Example name SKIV

Effect sizeOdds ratioAnalysis typeBasic analysis, Cumulative analysisLevelBasic

Synopsis

This analysis includes 33 studies where patients who had suffered an MI were randomized to be treated with either streptokinase or placebo. Outcome was death, and we focused on the odds ratio as the effect size.

We use this example to show

- How to enter data from 2x2 tables
- How to get a sense of the weight assigned to each study
- How the study weights are affected by the model
- How to perform a cumulative analysis

To open a CMA file > Download and Save file | Start CMA | Open file from within CMA

Download CMA file for computers that use a period to indicate decimals Download CMA file for computers that use a comma to indicate decimals

Download this PDF Download data in Excel Download trial of CMA

Start the program

- Select the option [Start a blank spreadsheet]
- Click [Ok]

👬 Comprehensive meta analysis - [Data]	
<u>File Edit</u> Format <u>View</u> Insert Identify <u>T</u> ools Computational options Anal	lyses <u>H</u> elp
Run analyses → 🗞 🗅 😅 🚟 🔲 🎒 👗 🗈 🛍 🧖 トート_ ト= ;	않 않 씀 ▾ ↓ → + ✔ □ 회 진 ①
A B C D E F	G H I J K L M N O P Q
	🔁 Welcome
2	
3	
4	What would you like to do?
7	
8	C Run the hitorial
9	 Start a blank spreadsheet
10	
11	
12	C Open an existing file
13	C Import data from another program
14	
15	
17	
18	
19	
20	
21	
22	
23	
24	
25	
2b	
20	
29	Show this dialog when I start the program
30	Class
31	
32	
33	
34	
35	

Click Insert > Column for > Study names

👬 Comprehensive meta analysis -	- [Data]								
<u>File Edit Format View</u> Insert	Identify <u>T</u> ools Computat	tional options Analyses <u>H</u> elp							
Run analyses 🔸 🏷 🗋 🎹 😋	olumn for 🔶 🕨	Study names	- 4	$\rightarrow + \checkmark$	´ □ ≜ ↓	∡ ↓ 🔍			
A B B	ank column	Subgroups within study が Comparison names	Н	I	J	к	L	м	N
1 → Bla 2 → Bla 3 >= Bla 4 ■ Co 5 6 >≡ 7 8 9 9	ank row ank rows opy of selected row(s) udy	Outcome names Time point names Effect size data Moderator variable							

The screen should look like this

👬 Co	mprehensive met	a analysis - [[Data]											
<u>F</u> ile	<u>File Edit</u> Format <u>View Insert</u> Identify <u>T</u> ools Computational options Analyses <u>H</u> elp													
Run a	analyses 🔸 🗞 [🗅 🚅 🚟 I		% 🖻 🛍	∕⊒))	= *≣ #3	3 1:08 🛗 👻	$\downarrow \rightarrow -$	⊢ ✓ 🗆	≜i zi∣ 🤅)			
	Study name	в	С	D	E	F	G	н	I	J	к	L	м	N
2														
3														
4														
6														
8														
9														

Click Insert > Column for > Effect size data

🕂 Comprehensive meta	analysis - [Data]									
<u>F</u> ile <u>E</u> dit Format <u>V</u> iev	<u> Insert</u> Identify <u>Tools</u> Comput Comput Section: Section: Section: Identify Tools Comput Section: Section:	tational options Analyses <u>H</u> elp								
Run analyses 🔸 🗞 🗋	Column for	Study names	$\neg \downarrow \rightarrow \neg$	+ 🗸 🖂 :	\$† <u>Z</u> † 🧐)				
Study name	Blank column	Subgroups within study Comparison names	н	I	J	к	L	м	N	
1 2 3	Blank row Blank row	Outcome names Time point names								
4 5 6	Copy of selected row(s)	Effect size data Moderator variable								
7										

The program displays this wizard

Select [Show all 100 formats] Click [Next]



Select [Comparison of two groups...] Click [Next]

Drill down to

Dichotomous (number of events) Unmatched groups, prospective ... Events and sample size in each group



C Estimate of means, proportions or rates in one group at one time-point

Generic point estimates
 Generic point estimates, log scale

Rates (events by person years)

The program displays this wizard

Enter the following labels into the wizard

- First group > SKIV
- Second group > Placebo
- Name for events > Dead
- Name for non-events > Alive

Click [Ok] and the program will copy the names into the grid

† Con	nprehensive met	a analysis	- [Data]												
<u>F</u> ile <u>E</u>	dit Format <u>V</u> ie	w <u>I</u> nsert	t Identify	<u>T</u> ools Co	mputationa	l options Ar	nalyses <u>H</u>	<u>H</u> elp							
Run an	ialyses → 🏷 [ጋ 😅 🖣	1 🖬 🍯	8 🖻	🛍 ⁄ 🕄	'-'=' ' ≣	.00 +.0 +.0 .00	∺ • ↓ -	> + √ 🛛		Q				
	Study name	SKIV Dead	SKIV Total N	Placebo Dead	Placebo Total N	Odds ratio	Log odd ratio	s Std Err	Variance	J	к	L	м	N	0
1															
2															
3															
4															
6															
7															
8							1	_							
9								🔄, Group na	mes			_		x	
10															
11								Group na	ames for coh	ort or pros	pective stu	dies			
12								Name for I	int many farm	Trankadi		SKD/			
13								Name for I	irst group (e.g.,	, i reatedj					
14								Name for :	econd group (e.g., Control)		Placeb	0		
15															
16											_				
17								Binary o	utcome in co	phort or pro	spective sl	udies			
18								Name for a	vents (e.a. Di	eadì		Dead			
19							_								
20							-	Name for i	non-events (e.g	g., Alive)		Alive			
21															
22											[o. 1		
23										Cancel	Ap	Ply	UK		
25										_					
26											-	_	_		
27															
28															

Rather than enter the data directly into CMA we will copy the data from Excel

- Switch to Excel and open the file "SKIV"
- Highlight columns (A to E) rows (1 to 34) and press CTRL-C to copy to clipboard

X∎ F	ILE HOME	c∛ ∵ ∓ E INSERT	PAGE LAYOU	JT FORMU	LAS DATA	REVIEW	VIEW	S ACROBAT	KIV.xlsx - Exe	cel	
A	L *	: × ,	<i>f</i> _{s⊄} St	udy							
	Α	В	С	D	E	F	G	н	I	J	K
1	Study	SKIV-Dead	SKIV-Total	CTRL-Dead	CTRL-Total	Year					
2	Fletcher	1	12	4	11	1959					
3	Dewar	4	21	7	21	1963					
4	European 1	20	83	15	84	1969					
5	European 2	69	373	94	357	1971					
6	Heikinheimo	22	219	17	207	1971					
7	Italian	19	164	18	157	1971					
8	Australian 1	26	264	32	253	1973					
9	Franfurt 2	13	102	29	104	1973					
10	NHLBI SMIT	7	53	3	54	1974					
11	Frank	6	55	6	53	1975					
12	Valere	11	49	9	42	1975					
13	Klein	4	14	1	9	1976					
14	UK-Collab	38	302	40	293	1976					
15	Austrian	37	352	65	376	1977					
16	Australian 2	25	123	31	107	1977					
17	Lasierra	1	13	3	11	1977					
18	N Ger Collab	63	249	51	234	1977					
19	Witchitz	5	32	5	26	1977					
20	European 3	18	156	30	159	1979					
21	ISAM	54	859	63	882	1986					
22	GISSI-1	628	5860	758	5852	1986					
23	Olson	1	28	2	24	1986					
24	Baroffio	0	29	6	30	1986					

Switch back to CMA

• Click in Cell Study name – 1

Click here

🕂 Comprehensi	ve meta analysis -	[Data]
---------------	--------------------	--------

|--|

Run analyses 🔸 📎	D 🚅 🤊	í 🛛 🏼	× 🖻	r 🔁	_ ` =*≣	.00 *.0 * +	- V -	> + √ [
Study name	SKIV Dead	SKIV Total N	Placebo Dead	Placebo Total N	Odds ratio	Log odds ratio	Std Err	Variance	J	к	L	м
1 Study	SKIV-De	SKIV-Total	CTRL-Dea	CTRL-Total								
2 Fletcher	1	12	4	11	0.159	-1.838	1.218	1.484				
3 Dewar	4	21	7	21	0.471	-0.754	0.723	0.523				
4 European 1	20	83	15	84	1.460	0.379	0.383	0.147				
5 European 2	69	373	94	357	0.635	-0.454	0.180	0.032				
6 Heikinheimo	22	219	17	207	1.248	0.222	0.339	0.115				
7 Italian	19	164	18	157	1.012	0.012	0.350	0.122				
8 Australian 1	26	264	32	253	0.754	-0.282	0.280	0.078				
9 Franfurt 2	13	102	29	104	0.378	-0.973	0.369	0.136				
10 NHLBI SMIT	7	53	3	54	2.587	0.950	0.719	0.518				
11 Frank	6	55	6	53	0.959	-0.042	0.612	0.375				
12 Valere	11	49	9	42	1.061	0.060	0.509	0.259				
13 Klein	4	14	1	9	3.200	1.163	1.214	1.475				
14 UK-Collab	38	302	40	293	0.910	-0.094	0.243	0.059				
15 Austrian	37	352	65	376	0.562	-0.576	0.221	0.049				
16 Australian 2	25	123	31	107	0.625	-0.469	0.309	0.096				
17 Lasierra	1	13	3	11	0.222	-1.504	1.242	1.542				
18 N Ger Collab	63	249	51	234	1.215	0.195	0.215	0.046				
19 Witchitz	5	32	5	26	0.778	-0.251	0.696	0.485				
20 European 3	18	156	30	159	0.561	-0.578	0.322	0.104				
21 ISAM	54	859	63	882	0.872	-0.137	0.192	0.037				
22 GISSI-1	628	5860	758	5852	0.807	-0.215	0.057	0.003				
23 Olson	1	28	2	24	0.407	-0.898	1.258	1.582				
24 Baroffio	0	29	6	30	0.064	-2.751	1.493	2.229				
25 Schreiber	1	19	3	19	0.296	-1.216	1.205	1.451				
26 Cribier	1	21	1	23	1.100	0.095	1.448	2.095				
27 Sainsous	3	49	6	49	0.467	-0.761	0.738	0.545				
28 Durand	3	35	4	29	0.586	-0.535	0.809	0.655				
29 White	2	107	12	112	0.159	-1.841	0.776	0.603				
30 Bassand	4	52	7	55	0.571	-0.560	0.659	0.435				
31 Vlay	1	13	2	12	0.417	-0.875	1.297	1.683				
32 Kennedy	12	191	17	177	0.631	-0.461	0.392	0.154				
33 ISIS-2	791	8592	1029	8595	0.746	-0.294	0.050	0.002				
34 Wisenberg	2	41	5	25	0.205	-1.584	0.881	0.776				

