
Post dates pregnancy
Northern Ontario
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Declaration on Conflict of interest: NONE

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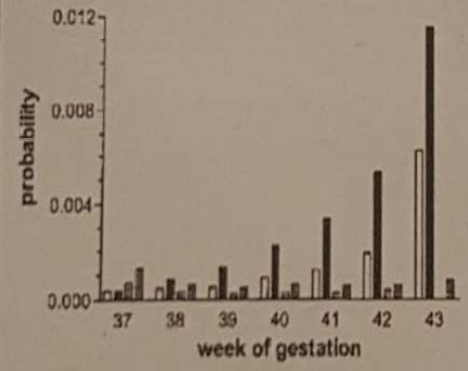
Why is this important in Northern Ontario?

- Increasing risk to neonate as pregnancy advances beyond 38 weeks
- High Risk Population in Northern Ontario
- Geographic Challenges to Access Health Care/Unique Population

Pregnancy outcome at gestational age 37-42 weeks

Table I. Life-table analysis of risks of antepartum stillbirth at term and after term, Scotland, 1985-1996

Gestational wk	Ongoing pregnancy (No.)	Antepartum stillbirth (No.)	All other births (No.)	Conditional probability of antepartum stillbirth	95% Confidence interval	Cumulative probability of antepartum stillbirth	95% Confidence interval
37	700,878	256	33,933	0.0004	0.0003-0.0004	0.0004	0.0003-0.0004
38	666,689	276	88,943	0.0004	0.0004-0.0005	0.0008	0.0008-0.0009
39	577,470	249	147,195	0.0005	0.0004-0.0006	0.0013	0.0012-0.0014
40	430,026	274	246,193	0.0009	0.0008-0.0010	0.0022	0.0021-0.0023
41	183,559	134	146,212	0.0012	0.0010-0.0014	0.0034	0.0032-0.0037
42	37,213	37	35,901	0.0019	0.0014-0.0026	0.0053	0.0047-0.006
43	1,275	4	1,271	0.0063	0.0017-0.0160	0.0115	0.0068-0.0196



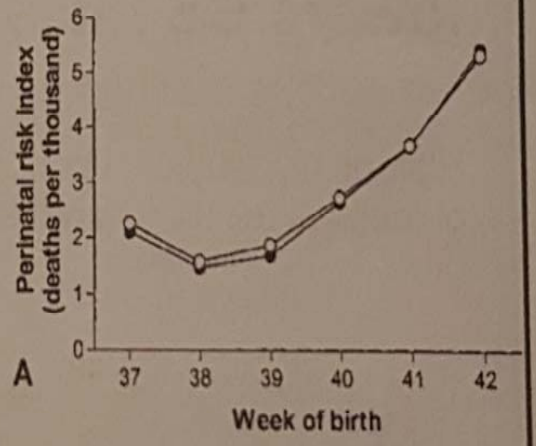


Fig 1. Estimated probabilities of antepartum stillbirth (both conditional risk, *white bars* and cumulative risk, *black bars*), intrapartum stillbirth *(finedotted bars)*, and neonatal death *(heavydotted bars)* associated with delivery at each gestational week at term and after term in Scotland, 1985-1996

Open circles represent primigravid women and closed circles parous wome

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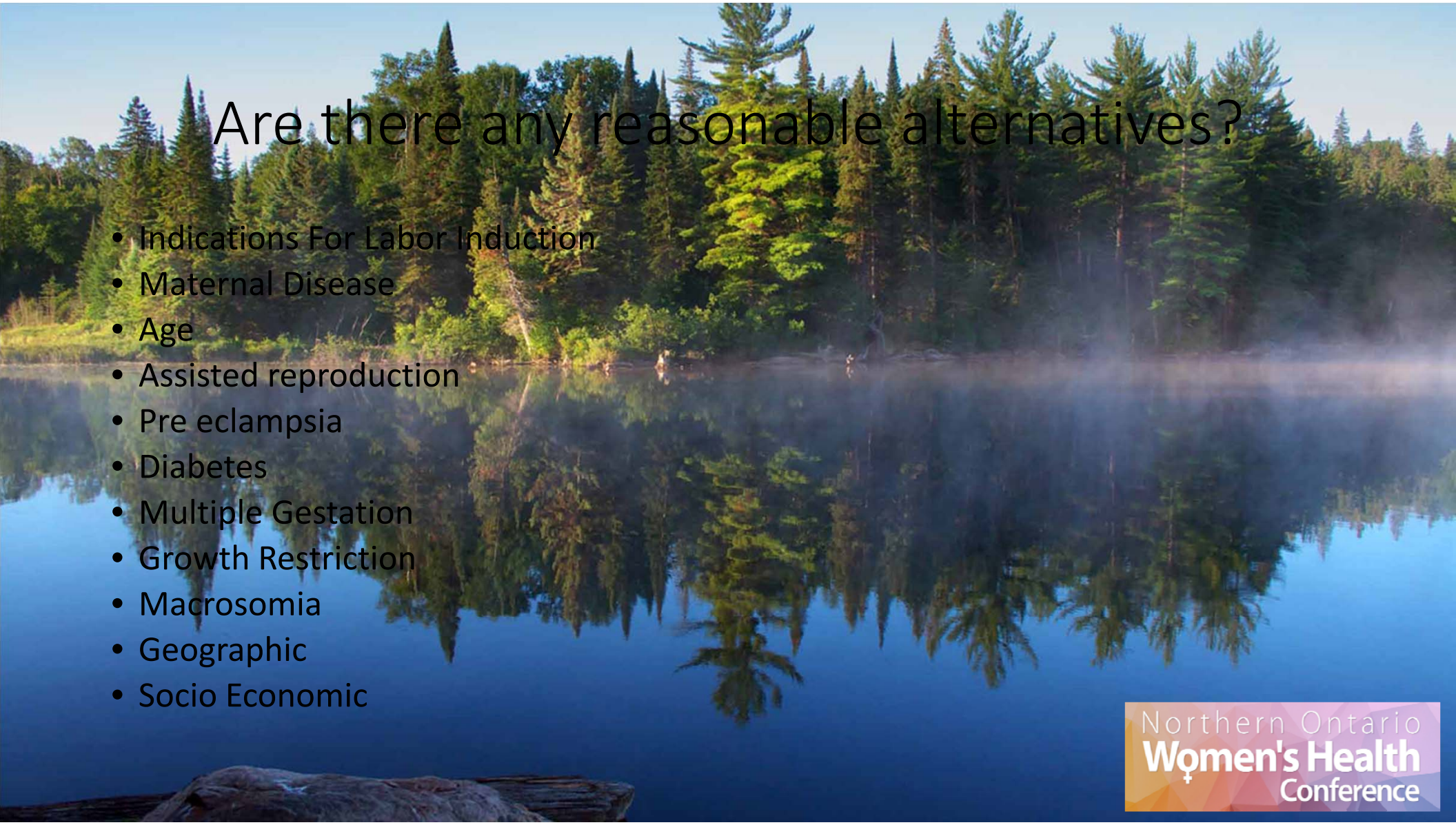
No. 214-Guidelines for the Management of Pregnancy at 41+0 to 42+0 Weeks
Delaney, Martina Roggensack, Anne et al.
Journal of Obstetrics and Gynaecology Canada , Volume 39 , Issue 8 , e164 - e174, August 2017

