Title of the manuscript:

Outcomes and Efficacy of Neuroendoscopic Resection of Intraventricular Tumors: A Systematic Review and Meta-Analysis

Journal: Neurosurgical Reviews

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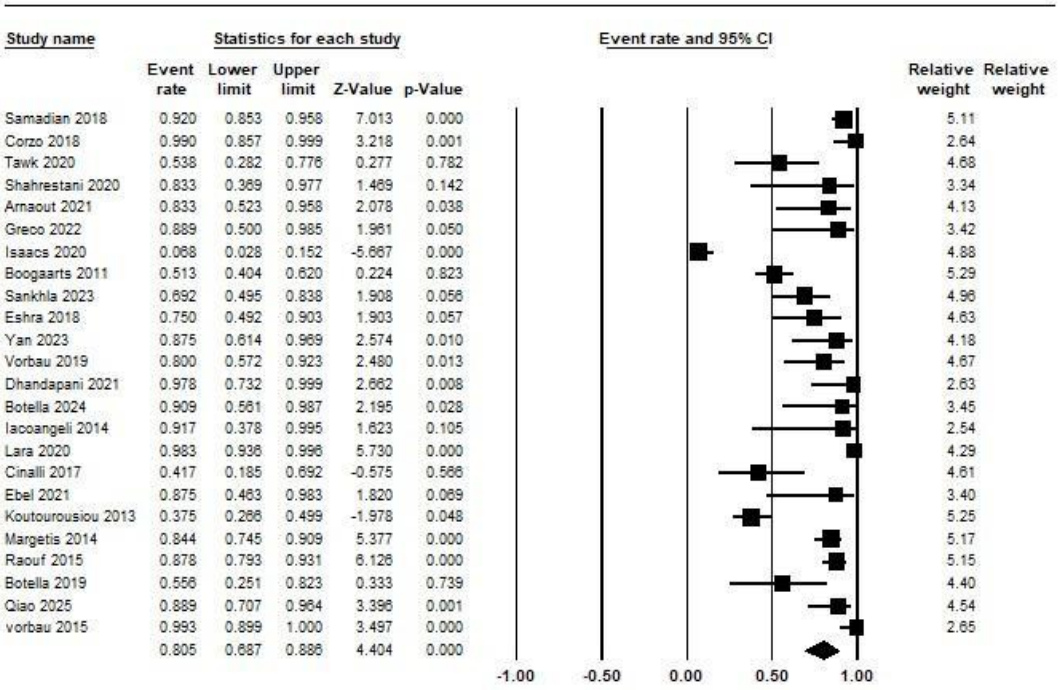
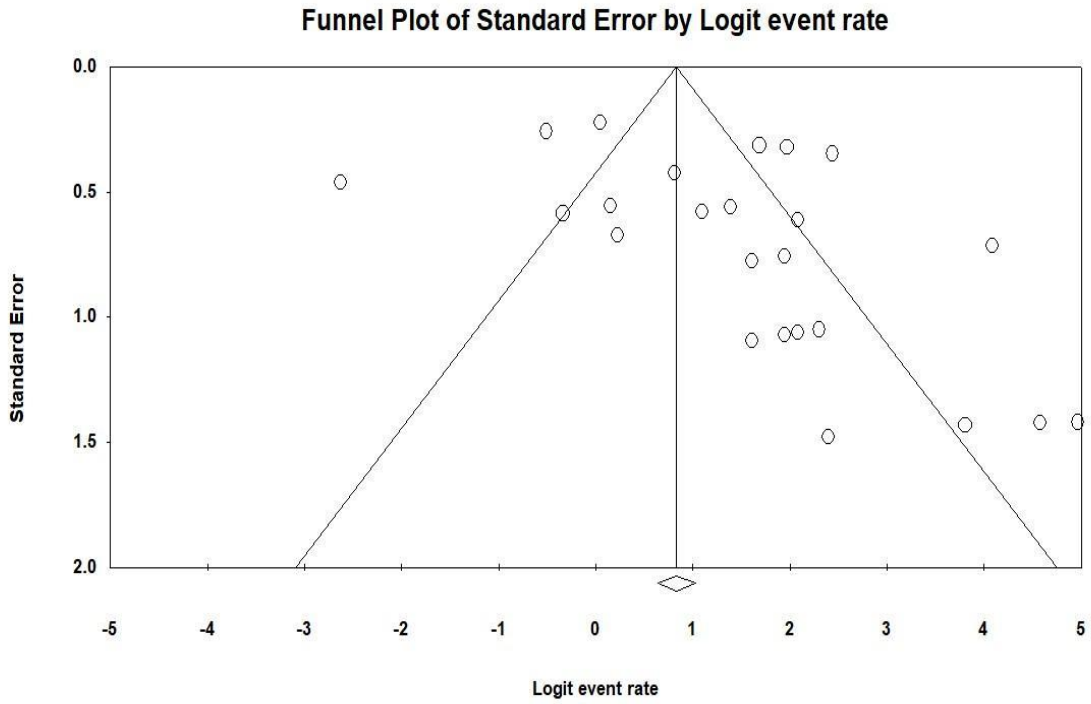
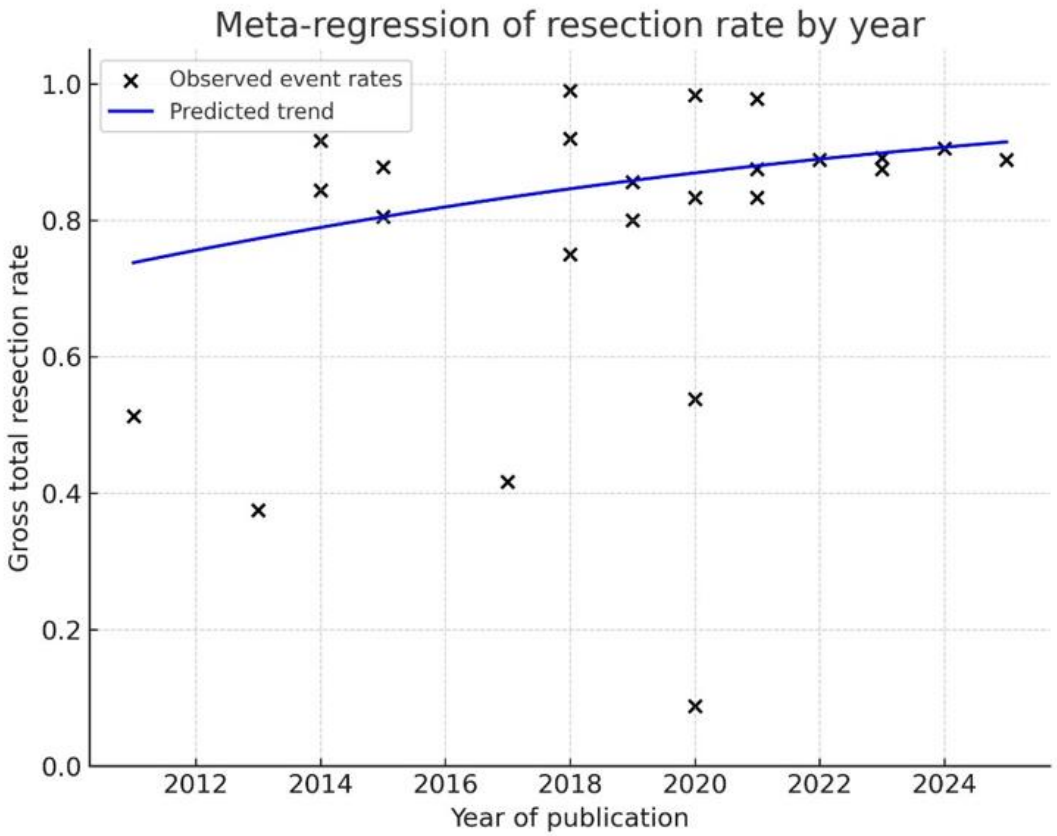
Supplementary Figure 1:Joanna Briggs Institute (JBI) Critical



