

## Appendix 4: Supplementary analyses [posted as supplied by author]

Supplementary table S1: Number of trials of cancer screening that report on cancer mortality, incidence, and harms assuming that the articles without translation had reported all outcomes.

	Trials that report data for the screened and control groups*		Trials that report data at least in the screened group†	
	Absolute number	Percentage of trials (95% CI)	Absolute number	Percentage of trials (95% CI)
<b>Total number of trials</b>	57		57	
<b>General outcomes</b>				
Cancer-specific mortality	47	82% (70%-91%)	47	82% (70%-91%)
Cancer-specific incidence	51	89% (78%-96%)	53	93% (83%-98%)
<b>Harm outcomes</b>				
Withdrawals due to adverse events	5	9% (3%-19%)	7	12% (5%-24%)
Numerical estimate for overdiagnosis	8	14% (6%-26%)	8	14% (6%-26%)
Numerical estimate for false-positive findings	5	9% (3%-19%)	20	35% (23%-49%)
Numerical estimate for negative psychosocial consequences	9	16% (7%-28%)	12	21% (11%-34%)
Numerical estimate for somatic complications	15	26% (16%-40%)	24	42% (29%-56%)
Numerical estimate for invasive procedures	28	49% (36%-63%)	47	82% (70%-91%)
All-cause mortality	36	63% (49%-76%)	36	63% (49%-76%)

\*210 articles provided data for both the intervention and the control groups (198 included in the main analysis and 12 articles which were not translated). † 242 articles provided data for at least the intervention group (210 for both groups and 44 for the screened group alone). 95%CI: 95% exact confidence interval.

Supplementary table S2: Number of trials that report on cancer mortality, incidence, and harms stratified by continent where it was performed.

	Africa	Asia	Europe	North America
<b>Total number of trials</b>	1	8	31	17
<b>General outcomes</b>				
Cancer-specific mortality	0	6	25	16
Cancer-specific incidence	1	8	29	13
<b>Harm outcomes</b>				
Withdrawals due to adverse events	0	0	1	0
Numerical estimate for overdiagnosis	0	0	3	1
Numerical estimate for false-positive findings	0	0	3	2
Numerical estimate for negative psychosocial consequences	0	0	3	2
Numerical estimate for somatic complications	0	0	7	4
Numerical estimate for invasive procedures	0	3	14	10
All-cause mortality	0	2	20	12
<b>Percentage of space devoted to harm: median ( interquartile range)</b>	0%	5% (0-10%)	13%(5-20%)	13% (2-19%)

This table presents the number of trials that provided data for each outcome for both the intervention and control group.

Supplementary table S3: Number of trials that report on cancer mortality, incidence, and harms stratified by type of comparator

	Usual care	Active comparator
<b>Total number of trials</b>	46	11
General outcomes		
Cancer-specific mortality	38	9
Cancer-specific incidence	42	9
Harm outcomes		
Withdrawals due to adverse events	1	0
Numerical estimate for overdiagnosis		
Numerical estimate for false-positive findings	4	1
Numerical estimate for negative psychosocial consequences		
Numerical estimate for somatic complications	7	4
Numerical estimate for invasive procedures		
All-cause mortality	28	6
Percentage of space devoted to harm: median ( interquartile range)		
	9% (2-18%)	13% (7-18%)

This table presents the number of trials that provided data for each outcome for both the intervention and control group.