

EP16.175 Clinical significance of vaginal culture testing for predicting preterm birth in women with cervical shortening detected by transvaginal ultrasound

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Background

Transvaginal ultrasound measurement of cervical length is important in the assessment of threatened preterm labor, but its predictive accuracy remains limited.

Objective

To determine whether *Ureaplasma urealyticum* (*U. urealyticum*) positivity improves prediction of preterm birth among symptomatic women before 34weeks with CL ≤25 mm.

Study design

Retrospective single-center cohort (Jan 2022–Mar 2025)
Singleton pregnancies admitted <34 weeks
Threatened preterm labor with transvaginal CL ≤25 mm
Vaginal culture performed in all cases
Groups: *U. urealyticum* positive vs negative
Primary outcomes: delivery before 34 weeks and before 37 weeks
Effect estimates: unadjusted odds ratios (ORs) with 95% confidence intervals (CIs)

Results

Among the 22 eligible cases; 7/22 (31.8%) delivered <34 weeks and 11/22 (50.0%) delivered <37 weeks.
U. urealyticum was detected in 8 cases(36.4%).
The rate of preterm birth before 34 weeks was higher in the *U. urealyticum*-positive group than in the negative group (50.0% vs 21.4%; [OR] 3.67, 95% [CI] 0.56–24.13).
Similarly, the rate of preterm birth before 37 weeks was higher in the positive group than in the negative group (75.0% vs 35.7%; OR 5.40, 95% CI 0.78–37.51). c

Conclusion

Among women with CL ≤25 mm, those with positive *U. urealyticum* cultures had higher observed preterm birth rates than culture-negative patients.
Adding vaginal culture to cervical-length assessment may refine risk stratification and help Identify a particularly high-risk subgroup.
Larger studies are needed.