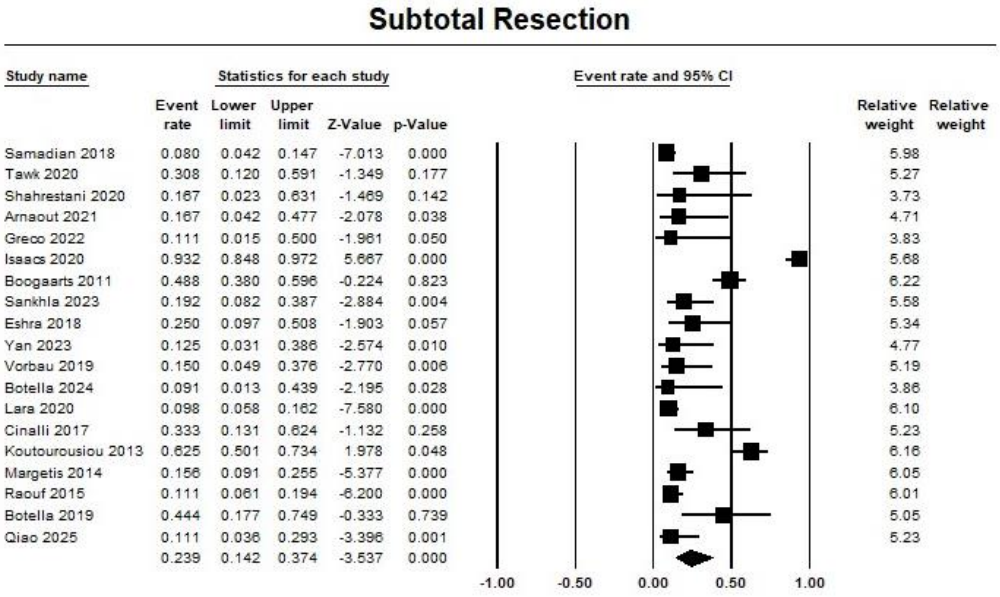
Supplementary Figure 2: Sensitivity analysis of Gross total resection



Supplementary Figure 3: Funnel plot of Gross total resection



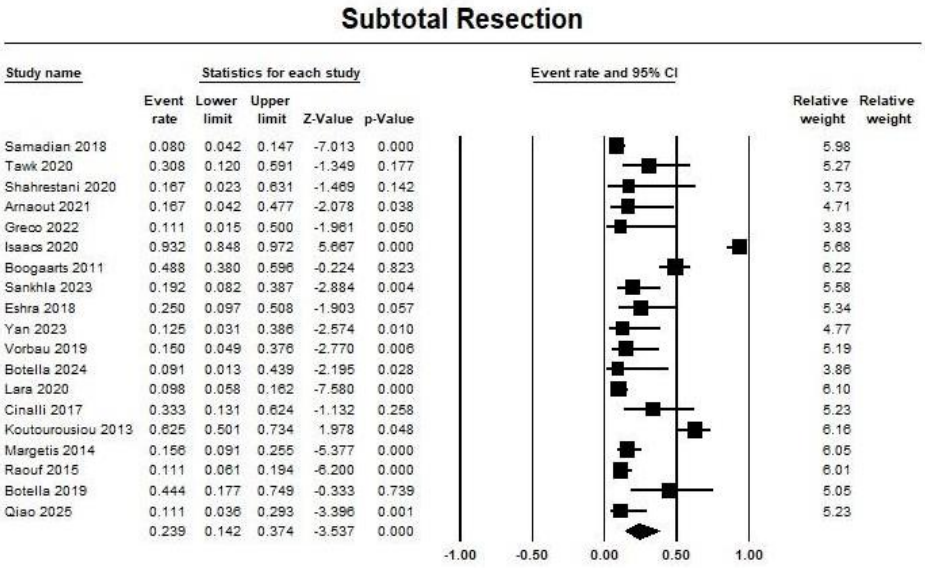
Supplementary Figure 4:Meta-regression analysis of Gross total resection



