Figure S1. Forest plot of the sensitivity and specificity of HPV E6/E7 mRNA to distinguish between CIN2+ and CIN2- (before sensitivity analysis). CIN2+, cervical intraepithelial neoplasia grade 2 or worse; HPV, human papillomavirus.



| StudyId | SENSITIVITY (95% CI) | StudyId | SPECIFICITY (95% CI) |
|---|---|---|---|
| Sun 2021 | 0.87 [0.69 - 0.96] | Sun 2021 | 0.49 [0.36 - 0.63] |
| Zhang 2020 | 0.94 [0.91 - 0.96] | Zhang 2020 | 0.79 [0.73 - 0.84] |
| Pan 2019 | 0.92 [0.85 - 0.97] | Pan 2019 | 0.33 [0.27 - 0.40] |
| Han 2018 | 0.85 [0.77 - 0.91] | Han 2018 | 0.67 [0.56 - 0.76] |
| Fan 2018 | 0.92 [0.84 - 0.96] | Fan 2018 | 0.81 [0.72 - 0.89] |
| Camus 2018 | 0.90 [0.55 - 1.00] | Camus 2018 | 0.50 [0.19 - 0.81] |
| Shi 2017 | 0.71 [0.66 - 0.76] | Shi 2017 | 0.68 [0.58 - 0.77] |
| Liu 2013 | 0.67 [0.53 - 0.79] | Liu 2013 | 0.89 [0.73 - 0.97] |
| Waldstrom 2011 | 0.93 [0.87 - 0.97] | Waldstrom 2011 | 0.39 [0.27 - 0.51] |
| Andersson 2011 | 0.91 [0.83 - 0.96] | Andersson 2011 | 0.68 [0.55 - 0.78] |
| COMBINED | 0.88[0.82 - 0.92] | COMBINED | 0.64[0.51 - 0.75] |
| | Q =108.57, df = 9.00, p =  0.00 | | Q =148.76, df = 9.00, p =  0.00 |
| | I2 = 91.71 [87.90 - 95.52] | | I2 = 93.95 [91.42 - 96.48] |

