

**Supplementary Table 2.** Domain-wise quality assessment for the 45 studies included in the meta-analysis

References	Patient selection		Index test		Reference standard		Flow and timing
	Risk of bias	Applicability	Risk of bias	Applicability	Risk of bias	Applicability	Risk of bias
<b>Prediction of fractures</b>							
Amininezhad et al. (2015) [63]	+	+	?	+	?	+	?
An et al. (2021) [26]	+	+	-	+	+	+	+
Bansal et al. (2018) [54]	-	+	-	+	+	+	?
Chang et al. (2016) [27]	-	+	+	+	+	+	?
Chanplakorn et al. (2021) [60]	-	+	?	+	+	+	?
Chen et al. (2016) [38]	?	+	-	+	-	-	?
Cheung et al. (2012) [7]	-	+	?	+	+	+	-
Chuan et al. (2023) [28]	+	-	?	+	+	+	-
Guo et al. (2022) [29]	-	+	+	+	+	+	+
Huang et al. (2021) [30]	-	+	-	?	+	+	+
Iki et al. (2015) [46]	?	+	+	+	+	+	-
Ji et al. (2022) [31]	?	-	-	+	?	?	+
Kim et al. (2016) [50]	?	-	-	+	+	+	+
Kong et al. (2020) [51]	?	+	+	+	-	+	+
Kong et al. (2022) [32]	?	-	?	+	+	+	+
Lam et al. (2020) [43]	?	+	?	+	+	+	+
Lee et al. (2015) [52]	-	+	?	+	+	+	+
Lee et al. (2023) [53]	?	-	?	+	+	+	+
Lekamwasam (2010) [14]	?	+	?	+	+	+	+
Lekamwasam et al. (2020) [62]	+	+	?	+	+	+	+
Lin et al. (2016) [33]	-	+	?	+	+	+	+
Liu et al. (2022) [39]	-	+	?	+	+	+	+
Rajan et al. (2020) [55]	+	+	?	+	+	+	+
Sribenjalak et al. (2022) [61]	?	+	?	+	-	+	+
Su et al. (2017) [44]	?	+	?	+	+	+	?
Su et al. (2018) [45]	-	+	?	+	+	+	+
Sheng et al. (2024) [42]	-	+	?	+	+	+	+
Tamaki et al. (2011) [47]	+	+	?	+	+	+	-
Tamaki et al. (2019) [48]	+	+	?	+	+	+	+
Yang et al. (2023) [40]	?	+	?	+	+	+	+
Yu et al. (2014) [34]	?	+	?	+	+	+	+
Yu et al. (2022) [41]	+	+	?	+	+	+	+
<b>Prediction of osteoporosis</b>							
Ang et al. (2022) [57]	?	+	?	+	+	+	+
Chandran et al. (2020) [58]	-	+	?	+	+	+	+
Cherian et al. (2018) [56]	?	+	?	+	+	+	+
Fan et al. (2020) [12]	?	+	?	+	+	+	-
Fujimaki et al. (2022) [49]	?	+	?	+	+	+	+
Jia et al. (2023) [35]	-	-	?	+	+	+	+
Kharroubi et al. (2017) [64]	-	+	-	?	+	+	?
Lekamwasam (2010) [14]	?	+	?	+	+	+	+
Liu et al. (2021) [36]	+	+	?	+	+	+	+
Logan et al. (2017) [59]	?	+	?	+	+	+	+
Zhang et al. (2018) [37]	+	+	?	+	+	+	+

+, high risk; -, low risk; ?, unclear risk.