Supplementary Figure 5: Forest plot of Subtotal resection

Model		Effect size and 95% interval			Test of null (2-Tail)		Heterogeneity				Tau-squared			
Model	Number Studies	Point estimate	Lower limit	Upper limit	Z-value	P-value	Q-value	df (Q)	P-value	I-squared	Tau Squared	Standard Error	Variance	Tau
Fixed	19	0.282	0.245	0.322	-9.566	0.000	174.684	18	0.000	89.696	1.665	0.804	0.647	1.290
Random	19	0.239	0.142	0.374	-3.537	0.000								

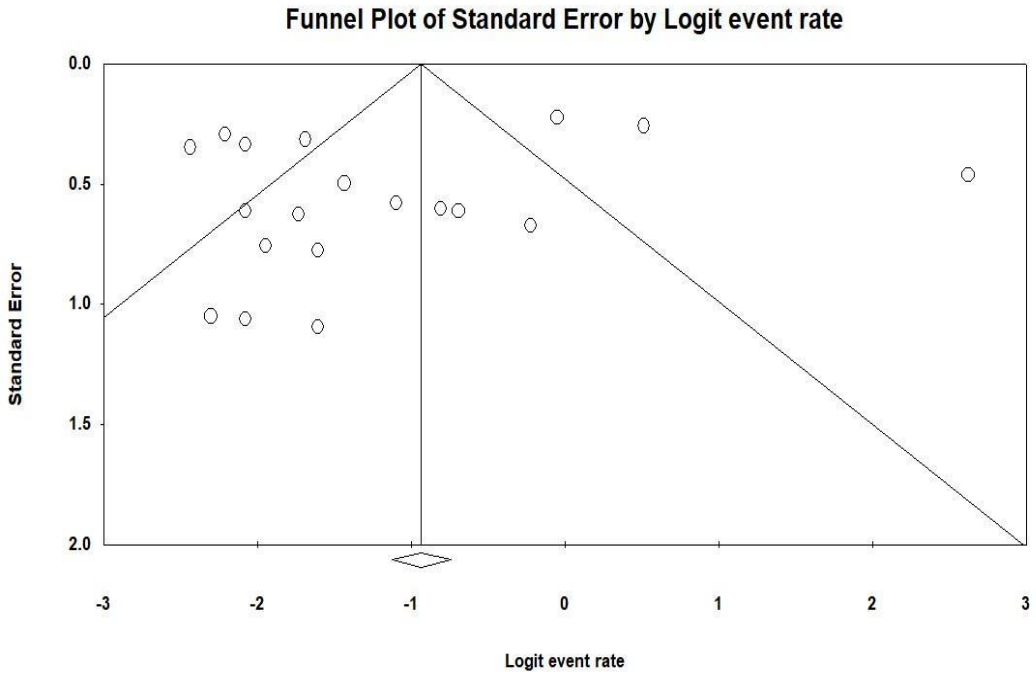
Supplementary Figure 6: Heterogeneity statistics of Subtotal resection



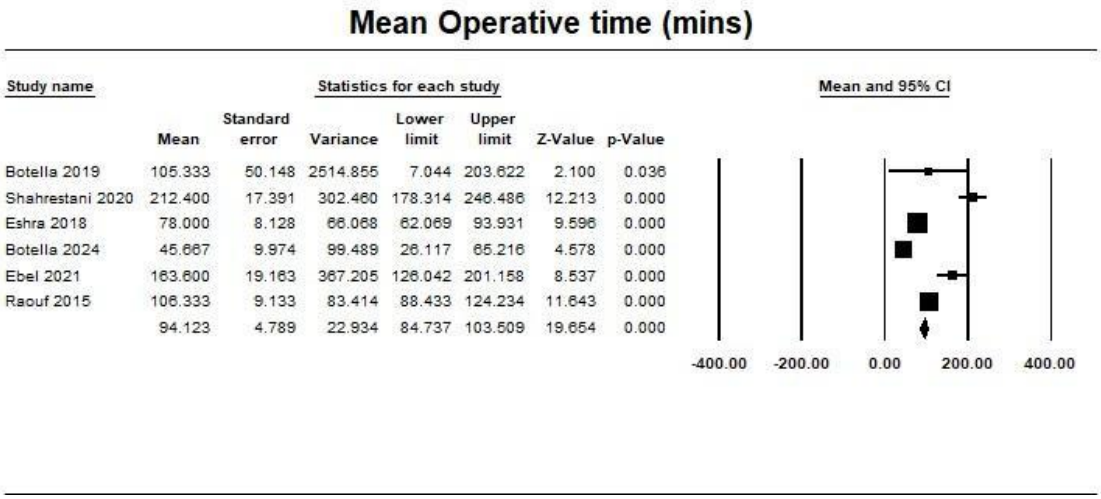
Supplementary Figure 7:Sensitivity analysis of Subtotal resection

Model		Effect size and 95% interval			Test of null (2-Tail)		Heterogeneity				Tau-squared			
Model	Number Studies	Point estimate	Lower limit	Upper limit	Z-value	P-value	Q-value	df (Q)	P-value	I-squared	Tau Squared	Standard Error	Variance	Tau
Fixed	18	0.250	0.215	0.288	-11.010	0.000	112.848	17	0.000	84.935	1.075	0.557	0.310	1.037
Random	18	0.203	0.128	0.306	-4.863	0.000								

Supplementary Figure 8: Heterogeneity statistics of the Sensitivity analysis of Subtotal resection



