

Overall bias

Up to 2 “unclear” and no “high risk”, the overall bias was considered “low”.

3 “unclear” and/or one “high risk”, the overall bias was considered “moderate”; and more than three “unclear” and/or more than one “high risk” it was considered “high”.

NA is reported when the outcome is not considered in the study.

Our final risk of bias assessments for all eligible trials is presented in the table below:

Assessment of objective outcome (mortality)

Trials	Sequence generation	Allocation concealment	Blinding of patients and care providers	Blinding of outcomes assessors	Incomplete outcome data	Selective outcome reporting	Overall bias
ARCHER 1009, 2014	low risk	low risk	low risk	low risk	low risk	low risk	low risk
ARQ 197-209, 2011	unclear	low risk	low risk	low risk	low risk	low risk	low risk
ATTENTION, 2015	unclear	unclear	low risk	low risk	low risk	low risk	low risk
Bergqvist, 2014	low risk	low risk	low risk	low risk	low risk	low risk	low risk
Besse, 2014	unclear	unclear	low risk	low risk	low risk	high risk	moderate risk
BeTa, 2011	low risk	low risk	low risk	low risk	low risk	low risk	low risk
Bhatnagar, 2012	unclear	unclear	NA	NA	unclear	unclear	high risk
Blumenschein, 2015	unclear	unclear	low risk	low risk	low risk	low risk	low risk
BR21, 2005	low risk	low risk	low risk	low risk	low risk	unclear	low risk
CALGB 30704, 2014	low risk	unclear	low risk	low risk	low risk	low risk	low risk
CheckMate017, 2015	low risk	low risk	low risk	low risk	low risk	low risk	low risk
CheckMate057, 2015	low risk	low risk	low risk	low risk	low risk	low risk	low risk
Chen, 2011	unclear	unclear	low risk	low risk	low risk	low risk	low risk
CTONG0806, 2014	low risk	unclear	low risk	low risk	low risk	low risk	low risk
Dai, 2013	unclear	unclear	NA	NA	unclear	unclear	high risk
DATE, 2015	low risk	unclear	low risk	low risk	low risk	low risk	low risk
DELTA, 2014	low risk	unclear	low risk	low risk	low risk	unclear	low risk
Dittrich, 2014	low risk	low risk	low risk	low risk	low risk	low risk	low risk
E1512, 2015	low risk	low risk	low risk	low risk	high risk	low risk	moderate risk
Esteban, 2003	unclear	unclear	low risk	low risk	low risk	unclear	moderate risk
Gerber, 2014	unclear	unclear	low risk	low risk	low risk	low risk	low risk
GFPC 05-06, 2011	unclear	unclear	low risk	low risk	high risk	unclear	moderate risk
Groen, 2013	low risk	low risk	low risk	low risk	low risk	low risk	low risk
Hainsworth, 2010	unclear	unclear	NA	NA	low risk	low risk	high risk
Han, 2011	unclear	unclear	low risk	low risk	unclear	unclear	high risk

