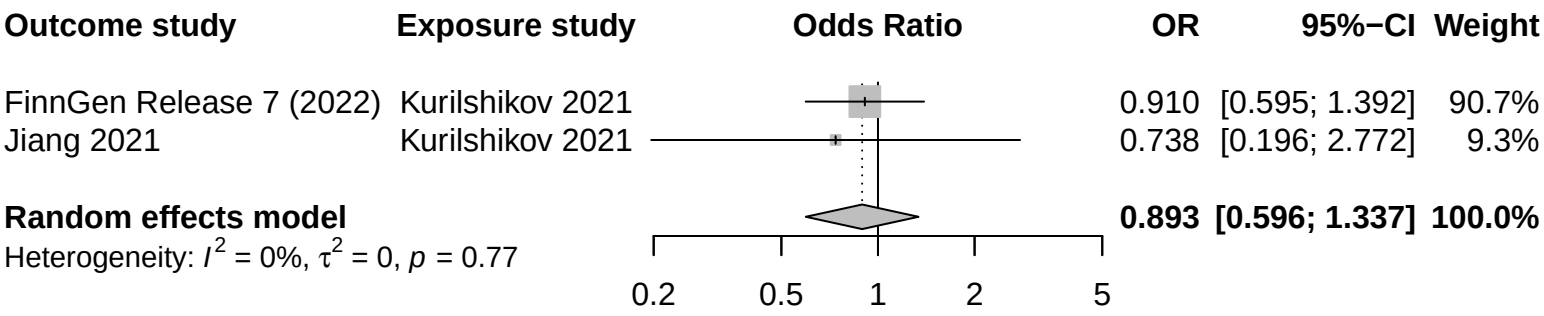
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.35



Ruminococcus2 (Genus) on Optic nerve swelling in Kangcheng Liu 2022



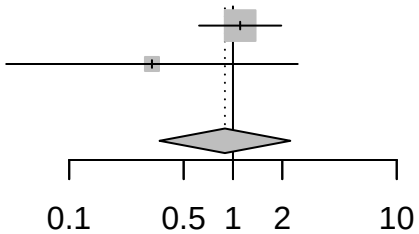
S24_7 Group (Family in Bacteroidales Order) on Optic nerve swelling in Kangcheng Liu 2022



Selenomonadales (Order) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.107	[0.621; 1.971]	82.7%
Jiang 2021	Kurilshikov 2021		0.320	[0.041; 2.485]	17.3%
Random effects model			**0.893**	**[0.356; 2.239]**	**100.0%**

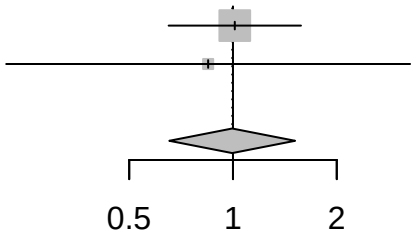
Heterogeneity: I^2 = 23%, τ^2 = 0.1790, p = 0.25



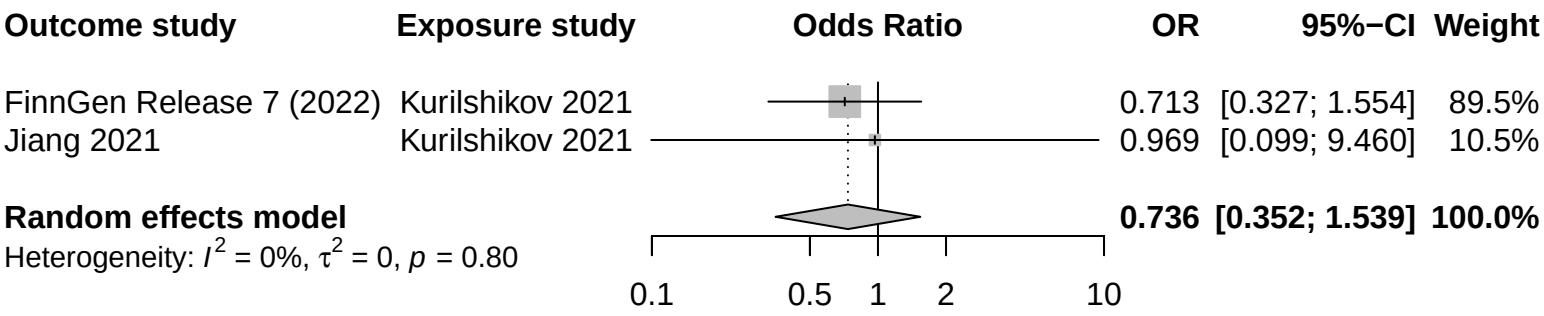
Sellimonas (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.012	[0.651; 1.575]	90.3%
Jiang 2021	Kurilshikov 2021		0.847	[0.220; 3.264]	9.7%
Random effects model			**0.995**	**[0.654; 1.514]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.81



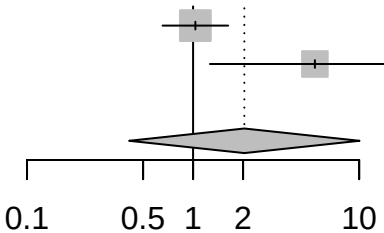
Senegalimassilia (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Slackia (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	1.032	[0.655; 1.627]	59.0%
Jiang 2021	Kurilshikov 2021	5.415	[1.264; 23.199]	41.0%
Random effects model		**2.035**	**[0.412; 10.054]**	**100.0%**

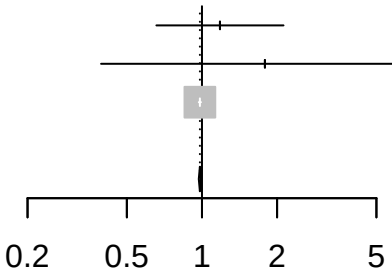
Heterogeneity: I^2 = 78%, τ^2 = 1.0710, p = 0.03



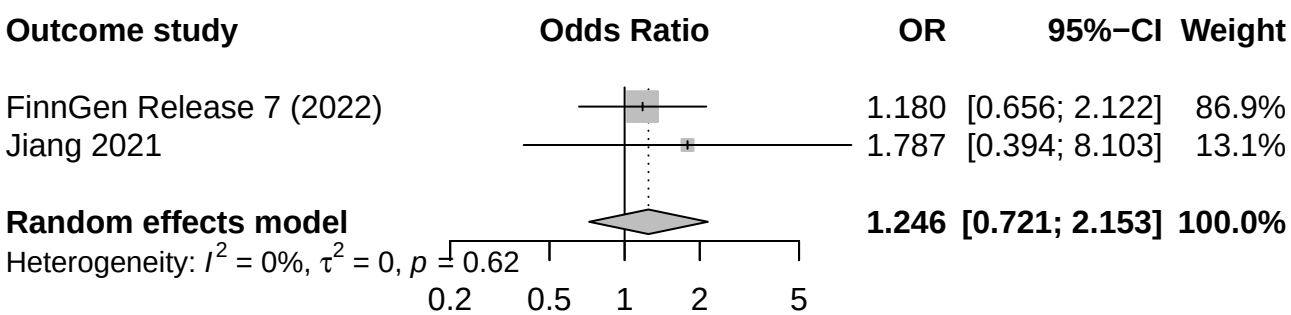
Streptococcaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.180	[0.656; 2.122]	0.0%
Jiang 2021	Kurilshikov 2021		1.787	[0.394; 8.103]	0.0%
FinnGen Release 7 (2022)	Goodrich 2016		0.981	[0.971; 0.991]	100.0%
Random effects model			**0.981**	**[0.971; 0.991]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.61



