

S1 Fig. Risk of bias and applicability concerns summary

	Risk of Bias				Applicability Concerns				Risk of Bias				Applicability Concerns				Risk of Bias				Applicability Concerns		
	Patient Selection	Index Test	Reference Standard	Flow and Timing	Patient Selection	Index Test	Reference Standard		Patient Selection	Index Test	Reference Standard	Patient Selection	Index Test	Reference Standard	Patient Selection		Index Test	Reference Standard	Patient Selection	Index Test	Reference Standard		
Piras, 1978	?	-	?	+	+	+	+	Porcel, 2003	-	-	-	+	-	+	+	Khan, 2013	+	-	+	+	+	+	+
Blake, 1982	+	-	?	+	-	+	+	Tahhan, 2003	+	-	+	-	+	+	+	Khow-Ean, 2013	-	-	+	+	-	+	+
Maritz, 1982	+	-	+	+	-	+	+	Chen, 2004	-	-	?	+	-	+	+	Lee, 2013	-	-	+	+	-	+	+
Petterson, 1984	+	-	+	+	-	+	+	Ghanei, 2004	+	-	+	+	-	+	+	Sahn, 2013	-	-	+	+	-	+	+
Niwa, 1985	-	-	+	-	-	+	+	Poyraz, 2004	?	-	+	+	-	+	+	Tay, 2013	-	-	+	+	+	+	+
Raj, 1985	+	-	+	+	-	+	+	Gaga, 2005	-	-	+	+	-	+	+	Wu, 2013	-	-	+	+	-	+	+
Sinha, 1987	+	-	?	-	-	+	+	Gao, 2005	-	-	?	+	-	+	+	Abrao, 2014	+	-	+	+	+	+	+
Strankinga, 1987	+	-	+	-	-	+	+	Moon, 2005	+	-	+	+	+	+	+	Anwar, 2014	+	-	?	+	-	+	+
Teo, 1987	+	-	+	+	-	+	+	Okamoto, 2005	-	-	+	+	-	+	+	Kong, 2014	+	-	+	+	-	+	+
van Keimpema, 1987	+	-	+	+	-	+	+	Sharma, 2005	+	-	+	+	+	+	+	Li, 2014	-	-	+	+	-	+	+
Fontan Bueso, 1988	-	-	+	+	-	+	+	Tozkoparan, 2005	-	-	-	-	-	+	+	Liao, 2014	+	-	-	+	-	+	+
Kao, 1988	+	-	+	+	-	-	+	Celik, 2006	?	-	+	+	+	+	+	Mehta, 2014	+	-	?	+	+	+	+
Kim, 1988	?	-	-	+	-	+	+	Mishra, 2006	+	-	-	+	+	+	+	Meldau, 2014	+	-	+	-	-	+	+
Tamura, 1988	?	-	?	-	-	-	+	Morimoto, 2006	?	-	?	+	-	+	+	Rahim, 2014	-	-	+	-	-	+	-
Gilhotra, 1989	+	-	+	+	-	+	+	Antonangelo, 2007	-	-	-	+	-	+	+	Reis, 2014	+	-	?	+	+	+	+
Hsu, 1989	-	-	+	+	-	+	+	Ariga, 2007	-	-	+	+	-	+	+	Sanchez-Otero, 2014	?	-	?	-	+	+	+
Moriwaki, 1989	-	-	+	+	+	+	+	Cok, 2007	-	-	-	+	-	+	+	Sethi, 2014	+	+	-	+	+	+	+
Segura, 1989	+	-	+	+	-	+	+	Daniil, 2007	+	-	+	+	+	+	+	Trajman, 2014	-	-	-	-	-	+	+
Gourgoulianis, 1990	?	-	+	?	?	+	+	Lamsal, 2007	?	-	-	+	?	+	+	Valdes, 2014	-	-	+	+	-	+	+
Gupta, 1990	-	-	+	+	+	+	+	Moon, 2007	+	-	+	+	+	+	+	Yurt, 2014	-	-	+	+	+	+	+
Banales, 1991	+	-	+	+	+	+	+	Neves, 2007	-	-	+	+	+	+	+	Agha, 2015	-	-	+	+	-	+	+
Lopez Jimenez, 1991	?	-	?	+	-	+	+	Trajman, 2007	-	-	+	-	-	+	+	Ali, 2015	-	-	+	+	-	+	+
Maartens, 1991	-	-	+	-	-	+	+	Xue, 2007	-	-	+	+	-	+	+	Arnold, 2015	+	-	+	+	-	+	+
Hara, 1992	+	-	+	+	+	+	+	Baba, 2008	-	-	+	-	-	+	+	Behrsin, 2015	+	-	+	+	-	+	+
Kaur, 1992	+	-	+	+	-	+	+	Bandyopadhyay, 2008	-	-	?	+	-	+	+	Farhana, 2015	+	-	-	+	+	+	+
Muranishi, 1992	-	-	+	+	-	+	+	Krenke, 2008	-	-	+	+	-	+	+	He, 2015	-	-	+	+	+	+	+