- Press [CTRL-V] to paste the data into CMA
- Stretch the columns as needed for the text to be fully visible

In Excel, copy column F to the clipboard

x	1 🔒 🕤 🔹	¢							SKIV.xlsx - Excel
F	ILE HOME	INSERT	PAGE LAYOU	T FORMUL	AS DATA	REVIEW	VIEW	ACROBAT	
F1	<u>۳</u>	\pm \times \sim	<i>f</i> ∞ Y∈	ar					
	Α	В	С	D	E	F	G	н	I
1	Study	SKIV-Dead	SKIV-Total	CTRL-Dead	CTRL-Total	Year			
2	Fletcher	1	12	4	11	1959			
3	Dewar	4	21	7	21	1963			
4	European 1	20	83	15	84	1969			
5	European 2	69	373	94	357	1971			
6	Heikinheimo	22	219	17	207	1971			
7	Italian	19	164	18	157	1971			
8	Australian 1	26	264	32	253	1973			
9	Franfurt 2	13	102	29	104	1973			
10	NHLBI SMIT	7	53	3	54	1974			
11	Frank	6	55	6	53	1975			
12	Valere	11	49	9	42	1975			
13	Klein	4	14	1	9	1976			
14	UK-Collab	38	302	40	293	1976			
15	Austrian	37	352	65	376	1977			
16	Australian 2	25	123	31	107	1977			
17	Lasierra	1	13	3	11	1977			
18	N Ger Collab	63	249	51	234	1977			
19	Witchitz	5	32	5	26	1977			
20	European 3	18	156	30	159	1979			
21	ISAM	54	859	63	882	1986			
22	GISSI-1	628	5860	758	5852	1986			
23	Olson	1	28	2	24	1986			
24	Baroffio	0	29	6	30	1986			
25	Schreiber	1	19	3	19	1986			
26	Cribier	1	21	1	23	1986			

In CMA, click and paste into column J

E Co	omprehensive me	ta analysis	- [Data]							-		
<u>F</u> ile	<u>E</u> dit Format <u>V</u> i	ew <u>I</u> nsert	Identify	Tools Cor	nputational	options Ar	nalyses <u>H</u> el	р				
Run	analyses 🔸 🗞	🗅 🚅 🖣	i 🖬 😂	X 🗈	e 🕫 •	- *= *≣	.00 +.0 +. +.0 .00 F		> + √ [Q	
	Study name	SKIV Dead	SKIV Total N	Placebo Dead	Placebo Total N	Odds ratio	Log odds ratio	Std Err	Variance	J	К	
1	Study	SKIV-De	SKIV-Total	CTRL-Dea	CTRL-Total					Year		
2	Fletcher	1	12	4	11	0.159	-1.838	1.218	1.484	1959.000		
3	Dewar	4	21	7	21	0.471	-0.754	0.723	0.523	1963.000		
- 4	European 1	20	83	15	84	1.460	0.379	0.383	0.147	1969.000		
5	European 2	69	373	94	357	0.635	-0.454	0.180	0.032	1971.000		
6	Heikinheimo	22	219	17	207	1.248	0.222	0.339	0.115	1971.000		
- 7	Italian	19	164	18	157	1.012	0.012	0.350	0.122	1971.000		
8	Australian 1	26	264	32	253	0.754	-0.282	0.280	0.078	1973.000		
9	Franfurt 2	13	102	29	104	0.378	-0.973	0.369	0.136	1973.000		
10	NHLBI SMIT	7	53	3	54	2.587	0.950	0.719	0.518	1974.000		
11	Frank	6	55	6	53	0.959	-0.042	0.612	0.375	1975.000		
12	Valere	11	49	9	42	1.061	0.060	0.509	0.259	1975.000		
13	Klein	4	14	1	9	3.200	1.163	1.214	1.475	1976.000		
14	UK-Collab	38	302	40	293	0.910	-0.094	0.243	0.059	1976.000		
15	Austrian	37	352	65	376	0.562	-0.576	0.221	0.049	1977.000		
16	Australian 2	25	123	31	107	0.625	-0.469	0.309	0.096	1977.000		
17	Lasierra	1	13	3	11	0.222	-1.504	1.242	1.542	1977.000		
18	N Ger Collab	63	249	51	234	1.215	0.195	0.215	0.046	1977.000		
19	Witchitz	5	32	5	26	0.778	-0.251	0.696	0.485	1977.000		
20	European 3	18	156	30	159	0.561	-0.578	0.322	0.104	1979.000		
21	ISAM	54	859	63	882	0.872	-0.137	0.192	0.037	1986.000		
22	GISSI-1	628	5860	758	5852	0.807	-0.215	0.057	0.003	1986.000		
23	Olson	1	28	2	24	0.407	-0.898	1 258	1.582	1986.000		
24	Baroffio	, ,	29	6	30	0.064	-2 751	1 493	2 229	1986.000		
25	Schreiber	1	19	3	19	0.001	-1 216	1.400	1 451	1986.000		
26	Cribier	1	21	1	22	1 100	0.095	1 448	2.095	1986.000		
27	Sainsous	2	12	3	23	0.467	-0.761	0.738	0.545	1986.000		
29	Durand	2 2	93	4	4J 20	0.407	-0.525	0.130	0.545	1987.000		
20	White	2 2	107	12	112	0.300	-1.9/1	0.005	0.000	1997.000		
20	Receard	4	52	7	55	0.155	-0.590	0.00	0.005	1997 000		
21	Vlau	4	10	2	10	0.371	-0.360	1 207	1 600	1999 000		
31	Vidy Kannada	10	101	17	12	0.417	-0.070	0.202	1.003	1000.000		
32	Nennedy	701	191	1000	0505	0.631	-0.461	0.392	0.154	1000.000		
33	1515-2	/91	8592	1029	8595	0.746	-0.294	0.050	0.002	1988.000		
-34	Wisenberg	2	41	5	25	0.205	-1.584	0.881	0.776	1988.000		

Now, we can remove the first row

15 Austrian

16 Australian 2 17 Lasierra

	~		£			••				Click h	ere				
•	C	lick in the	first rov	v lo	select	IL									
•	Com	prehensive meta	a analysis - [D	ata]								_			
Eil	e <u>E</u>	dit Format <u>V</u> ie	w <u>I</u> nsert Id	entify	Tools Co	mputational	options Ar	nalyses <u>H</u> elp	•						
Ru	٩	২ Bookmark dat	ta	6	8 B	🛍 ⁄ 🗈		.00 +.0 ++	+ V -	> + ✓ [•			
	ľ	 Restore data Column prop 	erties	(IV al N	Placebo Dead	Placebo Total N	Odds ratio	Log odds ratio	Std Err	Variance	J	к	L	м	N
	1 🔒	b. Comunitatio	- Chilling	'-Total	CTRL-Dea	CTRL-Total				V	Year]		
	2	Copy selectio	n cm+c	12	4	11	0.159	-1.838	1.218	1.484	1959.000				
	3 4	Copy with he	ader	21	7	21	0.471	-0.754	0.723	0.523	1963.000				
	4 🗎	🗎 Copy entire g	rid	83	15	84	1.460	0.379	0.383	0.147	1969.000				
	5	Paste	Ctrl+V	3/3	94	357	0.635	-0.454	0.180	0.032	19/1.000				
	5			104	1/	207	1.248	0.222	0.339	0.115	1971.000				
	<u>_</u> d	‰ С <u>u</u> t	Ctrl+X	264	10	252	0.754	.0.292	0.300	0.122	1973.000				
	<u>4</u> 4	🖉 Delete	Del	102	29	104	0.734	-0.202	0.200	0.070	1973.000				
1	0	Delete row	N	53	3	54	2.587	0.950	0.719	0.518	1974.000				
1	1	Delete study	NS	55	6	53	0.959	-0.042	0.612	0.375	1975.000				
1	2	Delete colum	n	49	9	42	1.061	0.060	0.509	0.259	1975.000				
1	3 -			14	1	9	3.200	1.163	1.214	1.475	1976.000				
1	4	Edit group na	mes	302	40	293	0.910	-0.094	0.243	0.059	1976.000				

