

APPENDIX TABLES

Appendix Table 3. Cochrane Risk of Bias for the Included Studies.

	Randomization sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Crino, 2008 ⁶	+	+	?	?	+	+	+
Goss, 2009 ⁷	+	+	?	?	+	+	+
Mok, 2009 ⁸	+	+	-	-	+	+	+
Maemondo, 2010 ⁹	+	+	+	+	+	+	+
Zhou, 2011 ¹⁰	+	+	-	-	+	+	?
Gridelli, 2012 ¹¹	+	+	-	-	+	+	+
Miller, 2012 ¹²	+	+	+	+	+	?	+
Pirker, 2012 ¹³	+	+	-	-	+	+	?
Rosell, 2012 ¹⁴	+	+	-	-	+	+	+
Scagliotti, 2012 ¹⁵	+	+	+	+	+	+	?
Zhang, 2012 ¹⁶	+	+	+	+	+	+	+
Shi, 2013 ¹⁷	+	+	+	+	?	+	+
Wu, 2013 ¹⁸	+	+	+	+	+	+	+
Ellis, 2014 ¹⁹	+	+	+	+	+	+	?
Kawaguchi, 2014 ²⁰	+	+	-	-	+	+	?
Ramalingam, 2014 ²¹	+	+	+	+	+	+	+
Seto, 2014 ²²	+	+	-	-	+	?	?
Wu, 2014 ²³	+	+	-	-	+	+	+
Yang, 2014 ²⁴	+	+	-	-	+	?	-

Scagliotti, 2015²⁵	+	+	+	+	+	+	+
Soria, 2015²⁶	+	+	?	?	+	+	?
Vansteenkiste, 2015²⁷	+	+	-	-	+	+	?
Wu, 2015²⁸	+	+	-	-	+	?	?
Zhou, 2015²⁹	+	+	-	-	+	+	?
Cheng, 2016³⁰	+	+	-	-	+	+	+
Park, 2016³¹	+	+	-	-	+	+	?
Urata, 2016³²	+	+	-	-	+	+	+
Kubota, 2017³³	+	+	+	+	+	+	+
Mok, 2017³⁴	+	+	-	-	+	+	+
Shi, 2017³⁵	+	+	-	-	+	?	?
Spigel, 2017³⁶	+	+	+	+	+	+	+
Wu, 2017³⁷	+	+	-	-	+	+	+
Yang (2), 2017³⁸	+	+	-	-	+	+	?
Yang, 2017³⁹	+	+	?	?	+	+	?
Herbst, 2018⁴⁰	+	+	-	-	+	+	+
Mok, 2018⁴¹	+	+	-	-	+	+	?
Soria, 2018⁴²	+	+	+	+	+	+	+
Wu, 2018⁴³	+	+	-	-	+	+	+
Kelly, 2019⁴⁴	+	+	-	-	+	+	?
Reck, 2019⁴⁵	+	+	-	-	+	+	+
Saito, 2019⁴⁶	+	+	-	-	?	+	-

'+', yes; '-', no; '?', unclear.

Appendix Table 6. ORR of all available interventions according to treatment-level Bayesian network analysis.

Gef									
2.22 (0.44-14.61)	Erlo								
0.67 (0.25-1.80)	0.30 (0.05-1.56)	Afa							
0.84 (0.26-2.71)	0.38 (0.04-2.79)	1.26 (0.28-5.73)	Dac						
1.76 (0.53-7.49)	0.79 (0.24-2.53)	2.62 (0.79-10.86)	2.07 (0.40-13.87)	Osi					
4.14 (0.57-39.21)	1.87 (0.59-6.08)	6.22 (0.86-57.60)	4.90 (0.50-64.65)	2.37 (0.46-12.50)	Naq				
1.68 (0.27-13.68)	0.76 (0.31-1.82)	2.50 (0.40-20.46)	1.99 (0.23-22.56)	0.95 (0.23-4.17)	0.40 (0.09-1.77)	Erlo + Bev			
0.86 (0.34-2.44)	0.39 (0.05-2.74)	1.29 (0.34-5.32)	1.01 (0.23-5.02)	0.49 (0.09-2.37)	0.21 (0.02-1.98)	0.51 (0.05-4.30)	Gef + Peme		
2.52 (0.56-11.83)	1.13 (0.16-6.68)	3.77 (0.81-17.54)	3.01 (0.44-21.60)	1.44 (0.30-5.72)	0.61 (0.06-4.92)	1.51 (0.17-10.61)	2.94 (0.45-17.49)	Cet + Plat	
<u>5.14 (1.96-14.10)</u>	2.32 (0.48-8.90)	7.67 (2.93-20.68)	6.10 (1.34-29.20)	2.93 (1.10-6.37)	1.25 (0.17-7.18)	3.06 (0.50-14.90)	6.02 (1.42-23.13)	2.04 (0.62-6.58)	Plat

