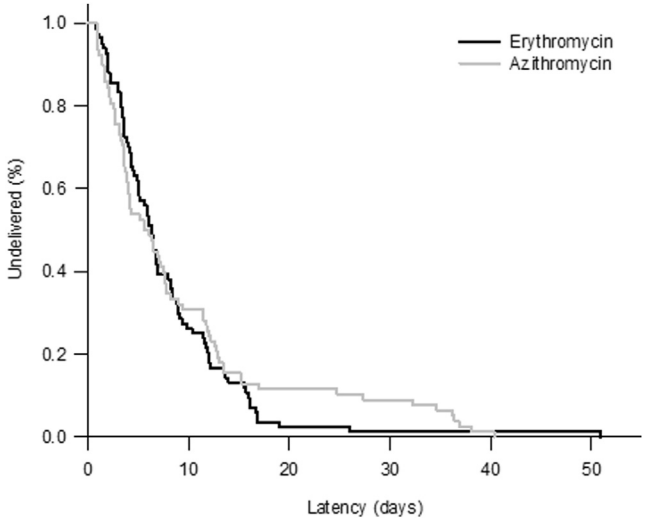
RESULTS: 162 women met inclusion criteria, 78 in the azithromycin group and 84 in the erythromycin group. There was no difference in the median latency from PPROM to delivery between groups (azithromycin: 5.86 days, IQR 3.12-12.05 vs. erythromycin: 6.37, IQR 3.59-10.93; p=0.67). There was a higher rate of cesarean section (48.8% vs. 29.5%; p=0.01) and positive neonatal blood cultures (13.6% vs. 4.1%; p=0.04) in the erythromycin group, but overall rates of neonatal sepsis were low in this cohort. There were no significant differences in the other secondary outcomes studied.
CONCLUSION: There is no difference in latency to delivery when a single oral dose of azithromycin 1g is substituted for erythromycin in the standard antibiotic regimen used in singleton pregnancies complicated by PPROM between 23 and 33 6/7 weeks gestation. The ease of administration and cost-effectiveness of azithromycin make it a favorable option when compared to erythromycin and further prospective study to validate these results is warranted.



384 37: a mobile preterm birth calculator

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OBJECTIVE: We sought to create and validate a mobile preterm birth calculator, which estimates a woman's relative risk for preterm birth (PTB).
STUDY DESIGN: Using data on four million pregnancies, of which 11% resulted in PTB, published by the National Center for Health Statistics and collected in 2013, we applied Bayesian models for generalized linear regression to estimate the risk of delivery before 37 weeks based on maternal characteristics. The characteristics included in the model included maternal demographics, behaviors and obstetric history (level of education, ethnicity, age, BMI, height, smoking status, payment source, plurality, prior terminations, prior live births, interval since last pregnancy, previous preterm delivery, previous C-section, pre-pregnancy complications), and pregnancy characteristics (weight gain, prenatal care, complications). We used 60% of the data (2.4 million delivery outcomes) to build the calculator using published PTB risk estimates for the above characteristics, and we tested the calculator using the remaining 40% (1.4 million delivery outcomes).
RESULTS: We found that our model estimates a woman's relative risk of PTB with a sensitivity of 0.27, specificity of 0.98, PPV of 0.54 and NPV of 0.93. Conclusions: Our calculator demonstrated relatively high specificity and NPV, and significantly lower sensitivity and PPV in predicting full-term birth. This calculator may be useful to physicians in risk stratification, and could be used as the basis for risk quantification in future prospective research.
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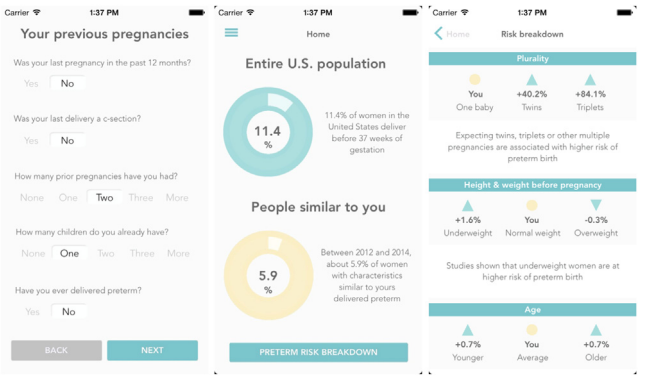

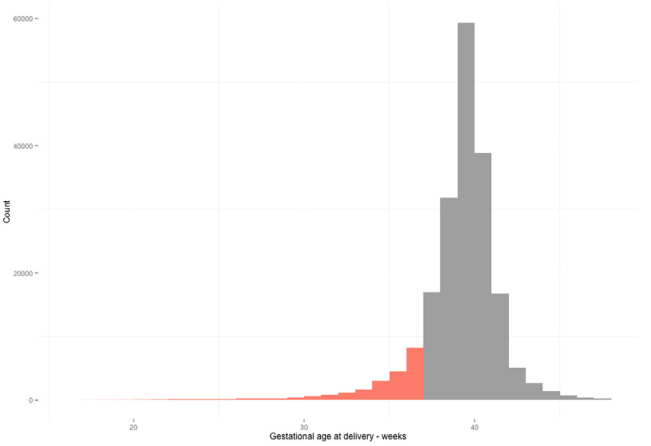

385 D-lactic Acid and Matrix Metalloproteinase-2 (MMP-2) levels in vaginal secretions predict cervical length in mid-trimester pregnant women

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OBJECTIVE: Short cervical length is one of the best predictors of preterm birth. We evaluated whether compounds in vaginal fluid from mid-trimester pregnant women correlated with cervical length.
STUDY DESIGN: In this ongoing study vaginal secretions were obtained before ultrasound evaluation and the soluble fraction assayed by colorimetric assay for D- and L-lactic acid and ELISA for MMP-2,