-0.576

-0.469 -1.504

0.221

0.309

0.049

0.096

1.542

1977.000

1977.000

1977.000

376

107 11

0.562

0.625

65

31 3

ſ

Click Edit > Delete row and confirm •

37

25

1

352

123

13

The screen should look like this

Ŧ	Compre	hensive	meta	anal	vsis -	Data

e <u>E</u> dit Format <u>V</u> i	ew <u>I</u> nsert	Identify	Tools Cor	nputational	options Ar	nalyses <u>H</u> elp								
in analyses → 🏷	🗅 🚅 🐔	i 🖪 🍯	¥ 🖻	r l 23 •	-'= ' =	+** ***	 ↓ → 	> + ✓ 🗌	₹↓ Z↓	Q				
Study name	SKIV Dead	SKIV Total N	Placebo Dead	Placebo Total N	Odds ratio	Log odds ratio	Std Err	Variance	J	К	L	м	N	
1 Fletcher	1	12	4	11	0.159	-1.838	1.218	1.484	1959.000					
2 Dewar	4	21	7	21	0.471	-0.754	0.723	0.523	1963.000					
3 European 1	20	83	15	84	1.460	0.379	0.383	0.147	1969.000					
4 European 2	69	373	94	357	0.635	-0.454	0.180	0.032	1971.000					
5 Heikinheimo	22	219	17	207	1.248	0.222	0.339	0.115	1971.000					
6 Italian	19	164	18	157	1.012	0.012	0.350	0.122	1971.000					
7 Australian 1	26	264	32	253	0.754	-0.282	0.280	0.078	1973.000					
8 Franfurt 2	13	102	29	104	0.378	-0.973	0.369	0.136	1973.000					
9 NHLBI SMIT	7	53	3	54	2.587	0.950	0.719	0.518	1974.000					
0 Frank	6	55	6	53	0.959	-0.042	0.612	0.375	1975.000					
1 Valere	11	49	9	42	1.061	0.060	0.509	0.259	1975.000					
2 Klein	4	14	1	9	3.200	1,163	1,214	1.475	1976.000					
3 UK-Collab	38	302	40	293	0.910	-0.094	0.243	0.059	1976.000					
4 Austrian	37	352	65	376	0.562	-0.576	0.221	0.049	1977.000					
5 Australian 2	25	123	31	107	0.625	-0.469	0.309	0.096	1977.000					
6 Lasierra	1	13	3	11	0.222	-1.504	1 242	1.542	1977.000					
7 N Ger Collab	63	249	51	234	1 215	0.195	0.215	0.046	1977 000					
8 Witchitz	5	32	5	26	0.778	-0.251	0.696	0.485	1977.000					
9 European 3	18	156	30	159	0.561	-0.578	0.322	0.104	1979.000					
n ISAM	54	859	63	882	0.872	-0.137	0.192	0.037	1986.000					
1 61551-1	628	5860	758	5852	0.807	-0.215	0.057	0.003	1986.000					
2 Olson	1	28	2	24	0.407	-0.898	1 258	1.582	1986.000					
3 Baroffio	0	29	6	30	0.064	-2 751	1 493	2 229	1986.000					
24 Schreiber	1	19	3	19	0.001	-1.216	1 205	1 451	1986.000					
5 Cribier	1	21	1	23	1 100	0.095	1.200	2.095	1986.000					
S Cribici R Spincous	2	19	6	19	0.467	.0.761	0.739	0.545	1996.000					
7 Durand	2	45	4	40	0.407	0.525	0.750	0.045	1997.000					
7 Duranu 19 Yurlaita	2	107	12	110	0.000	1.041	0.003	0.000	1997.000					
0 Write	2	107	12	112	0.109	-1.041	0.776	0.603	1907.000					
o bassano	4	02		50	0.371	-0.060	1.007	0.435	1000.000					
u viay a kasa ata	12	101	17	12	0.417	-0.875	0.202	0.154	1000.000					
n kennedy	12	191	1/	1//	0.631	-0.461	0.392	0.154	1988.000					
2 1515-2	/91	8592	1029	8595	0.746	-0.294	0.050	0.002	1988.000					
3 Wisenberg	2	41	5	25	0.205	-1.584	0.881	0.776	1988.000					

Define Column J as a moderator

- Double-click on the header for column J
- Set the name to Year
- Set the function to Moderator
- Set the type to Integer
- Click OK

Comprehensive met	ta analysis	- [Data]									-			
<u>File Edit Format Vi</u>	ew <u>I</u> nsert	Identify	Tools Co	mputational	loptions A	nalyses <u>H</u> elp)							
Run analyses 🔸 🗞	D 🚅 🖷	8	X 🖻	n 🔁 🔁	= -=	.00 +.0 ++ +.0 .00 □	- V -	> + √	<mark>∖</mark> ≵∔ ∡∔	Q				
Study name	SKIV Dead	SKIV Total N	Placebo Dead	Placebo Total N	Odds ratio	Log odds ratio	Std Err	Variance	J	К	L	м	N	O
1 Fletcher	1	12	4	11	0.159	-1.838	1.218	1.484	1959.000					
2 Dewar	4	21	7	7 21	0.471	-0.754	0.723	0.523	1963.000					
3 European 1	20	83	15	5 84	1.460	0.379	0.383	0.147	1969.000					
4 European 2	69	373	(Column f	ormat	-		×	1971.000					
5 Heikinheimo	22	219					-		1971.000					
6 Italian	19	164		Name					1971.000					
7 Australian 1	26	264							1973.000					
8 Franfurt 2	13	102							1973.000					
9 NHLBI SMIT	7	53		Variable nar	me	Year			1974.000					
10 Frank	6	55		<i>.</i>					1975.000					
11 Valere	11	49		Column fund	ction	Moderator		•	1975.000					
12 Klein	4	14		Data type		Integer		T	1976.000					
13 UK-Collab	38	302							1976.000					
14 Austrian	37	352		Alignment		Right		-	1977.000					
15 Australian 2	25	123							1977.000					
16 Lasierra	1	13							1977.000					
17 N Ger Collab	63	249							1977.000					
18 Witchitz	5	32							1977.000					
19 European 3	18	156							1979.000					
20 ISAM	54	859							1986.000					
21 GISSI-1	628	5860							1986.000					
22 Olson	1	28							1986.000					
23 Baroffio	0	29							1986.000					
24 Schreiber	1	19					C	ancel	1986.000					
25 Cribier	1	21						0k	1986.000					
26 Sainsous	3	49						UK	1986.000					
27 Durand	3	35	L	_					1987.000					
28 White	2	107	12	2 112	0.159	-1.841	0.776	0.603	1987.000					
		50	-	,	0.571	0.500	0.050	0.405	1007.000					

We've followed the convention of putting the treated (SKIV) group before the control (Placebo). When we do this, if (a) the treated group does better and (b) the outcome is something bad (being dead) the odds ratio will be less than 1.0.

,† 0	omprehensive met	a analysis	- [Data]						1000-0						
<u>F</u> ile	ile Edit Format View Insert Identify Iools Computational options Analyses Help														
Run															
	Study name SKIV Dead SKIV Total N Placebo Dead Placebo Total N Dods ratio Log odds ratio Std Err Variance Year K L M N O														
1	Fletcher	1	12	4	11	0.159	-1.838	1.218	1.484	1959					
2	Dewar	4	21	7	21	0.471	-0.754	0.723	0.523	1963					
3	European 1	20	83	15	84	1.460	0.379	0.383	0.147	1969					
4	European 2	69	373	94	357	0.635	-0.454	0.180	0.032	1971					
5	Heikinheimo	22	219	17	207	1.248	0.222	0.339	0.115	1971					
6	Italian	19	164	18	157	1.012	0.012	0.350	0.122	1971					
7	Australian 1	26	264	32	253	0.754	-0.282	0.280	0.078	1973					
8	Franfurt 2	13	102	29	104	0.378	-0.973	0.369	0.136	1973					

To check that things are working as planned let's use the first study. The two groups have roughly the same N, but 1 person died in the SKIV group while 4 died in the control group. The odds ratio (0.159) is indeed less than 1. In the analysis, odds ratio less than 1 should be labeled "Favors SKIV" while odds ratios greater than 1 should be labeled "Favors Control". We need to apply these labels manually.

At this point we should save the file

Click File > Save As ... •

•T U	omprenensive meta	a analysis	- [C:\Users	\Biostat\Dr	oppox\wor	ksnops (nree	e-Day(SKIV):	skiv.cmaj							
<u>F</u> ile	<u>E</u> dit Format <u>V</u> ie	w <u>I</u> nsert	Identify	<u>T</u> ools Cor	nputational	options Ar	alyses <u>H</u> elp)							
D	New	•	8	X 🗈	ê 🕫 🕨	- ' = ' ≣	••• 00. ••• +•0 00. □	· • ↓ -	+ 🗸 🗌		•				
2	Open Opening screen wi	Ctrl+0	SKIV Total N	Placebo Dead	Placebo Total N	Odds ratio	Log odds ratio	Std Err	Variance	Year	к	L	м	N	0
	Opening screen wizard 12 4 11 0.159 -1.838 1.218 1.484 1959														
i	Import 21 7 21 0.471 -0.754 0.723 0.523 1963														
	Save	Ctrl+S	83	15	84	1.460	0.379	0.383	0.147	1969					
	Savo Ac		373	94	357	0.635	-0.454	0.180	0.032	1971					
	Jave Hs		219	17	207	1.248	0.222	0.339	0.115	1971					
6	Print	Ctrl+P	164	18	157	1.012	0.012	0.350	0.122	1971					
m.	Print setup		264	32	253	0.754	-0.282	0.280	0.078	1973					
-			102	29	104	0.378	-0.973	0.369	0.136	1973					
	Exit		53	3	54	2.587	0.950	0.719	0.518	1974					
10	Frank	6	55	6	53	0.959	-0.042	0.612	0.375	1975					
11	Valere	11	49	9	42	1.061	0.060	0.509	0.259	1975					
12	Klein	4	14	1	9	3.200	1.163	1.214	1.475	1976					

T Comprehensive meta analysis - [C/Ulsers/Biostat/Dronboy/Workshops Three-Day/SKIV/SKIV cma]

Note that the file name is now in the header.