Recommendations

1. First trimester ultrasound should be offered, ideally between 11 and 14 weeks, to all women, as it is a more accurate assessment of gestational age than last menstrual period with fewer pregnancies prolonged past 41+0 weeks (I-A).
2. If there is a difference of greater than 5 days between gestational age dated using the last menstrual period and first trimester ultrasound, the estimated date of delivery should be adjusted as per the first trimester ultrasound (I-A).
3. If there is a difference of greater than 10 days between gestational age dated using the last menstrual period and second trimester ultrasound, the estimated date of delivery should be adjusted as per the second trimester ultrasound (I-A).
4. When there has been both a first and second trimester ultrasound, gestational age should be determined by the earliest ultrasound (I-A).

No. 214-Guidelines for the Management of Pregnancy at 41+0 to 42+0 Weeks
Delaney, Martina Roggensack, Anne et al.
Journal of Obstetrics and Gynaecology Canada , Volume 39 , Issue 8 , e164 - e174, August 2017

5. Women should be offered the option of membrane sweeping commencing at 38 to 41 weeks, following a discussion of risks and benefits (I-A).
6. Women should be offered induction at 41+0 to 42+0 weeks, as the present evidence reveals a decrease in perinatal mortality without increased risk of Caesarean section (I-A).
7. Antenatal testing used in the monitoring of the 41- to 42-week pregnancy should include at least a non-stress test and an assessment of amniotic fluid volume (I-A).
8. Each obstetrical department should establish guidelines dependent on local resources for scheduling of labour induction (I-A).



Are there any reasonable alternatives?

- Indications For Labor Induction
- Maternal Disease
- Age
- Assisted reproduction
- Pre eclampsia
- Diabetes
- Multiple Gestation
- Growth Restriction
- Macrosomia
- Geographic
- Socio Economic

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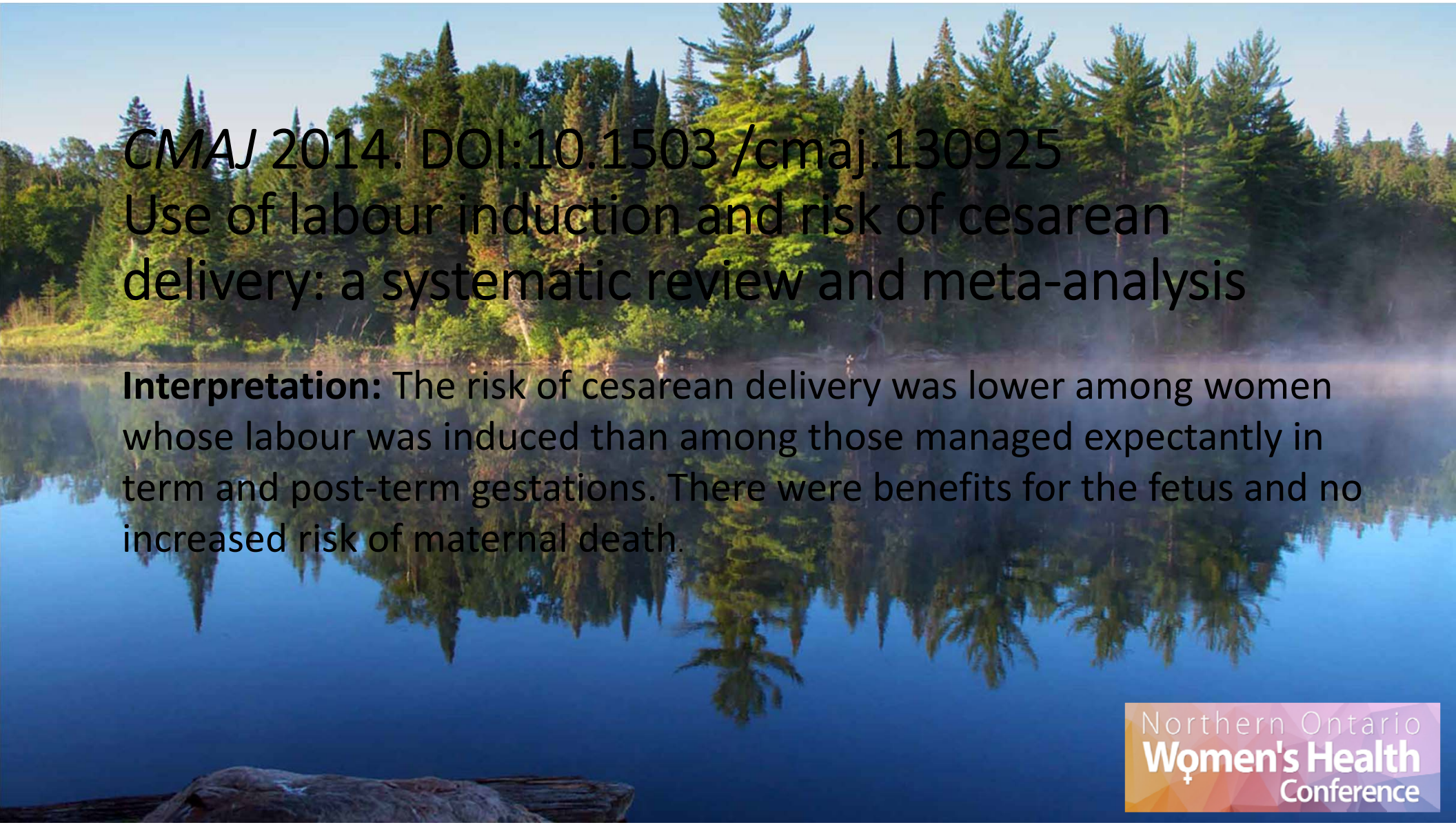