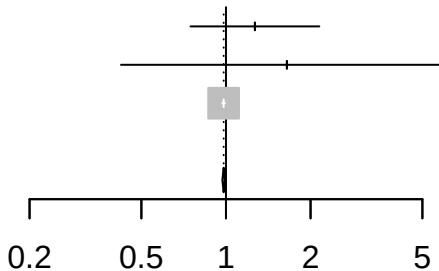
Streptococcaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



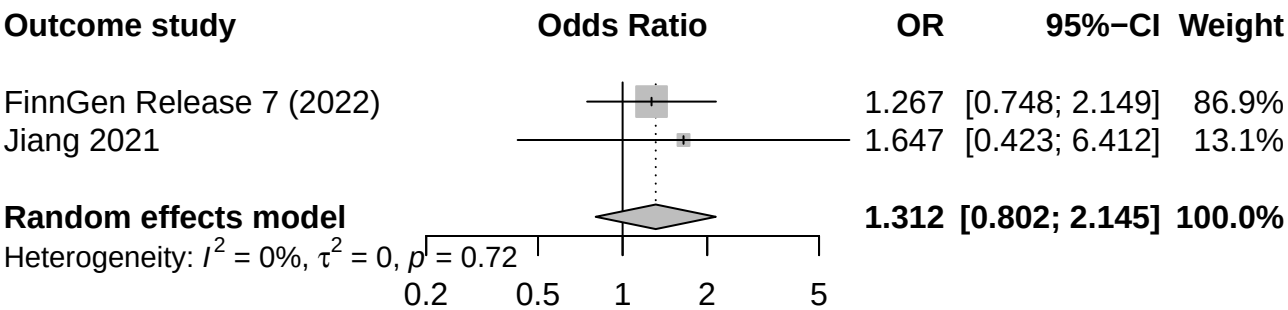
Streptococcus (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	1.267	[0.748; 2.149]	0.0%
Jiang 2021	Kurilshikov 2021	1.647	[0.423; 6.412]	0.0%
FinnGen Release 7 (2022)	Goodrich 2016	0.981	[0.971; 0.991]	100.0%
Random effects model		**0.981**	**[0.971; 0.991]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.48



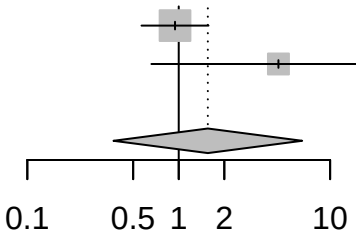
Streptococcus (Genus) on Optic nerve swelling in Kangcheng Liu 2022



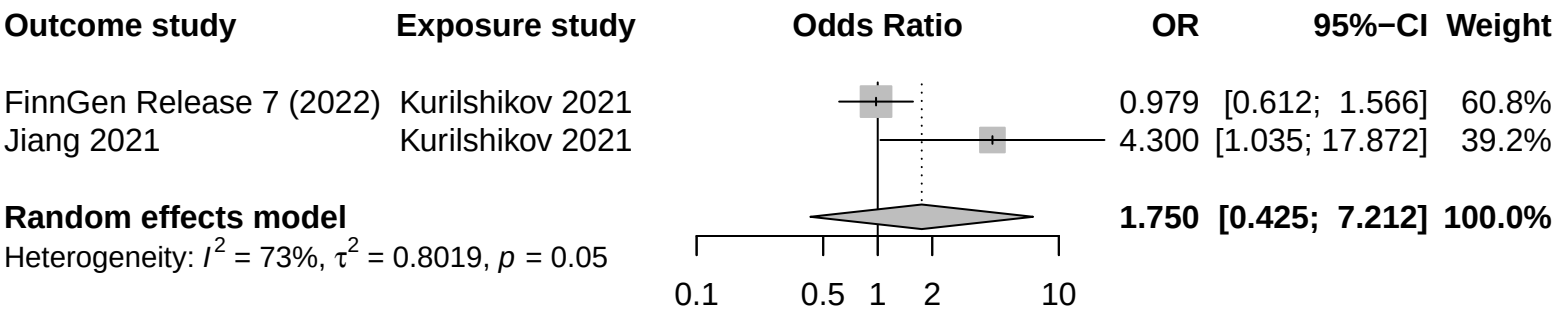
Subdoligranulum (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.945	[0.568; 1.574]	68.3%
Jiang 2021	Kurilshikov 2021		4.557	[0.660; 31.472]	31.7%
Random effects model			**1.557**	**[0.371; 6.539]**	**100.0%**

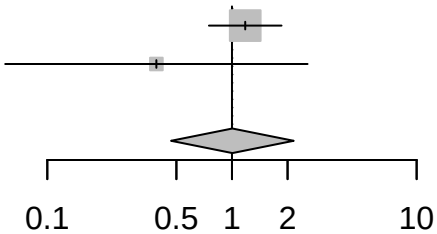
Heterogeneity: I^2 = 58%, τ^2 = 0.7176, p = 0.12



Sutterella (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Tenericutes (Phylum) on Optic nerve swelling in Kangcheng Liu 2022



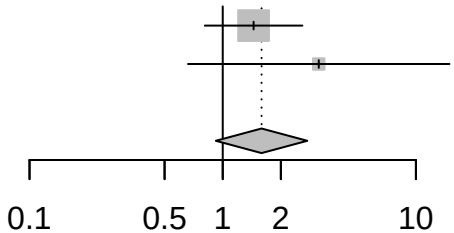
Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	1.180	[0.750; 1.856]	85.5%
Jiang 2021	Kurilshikov 2021	0.390	[0.059; 2.566]	14.5%
Random effects model		**1.005**	**[0.468; 2.158]**	**100.0%**

Heterogeneity: I^2 = 20%, τ^2 = 0.1245, p = 0.26

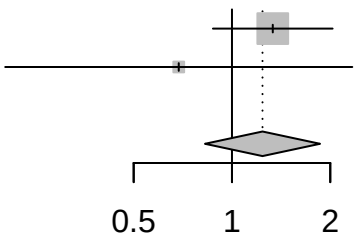
Terrisporobacter (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.445	[0.808; 2.585]	87.8%
Jiang 2021	Kurilshikov 2021		3.141	[0.661; 14.921]	12.2%
Random effects model			**1.589**	**[0.921; 2.740]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.36



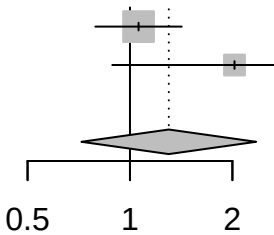
Turicibacter (Genus) on Optic nerve swelling in Kangcheng Liu 2022



Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	1.333	[0.874; 2.033]	89.1%
Jiang 2021	Kurilshikov 2021	0.687	[0.202; 2.336]	10.9%
Random effects model		**1.240**	**[0.827; 1.860]**	**100.0%**