- [Save] will over-write the prior version of this file without warning
- [Save As...] will allow you to save the file with a new name •

,† с	omprehensive met	a analysis	- [C:\Users	\Biostat\Dr	opbox\Wor	kshops Thre	e-Day\SKIV\S	KIV.cma]							
<u>F</u> ile	ile Edit Format View Insert Identify Tools Computational options Analyses Help Run analyses $\rightarrow \infty$ D \cong \bowtie \square \blacksquare \square \blacksquare X \bowtie \blacksquare \blacksquare \blacksquare \square \blacksquare 21 \bigcirc														
Run	analyses 🔸 🗞 [) 😅 🦷	i 🖬 🏼 🚳	X 🖻	r 🔁	'- ' = ' ≣	••• 00 •••	 ↓ → 	> + √ 🗆	≜↓ _₹ ↓	Q				
	Study name	SKIV Dead	SKIV Total N	Placebo Dead	Placebo Total N	Odds ratio	Log odds ratio	Std Err	Variance	Year	к	L	м	N	0
1	Fletcher	1	12	4	11	0.159	-1.838	1.218	1.484	1959					
2	Dewar	4	21	7	21	0.471	-0.754	0.723	0.523	1963					
3	European 1	20	83	15	84	1.460	0.379	0.383	0.147	1969					
4	European 2	69	373	94	357	0.635	-0.454	0.180	0.032	1971					
5	Heikinheimo	22	219	17	207	1.248	0.222	0.339	0.115	1971					
6	Italian	19	164	18	157	1.012	0.012	0.350	0.122	1971					
7	Australian 1	26	264	32	253	0.754	-0.282	0.280	0.078	1973					
8	Franfurt 2	13	102	29	104	0.378	-0.973	0.369	0.136	1973					
9	NHLBI SMIT	7	53	3	54	2.587	0.950	0.719	0.518	1974					
10	Frank	6	55	6	53	0.959	-0.042	0.612	0.375	1975					
11	Valere	11	49	9	42	1.061	0.060	0.509	0.259	1975					
12	Klein	4	14	1	9	3.200	1.163	1.214	1.475	1976					
13	UK-Collab	38	302	40	293	0.910	-0.094	0.243	0.059	1976					
14	Austrian	37	352	65	376	0.562	-0.576	0.221	0.049	1977					
10	A	1 5	100	21	107	0.005	0.400	0.000	0.000	1077					

By default the program displays the odds ratio.

This is what we want to use in the analysis, so no modification is needed.

• To run the analysis, click [Run analysis]

	Four Lounder T	w insere	,	<u> </u>				-			_					-
Run	analyses 🔸 🗞	ጋ 🖻 🚽	i 🛛 🖨	8 🖻	🛍 🚈 🕨	_'=* <u></u>	++ 00 + 00+ ☐ 00. 0.+	· - ↓ -	> + √ [•					
	Study name	SKIV Dead	SKIV Total N	Placebo Dead	Placebo Total N	Odds ratio	Log odds ratio	Std Err	Variance	Year	к	L	м	N	0	
1	Fletcher	1	12	4	11	0.159	-1.838	1.218	1.484	1959						
2	Dewar	4	21	7	21	0.471	-0.754	0.723	0.523	1963						
3	European 1	20	83	15	84	1.460	0.379	0.383	0.147	1969						
4	European 2	69	373	94	357	0.635	-0.454	0.180	0.032	1971						
5	Heikinheimo	22	219	17	207	1.248	0.222	0.339	0.115	1971						
6	Italian	19	164	18	157	1.012	0.012	0.350	0.122	1971						
-7	Australian 1	26	264	32	253	0.754	-0.282	0.280	0.078	1973						
8	Franfurt 2	13	102	29	104	0.378	-0.973	0.369	0.136	1973						
9	NHLBI SMIT	7	53	3	54	2.587	0.950	0.719	0.518	1974						
10	Frank	6	55	6	53	0.959	-0.042	0.612	0.375	1975						
11	Valere	11	49	9	42	1.061	0.060	0.509	0.259	1975						
12	Klein	4	14	1	9	3.200	1.163	1.214	1.475	1976						
13	UK-Collab	38	302	40	293	0.910	-0.094	0.243	0.059	1976						
14	Austrian	37	352	65	376	0.562	-0.576	0.221	0.049	1977						
15	Australian 2	25	123	31	107	0.625	-0.469	0.309	0.096	1977						
16	Lasierra	1	13	3	11	0.222	-1.504	1.242	1.542	1977						
17	N Ger Collab	63	249	51	234	1.215	0.195	0.215	0.046	1977						
18	Witchitz	5	32	5	26	0.778	-0.251	0.696	0.485	1977						
19	European 3	18	156	30	159	0.561	-0.578	0.322	0.104	1979						
20	ISAM	54	859	63	882	0.872	-0.137	0.192	0.037	1986						
21	GISSI-1	628	5860	758	5852	0.807	0.215	0.057	0.003	1986						
22	Olson	1	28	2	24	0.407	-0.898	1.258	1.582	1986						
23	Baroffio	0	29	6	30	0.064	-2.751	1.493	2 229	1986						
24	Schreiher	1	19	3	19	0.296	-1.216	1 205	1 451	1986						
25	Cribier	1	21	1	23	1 100	0.095	1 448	2.095	1986						
26	Sainsous	3	49	6	49	0.467	-0.761	0.738	0.545	1986						
27	Durand	2	35	4	- 40	0.586	-0.535	0.809	0.655	1987						
28	White	2	107	12	112	0.500	-1.841	0.005	0.603	1987						
29	Bassand	A	52	7	55	0.571	-0.560	0.659	0.005	1987						
30	Vlau	1	13	2	12	0.417	.0.875	1 297	1,683	1988						
31	Kennedu	12	191	17	177	0.417	-0.075	0.392	0.154	1999						
32	ICIE.2	701	9500	1029	0505	0.031	-0.401	0.332	0.104	1990						
32	Wieenberg	731	5500	1023	0030	0.746	-0.234	0.000	0.002	1900						
33	wisenbeig	2	41	5	25	0.205	-1.384	0.661	0.776	1366						
34																

This is the basic analysis screen

Stretch the Study name column so the full name displays

Initially, the program displays the fixed-effect analysis. This is indicated by the tab at the bottom and the label in the plot.

	<u>o</u> mac <u>r</u> en	computatio	nui options	Analyses	Terk							
- Data ent	ry t∓Ne	ext table	🛨 High re	solution plot	Select I	by +	Effect measure:	Odds ratio			II 🕸 E	1 Q
Model	Study name		Statis	tics for each s	tudy			Od	ds ratio and 95%	CI		Weight (Fixed)
		Odds ratio	Lower limit	Upper limit	Z-Value	p-Value	0.01	0.10	1.00	10.00	100.00	Relative weight
	Fletcher	0.159	0.015	1.732	-1.509	0.131	l ——				1	0.07
	Dewar	0.471	0.114	1.942	-1.042	0.297		<u> </u>				0.21
	European 1	1.460	0.689	3.096	0.987	0.323			++			0.74
	European 2	0.635	0.447	0.903	-2.529	0.011			_ —			3.38
	Heikinheimo	1.248	0.643	2.423	0.655	0.513			-++			0.95
	Italian	1.012	0.510	2.008	0.034	0.973			_ _			0.89
	Australian 1	0.754	0.436	1.306	-1.006	0.314			<u> </u>			1.39
	Franfurt 2	0.378	0.183	0.778	-2.640	0.008		-				0.80
	NHLBI SMIT	2.587	0.632	10.596	1.321	0.186			+++			0.21
	Frank	0.959	0.289	3.185	-0.068	0.946			<u> </u>			0.29
	Valere	1.061	0.392	2.876	0.117	0.907			i			0.42
	Klein	3.200	0.296	34.588	0.958	0.338					-	0.07
	UK-Collab	0.910	0.565	1.466	-0.386	0.699						1.85
	Austrian	0.562	0.365	0.867	-2.609	0.009						2.23
	Australian 2	0.625	0.341	1.147	-1.518	0.129			— ++			1.14
	Lasierra	0.222	0.019	2.533	-1.211	0.226						0.07
	N Ger Collab	1.215	0.797	1.853	0.906	0.365			+			2.35
	Witchitz	0.778	0.199	3.044	-0.361	0.718		-				0.22
	European 3	0.561	0.298	1.055	-1.794	0.073						1.05
	ISAM	0.872	0.599	1.270	-0.713	0.476			-+-			2.96
	GISSI-1	0.807	0.721	0.903	-3.741	0.000			+			33.05
	Olson	0.407	0.035	4.795	-0.714	0.475	-			-		0.07
	Baroffio	0.064	0.003	1.192	-1.843	0.065						0.05
	Schreiber	0.296	0.028	3.142	-1.010	0.313	-					0.08
	Cribier	1.100	0.064	18.774	0.066	0.948						0.05
	Sainsous	0.467	0.110	1.986	-1.030	0.303						0.20
	Durand	0.586	0.120	2.861	-0.661	0.509		—				0.17
	White	0.159	0.035	0.727	-2.371	0.018	-	-++-	— I			0.18
	Bassand	0.571	0.157	2.080	-0.849	0.396						0.25
	Vlay	0.417	0.033	5.299	-0.675	0.500	-	_		-		0.06
	Kennedy	0.631	0.292	1.362	-1.174	0.241			+-			0.71
	ISIS-2	0.746	0.676	0.822	-5.877	0.000			+			43.68
	wisenberg	0.205	0.037	1.153	-1.799	0.072	-	+				0.14
xed		0.768	0.720	0.819	-8.007	0.000			+			

Click [Both models]

The program displays results for both the fixed-effect and the random-effects analysis.