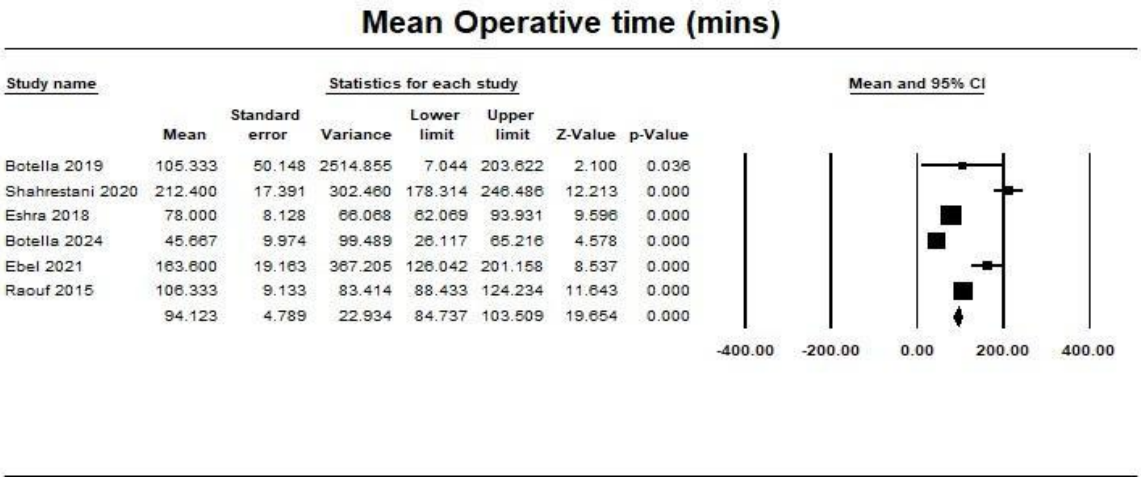
Supplementary Figure 9*:* Funnel plot of Subtotal resection



Supplementary Figure 10: Forest plot of mean operative time

Model		Effect size and 95% confidence interval					Test of null (2-Tail)		Heterogeneity				Tau-squared			
Model	Number Studies	Point estimate	Standard error	Variance	Lower limit	Upper limit	Z-value	P-value	Q-value	df (Q)	P-value	I-squared	Tau Squared	Standard Error	Variance	Tau
Fixed	6	94.123	4.789	22.934	84.737	103.509	19.654	0.000	88.770	5	0.000	94.367	2592.619	2147.889	4613428.46	50.918
Random	6	117.630	22.359	499.917	73.808	161.453	5.261	0.000								

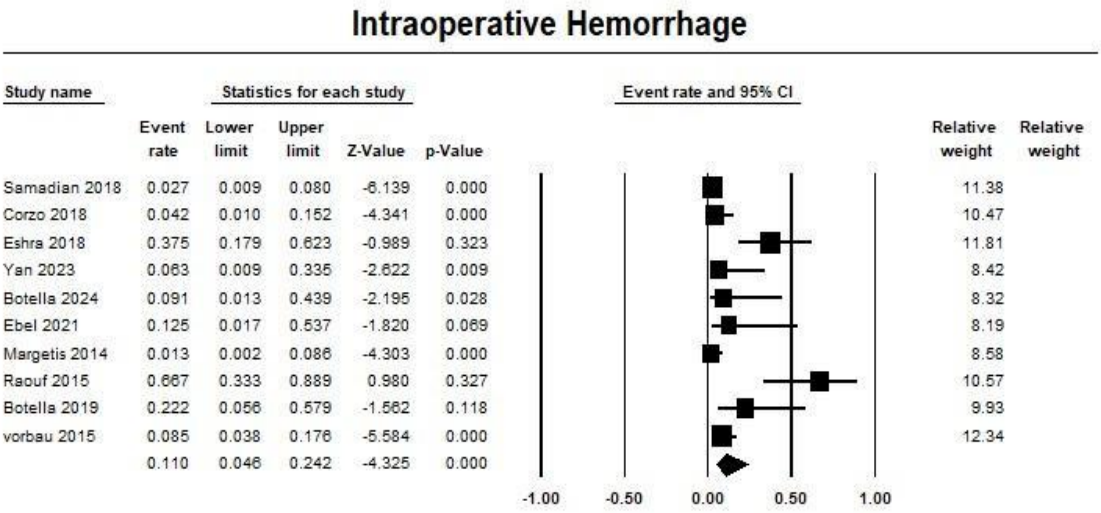
Supplementary Figure 11:Heterogeneity statistics of mean operative time



Supplementary Figure 12: Sensitivity analysis of mean operative time

Model	Effect size and 95% confidence interval					Test of null (2-Tail)		Heterogeneity				Tau-squared			
Model	Number Studies	Point estimate	Standard error	Variance	Lower limit	Upper limit	Z-value	P-value	Q-value	df (Q)	P-value	I-squared	Tau Squared	Standard Error	Variance	Tau
Fixed	5	84.419	4.982	24.816	74.655	94.183	16.946	0.000	38.723	4	0.000	89.670	1224.825	1165.852	1359210.87	34.998
Random	5	96.284	17.706	313.511	61.580	130.987	5.438	0.000								

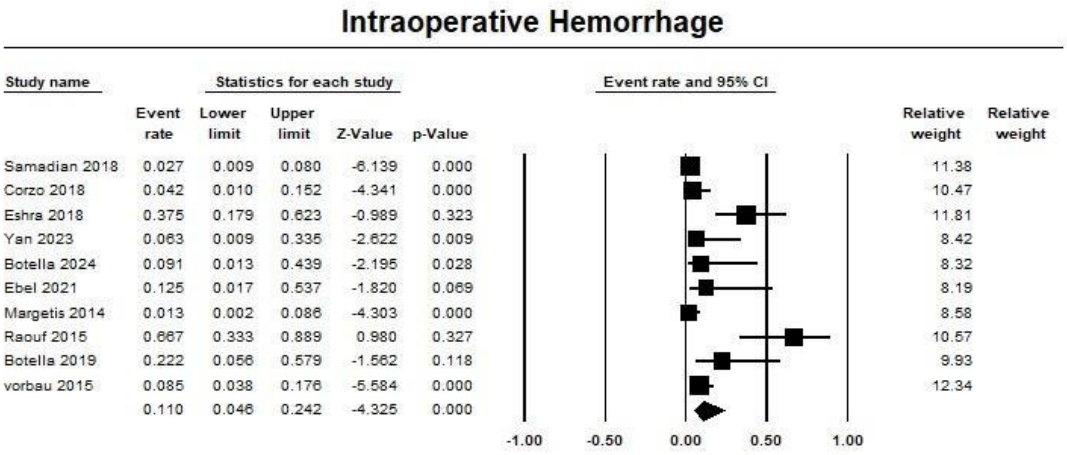
Supplementary Figure 13:Heterogeneity statistics of the Sensitivity analysis of mean operative time