Note: Results for objective response rate (ORR) are shown in blue-colour cells. Comparisons should be read from left to right and the estimate is in the cell in common between the column-defining drugs and the row-defining treatment. ORs (and 95% CrI) more than 1 favour the column-defining treatment (the column-defining treatment has superior ORR). To obtain ORs for comparisons in the opposite direction, reciprocals should be taken. Significant results are in bold and underscored.

Abbreviations: Gef: gefitinib; Erlo: erlotinib; Dac: dacomitinib; Afa: afatinib; Osi: osimertinib; Naq: naquotinib; Erlo+Bev: erlotinib+bevacizumab; Gef+Peme: gefitinib+pemetrexed; Cet+Plat: cetuximab+platinum-based therapy; Plat: platinum-based therapy.

Appendix Table 7. Results of eligible studies on grade 3 or higher AEs.

Study	Intervention	Control	AEs in intervention arm	AEs in control arm	OR value
Saito et al, 2019⁴⁶ (Japan)	erlotinib + bevacizumab (112)	erlotinib (112)	88% (98/112)	46% (53/114)	8.06 (4.12-15.75)
Kelly et al, 2019⁴⁴ (America)	naquotinib (267)	gefitinib/erlotinib (263)	46% (122/267)	25.6% (67/262)	2.45 (1.70-3.54)
Soria et al, 2018⁴² (multiple nations)	osimertinib (279)	gefitinib/erlotinib (277)	32% (89/279)	41% (114/271)	0.65 (0.46-0.91)
Yang et al, 2017³⁹ (China)	erlotinib (128)	gefitinib (128)	0% (0/128)	4.6% (6/128)	0.16 (0.02-1.35)
Yang et al (2), 2017³⁸ (China)	icotinib (85)	WBRT (73)	8% (7/85)	38% (28/73)	0.14 (0.06-0.36)
Wu et al, 2017³⁷ (multiple nations)	dacomitinib (227)	gefitinib (225)	63% (143/227)	41% (92/224)	2.44 (1.67-3.57)
Shi et al, 2017³⁵ (China)	icotinib (148)	cisplatin+pemetrexed (137)	0.7 % (1/148)	5.8% (8/137)	0.11 (0.01-1.89)
Mok et al, 2017³⁴ (multiple nations)	osimertinib (279)	pemetrexed+carboplatin/cisplatin (140)	9% (34/279)	53.7% (73/136)	0.12 (0.07-0.20)
Park et al, 2016³¹ (multiple nations)	afatinib (160)	gefitinib (159)	31% (50/160)	18% (29/159)	2.04 (1.21-3.44)
Cheng et al, 2016³⁰ (multiple nations)	gefitinib+pemetrexed (126)	gefitinib (65)	42% (53/126)	19% (12/65)	3.21 (1.56-6.58)
Wu et al, 2015²⁸ (China)	erlotinib (110)	gemcitabine/cisplatin (107)	40% (44/110)	56.7% (59/104)	0.51 (0.30-0.88)
Soria et al, 2015²⁶ (multiple nations)	gefitinib (133)	placebo (132)	45% (59/132)	47% (55/132)	1.13 (0.70-1.84)
Wu et al, 2014²³ (multiple nations)	afatinib (242)	cisplatin+gemcitabine (122)	36% (86/239)	60.2% (68/113)	0.37 (0.23-0.59)
Rosell et al, 2012¹⁴ (multiple nations)	erlotinib (86)	cisplatin+docetaxel/gemcitabine (87)	45% (38/84)	67% (55/82)	0.41 (0.22-0.76)
Pirker et al, 2012¹³ (multiple nations)	cetuximab+cisplatin+vinorelbine (178)	cisplatin+vinorelbine (167)	87% (153/175)	90% (151/168)	0.78 (0.40-1.53)
Zhou et al, 2011¹⁰ (China)	erlotinib (82)	gemcitabine+carboplatin (72)	17% (14/83)	65% (47/72)	0.11 (0.05-0.23)
Maemondo et al, 2010⁹ (Japan)	gefitinib (114)	carboplatin+paclitaxel (114)	41.2% (47/114)	71.7% (81/113)	0.28 (0.16-0.48)