Heterogeneity: I^2 = 1%, τ^2 = 0.0017, p = 0.32

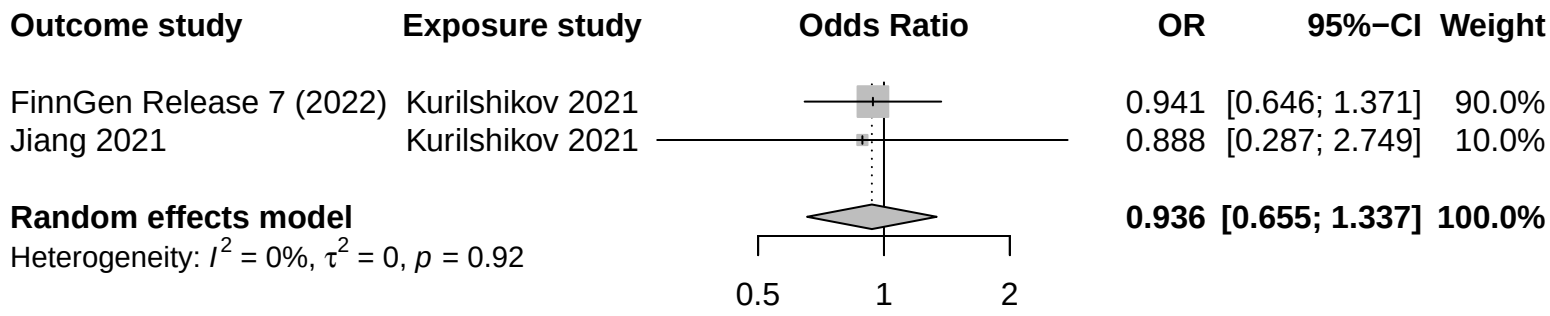
Tyzzerella3 (Genus) on Optic nerve swelling in Kangcheng Liu 2022



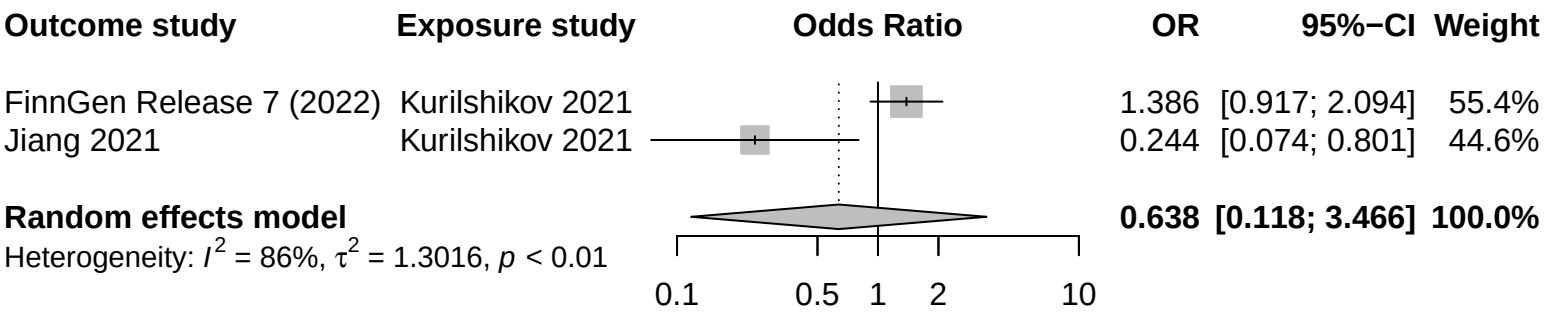
Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.060	[0.791; 1.420]	68.5%
Jiang 2021	Kurilshikov 2021		2.029	[0.887; 4.640]	31.5%
Random effects model			**1.300**	**[0.720; 2.349]**	**100.0%**

Heterogeneity: I^2 = 52%, τ^2 = 0.1106, p = 0.15

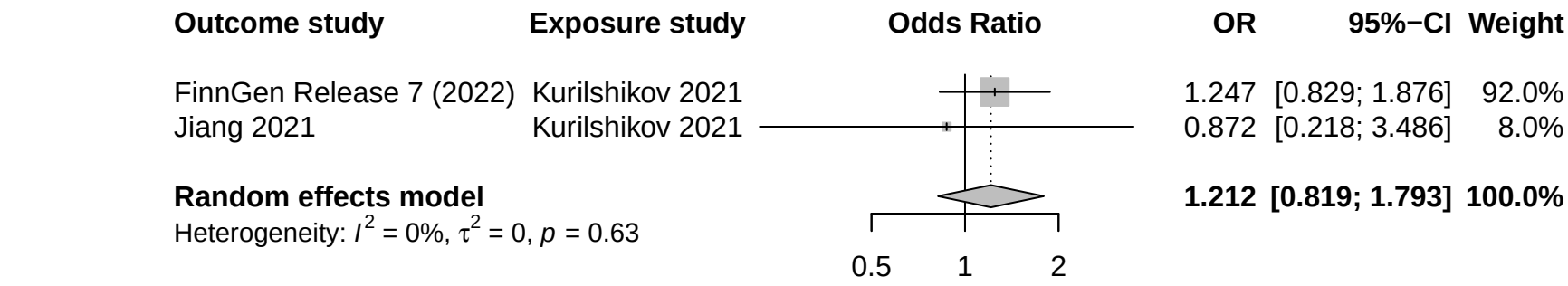
CG001 Group (Genus in Lachnospiraceae Family) on Optic nerve swelling in Kangcheng Liu 202



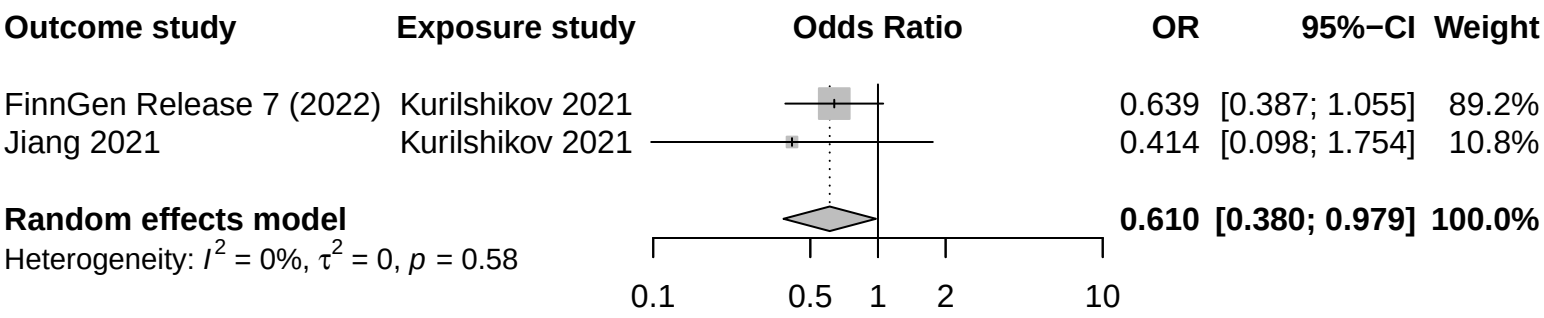
CG002 Group (Genus in Ruminococcaceae Family) on Optic nerve swelling in Kangcheng Liu 20