HANSHIN Oncology Group 0110, 2015	unclear	unclear	low risk	low risk	low risk	unclear	moderate risk
Herbst, 2007	unclear	unclear	low risk	low risk	low risk	unclear	moderate risk
Heymach, 2007	unclear	unclear	low risk	low risk	low risk	low risk	low risk
HORG, 2013	low risk	unclear	low risk	low risk	low risk	high risk	moderate risk
Hosomi, 2015	low risk	low risk	low risk	low risk	high risk	low risk	moderate risk
ICOGN, 2013	low risk	low risk	low risk	low risk	low risk	low risk	low risk
INTEREST, 2008	low risk	low risk	low risk	low risk	low risk	low risk	low risk
ISEL, 2005	low risk	low risk	low risk	low risk	low risk	unclear	low risk
ISTANA, 2010	unclear	unclear	low risk	low risk	low risk	low risk	low risk
Janne, 2013	low risk	low risk	low risk	low risk	low risk	low risk	low risk
JMEI, 2004	unclear	unclear	low risk	low risk	low risk	unclear	moderate risk
Jones, 2008	low risk	unclear	low risk	low risk	low risk	low risk	low risk
Juan, 2014	unclear	unclear	low risk	low risk	low risk	low risk	low risk
Kapoor, 2015	unclear	unclear	low risk	low risk	unclear	unclear	high risk
Katakami, 2014	unclear	unclear	low risk	low risk	unclear	low risk	moderate risk
KCSG-LU08-01, 2012	low risk	unclear	low risk	low risk	low risk	low risk	low risk
Kelly, 2012	unclear	unclear	low risk	low risk	low risk	low risk	low risk
KEYNOTE-010,2015	low risk	low risk	low risk	low risk	low risk	low risk	low risk
Kim A, 2012	low risk	low risk	low risk	low risk	low risk	low risk	low risk
Kim B, 2012	low risk	low risk	low risk	low risk	low risk	low risk	low risk
Kim, 2015	unclear	unclear	low risk	low risk	unclear	high risk	moderate risk
Krzakowski, 2010	unclear	unclear	low risk	low risk	low risk	unclear	moderate risk
Kuo, 2013	unclear	unclear	NA	NA	unclear	unclear	high risk
Lee, 2013	low risk	low risk	low risk	low risk	low risk	low risk	low risk
Levy, 2014	unclear	unclear	low risk	low risk	low risk	low risk	low risk
Li, 2010	unclear	unclear	low risk	low risk	unclear	unclear	high risk
Li, 2012	unclear	unclear	NA	NA	high risk	unclear	high risk
Li, 2013	low risk	unclear	low risk	low risk	high risk	low risk	moderate risk
Li, 2014	low risk	unclear	low risk	low risk	low risk	low risk	low risk
Liu, 2015	unclear	unclear	low risk	low risk	low risk	unclear	moderate risk
LUME-COLUMBUS,2016	unclear	unclear	NA	NA	high risk	high risk	high risk
LUME-LUNG 1, 2014	low risk	low risk	low risk	low risk	low risk	low risk	low risk
LUME-LUNG 2, 2013	low risk	low risk	low risk	low risk	low risk	low risk	low risk
Lux-Lung 8, 2015	low risk	low risk	low risk	low risk	low risk	low risk	low risk
Maitland, 2014	unclear	unclear	low risk	low risk	high risk	low risk	moderate risk