Abbreviation: AE: adverse events.

Appendix Table 8. Grade 3 or higher AEs of all available interventions according to treatment-level Bayesian network analysis.

Gef												
1.52 (0.41-9.54)	Erlo											
4.52 (0.24-NA)	2.83 (0.15-107.80)	Ico										
0.67 (0.15-3.61)	0.45 (0.06-2.28)	0.15 (0.003-3.16)	Afa									
0.41 (0.06-2.99)	0.27 (0.02-2.57)	0.09 (0.001-3.00)	0.61 (0.04-6.93)	Dac								
2.58 (0.45-23.67)	1.71 (0.37-7.30)	0.59 (0.01-13.45)	3.81 (0.53-36.59)	6.32 (0.50-130.80)	Osi							
0.72 (0.07-12.15)	0.48 (0.07-3.43)	0.16 (0.003-5.75)	1.06 (0.09-19.10)	1.75 (0.09-56.96)	0.28 (0.02-3.42)	Naq						
0.18 (0.02-3.13)	<u>0.12 (0.02-0.94)</u>	0.04 (0.001-1.56)	0.27 (0.02-4.92)	0.45 (0.02-14.84)	<u>0.07 (0.005-0.92)</u>	0.25 (0.01-4.46)	Erlo + Bev					
0.30 (0.04-2.33)	0.20 (0.01-2.03)	0.07 (0.001-2.35)	0.44 (0.03-5.54)	0.74 (0.04-12.85)	0.12 (0.005-1.60)	0.42 (0.01-8.40)	1.64 (0.05-34.07)	Gef + Peme				
0.44 (0.04-6.42)	0.29 (0.03-2.66)	0.10 (0.002-2.93)	0.66 (0.06-9.74)	1.08 (0.05-31.43)	0.17 (0.01-2.06)	0.62 (0.03-11.77)	2.44 (0.10-46.58)	1.47 (0.07-46.40)	Cet + Plat			
0.34 (0.10-1.68)	<u>0.23 (0.07-0.58)</u>	0.08 (0.002-1.16)	0.51 (0.12-2.63)	0.84 (0.09-11.47)	<u>0.13 (0.03-0.56)</u>	0.48 (0.05-4.03)	1.88 (0.17-17.01)	1.15 (0.11-16.61)	0.77 (0.10-5.88)	Plat		
0.64 (0.02-51.08)	0.40 (0.01-25.27)	0.14 (0.02-1.12)	0.93 (0.02-76.56)	1.57 (0.02-192.40)	0.24 (0.005-17.54)	0.86 (0.01-78.54)	3.41 (0.05-NA)	2.12 (0.03-NA)	1.40 (0.03-132.70)	1.81 (0.05-106.70)	WBRT	
1.13 (0.15-8.31)	0.75 (0.04-7.33)	0.25 (0.01-8.52)	1.68 (0.12-19.88)	2.78 (0.17-47.19)	0.44 (0.02-5.78)	1.58 (0.05-30.47)	6.21 (0.18-128.00)	3.76 (0.22-68.63)	2.57 (0.09-52.73)	3.31 (0.24-32.34)	1.77 (0.01-107.60)	Placebo

Note: Results for grade 3 or higher adverse events (AEs) in individual-treatment level are shown in blue-colour cells. Comparisons should be read from left to right and the estimate is in the cell in common between the column-defining drugs and the row-defining treatment. ORs (and 95% CrI) less than 1 favour the column-defining treatment, which shows the column-defining treatment has less grade 3 or higher AEs. To obtain ORs for comparisons in the opposite direction, reciprocals should be taken. Significant results are in bold and underscored.