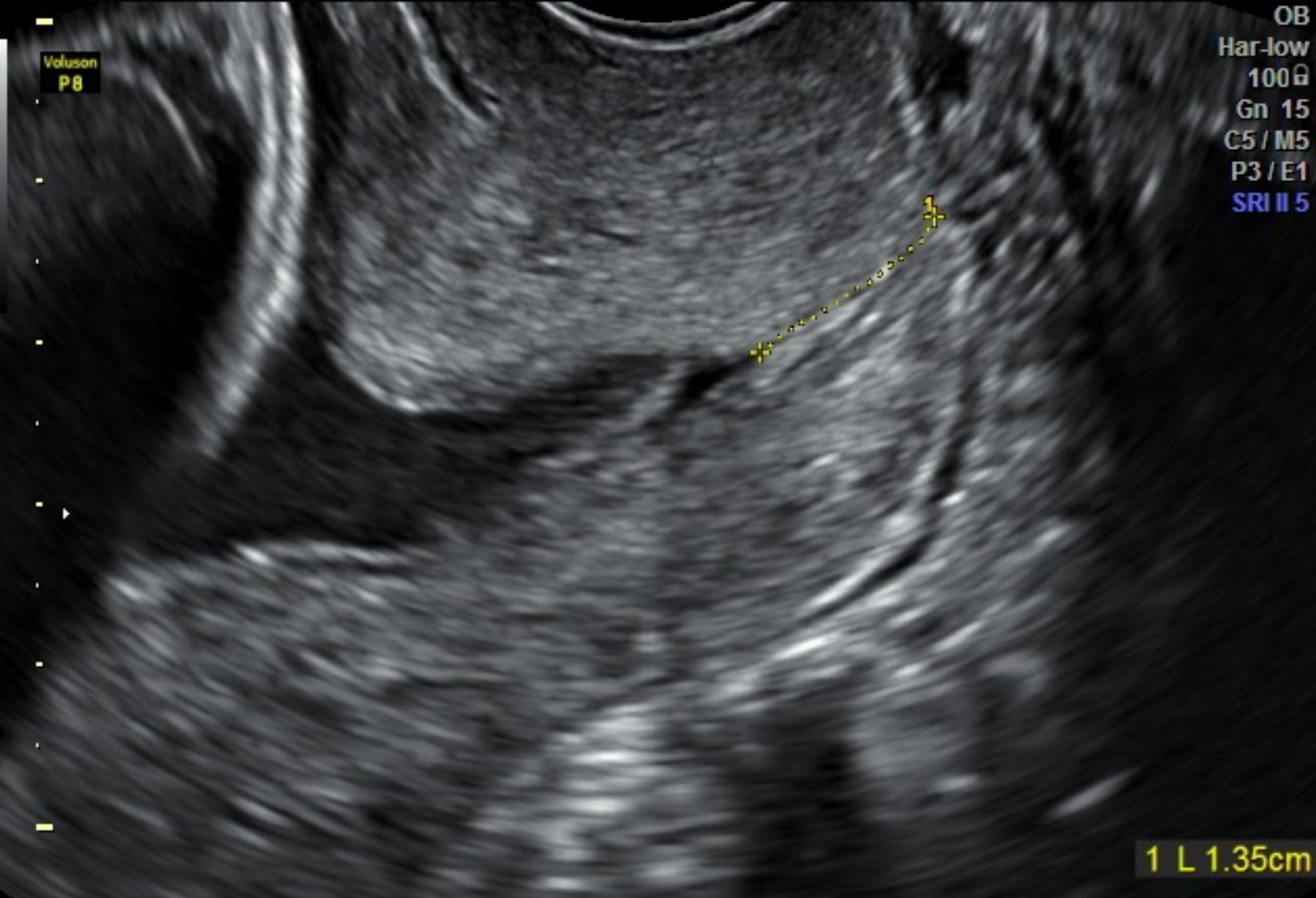


Figure 1. CX <25mm before 34wks were included

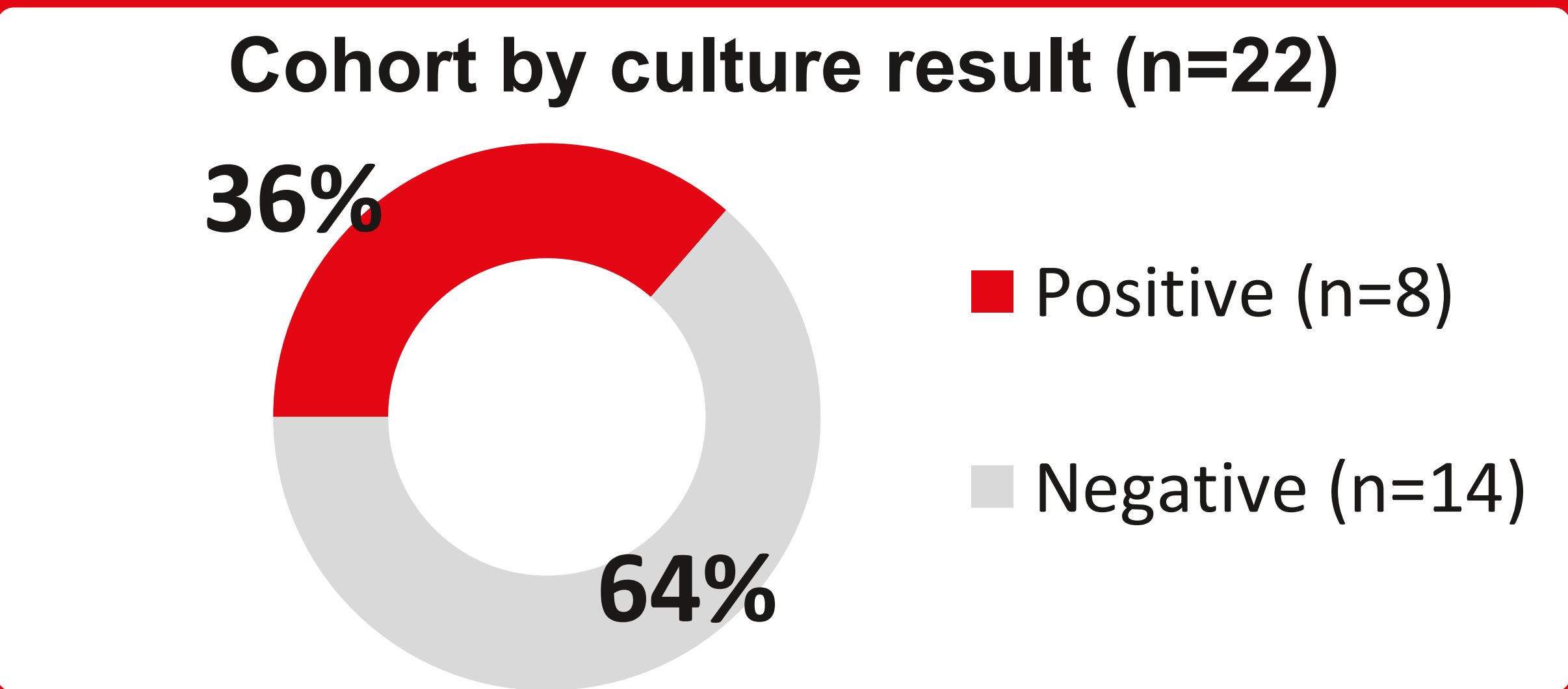


Figure 2. U. urealyticum culture status in the study cohort

