

**Additional file 3 Table S1.** Quality assessment by Cochrane Collaboration's tool.

Trial	Sequence generation	Allocation concealment	Blinding	Incomplete outcome data	Selective reporting	Other source of bias
ECOG4599 <sup>[1]</sup>	Adequate	Not clear	Adequate <sup>a</sup>	Adequate	Adequate	
JO19907 <sup>[2]</sup>	Adequate	Not clear	Adequate <sup>a</sup>	Adequate	Adequate	
AVAIL <sup>[3]</sup>	Adequate	Adequate (Central allocation)	Adequate <sup>a</sup>	Adequate	Adequate	
PRONOUNCE <sup>[4]</sup>	Adequate	Not clear	Adequate <sup>a</sup>	Adequate	Adequate	
ERACLE <sup>[5]</sup>	Adequate	Adequate (Central allocation)	Adequate <sup>a</sup>	Adequate	Adequate	
BEYOND <sup>[6]</sup>	Adequate	Adequate (Central allocation)	Adequate <sup>a</sup>	Adequate	Adequate	
KEYNOTE-189 <sup>[7]</sup>	Adequate	Adequate (Central allocation)	Adequate <sup>a</sup>	Adequate	Adequate	
KEYNOTE-021 <sup>[8]</sup>	Adequate	Adequate (Central allocation)	Adequate <sup>a</sup>	Adequate	Adequate	
IMpower130 <sup>[9]</sup>	Adequate	Adequate (Central allocation)	Adequate <sup>a</sup>	Adequate	Adequate	
IMpower132 <sup>[10]</sup>	Adequate	Not clear	Adequate <sup>a</sup>	Adequate	Adequate	
CheckMate 227 <sup>[11]</sup>	Adequate	Adequate (Central allocation)	Adequate <sup>a</sup>	Adequate	Adequate	
CAMEL <sup>[12]</sup>	Adequate	Not clear	Adequate <sup>a</sup>	Adequate	Adequate	
RATIONALE 304 <sup>[13]</sup>	Adequate	Adequate (Central allocation)	Adequate <sup>a</sup>	Inadequate <sup>b</sup>	Adequate	
ORIENT 11 <sup>[14]</sup>	Adequate	Adequate (Central allocation)	Adequate <sup>a</sup>	Adequate	Adequate	

a: The sponsor, investigator and subject were aware of the treatment administration but the response to treatment was assessed by means of blinded, independent, central radiologic review.

b: Absence of data of OS.

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