SENSITIVITY 0.5 – 1.0
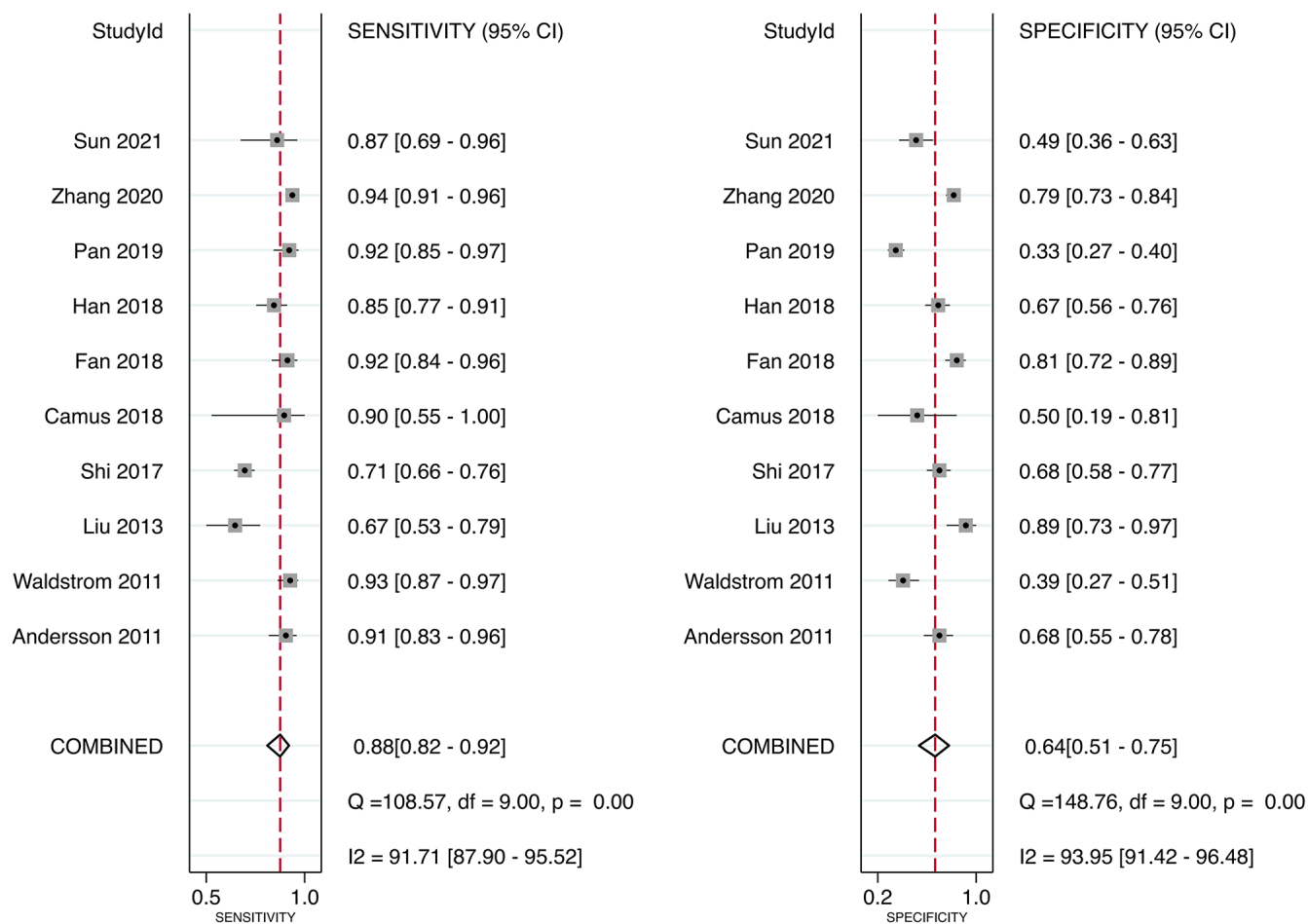
SPECIFICITY 0.2 – 1.0