Supplementary Figure 14: Forest plot of Intraoperative time

Model		Effect size and 95% interval			Test of null (2-Tail)		Heterogeneity				Tau-squared			
Model	Number Studies	Point estimate	Lower limit	Upper limit	Z-value	P-value	Q-value	df (Q)	P-value	I-squared	Tau Squared	Standard Error	Variance	Tau
Fixed	10	0.086	0.060	0.123	-11.781	0.000	24.858	9	0.003	63.795	0.748	0.603	0.364	0.865
Random	10	0.081	0.042	0.152	-6.753	0.000								

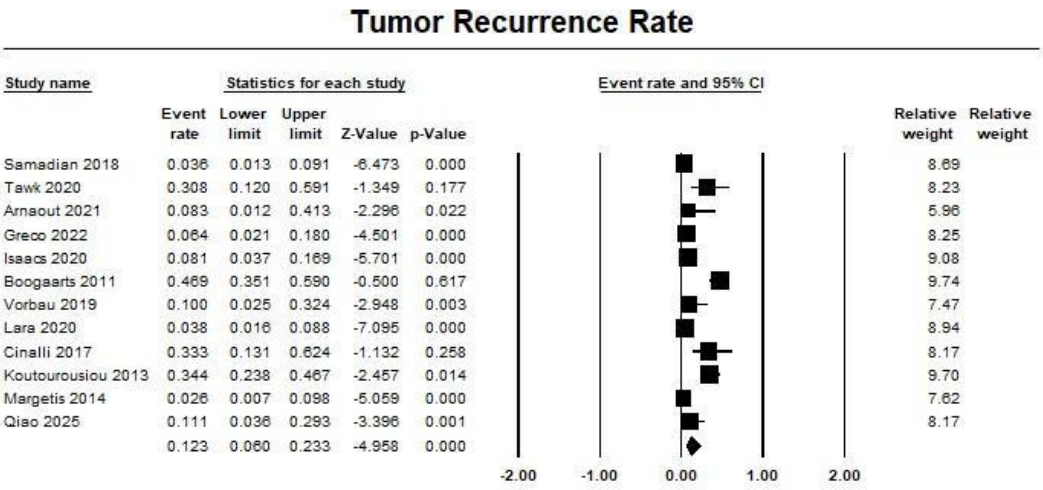
Supplementary Figure 15:Heterogeneity statistics of Intraoperative time



Supplementary Figure 16: Sensitivity analysis of Intraoperative time

Model		Effect size and 95% interval			Test of null (2-Tail)		Heterogeneity				Tau-squared			
Model	Number Studies	Point estimate	Lower limit	Upper limit	Z-value	P-value	Q-value	df (Q)	P-value	I-squared	Tau Squared	Standard Error	Variance	Tau
Fixed	9	0.064	0.043	0.094	-12.365	0.000	9.784	8	0.280	18.237	0.102	0.283	0.080	0.320
Random	9	0.063	0.039	0.100	-10.674	0.000								

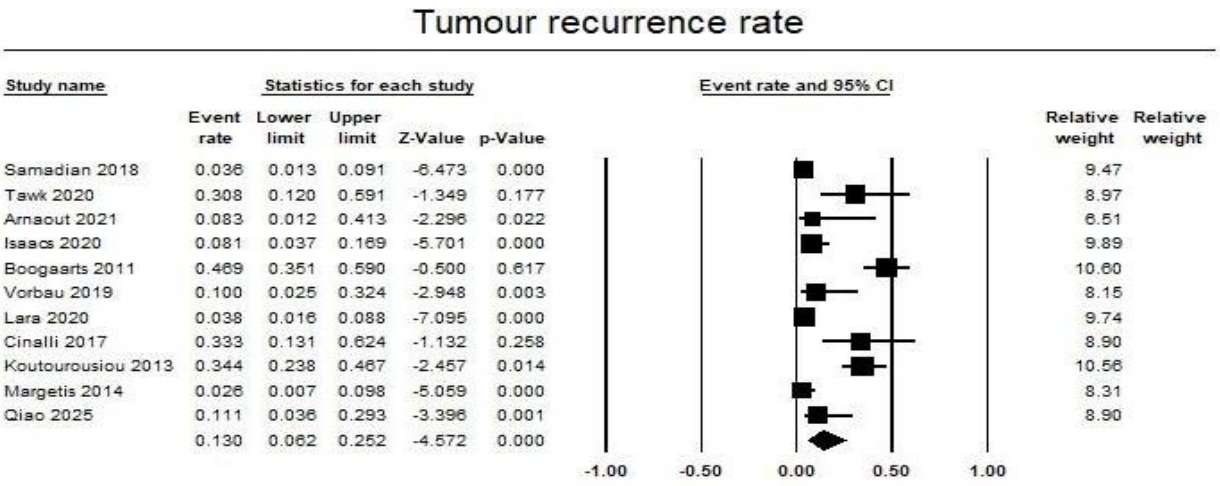
Supplementary Figure 17:Heterogeneity statistics of the Sensitivity analysis of intraoperative time



Supplementary Figure 18: Forest plot of Tumour recurrence rate

Model		Effect size and 95% interval			Test of null (2-Tail)		Heterogeneity				Tau-squared			
Model	Number Studies	Point estimate	Lower limit	Upper limit	Z-value	P-value	Q-value	df (Q)	P-value	I-squared	Tau Squared	Standard Error	Variance	Tau
Fixed	12	0.200	0.163	0.243	-10.753	0.000	89.828	11	0.000	87.754	1.555	0.950	0.902	1.247
Random	12	0.123	0.060	0.233	-4.958	0.000								