CMAJ 2014. DOI:10.1503 /cmaj.130925

Use of labour induction and risk of cesarean delivery: a systematic review and meta-analysis

Interpretation: The risk of cesarean delivery was lower among women whose labour was induced than among those managed expectantly in term and post-term gestations. There were benefits for the fetus and no increased risk of maternal death.

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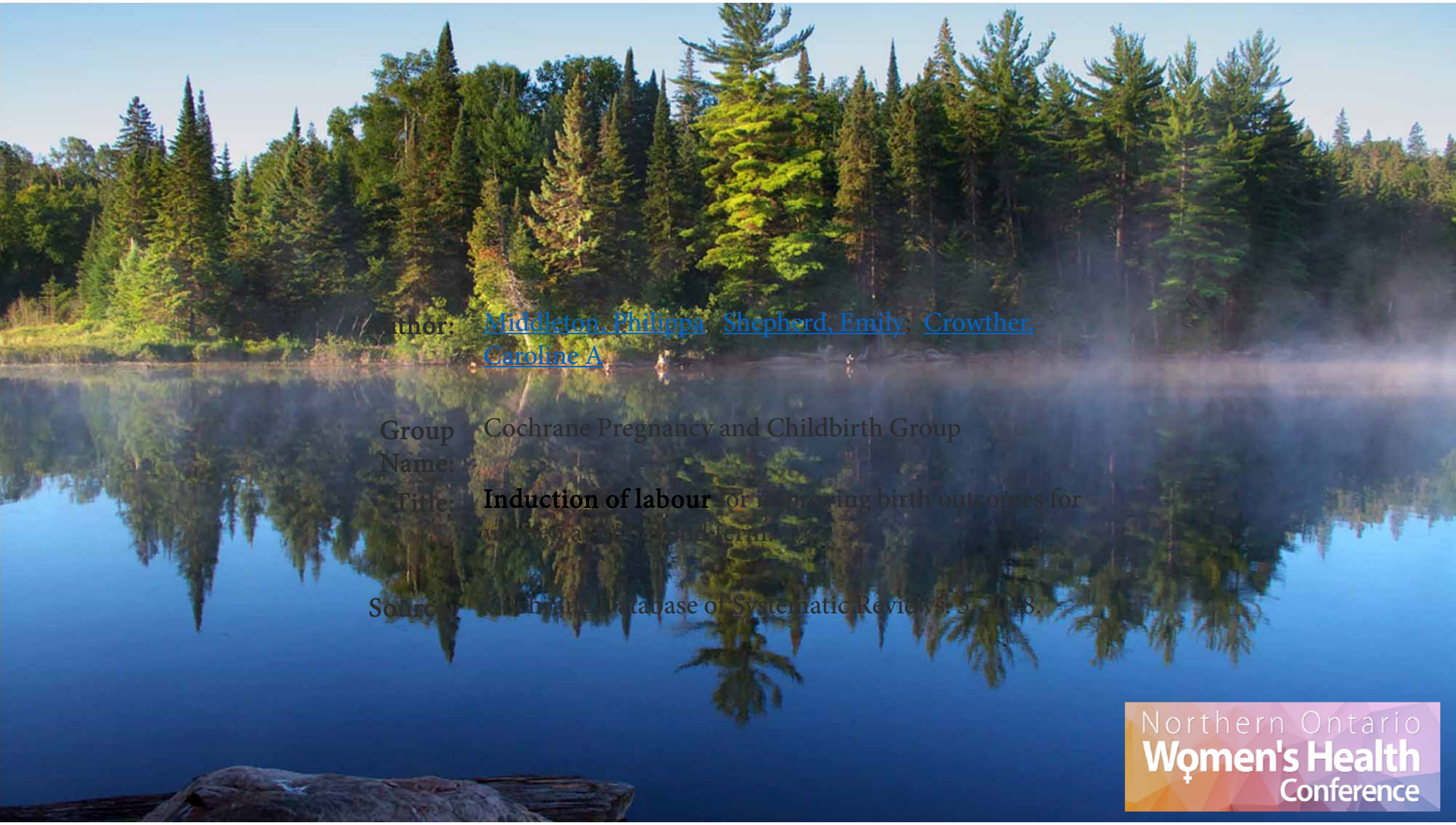
Table 1: Risk of adverse outcomes associated with labour induction versus expectant management
Outcome Relative risk (95% CI) *I*2 value, % No. of trials
Fetal death 0.50 (0.25–0.99) 0 60
Admission to NICU 0.86 (0.79–0.94) 0 55
Maternal death 1.00 (0.10–9.57) 0 20
Note: CI = confidence interval, NICU = neonatal intensive care unit.