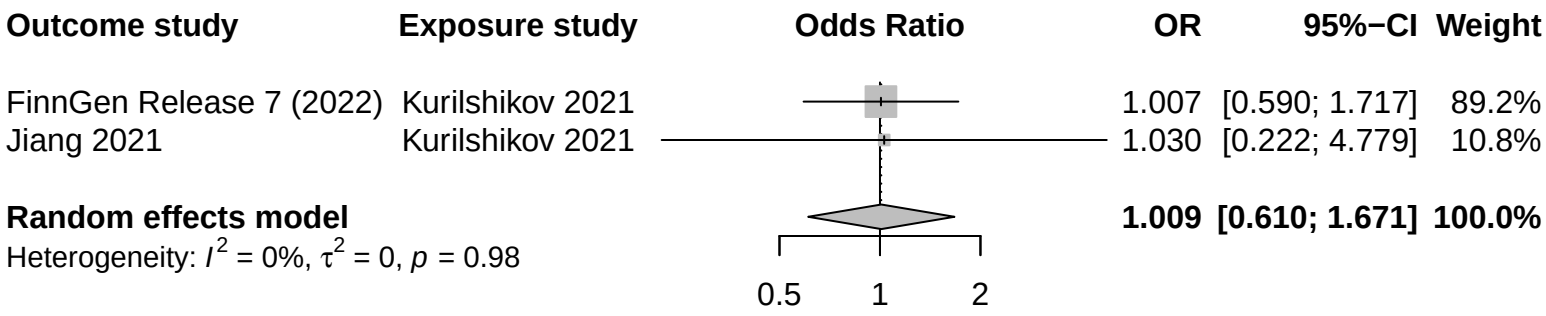
G003 Group (Genus in Erysipelotrichaceae Family) on Optic nerve swelling in Kangcheng Liu 20



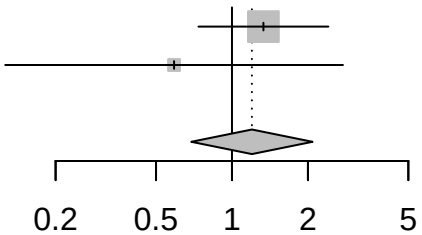
CG003 Group (Genus in Ruminococcaceae Family) on Optic nerve swelling in Kangcheng Liu 20



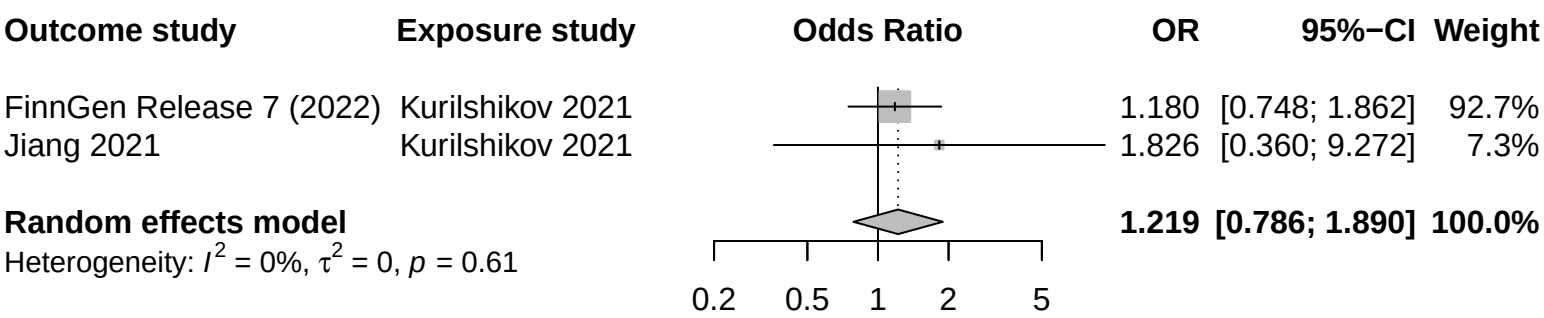
CG004 Group (Genus in Lachnospiraceae Family) on Optic nerve swelling in Kangcheng Liu 202



CG004 Group (Genus in Ruminococcaceae Family) on Optic nerve swelling in Kangcheng Liu 20



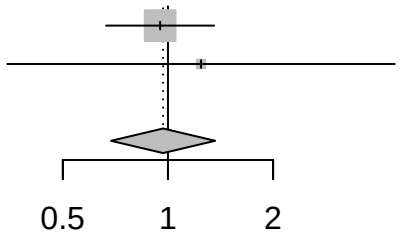
CG005 Group (Genus in Ruminococcaceae Family) on Optic nerve swelling in Kangcheng Liu 20



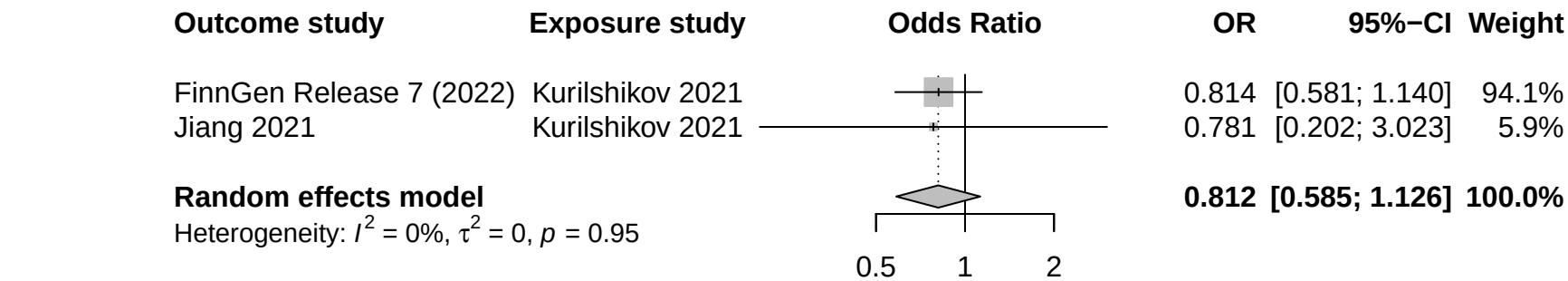
CG008 Group (Genus in Lachnospiraceae Family) on Optic nerve swelling in Kangcheng Liu 202

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.950	[0.665; 1.356]	92.8%
Jiang 2021	Kurilshikov 2021		1.244	[0.347; 4.460]	7.2%
Random effects model			**0.968**	**[0.687; 1.365]**	**100.0%**

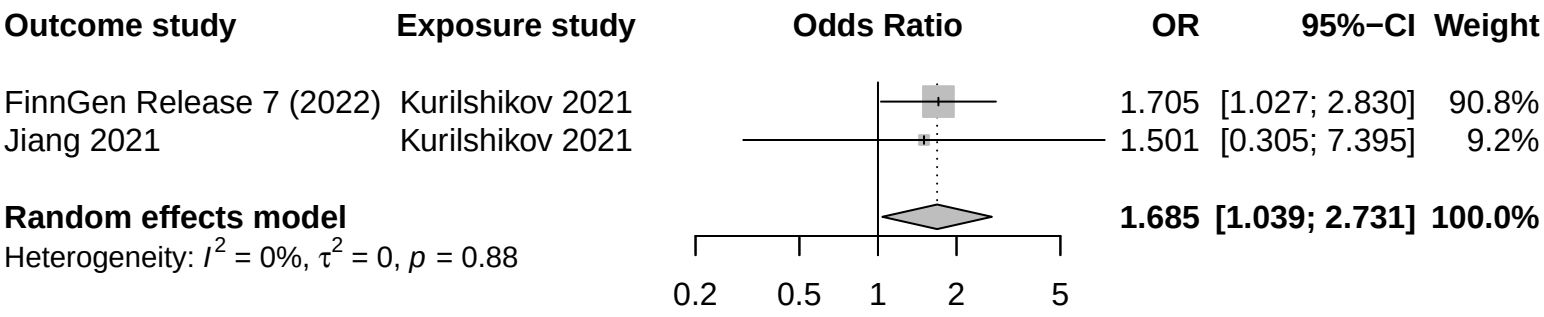
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.69