Nagaraja, 1992	+	-	+	+	-	+	+	Verma, 2008	+	-	+	+	+	+	+	Klimiuk, 2015	-	-	+	+	-	+	+
Perez-Rodriguez, 1992	+	-	?	+	-	+	+	Zaric, 2008	-	-	+	+	-	+	+	Koser, 2015	+	-	+	+	+	+	+
Prasad, 1992	?	-	+	+	-	+	+	Chang, 2009	-	-	+	+	+	+	+	Kumar, 2015	+	-	+	+	+	+	+
Hsu, 1993	-	-	+	+	-	+	+	Dhedag, 2009	+	+	+	+	+	+	+	Li, 2015	-	-	+	+	+	+	+
Valdes, 1993	+	-	+	-	-	+	+	Kupeli, 2009	+	-	?	-	-	+	+	Saiphoklang, 2015	-	-	-	+	-	+	+
Aoki, 1994	+	-	+	+	-	+	+	Valdes, 2009	+	-	+	+	+	+	+	Shu, 2015	-	-	+	+	+	+	+
Chiang, 1994	?	-	+	+	-	+	+	Zemlin, 2009	-	-	+	-	-	+	+	Skouras, 2015	-	-	+	+	+	+	+
De Olivera, 1994	+	+	-	+	-	+	+	Ciledag, 2010	?	-	+	+	-	+	+	Tural Onur, 2015	+	-	+	+	+	+	+
Richter, 1994	+	-	+	+	+	+	+	Gupta, 2010	+	-	-	+	+	+	+	Yoshino, 2015	-	-	+	+	+	+	+
Burgess, 1995	+	-	+	+	-	+	+	Katiyar, 2010	+	-	-	+	+	+	+	Biswas, 2016	+	-	+	+	-	+	-
Querol, 1995	+	-	+	+	-	+	+	Pandit, 2010	+	-	-	+	+	+	+	Coral-Gudino, 2016	-	-	+	+	-	+	+
Valdes, 1995	+	-	+	+	+	+	+	Porcel, 2010	-	-	+	+	-	+	+	Kim, 2016	-	-	+	+	+	+	+
Orphanidou, 1996	?	-	+	+	-	+	+	Song, 2010	?	-	+	?	+	+	+	Lee, 2016	-	-	+	+	-	+	+
Valdes, 1996	+	-	+	+	-	+	+	Valdes, 2010	+	-	+	+	+	+	+	Liu, 2016	+	-	+	+	+	+	+
Villena, 1996	+	-	+	+	-	+	+	Wu, 2010	-	-	+	+	-	+	+	Mallik, 2016	+	-	-	+	+	+	+
Ogawa, 1997	-	-	+	+	-	+	+	Ambade, 2011	+	-	+	-	+	+	+	Michot, 2016	+	-	+	+	+	+	+
Kuralay, 1998	?	-	+	+	-	+	+	Bhutia, 2011	+	-	?	+	-	+	+	Rahman, 2016	-	-	+	+	+	+	+
Ghelani, 1999	+	-	-	+	-	+	+	Kalantri, 2011	+	-	-	+	-	+	+	Saiphoklang, 2016	+	-	-	+	+	+	+
Perez-Rodriguez, 1999	+	-	+	+	-	+	+	Liu, 2011	-	-	+	+	-	+	+	Suleman, 2016	+	+	+	+	+	+	+
Riantawan, 1999	+	-	?	+	-	+	+	Ogata, 2011	+	-	+	+	-	+	+	Che, 2017	+	-	+	+	+	?	+
San Jose, 1999	+	-	+	+	-	+	+	Yildiz, 2011	-	-	+	+	-	+	+	Chung, 2017	+	-	+	-	+	+	+
Gorguner, 2000	+	-	+	+	-	+	+	Antonangelo, 2012	-	-	?	+	-	+	+	El Hoshy, 2017	-	-	+	+	-	+	+
Prandaman, 2000	+	-	?	-	-	+	-	Cirak, 2012	?	-	+	+	-	+	+	Kim, 2017	-	-	+	-	-	?	+
Villegas, 2000	+	-	+	+	-	+	+	Demirer, 2012	-	-	+	+	-	+	+	Sivakumar, 2017	-	-	+	?	-	+	+
Nagesh, 2001	+	-	+	+	-	+	+	Devkota, 2012	+	-	-	+	-	+	+	Xu, 2017	+	-	+	+	+	+	+
Reechaipichitkul, 2001	+	-	+	+	+	+	+	Garcia-Zamalloa, 2012	+	-	-	+	-	+	+	Zhang, 2017	+	-	+	-	+	+	+
Sharma, 2001	+	-	-	+	-	+	+	Kashiwabara, 2012	+	-	-	+	+	+	+	Blakiston, 2018	-	-	-	?	+	+	+
Yamada, 2001	?	-	+	+	-	+	+	Kumar, 2012	+	-	-	+	+	+	-	Chang, 2018	+	-	+	-	-	+	+
Andreasyan, 2002	+	-	?	+	+	+	+	Pal, 2012	?	-	?	+	-	+	+	He, 2018	-	-	+	-	+	+	+
Jimenez, 2002	-	-	+	+	+	+	+	Wang, 2012	+	-	+	+	-	+	+	Hong, 2018	-	-	+	+	-	+	+
Diacon, 2003	+	-	+	+	+	+	+	Kelam, 2013	+	-	+	+	+	+	+	Santos, 2018	-	-	+	+	+	+	+
Lima, 2003	+	-	-	+	+	+	+	Keng, 2013	+	-	+	+	-	+	+	Wang, 2018	+	-	+	+	+	+	+

+ Low - High ? Unclear

