Introduction & Purpose
- PUPPP complicates 0.07-0.3% of pregnancies
- Associated with preterm deliveries and increased risk of caesarean section, impacting maternal and perinatal morbidity.
- This study analysed the obstetric outcome of pregnant women with PUPPP, which would provide us the better insight into management strategies.

Methods
- Retrospective cohort study
- 78 PUPPP versus 83 non-PUPPP in pregnant women delivered between 2013 to 2018
- Royal Brisbane and Women's Hospital, Australia

Results
- Table 1 Baseline maternal demographics
  - PUPPP was strongly associated with parity, with markedly increased risk in nulliparous women (OR: 2.8; 95% CI: 1.3-5.8) compared to those with a single birth prior.
  - 64.1% of the PUPPP group were nulliparous compared to 38.6% of controls.
  - Pre-existing medical conditions were more common in the PUPPP group, cardio-respiratory conditions was strongly associated with PUPPP (OR: 3.6; 95% CI:1.4-8.9; p=0.006)

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PUPPP Characteristics
- Median gestation at diagnosis: 35 weeks
- 48.7% reported itch
- 96.1% cases were diagnosed clinically, 3.9% by histopathology

Symptoms of PUPPP: Distribution of Rash

Management of PUPPPP
- 27% responded to antihistamines alone, 22% required topical steroids additionally to resolve their symptoms.

Duration of Labour & Mode of Delivery
- The median duration of first stage of labour was significantly longer in the PUPPP group (338; IQR: 210-690 mins) compared to controls (238; IQR: 136-373 mins).
- Women with PUPPP were more likely to have a Caesarean section compared to controls (OR: 4.6; 95% CI: 2.2-9.7).

Mode of Delivery by PUPPP Status
- Cesarean section
  - PUPPP: 46.2%
  - Control: 35.9%
- Instrumental vaginal
  - PUPPP: 17.9%
  - Control: 10.5%
- Unassisted vaginal
  - PUPPP: 35.9%
  - Control: 63.9%

Antenatal Complications
- Several maternal complications were significantly higher in the PUPPP group than the controls: decreased foetal movements, gestational diabetes, large for gestation age, premature rupture of membranes and antepartum haemorrhage.

Postpartum Complications
- Table 2: Postpartum Complications by PUPPP Status

Neonatal Outcomes
- High rate of neonatal admissions: 34.6% in PUPPP compared to 17.9% in the control
- No statistical difference between the 2 groups including the gender, APGAR at 1 and 5 mins and complications
- Zero 30-day readmission and neonatal mortality in both groups

Conclusion
- PUPPP is a debilitating dermatological condition affecting pregnant women, resulting high intervention rate resulting in adverse maternal and perinatal outcome.
- Early recognition and treatment of this condition could improve maternal and perinatal outcome.