Compre	hensive meta a	nalysis - [An	alysis]											
ile <u>E</u> dit	Format <u>V</u> iew	Computatio	onal options	Analyses	<u>H</u> elp									
- Data en	try t⊒ Ne	ext table	井 High re	solution plot	Select	by 🕇 🕇	Effect mea	sure: Odds r	atio	• 🔳 🗖	1 11 1	Εŧ	🗘	
Model	Study name		Statis	stics for each :	study				Odds ratio ar	id 95% Cl			Weight (Fixed)	Weight (Random)
		Odds ratio	Lower limit	Upper limit	Z-Value	p-Value	0.01	0.10	1.00) 10	.00 100.0	00 F	Relative weight	Relative weight
	Dewar European 1	0.471	0.114 0.689	1.942 3.096	-1.042 0.987	0.297 0.323		-	-'+	_ 			0.21 0.74	0.59
	European 2	0.635	0.447	0.903	-2.529	0.011							3.38	7.18
	Heikinheimo	1.248	0.643	2.423	0.655	0.513			-+-				0.95	2.50
	Italian	1.012	0.510	2.008	0.034	0.973			\rightarrow	_			0.89	2.35
	Australian 1	0.754	0.436	1.306	-1.006	0.314			-+-				1.39	3.50
	Franfurt 2	0.378	0.183	0.778	-2.640	0.008			<u> </u>				0.80	2.14
	NHLBI SMIT	2.587	0.632	10.596	1.321	0.186			-		+		0.21	0.60
	Frank	0.959	0.289	3.185	-0.068	0.946							0.29	0.82
	Valere	1.061	0.392	2.876	0.117	0.907			-+-				0.42	1.17
	Klein	3.200	0.296	34.588	0.958	0.338					<u>├───</u>		0.07	0.21
	UK-Collab	0.910	0.565	1.466	-0.386	0.699			-+-	-			1.85	4.46
	Austrian	0.562	0.365	0.867	-2.609	0.009							2.23	5.21
	Australian 2	0.625	0.341	1.147	-1.518	0.129							1.14	2.94
	Lasierra	0.222	0.019	2.533	-1.211	0.226							0.07	0.20
	N Ger Collab	1.215	0.797	1.853	0.906	0.365			++	-			2.35	5.44
	Witchitz	0.778	0.199	3.044	-0.361	0.718							0.22	0.64
	European 3	0.561	0.298	1.055	-1.794	0.073							1.05	2.73
	ISAM	0.872	0.599	1.270	-0.713	0.476			-+-				2.96	6.50
	GISSI-1	0.807	0.721	0.903	-3.741	0.000			+				33.05	21.00
	Olson	0.407	0.035	4.795	-0.714	0.475							0.07	0.20
	Baroffio	0.064	0.003	1.192	-1.843	0.065							0.05	0.14
	Schreiber	0.296	0.028	3.142	-1.010	0.313							0.08	0.22
	Cribier	1.100	0.064	18.774	0.066	0.948		-			<u> </u>		0.05	0.15
	Sainsous	0.467	0.110	1.986	-1.030	0.303		-		_			0.20	0.57
	Durand	0.586	0.120	2.861	-0.661	0.509		-					0.17	0.47
	White	0.159	0.035	0.727	-2.371	0.018							0.18	0.51
	Bassand	0.571	0.157	2.080	-0.849	0.396		·		_			0.25	0.71
	Vlay	0.417	0.033	5.299	-0.675	0.500							0.06	0.19
	Kennedy	0.631	0.292	1.362	-1.174	0.241			+-				0.71	1.90
	ISIS-2	0.746	0.676	0.822	-5.877	0.000			+				43.68	22.18
	Wisenberg	0.205	0.037	1.153	-1.799	0.072							0.14	0.40
ixed		0.768	0.720	0.819	-8.007	0.000			+					
andom		0.762	0.682	0.851	-4.840	0.000			+					

Basic stats One study removed Cumulative analysis Calculations

The fact that the two results are not identical tells us that the weights are different, which means that the effect size varies from study to study. (This means that T^2 , the estimate of between-study variance in true effects is non-zero. It is *not* a test of statistical significance).

In any event, the random-effects model is a better fit for the way the studies were sampled, and therefore that is the model we will use in the analysis.

• Click Random on the tab at the bottom

The plot now displays the random-effects analysis alone.

					-							
ata entry	t구 Ne	ext table	🛨 High re	solution plot	E Select I	oy + I	ffect measure	: Odds ratio	•		11 # E	<u> 1 1 0</u>
odel !	Study name		Statis	tics for each s	tudy			Odd	ls ratio and 95%	s Cl		Weight (Random)
		Odds ratio	Lower limit	Upper limit	Z-Value	p-Value	0.01	0.10	1.00	10.00	100.00	Relative weight
FI	etcher	0.159	0.015	1.732	-1.509	0.131						0.21
D	ewar	0.471	0.114	1.942	-1.042	0.297						0.59
E	uropean 1	1.460	0.689	3.096	0.987	0.323			++			1.99
E	uropean 2	0.635	0.447	0.903	-2.529	0.011						7.18 📕
н	eikinheimo	1.248	0.643	2.423	0.655	0.513			-++			2.50
Ita	alian	1.012	0.510	2.008	0.034	0.973			_ \ _			2.35
A	ustralian 1	0.754	0.436	1.306	-1.006	0.314			+ -			3.50
Fr	anfurt 2	0.378	0.183	0.778	-2.640	0.008			+			2.14
N	HLBI SMIT	2.587	0.632	10.596	1.321	0.186						0.60
Fr	ank	0.959	0.289	3.185	-0.068	0.946						0.82
V.	alere	1.061	0.392	2.876	0.117	0.907						1.17
ĸ	ein	3.200	0.296	34,588	0.958	0.338			,		-	0.21
U	K-Collab	0.910	0.565	1.466	-0.386	0.699						4.46
Δ	ustrian	0.562	0.365	0.867	-2.609	0.009						5.21
A	ustralian 2	0.625	0.341	1 1 47	-1.518	0.129						2.94
12	asierra	0.222	0.019	2 533	-1 211	0.226						0.20
N	Ger Collab	1 215	0.797	1.853	0.906	0.365			4.			5 44
Ŵ	/itchitz	0.778	0.199	3 044	-0.361	0.718						0.64
E	uronean 3	0.561	0.298	1.055	-1 794	0.073						2.73
IS	AM	0.872	0.599	1 270	-0.713	0.476			_			6.50
G	1991-1	0.807	0.000	0.903	-3 741	0.000			+			21.00
0	lson	0.007	0.035	4 795	-0.714	0.475	.			_		0.20
R	aroffio	N04.0	0.003	1 1 92	-1.8/2	0.975						0.14
S	chreiber	0.296	0.000	3142	-1 010	0.313	_					0.22
	rihier	1 100	0.020	18 774	230.0	0.948						0.15
5	aineoue	0.467	0.004	1 986	.1 030	0.040						0.57
	urand	0.596	0.110	2.861	-0.661	0.503						0.47
L. L.	/hite	0.500	0.025	0.727	-2 371	0.000	.					0.51
PT R	assand	0.133	0.000	2 080	-2.571	0.010						0.71
	assanu	0.371	0.107	5 299	-0.043	0.530	.			_		0.19
VI V.	annedu	0.417	0.033	1.200	-0.070	0.000			·			1 90
N IC	icineuy	0.031	0.232	1.302	-1.174	0.241			1			22.10
15	10-2 Annhara	0.746	0.027	0.822	-3.077	0.000			-			22.10
W	senberg	0.205	0.037	1.103	-1.799	0.072						0.40

Basic stats One study removed Cumulative analysis Calculations

A quick view of the plot suggests the following

- The summary effect is 0.762 with a CI of 0.682 to 0.851. Thus, the mean effect is likely in the clinically important range.
- The summary effect has a Z-value of -4.840 and a *p*-value of < 0.001. Thus we can reject the null hypotheses that the true odds ratio is 1.0.

Click [Ne	xt table]													
			/			С	lick her	e						
Eile Edit Eerma	e meta analysis - [Analys	s]	urar Hala											
Data entry	t View Computational	High resolution	n plot 🛛 🖬 S	elect by	Effect measur	re: Odds ratio	- 8		11 # E -	⊧ ∖ 0				
Model		Effect si	ze and 95%	interval	Test of nu	III (2-Tail)		Hetero	ogeneity			Tau-so	quared	
Model	Number Studies	Point estimate	Lower limit	Upper limit	Z-value	P-value	Q-value	df (Q)	P-value	l-squared	Tau Squared	Standard Error	Variance	Tau
Fixed Random		33 0.768 33 0.762	0.720 0.682	0.819 0.851	-8.007 -4.840	0.000 0.000	39.484	32	0.170	18.954	0.012	0.018	0.000	0.108

The statistics at the left duplicate those we saw on the prior screen.