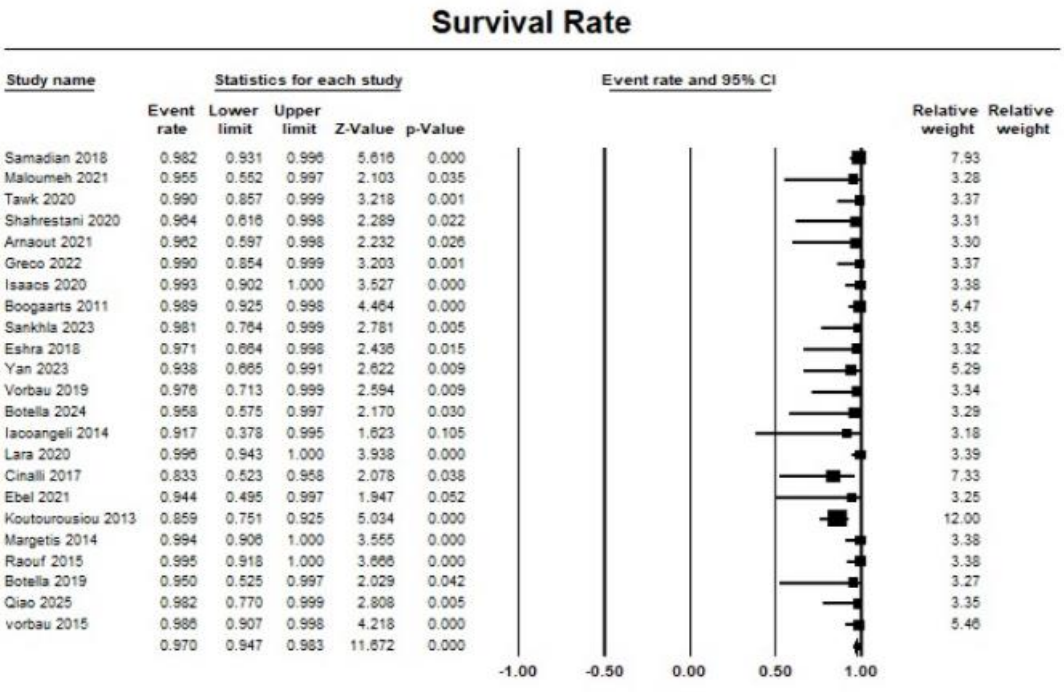
Supplementary Figure 19: Heterogeneity statistics of Tumour recurrence rate



Supplementary Figure 20: Sensitivity analysis of Tumour recurrence rate

Model		Effect size and 95% interval			Test of null (2-Tail)		Heterogeneity				Tau-squared			
Model	Number Studies	Point estimate	Lower limit	Upper limit	Z-value	P-value	Q-value	df (Q)	P-value	I-squared	Tau Squared	Standard Error	Variance	Tau
Fixed	11	0.137	0.106	0.176	-12.243	0.000	55.317	10	0.000	81.922	1.222	0.776	0.602	1.106
Random	11	0.103	0.052	0.195	-5.701	0.000								

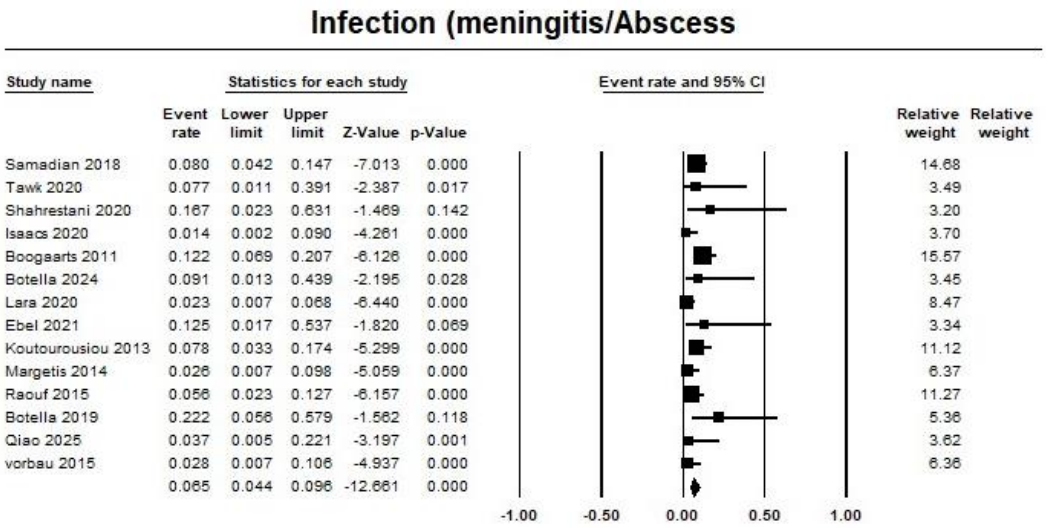
Supplementary Figure 21:Heterogeneity statistics of the Sensitivity analysis of Tumour recurrence rate



Supplementary Figure *22:* Forest plot of survival rate

Model		Effect size and 95% interval			Test of null (2-Tail)		Heterogeneity				Tau-squared			
Model	Number Studies	Point estimate	Lower limit	Upper limit	Z-value	P-value	Q-value	df (Q)	P-value	I-squared	Tau Squared	Standard Error	Variance	Tau
Fixed	23	0.953	0.931	0.969	14.313	0.000	33.763	22	0.052	34.840	0.610	0.572	0.328	0.781
Random	23	0.970	0.947	0.983	11.672	0.000								

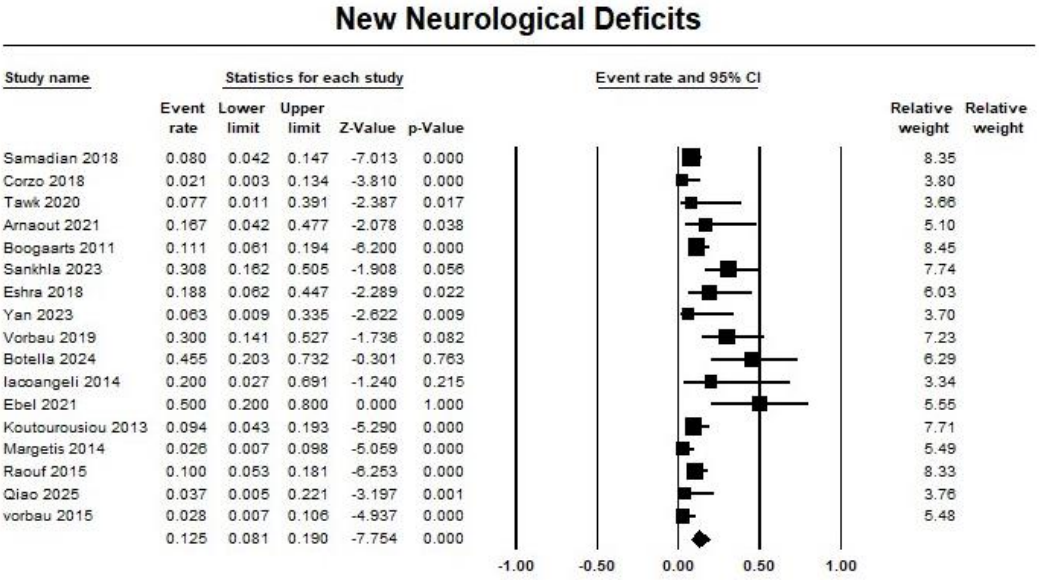
Supplementary Figure 23:Heterogeneity statistics of survival rate