Abbreviations: Gef: gefitinib; Erlo: erlotinib; Ico: icotinib; Dac: dacomitinib; Afa: afatinib; Osi: osimertinib; Naq: naquotinib; Erlo+Bev: erlotinib+bevacizumab; Gef+Peme: gefitinib+pemetrexed; Cet+Plat: cetuximab+platinum-based therapy; Plat: platinum-based therapy; WBRT: whole-brain radiotherapy; NA: not available.

Appendix Table 9. PFS and OS of all available interventions according to class-level Bayesian network analysis.

1st-gen ET	0.96 (0.54-2.14)	0.63 (0.24-1.68)	1.30 (0.56-2.98)	1.14 (0.47-3.43)	NA	NA	0.74 (0.24-2.20)	NA	0.63 (0.18-2.38)	NA	1.01 (0.58-1.72)	0.77 (0.30-2.09)	1.07 (0.39-2.97)	0.97 (0.48-2.50)
1.25 (0.73-2.07)	2nd-gen ET	0.66 (0.18-1.92)	1.34 (0.41-3.58)	1.17 (0.38-3.90)	NA	NA	0.77 (0.19-2.47)	NA	0.66 (0.14-2.59)	NA	1.05 (0.39-2.24)	0.78 (0.24-2.48)	1.12 (0.29-3.40)	1.01 (0.52-2.00)
1.27 (0.69-2.32)	1.02 (0.47-2.26)	3rd-gen ET	2.06 (0.56-7.47)	1.79 (0.52-8.36)	NA	NA	1.17 (0.26-5.15)	NA	1.00 (0.20-5.26)	NA	1.59 (0.52-4.90)	1.20 (0.33-5.08)	1.71 (0.42-7.03)	1.52 (0.49-6.31)
1.42 (0.71-2.83)	1.14 (0.49-2.75)	1.12 (0.44-2.82)	ET+aVE GFR	0.88 (0.26-3.56)	NA	NA	0.56 (0.15-2.26)	NA	0.48 (0.11-2.31)	NA	0.77 (0.29-2.10)	0.59 (0.18-2.23)	0.83 (0.22-3.08)	0.75 (0.26-2.75)
0.87 (0.21-3.51)	0.70 (0.16-3.09)	0.68 (0.15-3.18)	0.62 (0.13-2.88)	MT+ET	NA	NA	0.66 (0.13-2.40)	NA	0.56 (0.10-2.46)	NA	0.89 (0.26-2.41)	0.67 (0.17-2.46)	0.95 (0.20-3.42)	0.86 (0.24-2.98)
0.63 (0.11-3.65)	0.51 (0.08-3.09)	0.50 (0.08-3.13)	0.45 (0.07-2.95)	0.73 (0.08-7.14)	IT+Plat	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.19 (0.20-6.93)	0.95 (0.15-5.94)	0.94 (0.15-5.92)	0.84 (0.13-5.58)	1.36 (0.15-13.40)	1.87 (0.53-6.70)	IT+aVEG FR+Plat	NA	NA	NA	NA	NA	NA	NA	NA
0.92 (0.44-1.97)	0.74 (0.31-1.88)	0.73 (0.30-1.88)	0.65 (0.24-1.85)	1.07 (0.22-5.26)	1.45 (0.24-9.65)	0.77 (0.12-5.08)	ET+Plat	NA	0.85 (0.43-1.78)	NA	1.37 (0.53-3.58)	1.03 (0.26-4.72)	1.46 (0.33-6.42)	1.31 (0.38-5.88)
0.73 (0.20-2.64)	0.58 (0.15-2.31)	0.57 (0.15-2.28)	0.51 (0.12-2.21)	0.84 (0.13-5.74)	1.14 (0.35-3.77)	0.61 (0.18-2.04)	0.79 (0.19-3.16)	aVEGFR +Plat	NA	NA	NA	NA	NA	NA
1.24 (0.42-3.85)	1.00 (0.30-3.44)	0.87 (0.24-3.38)	1.44 (0.24-8.64)	1.96 (0.27-15.20)	1.05 (0.14-8.14)	1.35 (0.59-3.07)	1.71 (0.34-9.10)	0.84 (0.17-4.34)	ET+aVE GFR+Plat	NA	1.60 (0.48-5.10)	1.20 (0.26-6.20)	1.70 (0.32-8.68)	1.54 (0.37-7.99)
1.46 (0.47-4.73)	1.17 (0.34-4.28)	1.16 (0.32-4.41)	1.04 (0.28-4.09)	1.69 (0.28-10.60)	2.32 (0.28-19.00)	1.24 (0.15-10.40)	1.60 (0.40-6.39)	2.02 (0.36-11.40)	1.19 (0.23-5.84)	ET+CT	NA	NA	NA	NA
<u>0.41</u> <u>(0.28-0.61)</u>	<u>0.33</u> <u>(0.19-0.62)</u>	<u>0.33</u> <u>(0.18-0.61)</u>	<u>0.29</u> <u>(0.13-0.65)</u>	0.48 (0.11-2.06)	0.65 (0.12-3.63)	0.35 (0.06-1.98)	<u>0.45</u> <u>(0.22-0.90)</u>	0.57 (0.17-1.94)	<u>0.33</u> <u>(0.11-0.97)</u>	<u>0.28</u> <u>(0.08-0.94)</u>	Plat	0.76 (0.27-2.43)	1.07 (0.34-3.40)	0.97 (0.41-2.89)
1.53 (0.61-3.87)	1.23 (0.43-3.57)	1.21 (0.41-3.67)	1.08 (0.34-3.48)	1.77 (0.33-9.37)	2.42 (0.34-17.60)	1.29 (0.18-9.49)	1.66 (0.50-5.38)	2.11 (0.43-10.30)	1.23 (0.29-5.19)	1.04 (0.23-4.53)	3.69 (1.34-10.01)	CT	1.41 (0.33-5.34)	1.29 (0.38-4.70)
0.56 (0.17-1.85)	0.45 (0.13-1.68)	0.44 (0.12-1.67)	0.40 (0.10-1.59)	0.65 (0.11-4.08)	0.88 (0.11-7.50)	0.47 (0.06-4.04)	0.61 (0.15-2.47)	0.77 (0.14-4.51)	0.45 (0.09-2.24)	0.38 (0.07-2.00)	1.35 (0.40-4.75)	1.13 (0.31-4.46)	WBRT	0.90 (0.27-3.77)
<u>0.50</u> <u>(0.27-0.89)</u>	<u>0.40</u> <u>(0.21-0.73)</u>	<u>0.39</u> <u>(0.16-0.91)</u>	<u>0.35</u> <u>(0.14-0.85)</u>	0.57 (0.12-2.59)	0.79 (0.12-4.90)	0.42 (0.06-2.63)	0.54 (0.20-1.36)	0.69 (0.16-2.72)	0.40 (0.11-1.37)	0.34 (0.09-1.19)	1.20 (0.58-1.19)	<u>0.32</u> <u>(0.10-0.95)</u>	0.88 (0.22-3.27)	Placebo