- The summary effect is 0.762 with a CI of 0.682 to 0.851. Thus, the mean effect is likely in the clinically important range.
- The summary effect has a Z-value of -4.840 and a *p*-value of < 0.001. Thus we can reject the null hypotheses that the true odds ratio is 1.0.
- The statistics at the upper right relate to the dispersion of effect sizes across studies.
- The Q-value is 39.484 with df=32 and p=0.170. Q reflects the distance of each study from the mean effect (weighted, squared, and summed over all studies). Q is always computed using FE weights (which is the reason it is displayed on the "Fixed" row, but applies to both FE and RE analyses.
- If all studies actually shared the same true effect size, the expected value of Q would be equal to df (which is 32). Here, Q exceeds that value, but still falls in the range that can be attributed to random sampling error. The p-value is 0.017, and so we cannot reject the null hypothesis that all studies share the same true effect size.
- T² is the estimate of the between-study variance in true effects. This estimate is 0.012. T is the estimate of the between-study standard deviation in true effects. This estimate is 0.109. Note that these values are in log units. Therefore, to use these estimates to compute confidence intervals or prediction intervals we would need to convert all values into log units, perform the computations, and convert the values back into odds ratios. (This is handled automatically by the program.)
- The variance in effect sizes includes both sampling error and variance in the true effect size from study to study. The *l*² value is 18.954, which tell is that about 20% of the *observed* variance in effect sizes reflects differences in *true* effect sizes. This means that if each of the studies had a huge sample size (so that the observed effect closely mirrored the true effect size for that study's population) the observed effects would fall closer to each other than they do now, but would not align exactly. The variance of the observed effects would drop by about 80%.

Click [Next table] to return to this screen

We might wonder how the weight of the evidence has shifted over time. In other words, what would a meta-analysis have shown if we had performed it after the first study, after the first two studies, and so on.

To run this analysis we need to ensure that the studies are sorted by year on the data-entry screen. In this case, they are, and so we can proceed.

- Click [Cumulative analysis] on the bottom
- Click the tool for relative weights on the menu

The program displays this screen

Data ent	try t∓ Next	table	High reso	lution plot	E Select by	+ Eff	ect measure:	Odds ratio	• 🔳		I I I I I I	
odel	Study name		Cur	mulative statis	tics				Weight (Random)			
		Point	Lower limit	Upper limit	Z-Value	p-Value	0.01	0.10	1.00	10.00	100.00	Relative weight
	Fletcher	0.159	0.015	1.732	-1.509	0.131	I —					0.21
	Dewar	0.355	0.105	1.200	-1.667	0.096			+			0.80
	European 1	0.683	0.210	2.221	-0.633	0.526		-				2.79
	European 2	0.724	0.388	1.354	-1.010	0.312			+			9.97
	Heikinheimo	0.837	0.501	1.397	-0.682	0.495			-+			12.47
	Italian	0.871	0.581	1.305	-0.671	0.502			-+-			14.82
	Australian 1	0.840	0.613	1.150	-1.090	0.276			-++			18.32
	Franfurt 2	0.763	0.547	1.065	-1.591	0.112			-+-			20.46
	NHLBI SMIT	0.810	0.572	1.147	-1.189	0.234			-++			21.05
	Frank	0.816	0.591	1.127	-1.236	0.217			-+-			21.87
	Valere	0.828	0.614	1.118	-1.230	0.219			-+-			23.04
	Klein	0.846	0.627	1.143	-1.090	0.276	[-+-			23.25
	UK-Collab	0.848	0.655	1.100	-1.242	0.214	[-+-			27.71
	Austrian	0.802	0.630	1.021	-1.788	0.074			-+-			32.92
	Australian 2	0.781	0.626	0.975	-2.179	0.029			+			35.86
	Lasierra	0.773	0.620	0.964	-2.285	0.022						36.06
	N Ger Collab	0.817	0.656	1.018	-1.797	0.072			-+-			41.50
	Witchitz	0.815	0.660	1.008	-1.890	0.059			-+			42.13
	European 3	0.795	0.649	0.973	-2.223	0.026			-+-			44.86
	ISAM	0.801	0.668	0.962	-2.376	0.018			+			51.36
	GISSI-1	0.800	0.692	0.926	-2.997	0.003			+			72.36
	Olson	0.799	0.693	0.921	-3.101	0.002			+			72.56
	Baroffio	0.794	0.683	0.922	-3.032	0.002			+			72.70
	Schreiber	0.791	0.682	0.917	-3.114	0.002			+			72.91
	Cribier	0.792	0.685	0.914	-3.184	0.001			+			73.06
	Sainsous	0.788	0.684	0.907	-3.312	0.001			+			73.63
	Durand	0.787	0.686	0.902	-3.441	0.001			+			74.10
	White	0.774	0.667	0.897	-3.387	0.001			+			74.62
	Bassand	0.772	0.668	0.892	-3.510	0.000	[+			75.32
	Vlay	0.771	0.669	0.888	-3.595	0.000			+			75.51
	Kennedy	0.768	0.670	0.880	-3.793	0.000			+			77.41
	ISIS-2	0.767	0.689	0.852	-4.909	0.000	[+			99.60
	Wisenberg	0.762	0.682	0.851	-4.840	0.000			+			100.00
ndom	-	0.762	0.682	0.851	-4.840	0.000			+			
ed Ba	ndom											

- Click View > Columns > Moderators
- Click Year and Drag it as shown

🕂 Comp	prehensive meta an	alysis - [Analysis]]						-	-	-	-		
<u>F</u> ile <u>E</u> d	it F <u>o</u> rmat <u>V</u> iew	Computational o	ptions A	naly	ses <u>H</u> elp									
← Data	entry M	eta-analysis grid		ion	plot 🔁 Select by 🕂	- Effe	ct meas	ure: Odds i	ratio	• 🗏 🗌] 📰 🎞	13-E 1	Q 1	
Model	Study 🏪 Hi	eta-analysis stati gh resolution plo	stics ot	lativ	e statistics			C	Cumulative o	dds ratio (95	i% CI)		Weight (Random)	
	Co	olumns	•	١Ň	Moderators	ue	0.01	0.1	10 .	1.00	10.00	100.00	Relative weight	
	Fletcher Ro Dewar Europea	ows ow details and c	▶ autions	#	Show/hide basic stats Show/hide forest plot	.131 .096 526				+			0.21 0.80 2.79	
	European 2 Heikinheimo Italian Australian 1 Franfurt 2	0.724 0.837 0.871 0.840 0.763	0.388 0.501 0.581 0.613 0.547	Ē	Show/hide counts Show/hide weights 1.150 -1.090 0. 1.065 -1.591 0.	.312 .495 .502 .276 .112				+			9.97 12.47 14.82 18.32 20.46	

T Comprehensive meta analysis - [Analysis]

<u>File</u> <u>E</u> dit	F <u>o</u> rmat <u>V</u> iew C	Computation	al options	Analyses <u>H</u> e	elp								
← Data er	ntry t⊒ Next	table	🕂 High reso	olution plot	Select by	+ Effect me	asure: Odds r	atio	•=	II II 🏞	🕻 🔁		
Model	Study name		Cu	mulative statist	ics		C	umulative odd	ls ratio (95% C	3)	Wei	ght (Random)	
		Foir	Lower limit	Upper limit	Z-Value	p-Value	01 0.1	10 1.0	DO 10).00 100).00 Re	lative weight	
	Fletcher	0.159	0.015	1.732	-1.509	0.131		+	-			0.21	
	Dewar	0.355	0.105	1.200	-1.667	0.096			-			0.80	
	European 1	0.683	0.210	2.221	-0.633	0.526			<u> </u>			2.79	
	European 2	0.724	0.388	1.354	-1.010	0.312		-+	-			9.97 📕	
	Heikinheimo	0.837	0.501	1.397	-0.682	0.495		-+	-		1	2.47 📕	
	Italian	0.871	0.581	1.305	-0.671	0.502		-+	-		1	4.82 📕	
	Australian 1	0.840	0.613	1.150	-1.090	0.276		-+	-		1	8.32 📕	
	Franfurt 2	0.763	0.547	1.065	-1.591	0.112		-+-			2	0.46 📕	
	NHLBI SMIT	0.810	0.572	1.147	-1.189	0.234		-+	ł		2	1.05 📕	
	Frank	0.816	0.591	1.127	-1.236	0.217		-+	-		2	1.87 📕	
	Valere	0.828	0.614	1.118	-1.230	0.219		-+	-		2	3.04 📕	
	Klein	0.846	0.627	1.143	-1.090	0.276		-+	-		2	3.25 📕	
	UK-Collab	0.848	0.655	1.100	-1.242	0.214		-+	-		2	7.71 📕	
	Austrian	0.802	0.630	1.021	-1.788	0.074		+			3	2.92	
	Australian 2	0.781	0.626	0.975	-2.179	0.029		+			3	5.86	
	Lasierra	0.773	0.620	0.964	-2.285	0.022		+			3	6.06	
	N Ger Collab	0.817	0.656	1.018	-1.797	0.072		-+			4	1.50	
	Witchitz	0.815	0.660	1.008	-1.890	0.059		+			4	2.13	
	European 3	0.795	0.649	0.973	-2.223	0.026		+			4	4.86	
	ISAM	0.801	0.668	0.962	-2.376	0.018		+			5	1.36	
	GISSI-1	0.800	0.692	0.926	-2.997	0.003		+			7	2.36	
	Olson	0.799	0.693	0.921	-3.101	0.002		+			7	2.56	
	Baroffio	0.794	0.683	0.922	-3.032	0.002		+			7	2.70	
	Schreiber	0.791	0.682	0.917	-3.114	0.002		+			7	2.91	
	Cribier	0.792	0.685	0.914	-3.184	0.001		+			7	3.06	
	Sainsous	0.788	0.684	0.907	-3.312	0.001		+			7	3.63	
	Durand	0.787	0.686	0.902	-3.441	0.001		+			7	4.10	
	White	0.774	0.667	0.897	-3.387	0.001		+			7	4.62	
	Bassand	0.772	0.668	0.892	-3.510	0.000		+			7	5.32	
	Vlay	0.771	0.669	0.888	-3.595	0.000		+			7	5.51	
	Kennedy	0.768	0.670	0.880	-3.793	0.000		+			7	7.41	
	ISIS-2	0.767	0.689	0.852	-4.909	0.000		+			9	9.60	
	Wisenberg	0.762	0.682	0.851	-4.840	0.000		+			10	0.00	
Random		0.762	0.682	0.851	-4.840	0.000		+					

