

**Table S5.** Risk of potential bias and confounders of the included studies. Studies indicated by a “X” potentially have an increased risk of bias, whereas studies indicated by a “V” potentially have a decreased risk of bias.

Study	Selection bias	Assay method (measurement bias)	Outcome assessment (measurement bias)	Confounders	REMARK Score
Gaedcke et al. 2014	✓	✗	✓	✗	12
Luo et al. 2016	✓	✓	✓	✓	11.5
Benard et al. 2015	✓	✗	✗	✓	14.5
Chen et al. 2009	✗	✗	✗	✓	8.5
De Sousa et al. 2011	✗	✗	✗	✗	5.5
Kandimalla et al. 2017	✓	✓	✓	✓	15
Sangplod et al. 2014	✗	✗	✗	✗	7
Shimizu et al. 2010	✗	✗	✗	✓	9
Yi et al. 2011	✓	✗	✗	✗	11
Wang et al. 2012	✓	✗	✗	✗	10
Liang et al. 1999	✓	✗	✗	✗	9.5
Esteller et al. 2009	✓	✗	✗	✗	9
Maeda et al. 2003	✗	✗	✗	✗	6.5
Sanz-Casla et al. 2005	✓	✗	✗	✗	9.5
Nakayama et al. 2007	✗	✗	✗	✗	7
Wettergren et al. 2008	✗	✗	✓	✓	11.5
Wettergren et al. 2010	✓	✗	✓	✓	11
Malhotra et al. 2010	✓	✗	✗	✗	7.5
Mitomi et al. 2009	✓	✗	✓	✓	13.5
Shima et al. 2011	✓	✗	✓	✓	16
Bihl et al. 2012	✗	✗	✗	✓	9
Veganzones-de-Castro et al. 2012	✓	✗	✓	✗	12.5
Kohonen-Corish et al. 2014	✓	✗	✓	✓	12
Ishiguro et al. 2006	✗	✗	✓	✗	9
Aoyagi et al. 2011	✓	✗	✗	✗	10
Miladi-Abdennadher et al. 2011	✗	✗	✗	✓	12
Iida et al. 2012	✓	✗	✗	✓	11.5
Veganzones et al. 2015	✓	✗	✓	✗	12
Krtolica et al. 2007	✗	✗	✗	✗	9.5
Kamiyama et al. 2009	✗	✗	✗	✗	8.5
Kuan et al. 2015	✗	✗	✓	✗	11
Yang et al. 2014	✗	✗	✗	✓	10.5
Jiang et al. 2016	✓	✗	✗	✓	9.5
Tanaka et al. 2011	✓	✗	✗	✓	14.5
Cleven et al. 2014	✓	✗	✓	✓	17.5
Wang et al. 2015	✗	✗	✗	✓	7
Cui et al. 2011	✗	✗	✗	✗	8
Rawlusko-Wieczorek et al. 2014	✓	✗	✓	✓	12

Xu et al. 2015	X	X	✓	X	9.5
Wallner et al. 2006	✓	X	✓	✓	15
Herbst et al. 2009	✓	X	✓	✓	14.5
Philipp et al. 2012	X	X	✓	X	12.5
Philipp et al. 2014	X	X	X	X	10
Herbst et al. 2017	✓	✓	✓	✓	15
Jensen et al. 2013	X	X	✓	X	11
Wang et al. 2014	X	X	X	X	10
Malhotra et al. 2014	X	X	X	X	6.5
Katoh et al. 2012	X	X	X	✓	9.5
Umetani et al. 2004	X	X	X	✓	9.5
Fu et al. 2015	✓	X	X	✓	14
Perez-Carbonell et al. 2014	✓	X	✓	✓	13.5
Baba et al. 2010	✓	✓	✓	✓	17
Moya et al. 2013	X	X	✓	X	9
Su et al. 2015	✓	X	X	X	9
Shima et al. 2011	✓	✓	✓	✓	16
Oliver et al. 2014	✓	X	X	X	12
Shannon et al. 1999	X	X	X	X	4.5
Hiranuma et al. 2004	X	X	X	✓	9
Esteban et al. 2012	X	X	✓	X	10
Chaar et al. 2014	X	X	X	X	8
Heitzer et al. 2014	✓	X	✓	X	14
Pancione et al. 2010	✓	X	X	X	11
Lin et al. 2015	✓	X	✓	✓	13.5
Miladi-Abdennadher et al. 2010	X	X	X	✓	11
Chen et al. 2012	X	X	X	✓	10
Nilsson et al. 2013	X	X	X	X	5
Matthaios et al. 2016	X	✓	X	X	9.5
Draht et al. 2014	✓	X	✓	✓	15.5
Tham et al. 2015	✓	X	✓	✓	14.5
Liu et al. 2016	✓	X	✓	✓	15
Dallol et al. 2012	X	X	✓	X	10
Tang et al. 2011	X	X	X	✓	10
Tsai et al. 2015	✓	X	✓	X	13
He et al. 2017	X	X	X	✓	10.5
Kang et al. 2016	X	X	X	X	8.5
Yang et al. 2013	X	X	✓	✓	7.5
Yu et al. 2010	X	X	X	✓	9
Zhang et al. 2014	X	X	X	X	10.5
Park et al. 2015	✓	X	✓	✓	14
Beggs et al. 2015	X	X	X	X	5
Ruppenthal et al. 2011	X	X	✓	X	9.5
Abdelmaksoud-Dammak et al. 2014	X	X	X	X	9
Rawson et al. 2011	✓	X	✓	✓	12.5

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