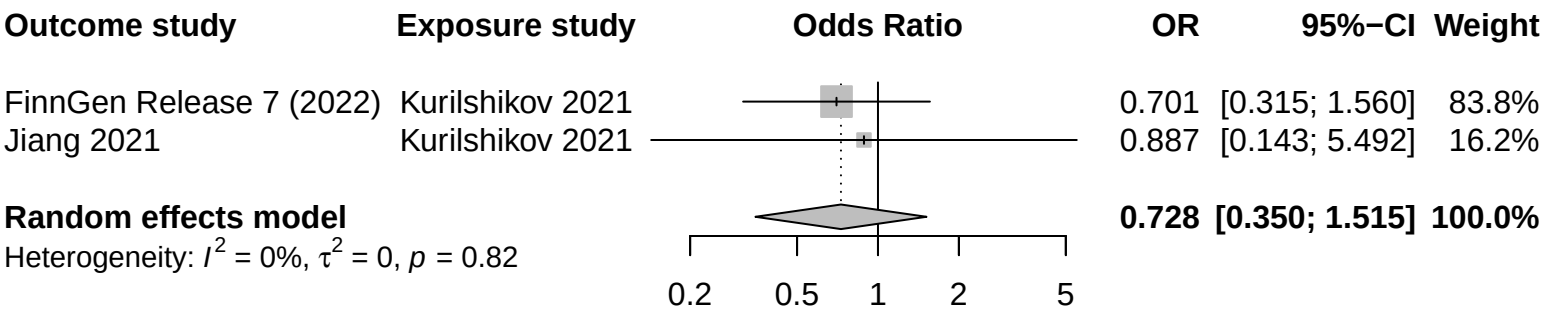
CG009 Group (Genus in Ruminococcaceae Family) on Optic nerve swelling in Kangcheng Liu 20



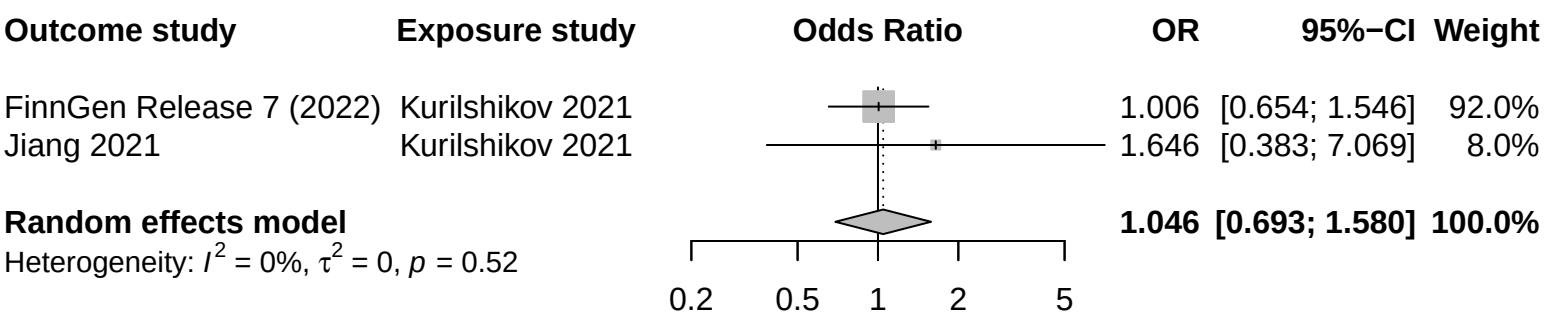
CG010 Group (Genus in Lachnospiraceae Family) on Optic nerve swelling in Kangcheng Liu 202



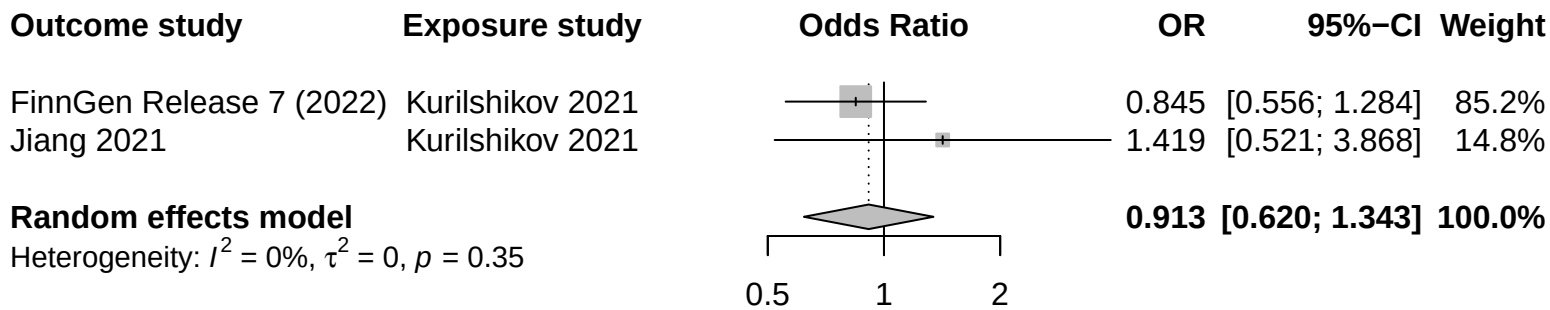
CG010 Group (Genus in Ruminococcaceae Family) on Optic nerve swelling in Kangcheng Liu 20



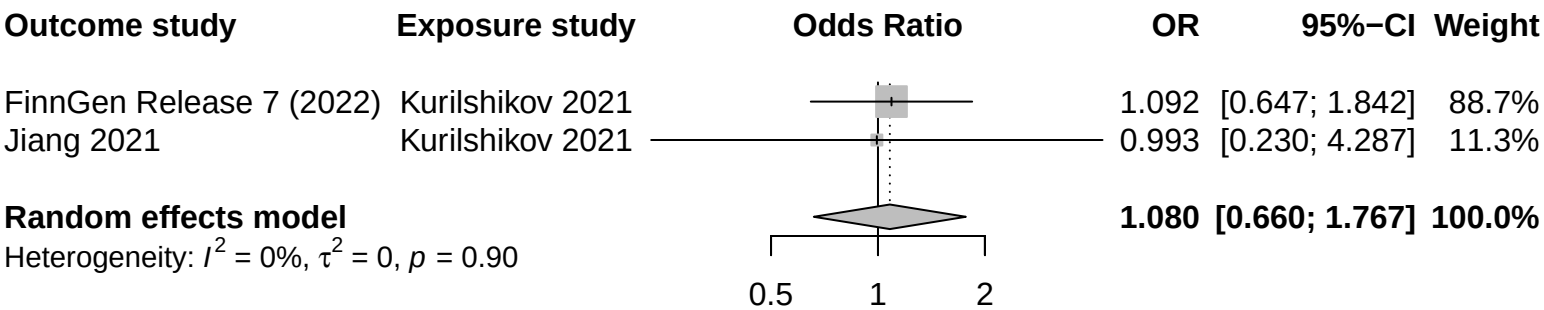
CG011 Group (Genus in Defluviitaleaceae Family) on Optic nerve swelling in Kangcheng Liu 202