Note: Results for PFS are shown in blue-colour cells, results for OS are in gray-color cells. Comparisons should be read from left to right and the estimate is in the cell in common between the column-defining drugs and the row-defining treatment. For PFS and OS, HRs (and 95% CI) less than 1 favour the column-defining treatment. To obtain HRs for comparisons in the opposite direction, reciprocals should be taken. Significant results are in bold and underscored.

Abbreviations: 1st-gen ET: first generation EGFR-TKI; 2nd-gen ET, second generation EGFR-TKI; 3rd-gen ET: third generation EGFR-TKI; ET+aVEGFR: EGFR-TKI+anti-VEGFR; MT+ET: MET-TKI+EGFR-TKI; IT+Plat: immunotherapy+platinum-based therapy;

IT+aVEGFR+Plat: immunotherapy+anti-VEGFR+platinum-based therapy; ET+Plat: EGFR-TKI+platinum-based therapy; aVEGFR+Plat: anti-VEGFR+platinum-based therapy; ET+aVEGFR+Plat: EGFR-TKI+anti-VEGFR+platinum-based therapy; ET+CT: EGFR-TKI+cytotoxic therapy; Plat: platinum-based therapy; CT: cytotoxic therapy; WBRT: whole-brain radiotherapy; PFS: progression-free survival; OS: overall survival; HR: hazard-ratio; CI: confidence interval.

