

Supplementary Table 2. Assessment of risk of bias for studies evaluating the diagnostic capability of WFA-MUC1

Author (Year)	Representative spectrum?	Acceptable reference standard?	Acceptable delay between tests?	Partial verification avoided?	Differential verification avoided?	Index test results blinded?	Withdrawals explained?
Shoda (2017)	YES	YES	YES	NO	YES	Unclear	YES
Yamaguchi (2016)	YES	YES	YES	NO	YES	Unclear	YES
Matsuda ⁺ (2015)	YES	YES	Unclear	NO	YES	YES	YES
Matsuda [‡] (2015)	YES	YES	Unclear	NO	YES	YES	YES
Zen (2014)	YES	YES	YES	YES	YES	YES	YES
Esperança (2014)	YES	YES	YES	YES	YES	YES	YES
Matsuda (2013)	YES	YES	YES	NO	YES	Unclear	YES
Matsuda (2010)	YES	YES	YES	NO	YES	Unclear	YES
Huang (2010)	YES	YES	YES	YES	YES	YES	YES

⁺, Cohort1; [‡], cohort2

Items chosen to score from QUADAS checklist

- 1# Was the spectrum of patients representative of those who will receive the test in practice?
- 2# Was the reference standard likely to correctly classify patients cholangiocarcinoma?
- 3# Was the time period between reference standard and index test short enough to be reasonably sure that the target condition did not change between the two tests?
- 4# Did the whole sample or a random selection of the sample receive verification using a reference standard?
- 5# Did patients receive the same reference standard regardless of the index test result?
- 6# Were the reference standard results interpreted without knowledge of the results of the index test?
- 7# Were withdrawals from the study explained?