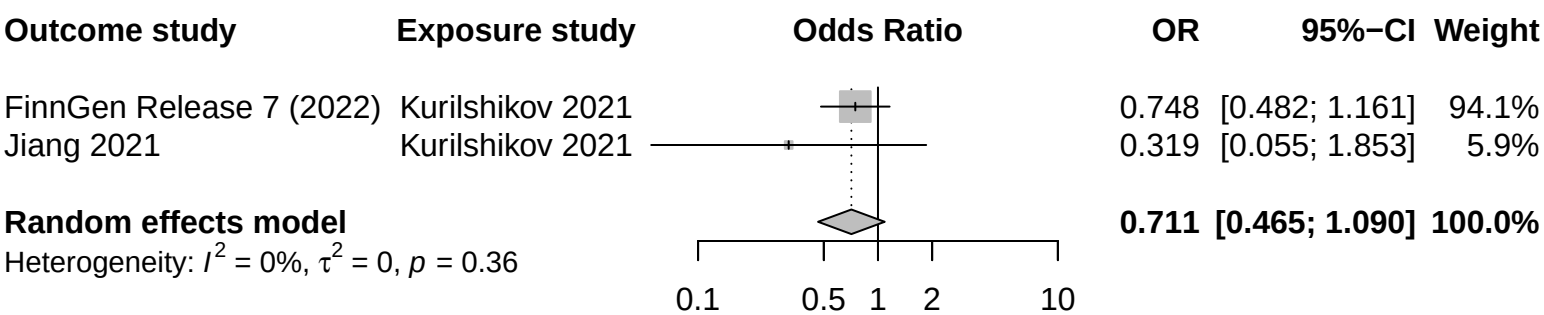
CG011 Group (Genus in Ruminococcaceae Family) on Optic nerve swelling in Kangcheng Liu 20



CG013 Group (Genus in Ruminococcaceae Family) on Optic nerve swelling in Kangcheng Liu 20



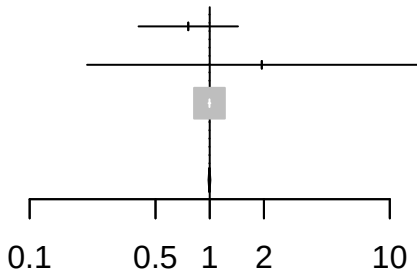
CG014 Group (Genus in Ruminococcaceae Family) on Optic nerve swelling in Kangcheng Liu 20



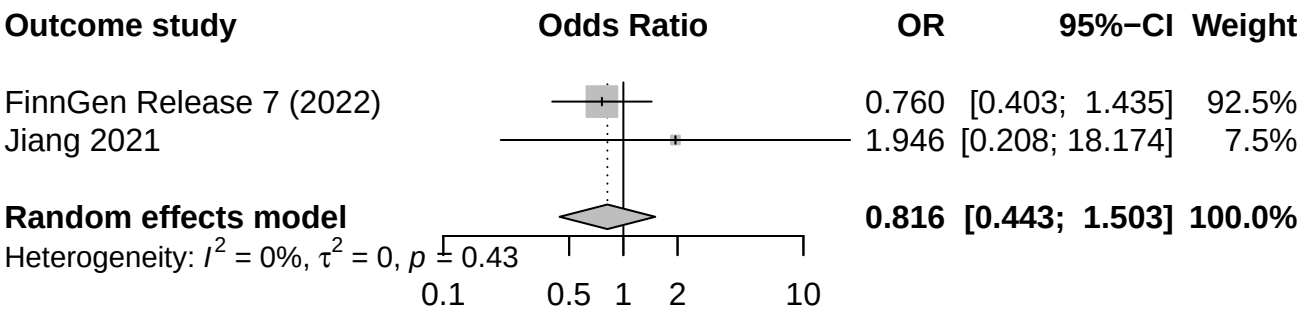
Veillonella (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.760	[0.403; 1.435]	0.0%
Jiang 2021	Kurilshikov 2021		1.946	[0.208; 18.174]	0.0%
FinnGen Release 7 (2022)	Goodrich 2016		0.997	[0.985; 1.008]	100.0%
Random effects model			**0.997**	**[0.985; 1.008]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.59



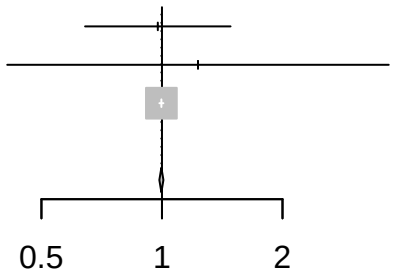
Veillonella (Genus) on Optic nerve swelling in Kangcheng Liu 2022



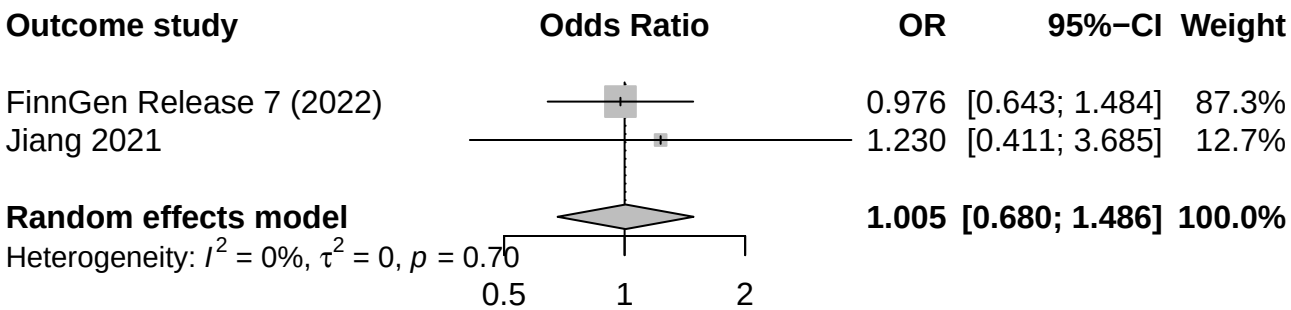
Veillonellaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.976	[0.643; 1.484]	0.1%
Jiang 2021	Kurilshikov 2021		1.230	[0.411; 3.685]	0.0%
FinnGen Release 7 (2022)	Goodrich 2016		0.997	[0.985; 1.008]	99.9%
Random effects model			**0.997**	**[0.985; 1.008]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.93



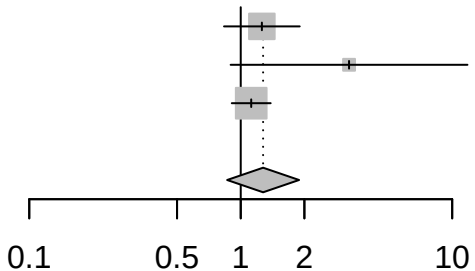
Veillonellaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