tnor: Middleton, Philippa; Shepherd, Emily; Crowther, Caroline A
Group Name: Cochrane Pregnancy and Childbirth Group
Title: Induction of labour for improving birth outcomes for
Sourc: Cochrane Database of Systematic Reviews. 5 2018.
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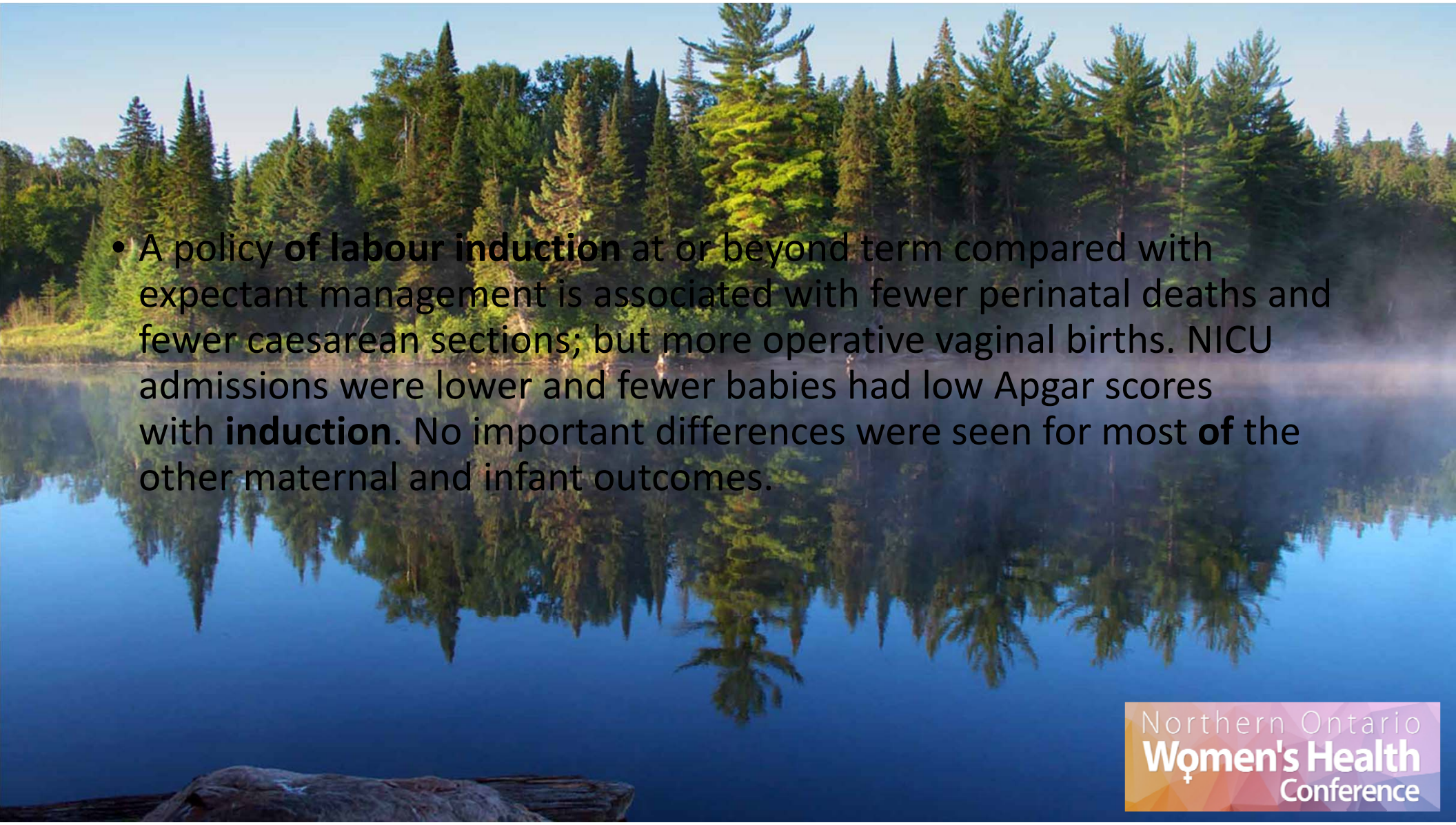

- A policy **of labour induction** at or beyond term compared with expectant management is associated with fewer perinatal deaths and fewer caesarean sections; but more operative vaginal births. NICU admissions were lower and fewer babies had low Apgar scores with **induction**. No important differences were seen for most **of** the other maternal and infant outcomes.