Fined Dandom

A column for year is now displayed

Comprehensive meta	analysis - [Analysis]
--------------------	-----------------------

<u>F</u> ile <u>E</u> dit	F <u>o</u> rmat <u>V</u> iew C	Computation	al options	Analyses <u>H</u>	elp										
← Data en	try t⊒ Next	table	井 High reso	olution plot	🔁 Select by	+	comeasure.	odds rat	tio	• 🔳		ī‡E	Q 1		
Model	Study name		Cu	mulative statis	tics		Year		C	umulati	ve odds ratio	(95% CI)		Weight (Random)	
		Point	Lower limit	Upper limit	Z-Value	p-Value		0.01	0.1	10	1.00	10.00	100.00	Relative weight	
	Fletcher	0.159	0.015	1.732	-1.509	0.131	1959							0.21	
	Dewar	0.355	0.105	1.200	-1.667	0.096	1963							0.80	
	European 1	0.683	0.210	2.221	-0.633	0.526	1969							2.79	
	European 2	0.724	0.388	1.354	-1.010	0.312	1971				-++			9.97	
	Heikinheimo	0.837	0.501	1.397	-0.682	0.495	1971				-++-			12.47	
	Italian	0.871	0.581	1.305	-0.671	0.502	1971				-+-			14.82	
	Australian 1	0.840	0.613	1.150	-1.090	0.276	1973				-++			18.32	
	Franfurt 2	0.763	0.547	1.065	-1.591	0.112	1973				-+-			20.46	
	NHLBI SMIT	0.810	0.572	1.147	-1.189	0.234	1974				-++			21.05	
	Frank	0.816	0.591	1.127	-1.236	0.217	1975				-++			21.87	
	Valere	0.828	0.614	1.118	-1.230	0.219	1975				-+-			23.04	
	Klein	0.846	0.627	1.143	-1.090	0.276	1976				-+-			23.25	
	UK-Collab	0.848	0.655	1.100	-1.242	0.214	1976				+			27.71 📕	
	Austrian	0.802	0.630	1.021	-1.788	0.074	1977				+			32.92	
	Australian 2	0.781	0.626	0.975	-2.179	0.029	1977				+			35.86	
	Lasierra	0.773	0.620	0.964	-2.285	0.022	1977				+			36.06	
	N Ger Collab	0.817	0.656	1.018	-1.797	0.072	1977				+			41.50	
	Witchitz	0.815	0.660	1.008	-1.890	0.059	1977				+			42.13	
	European 3	0.795	0.649	0.973	-2.223	0.026	1979				+			44.86	
	ISAM	0.801	0.668	0.962	-2.376	0.018	1986				+			51.36	
	GISSI-1	0.800	0.692	0.926	-2.997	0.003	1986				+			72.36	
	Olson	0.799	0.693	0.921	-3.101	0.002	1986				+			72.56	
	Baroffio	0.794	0.683	0.922	-3.032	0.002	1986				+			72.70	
	Schreiber	0.791	0.682	0.917	-3.114	0.002	1986				+			72.91	
	Cribier	0.792	0.685	0.914	-3.184	0.001	1986				+			73.06	
	Sainsous	0.788	0.684	0.907	-3.312	0.001	1986				+			73.63	
	Durand	0.787	0.686	0.902	-3.441	0.001	1987				+			74.10	
	White	0.774	0.667	0.897	-3.387	0.001	1987				+			74.62	
	Bassand	0.772	0.668	0.892	-3.510	0.000	1987				+			75.32	
	Vlay	0.771	0.669	0.888	-3.595	0.000	1988				+			75.51	
	Kennedy	0.768	0.670	0.880	-3.793	0.000	1988				+			77.41	
	ISIS-2	0.767	0.689	0.852	-4.909	0.000	1988				+			99.60	
	Wisenberg	0.762	0.682	0.851	-4.840	0.000	1988				+			100.00	
Random		0.762	0.682	0.851	-4.840	0.000					+				

Basic stats One study removed Cumulative analysis Calculations

- Click the button to display counts
- Drag the right-hand side of the new columns as needed to display the full numbers

lit	Format <u>V</u> iew C	omputation	al options 4	Analyses <u>H</u> e	elp				–						
ata en	try the Next	table	🕂 High reso	lution plot	🔁 Select by	+ Eff	ect measure: Od	ds ratio 👻		17 # E	🗘 👔				
odel	Study name		Cur	nulative statist	ics		Cumulative	Dead / Total	Year		Cumulativ	e odds ratio	Weight (Random)		
		Point	Lower limit	Upper limit	Z-Value	p-Value	SKIV	Placebo		0.01	0.10	1.00	10.00	100.00	Relative weight
	Fletcher	0.159	0.015	1.732	-1.509	0.131	1/12	4/11	1959						0.21
	Dewar	0.355	0.105	1.200	-1.667	0.096	5/33	11 / 32	1963			-+			0.80
	European 1	0.683	0.210	2.221	-0.633	0.526	25/116	26/116	1969						2.79
	European 2	0.724	0.388	1.354	-1.010	0.312	94 / 489	120 / 473	1971						9.97
	Heikinheimo	0.837	0.501	1.397	-0.682	0.495	116 / 708	137 / 680	1971			-+-			12.47
	Italian	0.871	0.581	1.305	-0.671	0.502	135 / 872	155 / 837	1971			-+-			14.82
	Australian 1	0.840	0.613	1.150	-1.090	0.276	161/1136	187 / 1090	1973			-++			18.32
	Franfurt 2	0.763	0.547	1.065	-1.591	0.112	174 / 1238	216 / 1194	1973			-+-			20.46
	NHLBI SMIT	0.810	0.572	1.147	-1.189	0.234	181 / 1291	219 / 1248	1974			-++			21.05
	Frank	0.816	0.591	1.127	-1.236	0.217	187 / 1346	225 / 1301	1975			-++			21.87
	Valere	0.828	0.614	1.118	-1.230	0.219	198 / 1395	234 / 1343	1975			-+			23.04
	Klein	0.846	0.627	1.143	-1.090	0.276	202 / 1409	235 / 1352	1976			-+			23.25
	UK-Collab	0.848	0.655	1.100	-1.242	0.214	240 / 1711	275 / 1645	1976			-+			27.71
	Austrian	0.802	0.630	1.021	-1.788	0.074	277 / 2063	340 / 2021	1977			+			32.92
	Australian 2	0.781	0.626	0.975	-2.179	0.029	302 / 2186	371 / 2128	1977			+			35.86
	Lasierra	0.773	0.620	0.964	-2.285	0.022	303 / 2199	374 / 2139	1977			+			36.06
	N Ger Collab	0.817	0.656	1.018	-1.797	0.072	366 / 2448	425 / 2373	1977			+			41.50
	Witchitz	0.815	0.660	1.008	-1.890	0.059	371 / 2480	430 / 2399	1977			+			42.13
	European 3	0.795	0.649	0.973	-2.223	0.026	389 / 2636	460 / 2558	1979			+			44.86
	ISAM	0.801	0.668	0.962	-2.376	0.018	443 / 3495	523 / 3440	1986			+			51.36
	GISSI-1	0.800	0.692	0.926	-2.997	0.003	1071 / 9355	1281 / 9292	1986			+			72.36
	Olson	0.799	0.693	0.921	-3.101	0.002	1072 / 9383	1283 / 9316	1986			+			72.56
	Baroffio	0.794	0.683	0.922	-3.032	0.002	1072 / 9412	1289 / 9346	1986			+			72.70
	Schreiber	0.791	0.682	0.917	-3.114	0.002	1073 / 9431	1292 / 9365	1986			+			72.91
	Cribier	0.792	0.685	0.914	-3.184	0.001	1074 / 9452	1293 / 9388	1986			+			73.06
	Sainsous	0.788	0.684	0.907	-3.312	0.001	1077 / 9501	1299 / 9437	1986			+			73.63
	Durand	0.787	0.686	0.902	-3.441	0.001	1080 / 9536	1303 / 9466	1987			+			74.10
	White	0.774	0.667	0.897	-3.387	0.001	1082 / 9643	1315 / 9578	1987			+			74.62
	Bassand	0.772	0.668	0.892	-3.510	0.000	1086 / 9695	1322 / 9633	1987			+			75.32
	Vlay	0.771	0.669	0.888	-3.595	0.000	1087 / 9708	1324 / 9645	1988			+			75.51
	Kennedy	0.768	0.670	0.880	-3.793	0.000	1099 / 9899	1341 / 9822	1988			+			77.41
	ISIS-2	0.767	0.689	0.852	-4.909	0.000	1890 / 18491	2370 / 18417	1988			+			99.60
	Wisenberg	0.762	0.682	0.851	-4.840	0.000	1892 / 18532	2375 / 18442	1988			+			100.00
dom		0.762	0.682	0.851	-4 840	0.000						+			