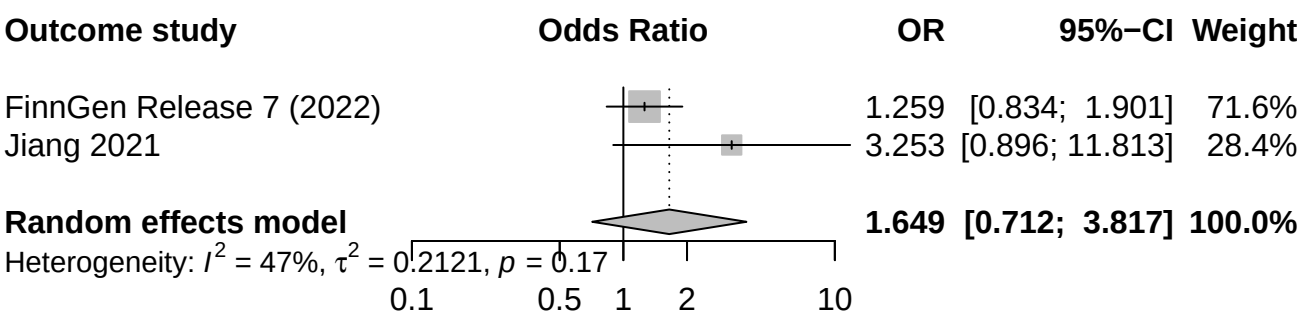
Verrucomicrobia (Phylum) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	1.259	[0.834; 1.901]	37.6%
Jiang 2021	Kurilshikov 2021	3.253	[0.896; 11.813]	8.1%
FinnGen Release 7 (2022)	Goodrich 2016	1.121	[0.907; 1.386]	54.3%
Random effects model		**1.276**	**[0.863; 1.888]**	**100.0%**

Heterogeneity: I^2 = 26%, τ^2 = 0.0618, p = 0.26



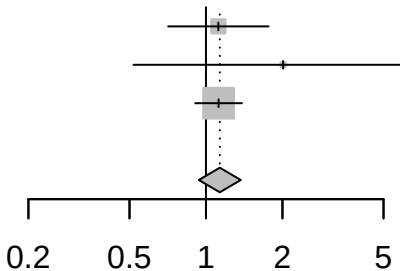
Verrucomicrobia (Phylum) on Optic nerve swelling in Kangcheng Liu 2022



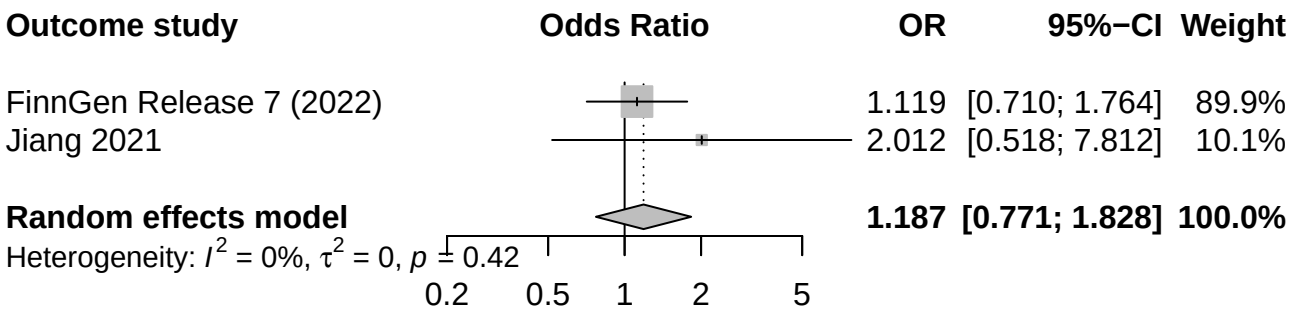
Verrucomicrobiaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.119	[0.710; 1.764]	17.4%
Jiang 2021	Kurilshikov 2021		2.012	[0.518; 7.812]	2.0%
FinnGen Release 7 (2022)	Goodrich 2016		1.121	[0.907; 1.386]	80.6%
Random effects model			**1.134**	**[0.937; 1.371]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.70



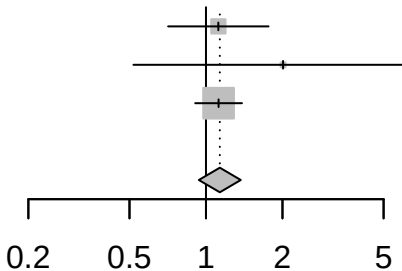
Verrucomicrobiaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022



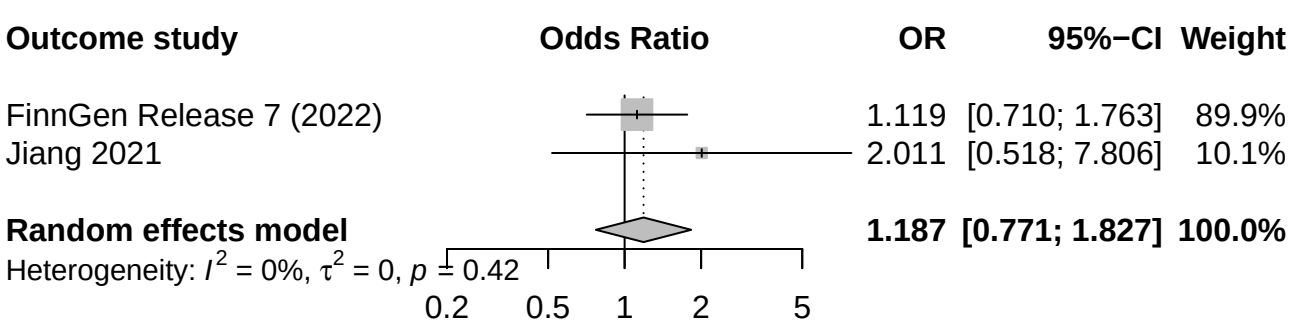
Verrucomicrobiae (Class) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.119	[0.710; 1.763]	17.5%
Jiang 2021	Kurilshikov 2021		2.011	[0.518; 7.806]	2.0%
FinnGen Release 7 (2022)	Goodrich 2016		1.121	[0.907; 1.386]	80.6%
Random effects model			**1.134**	**[0.937; 1.371]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.70



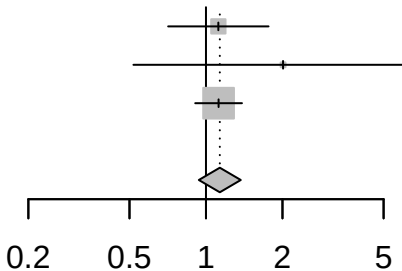
Verrucomicrobiae (Class) on Optic nerve swelling in Kangcheng Liu 2022