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The new england journal *of* medicine August 9, 2018 vol. 379 no. 6

- **ARRIVE TRIAL**

- **Labor Induction versus Expectant Management in Low-Risk Nulliparous Women**
- William A. Grobman, M.D., et Al for the Eunice Kennedy Shriver National Institute of Child Health and Human Development Maternal–Fetal Medicine Units Network*

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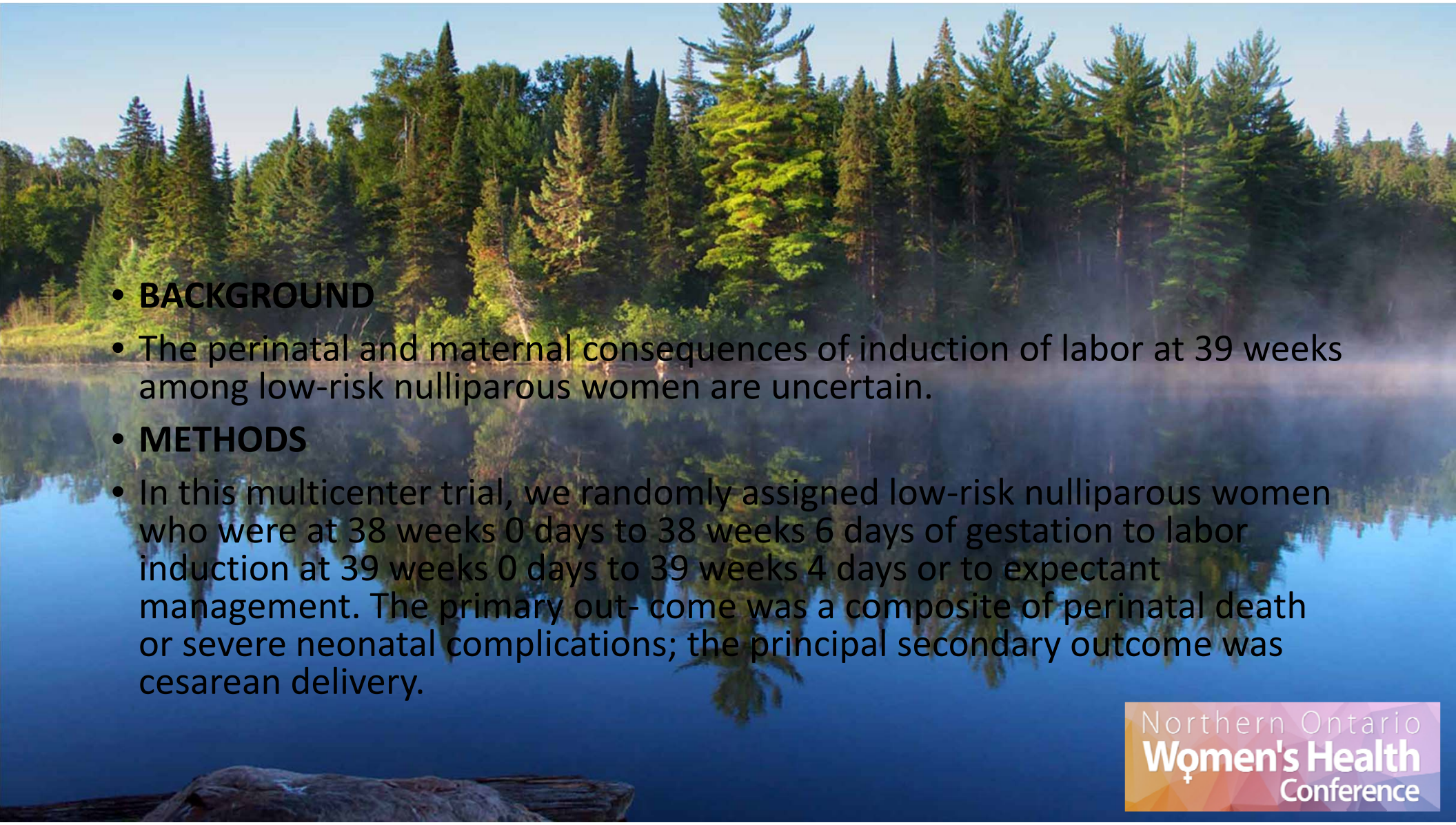

- **BACKGROUND**
- The perinatal and maternal consequences of induction of labor at 39 weeks among low-risk nulliparous women are uncertain.
- **METHODS**
- In this multicenter trial, we randomly assigned low-risk nulliparous women who were at 38 weeks 0 days to 38 weeks 6 days of gestation to labor induction at 39 weeks 0 days to 39 weeks 4 days or to expectant management. The primary out- come was a composite of perinatal death or severe neonatal complications; the principal secondary outcome was cesarean delivery.