Supplementary Figure *24:* Forest plot of post-surgery infection

Model		Effect size and 95% interval			Test of null (2-Tail)		Heterogeneity				Tau-squared			
Model	Number Studies	Point estimate	Lower limit	Upper limit	Z-value	P-value	Q-value	df (Q)	P-value	I-squared	Tau Squared	Standard Error	Variance	Tau
Fixed	14	0.071	0.053	0.094	-16.479	0.000	19.393	13	0.111	32.965	0.180	0.223	0.050	0.424
Random	14	0.065	0.044	0.096	-12.661	0.000								

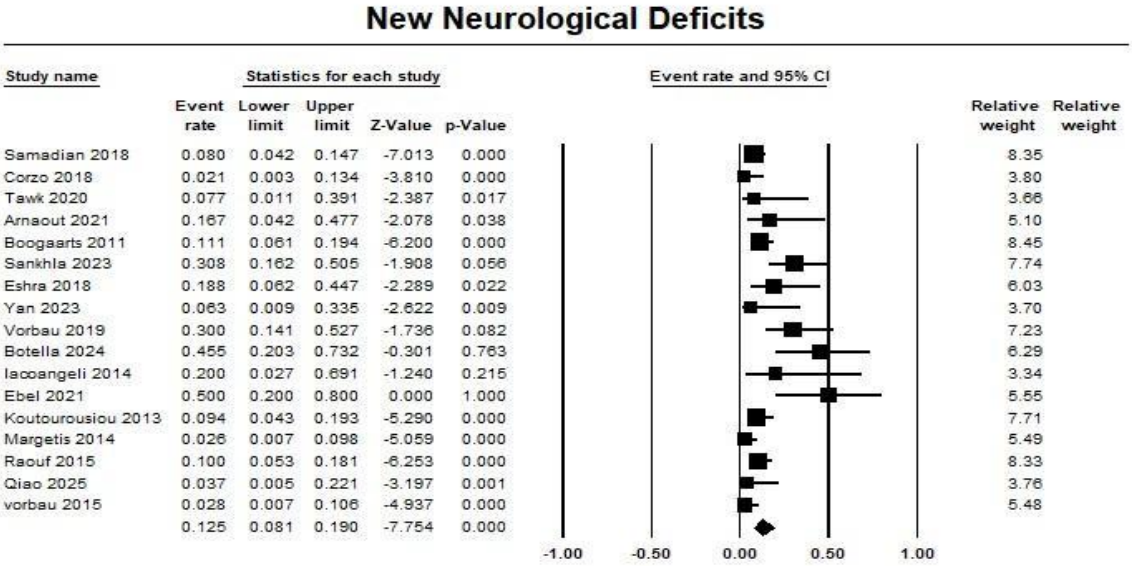
Supplementary Figure 25:Heterogeneity statistics of post-surgery infection



Supplementary Figure *26:* Forest plot of New Neurologic deficits

Model		Effect size and 95% interval			Test of null (2-Tail)		Heterogeneity				Tau-squared			
Model	Number Studies	Point estimate	Lower limit	Upper limit	Z-value	P-value	Q-value	df (Q)	P-value	I-squared	Tau Squared	Standard Error	Variance	Tau
Fixed	17	0.129	0.103	0.161	-14.524	0.000	48.879	16	0.000	67.266	0.630	0.375	0.140	0.794
Random	17	0.125	0.081	0.190	-7.754	0.000								

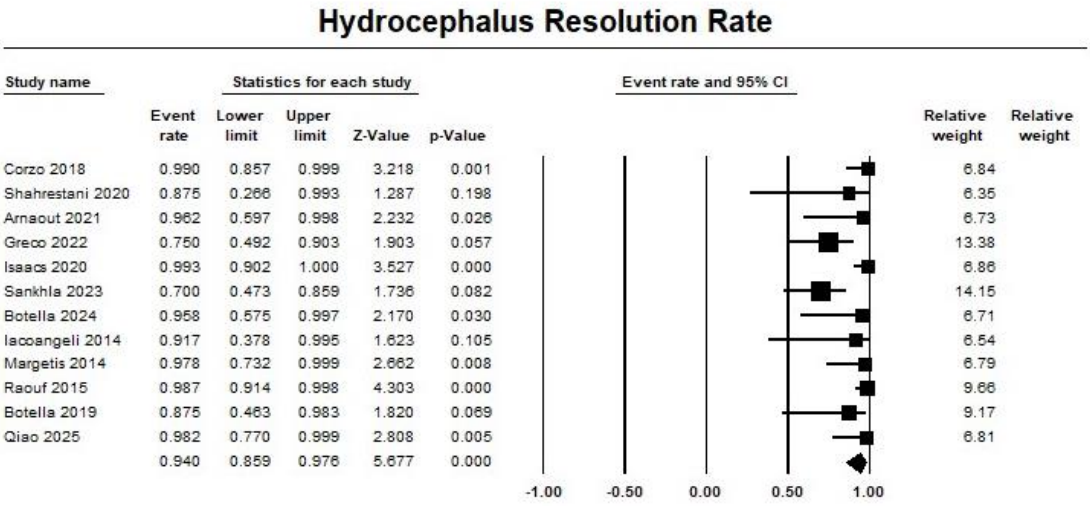
Supplementary Figure 27:Heterogeneity statistics of New Neurologic deficits