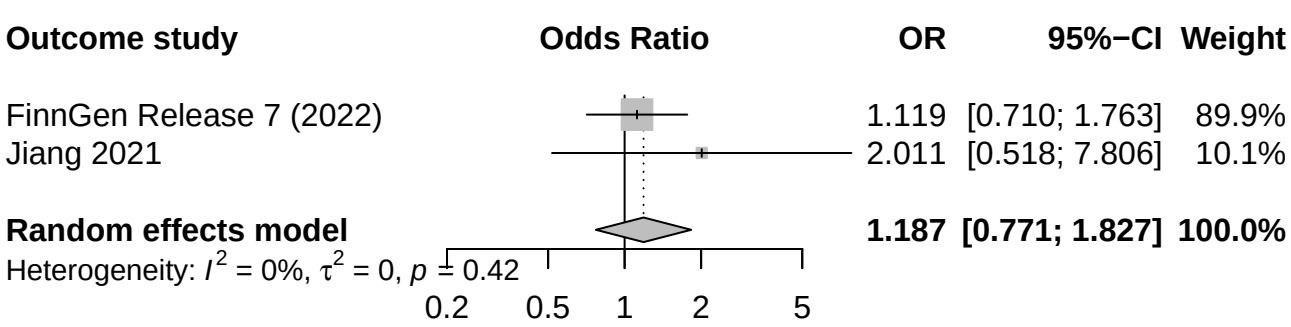
Verrucomicrobiales (Order) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		1.119	[0.710; 1.763]	17.5%
Jiang 2021	Kurilshikov 2021		2.011	[0.518; 7.806]	2.0%
FinnGen Release 7 (2022)	Goodrich 2016		1.121	[0.907; 1.386]	80.6%
Random effects model			**1.134**	**[0.937; 1.371]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.70



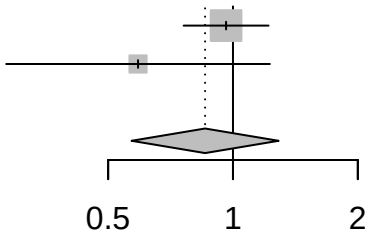
Verrucomicrobiales (Order) on Optic nerve swelling in Kangcheng Liu 2022



Victivallaceae (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.962	[0.760; 1.218]	76.2%
Jiang 2021	Kurilshikov 2021		0.590	[0.284; 1.227]	23.8%
Random effects model			**0.857**	**[0.569; 1.288]**	**100.0%**

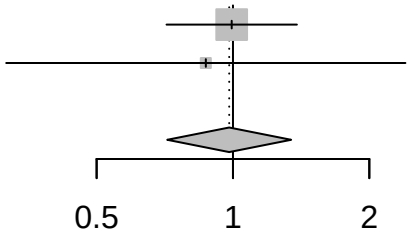
Heterogeneity: I^2 = 36%, τ^2 = 0.0425, p = 0.21



Victivallales (Order) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.994	[0.713; 1.384]	90.4%
Jiang 2021	Kurilshikov 2021		0.871	[0.316; 2.403]	9.6%
Random effects model			**0.981**	**[0.716; 1.344]**	**100.0%**

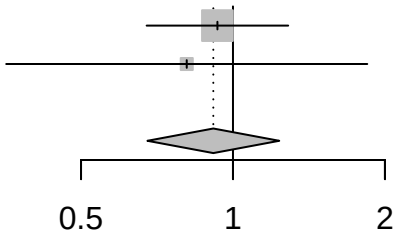
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.81



Victivallis (Genus) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.932	[0.674; 1.287]	86.7%
Jiang 2021	Kurilshikov 2021		0.810	[0.355; 1.845]	13.3%
Random effects model			**0.914**	**[0.677; 1.235]**	**100.0%**

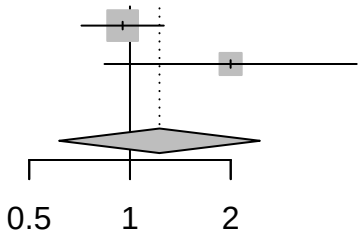
Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.76



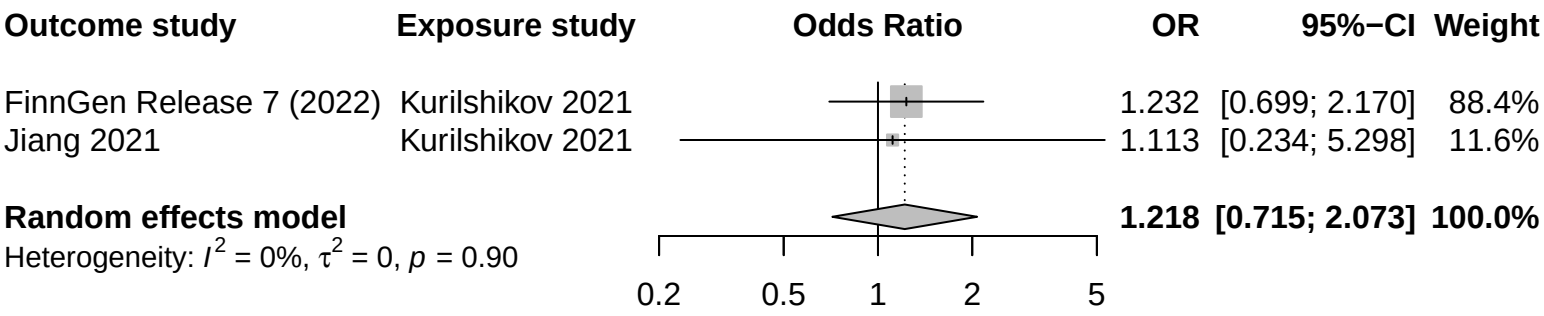
XI (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	Odds Ratio	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021		0.951	[0.716; 1.262]	65.9%
Jiang 2021	Kurilshikov 2021		1.999	[0.839; 4.759]	34.1%
Random effects model			**1.225**	**[0.614; 2.444]**	**100.0%**

Heterogeneity: I^2 = 61%, τ^2 = 0.1675, p = 0.11



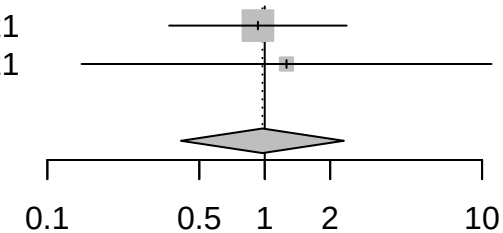
XII UCG001 Group (Genus in Family) on Optic nerve swelling in Kangcheng Liu 2022



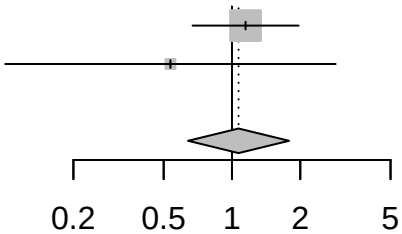
XIII (Family) on Optic nerve swelling in Kangcheng Liu 2022

Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	0.930	[0.363; 2.382]	84.2%
Jiang 2021	Kurilshikov 2021	1.260	[0.144; 11.045]	15.8%
Random effects model		**0.976**	**[0.412; 2.312]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.80



XIII AD3011 Group (Genus in Family) on Optic nerve swelling in Kangcheng Liu 2022



Outcome study	Exposure study	OR	95%−CI	Weight
FinnGen Release 7 (2022)	Kurilshikov 2021	1.148	[0.670; 1.966]	90.7%
Jiang 2021	Kurilshikov 2021	0.535	[0.100; 2.864]	9.3%
Random effects model		**1.069**	**[0.640; 1.784]**	**100.0%**

Heterogeneity: I^2 = 0%, τ^2 = 0, p = 0.40