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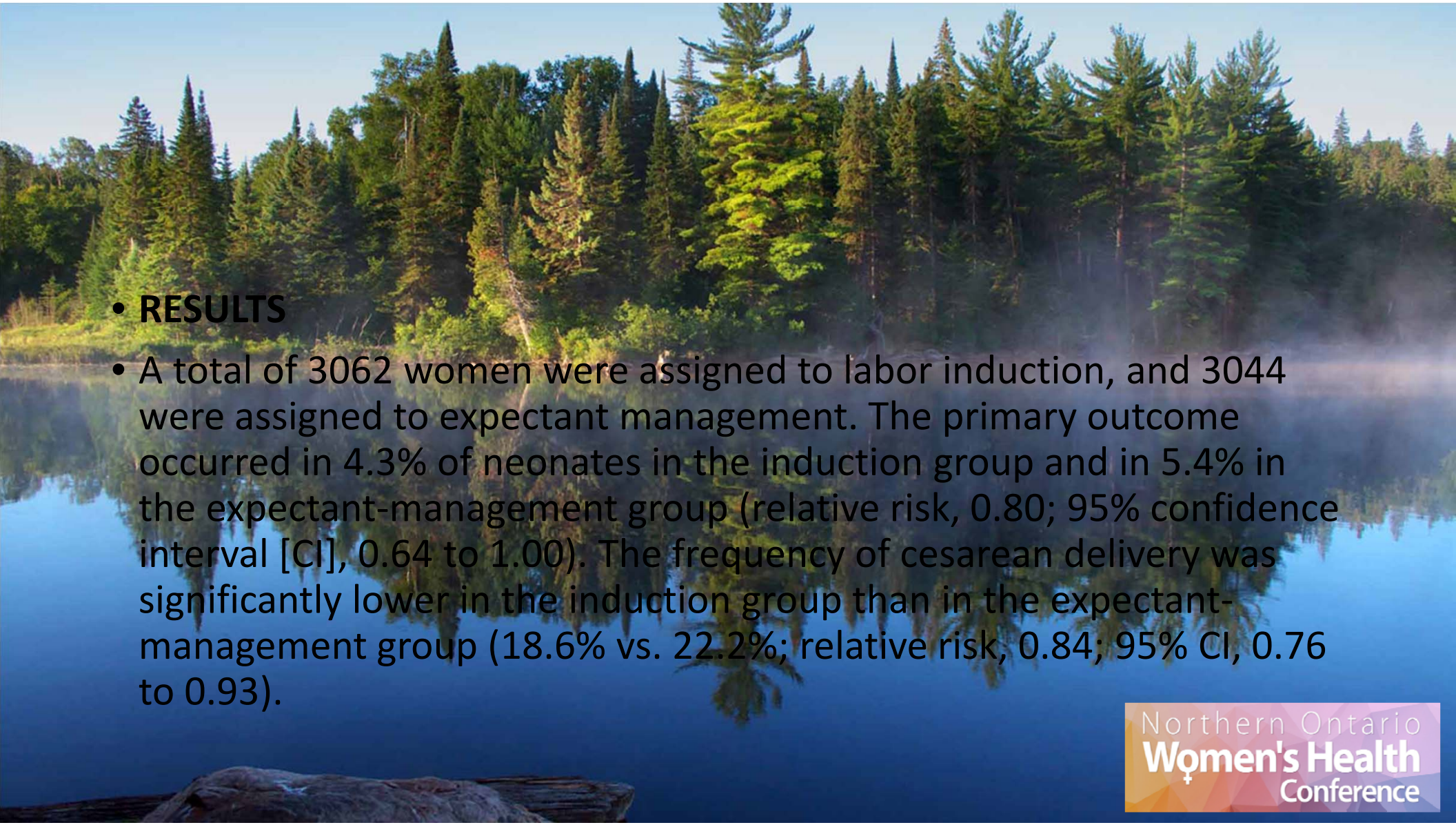
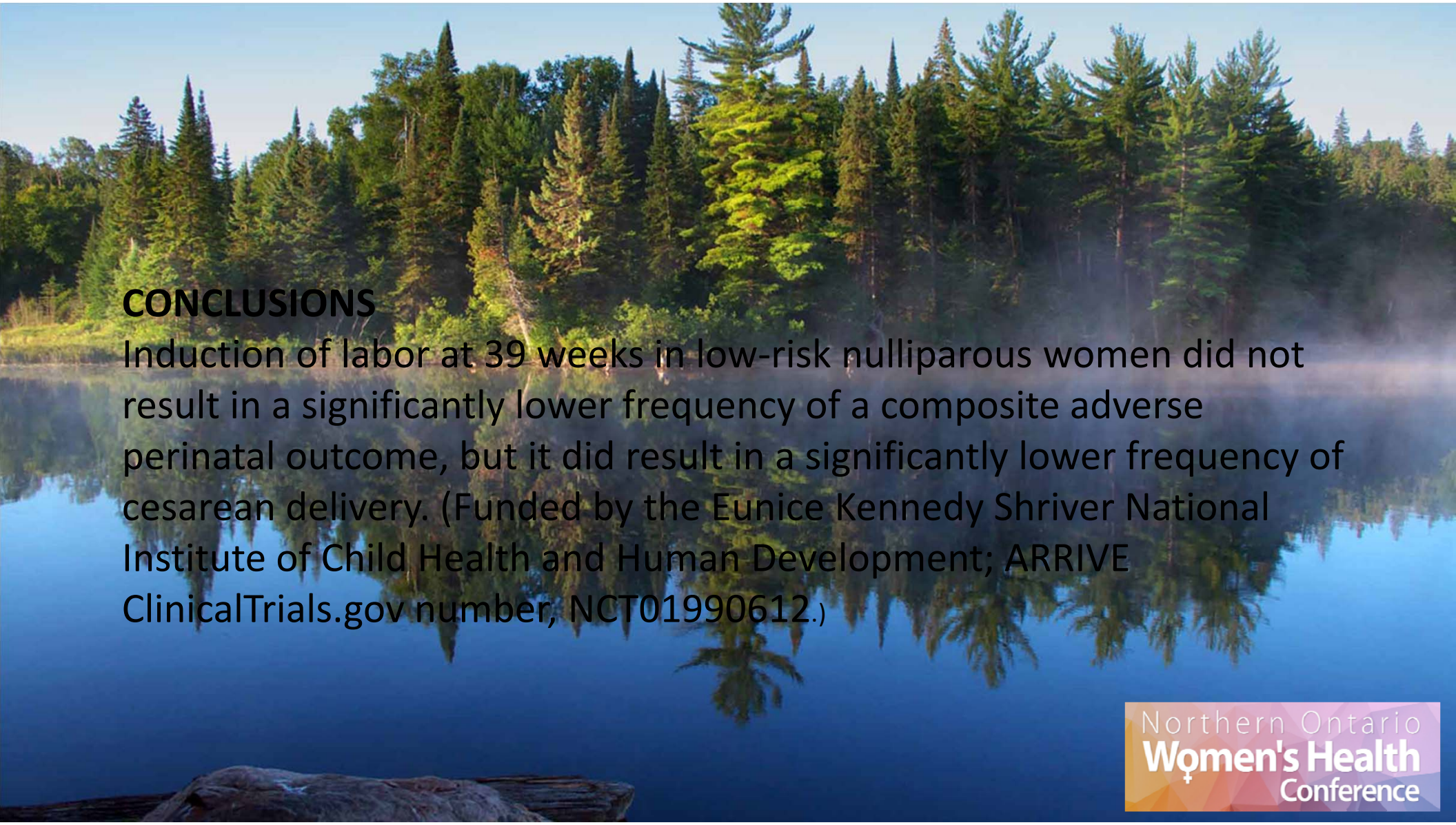