Appendix Table 10. ORR of all available interventions according to class-level Bayesian network analysis.

1st-gen ET							
0.71 (0.37-1.33)	2nd-gen ET						
1.38 (0.78-2.59)	1.96 (0.92-4.57)	3rd-gen ET					
0.76 (0.35-1.66)	1.08 (0.40-2.99)	0.55 (0.20-2.99)	ET + aVEGFR				
0.86 (0.35-2.21)	1.22 (0.42-3.90)	0.62 (0.21-1.87)	1.13 (0.34-3.91)	ET + CT			
2.27 (0.66-7.47)	3.22 (0.89-11.32)	1.64 (0.47-5.21)	2.99 (0.69-12.45)	2.66 (0.54-11.41)	ET + Plat		
<u>4.65 (2.42-8.79)</u>	<u>6.60 (3.14-13.78)</u>	<u>3.35 (1.70-6.09)</u>	<u>6.14 (2.19-16.81)</u>	<u>5.44 (1.67-15.96)</u>	2.06 (0.73-5.81)	Plat	
<u>8.82 (2.79-29.56)</u>	<u>12.52 (3.38-49.41)</u>	<u>6.33 (1.69-24.30)</u>	<u>11.64 (2.87-49.19)</u>	<u>10.28 (2.28-45.82)</u>	3.89 (0.74-21.81)	1.90 (0.52-7.58)	WBRT

Note: Results for objective response rate (ORR) are shown in blue-colour cells. Comparisons should be read from left to right and the estimate is in the cell in common between the column-defining drugs and the row-defining treatment. ORs (and 95% CrI) more than 1 favour the column-defining treatment (the column-defining treatment has superior ORR). To obtain ORs for comparisons in the opposite direction, reciprocals should be taken. Significant results are in bold and underscored.

Abbreviations: 1st-gen ET: first generation EGFR-TKI; 2nd-gen ET: second generation EGFR-TKI; 3rd-gen ET: third generation EGFR-TKI; ET+aVEGFR: EGFR-TKI+anti-VEGFR; ET+CT: EGFR-TKI+cytotoxic therapy; ET+Plat: EGFR-TKI+platinum-based therapy; Plat: platinum-based therapy; WBRT: whole brain radiotherapy.

Appendix Table 11. Results of eligible studies on DoR.

Study	Intervention	Control	DoR of intervention arm (Mons)	DoR of control arm (Mons)
Saito et al, 2019 ⁴⁶ (Japan)	erlotinib + bevacizumab (112)	erlotinib (112)	13.5 (0.2–26.9)	12.1 (1.43–24.5)
Reck et al, 2019 ⁴⁵ (multiple nations)	atezolizumab+bevacizumab+c arboplatin and paclitaxel (34)	atezolizumab+carboplatin and paclitaxel (45)	11.1 (2.8–18.0)	5.6 (2.6–15.2)
		bevacizumab+carboplatin and paclitaxel (45)		4.7 (2.6–13.5)
Kelly et al, 2019 ⁴⁴ (America)	naquotinib (267)	gefitinib/erlotinib (263)	9.17 (5.45-NA)	9.03 (7.39-NA)
Wu et al, 2018 ⁴³ (multiple nations)	osimertinib (75)	platinum-pemetrexed (41)	8.9 (4.3-NA)	5.7 (4.4-5.7)
Soria et al, 2018 ⁴² (multiple nations)	osimertinib (279)	gefitinib/erlotinib (277)	17.2 (13.8–22.0)	8.5 (7.3–9.8)
Wu et al, 2017 ³⁷ (multiple nations)	dacomitinib (227)	gefitinib (225)	14.8 (12.0–17.4)	8.3 (7.4–9.2)
Mok et al, 2017 ³⁴ (multiple nations)	osimertinib (279)	pemetrexed+carboplatin/cis platin (140)	9.7 (8.3-11.6)	4.1 (3.0-5.6)
Cheng et al, 2016 ³⁰ (multiple nations)	gefitinib+pemetrexed (126)	gefitinib (65)	16.2 (12.6-18.7)	10.9 (9.7-12.8)

Abbreviations: DoR: duration of response; NA: not available.