Basic stats One study removed Cumulative analysis Calculations

Change the scale

👬 Co	mprehensive meta an	alysis - [Anal	ysis]					-		and there is a second sec	
<u>F</u> ile	<u>E</u> dit F <u>o</u> rmat <u>V</u> iew	Computation	al options	Analyses <u>H</u> e	elp						
← D	ata entry 🔁 Nex	t table	井 High reso	olution plot	🔁 Select by	+ Effe	ct measure: Oc	dds ratio		II 🕸 🔁 👌 🔍	
Mo	odel Study name		Cu	mulative statis	tics		Cumulativ	e Dead / Total	Year	Cumulative odds ratio (95% CI)	Weight (Random)
		Point	Lower limit	Upper limit	Z-Value	p-Value	SKIV	Placebo		0.01 0.10 1.00 10.00 100.00	Relative weight
	Fletcher	0.159	0.015	1.732	-1.509	0.131	1/12	4 / 11	1959		0.21
	Dewar	0.355	0.105	1.200	-1.667	0.096	5/33	11 / 32	1963	* Show/hide forest plot	0.80
	European 1	0.683	0.210	2.221	-0.633	0.526	25 / 116	26 / 116	1969		2.79
	European 2	0.724	0.388	1.354	-1.010	0.312	94 / 489	120 / 473	1971	Scale Log scale .50 to	9.97 📕
	Heikinheimo	0.837	0.501	1.397	-0.682	0.495	116 / 708	137 / 680	1971	Log scale .1 to 1	05 2.47
	Italian	0.871	0.581	1.305	-0.671	0.502	135 / 872	155 / 837	1971	Log scale .01 to	100 4.82
	Australian 1	0.840	0.613	1.150	-1.090	0.276	161 / 1136	187 / 1090	1973	-+	8.32

-														
Data en	try t⊒ Next	table	🕂 High reso	lution plot	Select by	+ Effe	ect measure: Od	ds ratio 🔻		[] ‡ E	. <u>}</u>			
Model	Study name		Cur	nulative statist	ics		Cumulative	e Dead / Total	Year		Cumulative odd		Weight (Random	
		Point	Lower limit	Upper limit	Z-Value	p-Value	SKIV	Placebo		0.50	1.	00	2.00	Relative weight
	Fletcher	0.159	0.015	1.732	-1.509	0.131	1/12	4711	1959	- H			- 1	0.21
	Dewar	0.355	0.105	1.200	-1.667	0.096	5/33	11 / 32	1963					0.80
	European 1	0.683	0.210	2.221	-0.633	0.526	25/116	26 / 116	1969					2.79
	European 2	0.724	0.388	1.354	-1.010	0.312	94 / 489	120 / 473	1971		+			9.97
	Heikinheimo	0.837	0.501	1.397	-0.682	0.495	116 / 708	137 / 680	1971					12.47
	Italian	0.871	0.581	1.305	-0.671	0.502	135 / 872	155 / 837	1971					14.82
	Australian 1	0.840	0.613	1.150	-1.090	0.276	161 / 1136	187 / 1090	1973			<u> </u>		18.32
	Franfurt 2	0.763	0.547	1.065	-1.591	0.112	174 / 1238	216 / 1194	1973	_	,	_		20.46
	NHLBI SMIT	0.810	0.572	1.147	-1.189	0.234	181 / 1291	219 / 1248	1974					21.05
	Frank	0.816	0.591	1.127	-1.236	0.217	187 / 1346	225 / 1301	1975			<u> </u>		21.87
	Valere	0.828	0.614	1.118	-1.230	0.219	198 / 1395	234 / 1343	1975					23.04
	Klein	0.846	0.627	1.143	-1.090	0.276	202 / 1409	235 / 1352	1976					23.25
	UK-Collab	0.848	0.655	1.100	-1.242	0.214	240 / 1711	275 / 1645	1976			<u> </u>		27.71
	Austrian	0.802	0.630	1.021	-1.788	0.074	277 / 2063	340 / 2021	1977			-		32.92
	Australian 2	0.781	0.626	0.975	-2.179	0.029	302 / 2186	371 / 2128	1977					35.86
	Lasierra	0.773	0.620	0.964	-2.285	0.022	303 / 2199	374 / 2139	1977					36.06
	N Ger Collab	0.817	0.656	1.018	-1.797	0.072	366 / 2448	425 / 2373	1977			-		41.50
	Witchitz	0.015	0.000	1,000	1,000	0.050	271 / 2400	400 / 0000	1077					42.13
	European 3	0.795	0.649	0.973	-2.223	0.026	389 / 2636	460 / 2558	1979					44.86
	ISAM	0.801	0.668	0.962	-2.376	0.018	443 / 3495	523 / 3440	1986					51.36
	GISSI-1	0.800	0.692	0.926	-2.997	0.003	1071 / 9355	1281 / 9292	1986					72.36
	Olson	0.799	0.693	0.921	-3.101	0.002	1072 / 9383	1283 / 9316	1986					72.56
	Baroffio	0.794	0.683	0.922	-3.032	0.002	1072 / 9412	1289 / 9346	1986					72.70
	Schreiber	0.791	0.682	0.917	-3.114	0.002	1073 / 9431	1292 / 9365	1986					72.91
	Cribier	0.792	0.685	0.914	-3.184	0.001	1074 / 9452	1293 / 9388	1986					73.06
	Sainsous	0.788	0.684	0.907	-3.312	0.001	1077 / 9501	1299 / 9437	1986					73.63
	Durand	0.787	0.686	0.902	-3.441	0.001	1080 / 9536	1303 / 9466	1987					74.10
	White	0.774	0.667	0.897	-3.387	0.001	1082 / 9643	1315 / 9578	1987					74.62
	Bassand	0.772	0.668	0.892	-3.510	0.000	1086 / 9695	1322 / 9633	1987					75.32
	Vlav	0.771	0.669	0.888	-3.595	0.000	1087 / 9708	1324 / 9645	1988					75.51
	Kennedv	0.768	0.670	0.880	-3.793	0.000	1099 / 9899	1341 / 9822	1988					77.41
	ISIS-2	0.767	0.689	0.852	.4 909	0.000	1990 / 18491	2370 / 18417	1988	_				99.60
	Wisenberg	0.762	0.682	0.851	-4,840	0.000	1892 / 18532	2375 / 18442	1988					100.00

Basic stats One study removed Cumulative analysis Calculations

If a meta-analysis had been performed based on studies published through 1979, it would have reported an odds ratio of 0.795 with a CI of 0.649 to 0.973 and a p-value of 0.026.

The meta-analysis that was performed based on studies published through 1988 reported an odds ratio of 0.762 with a Cl of 0.682 to 0.851 and a p-value of < 0.001.

Please note that the cumulative analysis shown here is intended only as a look-back. It would be a very bad idea to repeat a meta-analysis every time a new study was added to the literature, with the goal of stopping when the *p*-value hits 0.05. If the goal is to repeat the analysis every time a study is added, then adjustments must be made to the *p*-value and confidence interval.

Summary

This analysis includes 33 studies where patients who had suffered an MI were randomized to be treated with either streptokinase or placebo. Outcome was death, and we focused on the odds ratio as the effect size.

Do the guidelines affect the likelihood of survival?

The mean odds ratio is 0.762, which means that SKIV reduced the risk of death by about 25%.

These studies were sampled from a universe of possible studies defined by certain inclusion/exclusion rules as outlined in the full paper. The confidence interval for the odds ratio is 0.682 to 0.851, which tell us that the <u>mean</u> odds ratio in the universe of studies could fall anywhere in this range. This range does not include an odds ratio of 1.0, which tells us that the mean odds ratio is probably not 1.0.

Similarly, the Z-value for testing the null hypothesis (that the mean odds ratio is 1.0) is -4.840, with a corresponding *p*-value of < 0.001. We can reject the null that the risk of death is the same in both groups, and conclude that the risk of death is lower in the SKIV group.

Does the effect size vary across studies?

The *observed* effect size varies somewhat from study to study, but a certain amount of variation is expected due to sampling error. We need to determine if the observed variation falls within the range that can be attributed to sampling error (in which case there is no evidence of variation in true effects), or if it exceeds that range.

The Q-statistic provides a test of the null hypothesis that all studies in the analysis share a common effect size. If all studies shared the same effect size, the expected value of Q would be equal to the degrees of freedom (the number of studies minus 1).

The *Q*-value is 39.484 with 32 degrees of freedom and the corresponding p-value is 0.170. Thus, we cannot reject the null hypothesis that the true odds ratio is the same in all studies.

The l^2 statistic tells us what proportion of the observed variance reflects differences in true effect sizes rather than sampling error. l^2 is 18.954, which means that about 20% of the observed variance reflects variance in true effects. Put another way, if we could plot the true effects rather than the observed effects, the variance of the new plot would shrink by about 80%.

 T^2 is the variance of true effect sizes (in log units). Here, T^2 is 0.012 in log units. T is the standard deviation of true effects (in log units). Here, T is 0.108 in log units.