- **RESULTS**
- A total of 3062 women were assigned to labor induction, and 3044 were assigned to expectant management. The primary outcome occurred in 4.3% of neonates in the induction group and in 5.4% in the expectant-management group (relative risk, 0.80; 95% confidence interval [CI], 0.64 to 1.00). The frequency of cesarean delivery was significantly lower in the induction group than in the expectant-management group (18.6% vs. 22.2%; relative risk, 0.84; 95% CI, 0.76 to 0.93).



CONCLUSIONS

Induction of labor at 39 weeks in low-risk nulliparous women did not result in a significantly lower frequency of a composite adverse perinatal outcome, but it did result in a significantly lower frequency of cesarean delivery. (Funded by the Eunice Kennedy Shriver National Institute of Child Health and Human Development; ARRIVE ClinicalTrials.gov number, NCT01990612.)

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• SMFM Statement on Elective Induction of Labor in Low-Risk Nulliparous Women at Term: The ARRIVETrial
• American Journal of Obstetrics and Gynecology,
• *In press, accepted manuscript*,
• Available online 9 August 2018
• Society for Maternal-Fetal Medicine (SMFM) Publications Committee
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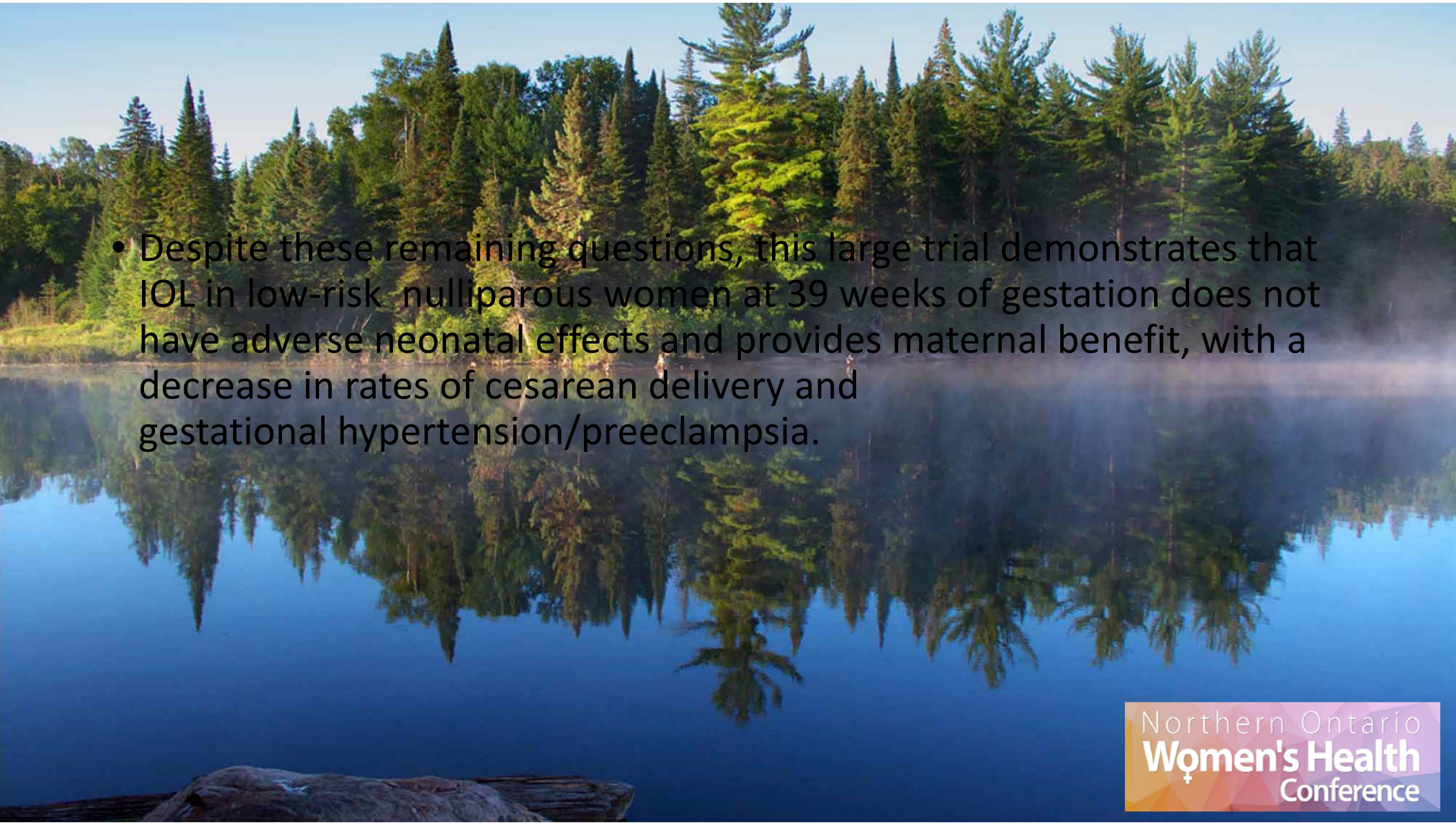