Figure S2. Forest plot of the LR+ of HPV E6/E7 mRNA to distinguish between CIN2+ and CIN2- (before sensitivity analysis). CIN2+, cervical intraepithelial neoplasia grade 2 or worse; HPV, human papillomavirus; LR+, positive likelihood ratio.
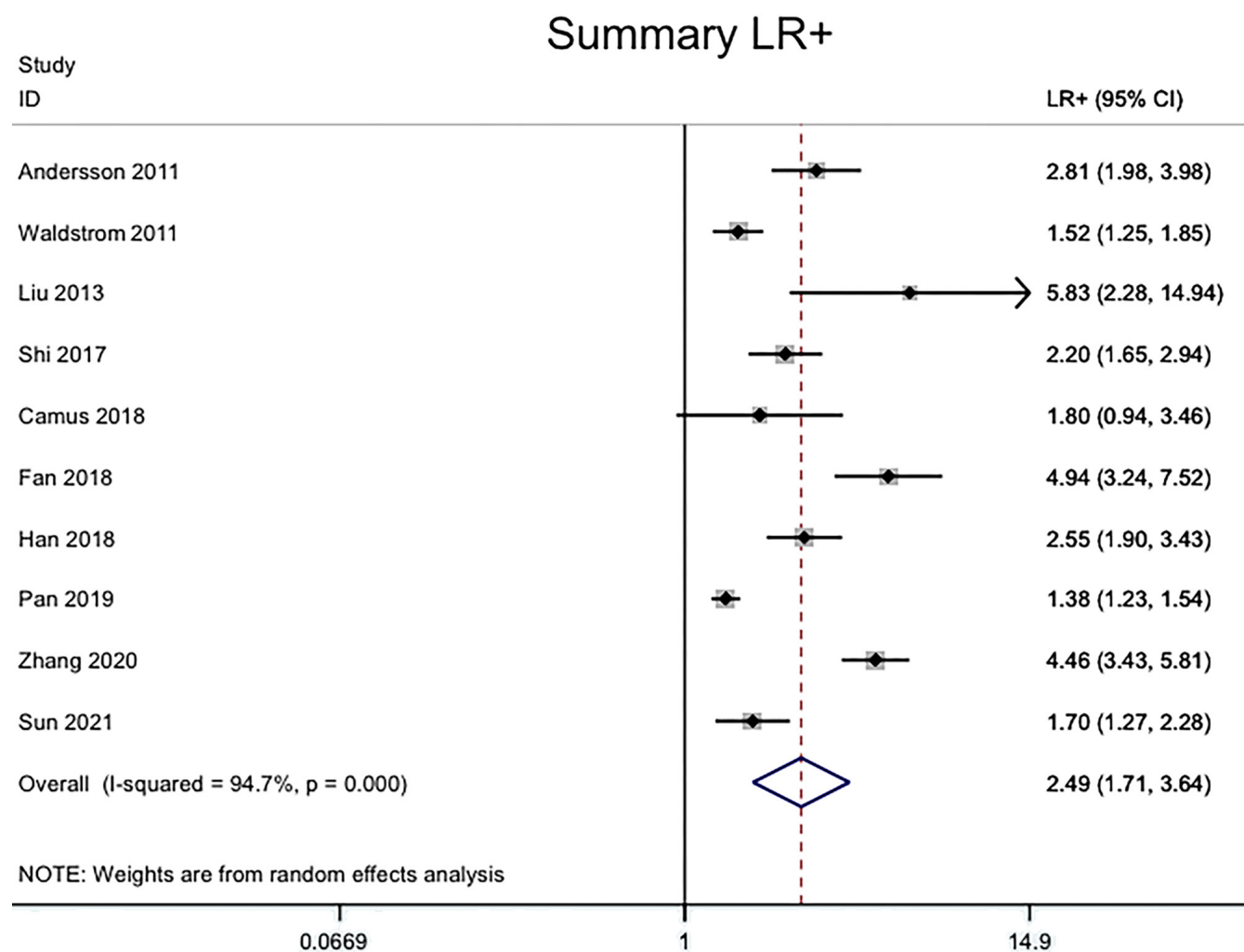
Figure S3. Forest plot of the LR- of HPV E6/E7 mRNA to distinguish between CIN2+ and CIN2- (before sensitivity analysis). CIN2+, cervical intraepithelial neoplasia grade 2 or worse; HPV, human papillomavirus; LR-, negative likelihood ratio.
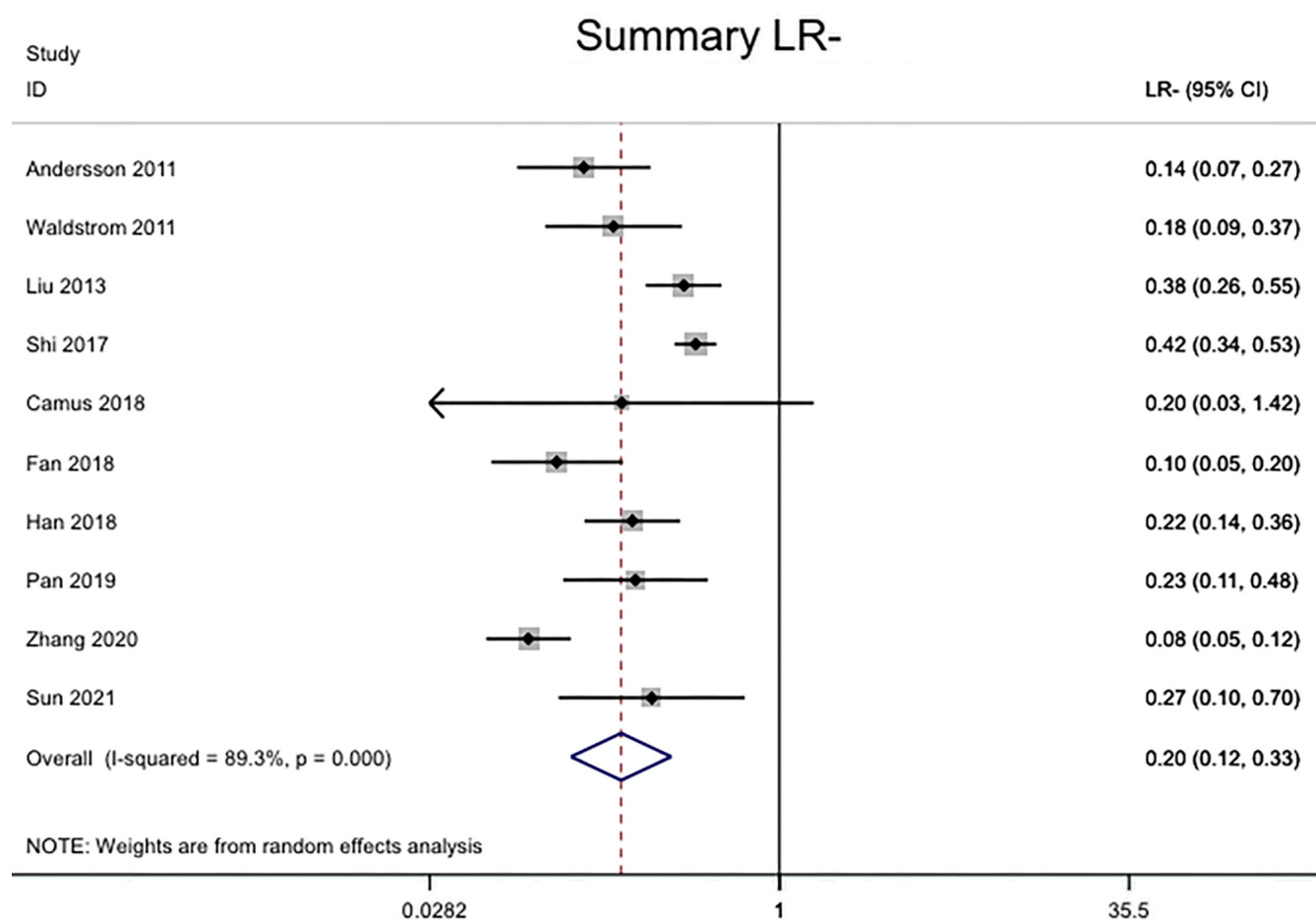


| Study ID | LR- (95% CI) |
| --- | --- |
| Andersson 2011 | 0.14 (0.07, 0.27) |
| Waldstrom 2011 | 0.18 (0.09, 0.37) |
| Liu 2013 | 0.38 (0.26, 0.55) |
| Shi 2017 | 0.42 (0.34, 0.53) |
| Camus 2018 | 0.20 (0.03, 1.42) |
| Fan 2018 | 0.10 (0.05, 0.20) |
| Han 2018 | 0.22 (0.14, 0.36) |
| Pan 2019 | 0.23 (0.11, 0.48) |
| Zhang 2020 | 0.08 (0.05, 0.12) |
| Sun 2021 | 0.27 (0.10, 0.70) |
| Overall (I-squared = 89.3%, p = 0.000) | 0.20 (0.12, 0.33) |

NOTE: Weights are from random effects analysis

0.0282    1    35.5

Figure S4. Forest plot of the DOR of HPV E6/E7 mRNA to distinguish between CIN2+ and CIN2- (before sensitivity analysis). CIN2+, cervical intraepithelial neoplasia grade 2 or worse; HPV, human papillomavirus; DOR, diagnostics odd ratio.