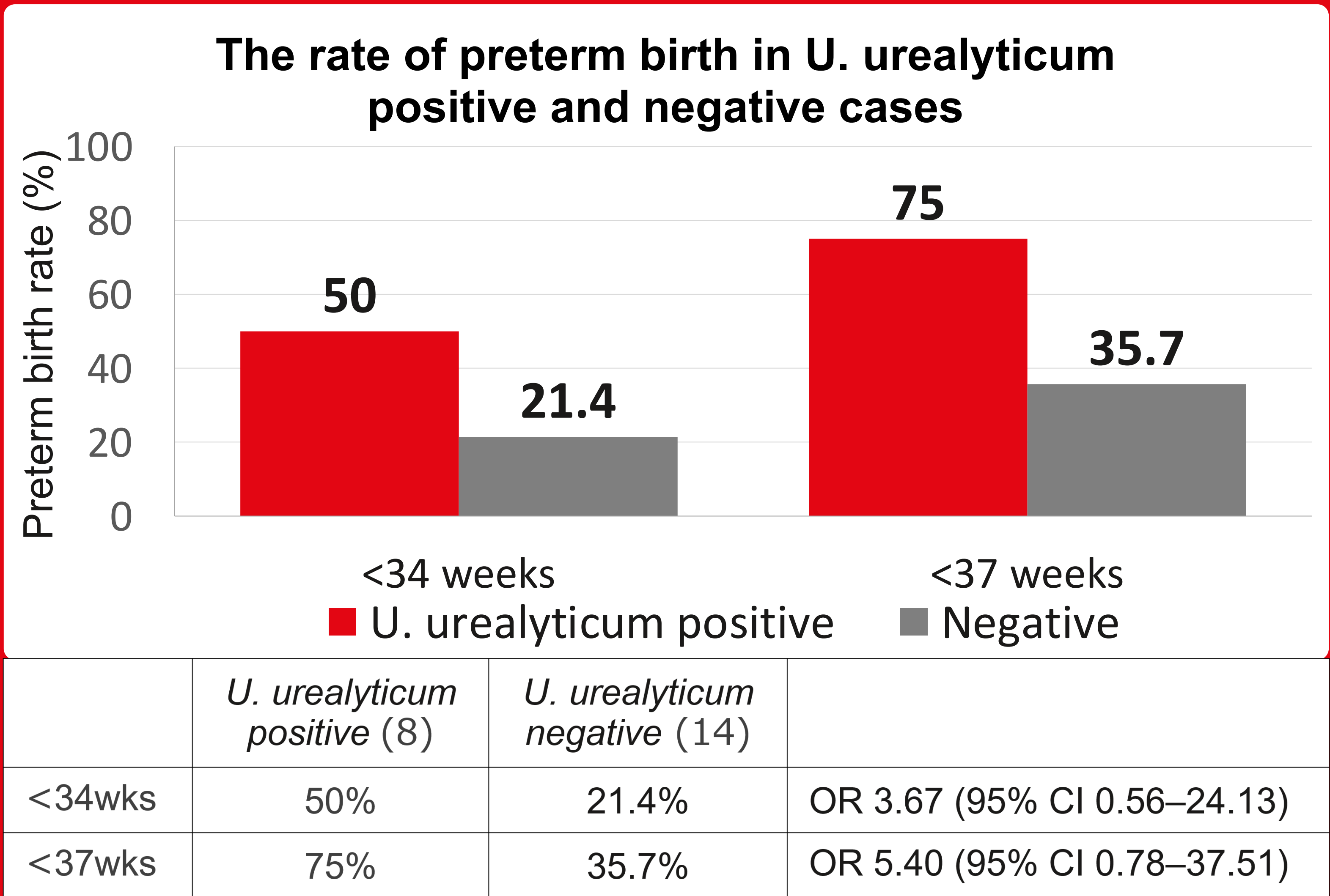


Figure 3. The rates of preterm birth before 34 and 37 weeks were higher in the U. uealyticum positive group.