Appendix Table 12. DoR of all available interventions according to class-level Bayesian network analysis.

1st-gen ET					
-6.48 (-18.19 to 5.16)	2nd-gen ET				
-4.43 (-12.62 to 3.80)	2.09 (-12.16 to 16.42)	3rd-gen ET			
-1.36 (-13.18 to 10.23)	5.08 (-11.44 to 21.63)	3.04 (-11.29 to 17.31)	ET + aVEGFR		
-0.04 (-11.68 to 11.60)	6.46 (-9.97 to 22.94)	4.40 (-3.79 to 12.65)	1.36 (-15.13 to 17.78)	Plat	
-5.28 (-16.81 to 6.27)	1.22 (-15.28 to 17.66)	-0.84 (-15.06 to 13.50)	-3.87 (-20.38 to 12.47)	-5.25 (-21.64 to 11.28)	ET + CT

Note: Results for Duration of response (DoR) are shown in blue-colour cells. Comparisons should be read from left to right and the estimate is in the cell in common between the column-defining drugs and the row-defining treatment. MDs (Mean Difference, MD and 95% CrI) more than 0 favour the column-defining treatment (the column-defining treatment has superior DoR). To obtain MDs for comparisons in the opposite direction, reciprocals should be taken. Significant results are in bold and underscored.

Abbreviations: 1st-gen ET: first generation EGFR-TKI; 2nd-gen ET: second generation EGFR-TKI; 3rd-gen ET: third generation EGFR-TKI; ET+aVEGFR: EGFR-TKI+anti-VEGFR; ET+CT: EGFR-TKI+cytotoxic therapy; Plat: platinum-based therapy.

Appendix Table 13. Grade 3 or higher AEs of all available interventions according to class-level Bayesian network analysis.

1st-gen ET								
0.49 (0.19-1.23)	2nd-gen ET							
1.09 (0.43-2.75)	2.24 (0.63-8.12)	3rd-gen ET						
<u>0.12 (0.02-0.61)</u>	0.25 (0.04-1.61)	<u>0.11 (0.02-0.72)</u>	ET + aVEGFR					
0.30 (0.06-1.57)	0.61 (0.09-4.15)	0.27 (0.04-1.84)	2.48 (0.25-26.12)	ET + CT				
0.28 (0.05-1.60)	0.57 (0.08-3.85)	0.25 (0.04-1.73)	2.33 (0.21-25.33)	0.94 (0.08-10.14)	ET + Plat			
<u>0.22 (0.11-0.41)</u>	0.45 (0.16-1.20)	<u>0.20 (0.07-0.53)</u>	1.81 (0.31-10.43)	0.73 (0.12-4.15)	0.78 (0.15-4.00)	Plat		
<u>0.14 (0.02-0.77)</u>	0.28 (0.04-2.04)	<u>0.13 (0.02-0.89)</u>	1.14 (0.10-12.42)	0.46 (0.04-4.87)	0.49 (0.04-5.91)	0.63 (0.10-4.16)	WBRT	
1.14 (0.24-5.60)	2.34 (0.38-14.82)	1.05 (0.17-6.52)	9.51 (1.00-92.27)	3.82 (0.39-37.26)	4.07 (0.39-45.12)	5.25 (0.98-29.83)	8.36 (0.81-87.95)	Placebo

Note: Results for grade 3 or higher adverse events (AEs) are shown in blue-colour cells. Comparisons should be read from left to right and the estimate is in the cell in common between the column-defining drugs and the row-defining treatment. ORs (and 95% CrI) less than 1 favour the column-defining treatment (the column-defining treatment has less grade 3 or higher AEs. To obtain ORs for comparisons in the opposite direction, reciprocals should be taken. Significant results are in bold and underscored.

Abbreviations: 1st-gen ET: first generation EGFR-TKI; 2nd-gen ET: second generation EGFR-TKI; 3rd-gen ET: third generation EGFR-TKI; ET+aVEGFR: EGFR-TKI+anti-VEGFR; ET+CT: EGFR-TKI+cytotoxic therapy; ET+Plat: EGFR-TKI+platinum-based therapy; Plat: platinum-based therapy; WBRT: whole brain radiotherapy.