Marangolo, 2000	unclear	unclear	NA	NA	unclear	unclear	high risk
MARQUEE, 2013	unclear	unclear	low risk	low risk	low risk	low risk	low risk
MARVEL, 2013	unclear	unclear	NA	NA	unclear	unclear	high risk
METLung, 2014	unclear	unclear	low risk	low risk	unclear	low risk	moderate risk
Moran, 2014	unclear	unclear	low risk	low risk	low risk	low risk	low risk
Natale, 2009	unclear	unclear	low risk	low risk	low risk	high risk	moderate risk
NCCTG N0626, 2011	unclear	unclear	low risk	low risk	high risk	unclear	high risk
NCIC CTG BR.26, 2014	low risk	low risk	low risk	low risk	low risk	low risk	low risk
NVALT-10, 2013	unclear	unclear	low risk	low risk	low risk	low risk	low risk
OAK,2016	low risk	low risk	low risk	low risk	low risk	low risk	low risk
Paz-Ares, 2008	unclear	unclear	low risk	low risk	low risk	unclear	moderate risk
POPLAR, 2016	low risk	low risk	low risk	low risk	low risk	low risk	low risk
PROSE, 2014	low risk	low risk	low risk	low risk	high risk	low risk	moderate risk
Ramalingam, 2011	unclear	unclear	low risk	low risk	low risk	low risk	low risk
Ramalingam, 2012	unclear	unclear	low risk	low risk	low risk	low risk	low risk
Ramlau, 2006	unclear	unclear	low risk	low risk	low risk	unclear	moderate risk
Ramlau, 2012	low risk	low risk	low risk	low risk	low risk	low risk	low risk
REVEL, 2014	low risk	low risk	low risk	low risk	low risk	low risk	low risk
Sbar, 2010	unclear	unclear	NA	NA	unclear	unclear	high risk
Scagliotti, 2012	low risk	low risk	low risk	low risk	low risk	low risk	low risk
Scagliotti, 2014	unclear	unclear	low risk	low risk	low risk	low risk	low risk
Schiller, 2010	low risk	unclear	low risk	low risk	low risk	low risk	low risk
SELECT 1,2017	low risk	low risk	low risk	low risk	low risk	low risk	low risk
SIGN, 2006	unclear	low risk	low risk	low risk	low risk	unclear	low risk
Spigel, 2011	low risk	unclear	low risk	low risk	low risk	low risk	low risk
Spigel, 2012	unclear	unclear	low risk	low risk	unclear	low risk	moderate risk
Spigel, 2013	low risk	low risk	low risk	low risk	low risk	low risk	low risk
Sun, 2013	unclear	unclear	low risk	low risk	low risk	low risk	low risk
TAILOR, 2013	low risk	low risk	low risk	low risk	low risk	low risk	low risk
TALISMAN, 2015	low risk	low risk	low risk	low risk	high risk	low risk	moderate risk
TAX 317, 2000	unclear	unclear	low risk	low risk	low risk	unclear	moderate risk
TITAN, 2012	low risk	low risk	low risk	low risk	low risk	low risk	low risk
TORI L-03, 2013	unclear	unclear	low risk	low risk	unclear	low risk	moderate risk
ULTIMATE-IFCT1103,2016	unclear	unclear	low risk	low risk	unclear	unclear	high risk
V15-32, 2008	unclear	unclear	low risk	low risk	low risk	low risk	low risk

Wen, 2016	unclear	unclear	low risk	low risk	low risk	unclear	moderate risk
Witta, 2012	low risk	unclear	low risk	low risk	low risk	unclear	low risk
WJOG 5108L, 2016	unclear	low risk	low risk	low risk	low risk	unclear	low risk
ZEAL, 2011	low risk	unclear	low risk	low risk	low risk	low risk	low risk
ZEST, 2011	unclear	unclear	low risk	low risk	low risk	low risk	low risk
Zhang, 2015	unclear	unclear	low risk	low risk	low risk	unclear	moderate risk
ZODIAC, 2010	low risk	low risk	low risk	low risk	low risk	low risk	low risk
East Asia S-1 Trial in Lung Cancer, 2018	unclear	unclear	low risk	low risk	low risk	low risk	low risk
Fandi, 2018	low risk	low risk	low risk	low risk	low risk	low risk	low risk
SELECT-2, 2017	unclear	low risk	low risk	low risk	low risk	low risk	low risk
Wu, 2017	unclear	unclear	low risk	low risk	unclear	unclear	high risk
Yu, 2018	unclear	unclear	NA	NA	NA	NA	high risk
JAVELIN, 2018	low risk	low risk	low risk	low risk	low risk	low risk	low risk
CHECKMATE 078, 2019	low risk	low risk	low risk	low risk	low risk	low risk	low risk
Sequist, 2019	unclear	unclear	low risk	low risk	high risk	low risk	moderate risk
NCT03023423, 2019	unclear	unclear	low risk	low risk	unclear	unclear	high risk
Lung-MAP S14001, 2019	unclear	unclear	low risk	low risk	unclear	unclear	high risk

**2018 studies in blue and 2019 in red*

Assessment of subjective outcomes (progression free survival, objective response rate, serious adverse events)

[illegible]