- Despite these remaining questions, this large trial demonstrates that IOL in low-risk nulliparous women at 39 weeks of gestation does not have adverse neonatal effects and provides maternal benefit, with a decrease in rates of cesarean delivery and gestational hypertension/preeclampsia.

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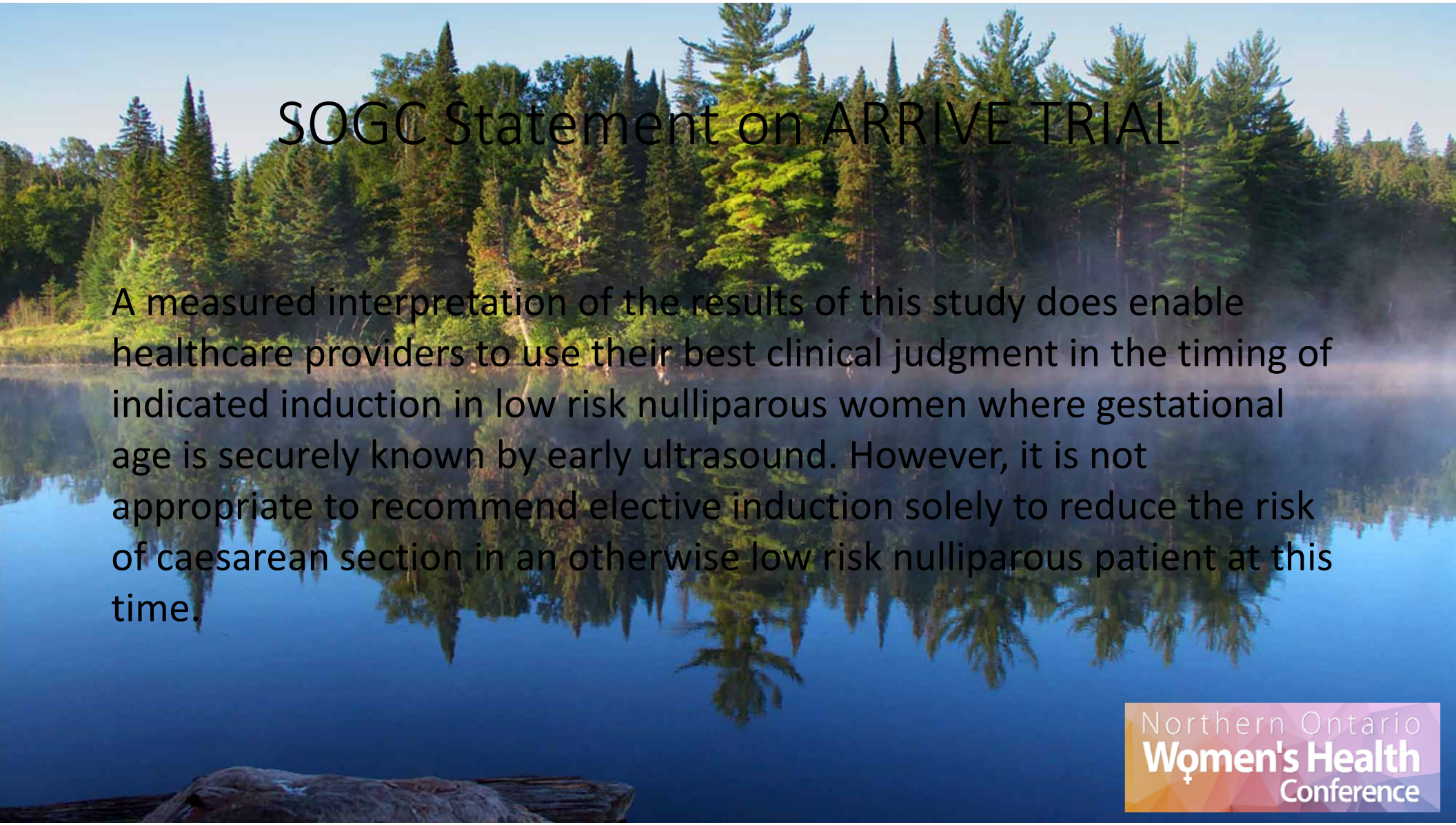

SOGC Statement on ARRIVE TRIAL

A measured interpretation of the results of this study does enable healthcare providers to use their best clinical judgment in the timing of indicated induction in low risk nulliparous women where gestational age is securely known by early ultrasound. However, it is not appropriate to recommend elective induction solely to reduce the risk of caesarean section in an otherwise low risk nulliparous patient at this time.

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How do we proceed in Northern Ontario?

- Consider all factors /Individualize patient care
- Are there any indications for delivery?
- Geography?
- Social/Economic considerations
- Develop appropriate safe care for this community

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Thank You
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