Supplementary Figure 28*:* Sensitivity analysis of New Neurologic Deficits

Model		Effect size and 95% interval			Test of null (2-Tail)		Heterogeneity				Tau-squared			
Model	Number Studies	Point estimate	Lower limit	Upper limit	Z-value	P-value	Q-value	df (Q)	P-value	I-squared	Tau Squared	Standard Error	Variance	Tau
Fixed	16	0.120	0.094	0.150	-14.812	0.000	40.327	15	0.000	62.804	0.514	0.334	0.112	0.717
Random	16	0.114	0.074	0.171	-8.451	0.000								

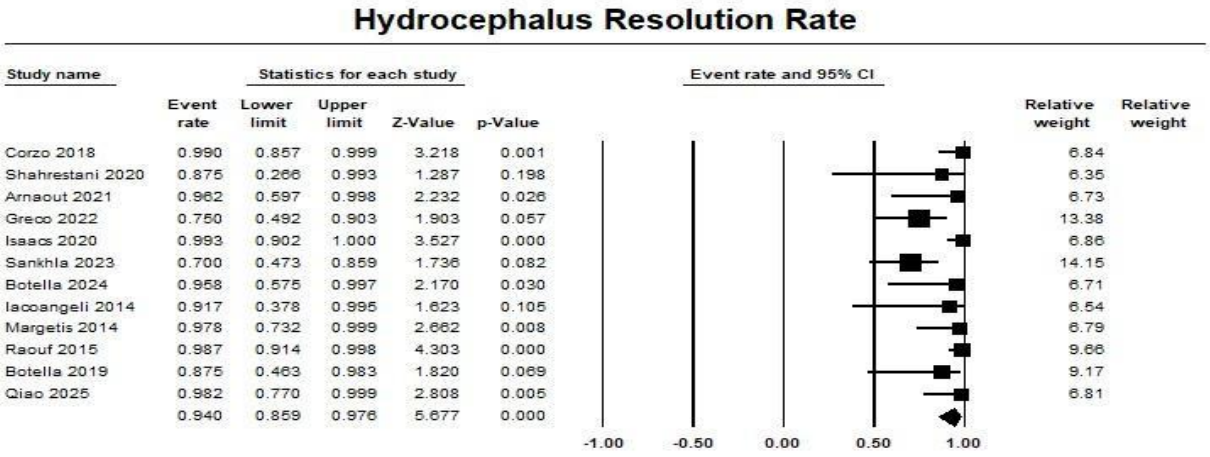
Supplementary Figure 29:Heterogeneity statistics of *the* Sensitivity analysis of New Neurologic deficits



Supplementary Figure *30:* Forest plot of resolution of hydrocephalus

Model	Number Studies	Point estimate	Lower limit	Upper limit	Z-value	P-value	Q-value	df (Q)	P-value	I-squared	Tau Squared	Standard Error	Variance	Tau
Fixed	12	0.886	0.818	0.931	7.356	0.000	26.095	11	0.006	57.847	1.431	1.210	1.464	1.196
Random	12	0.940	0.859	0.976	5.677	0.000								

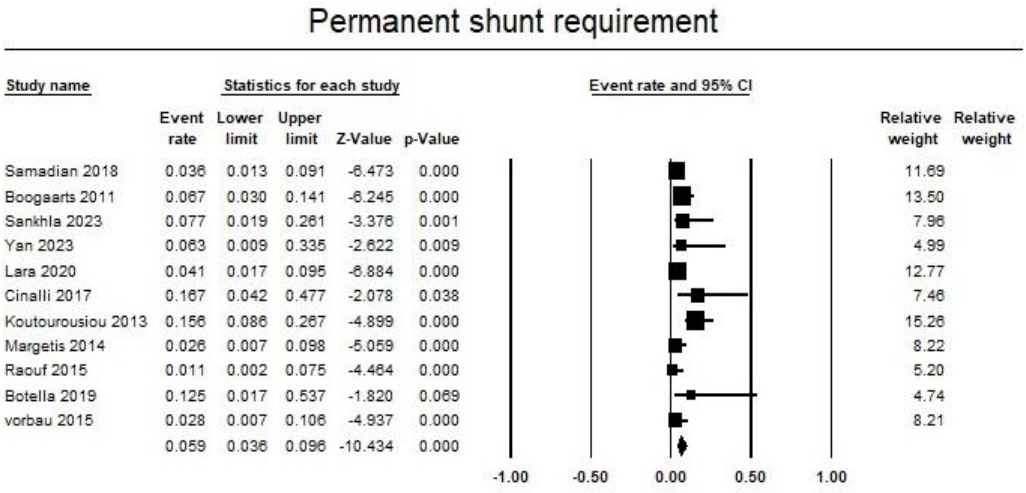
Supplementary Figure *31:*Heterogeneity statistics resolution of hydrocephalus



Supplementary Figure *32:* sensitivity analysis of the resolution of hydrocephalus

Model		Effect size and 95% interval			Test of null (2-Tail)		Heterogeneity				Tau-squared			
Model	Number Studies	Point estimate	Lower limit	Upper limit	Z-value	P-value	Q-value	df (Q)	P-value	I-squared	Tau Squared	Standard Error	Variance	Tau
Fixed	11	0.933	0.877	0.964	7.752	0.000	17.098	10	0.072	41.513	0.980	1.100	1.211	0.990
Random	11	0.954	0.890	0.981	6.307	0.000								

Supplementary Figure *33:* Heterogeneity statistics sensitivity analysis of the resolution of hydrocephalus



Supplementary Figure *34:* Forest plot of permanent shunt requirement

Model		Effect size and 95% interval			Test of null (2-Tail)		Heterogeneity				Tau-squared			
Model	Number Studies	Point estimate	Lower limit	Upper limit	Z-value	P-value	Q-value	df (Q)	P-value	I-squared	Tau Squared	Standard Error	Variance	Tau
Fixed	11	0.067	0.048	0.092	-15.114	0.000	19.634	10	0.033	49.069	0.343	0.331	0.110	0.585
Random	11	0.059	0.036	0.096	-10.434	0.000								

Supplementary Figure *35:*Heterogeneity statistics of permanent shunt requirement