INTEREST, 2008	low risk	low risk	high risk	high risk	low risk	low risk	high risk
ISEL, 2005	low risk	low risk	low risk	low risk	low risk	unclear	low risk
ISTANA, 2010	unclear	unclear	high risk	high risk	low risk	low risk	high risk
Janne, 2013	low risk	low risk	low risk	low risk	low risk	low risk	low risk
JMEI, 2004	unclear	unclear	high risk	high risk	low risk	unclear	high risk
Jones, 2008	low risk	unclear	high risk	high risk	low risk	low risk	high risk
Juan, 2014	unclear	unclear	high risk	high risk	low risk	low risk	high risk
Kapoor, 2015	unclear	unclear	high risk	high risk	unclear	unclear	high risk
Katakami, 2014	unclear	unclear	high risk	unclear	unclear	low risk	high risk
KCSG-LU08-01, 2012	low risk	unclear	high risk	low risk	low risk	low risk	moderate risk
Kelly, 2012	unclear	unclear	high risk	high risk	low risk	low risk	high risk
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Krzakowski, 2010	unclear	unclear	high risk	high risk	low risk	unclear	high risk
Kuo, 2013	unclear	unclear	high risk	low risk	unclear	unclear	high risk
Lee, 2013	low risk	low risk	high risk	high risk	low risk	low risk	high risk
Levy, 2014	unclear	unclear	high risk	high risk	low risk	low risk	high risk
Li, 2010	unclear	unclear	high risk	high risk	unclear	unclear	high risk
Li, 2012	unclear	unclear	high risk	high risk	high risk	unclear	high risk
Li, 2013	low risk	unclear	high risk	high risk	high risk	low risk	high risk
Li, 2014	low risk	unclear	high risk	high risk	low risk	low risk	high risk
Liu, 2015	unclear	unclear	high risk	high risk	low risk	unclear	high risk
LUME-COLUMBUS,2016	unclear	unclear	low risk	low risk	high risk	high risk	high risk
LUME-LUNG 1, 2014	low risk	low risk	low risk	low risk	low risk	low risk	low risk
LUME-LUNG 2, 2013	low risk	low risk	low risk	low risk	low risk	low risk	low risk
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Maitland, 2014	unclear	unclear	high risk	high risk	high risk	low risk	high risk
Marangolo, 2000	unclear	unclear	unclear	unclear	unclear	unclear	high risk
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Ramalingam, 2011	unclear	unclear	high risk	high risk	low risk	low risk	high risk
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Spigel, 2012	unclear	unclear	low risk	low risk	unclear	low risk	moderate risk
Spigel, 2013	low risk	low risk	low risk	low risk	low risk	low risk	low risk
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Witta, 2012	low risk	unclear	low risk	low risk	low risk	unclear	low risk
WJOG 5108L, 2016	unclear	low risk	high risk	high risk	low risk	unclear	high risk
ZEAL, 2011	low risk	unclear	low risk	low risk	low risk	low risk	low risk
ZEST, 2011	unclear	unclear	low risk	low risk	low risk	low risk	low risk
Zhang, 2015	unclear	unclear	high risk	high risk	low risk	unclear	high risk

ZODIAC, 2010	low risk	low risk	low risk	low risk	low risk	low risk	low risk
East Asia S-1 Trial in Lung Cancer, 2018	unclear	unclear	high risk	high risk	low risk	low risk	high*risk
Fandi, 2018	low risk	low risk	low risk	low risk	low risk	low risk	low risk
SELECT-2, 2017	unclear	low risk	low risk	low risk	low risk	low risk	low risk
Wu, 2017	unclear	unclear	high risk	high risk	unclear	unclear	high risk
Yu, 2018	unclear	unclear	unclear	unclear	NA	NA	high risk
JAVELIN, 2018	low risk	low risk	high risk	low risk	low risk	low risk	moderate risk
CHECKMATE 078, 2019	low risk	low risk	high risk	high risk	low risk	low risk	high risk
Sequist, 2019	unclear	unclear	high risk	high risk	high risk	low risk	high risk
NCT03023423, 2019	unclear	unclear	high risk	unclear	unclear	unclear	high risk
Lung-MAP S14001, 2019	unclear	unclear	high risk	high risk	unclear	unclear	high risk

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