

Faster, Safer, Cost-Effective? A Comparison of Propess vs. Prostin for Induction of Labour

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INTRODUCTION

Prostaglandin analogues such as Propess and Prostin are commonly used to induce labour, but their comparative effectiveness remains debated. Propess, with prolonged release, may delay labour, while Prostin’s faster onset may shorten it. This study compares both agents to evaluate include induction-to-delivery time, delivery mode, neonatal outcomes, and cost-effectiveness.

METHODS

A retrospective, non-randomised study was conducted at a UK district general hospital. During the COVID-19 pandemic, Prostin was used to reduce vaginal exams and transmission risk. Post-pandemic, Propess was reinstated, allowing comparison across two cohorts:

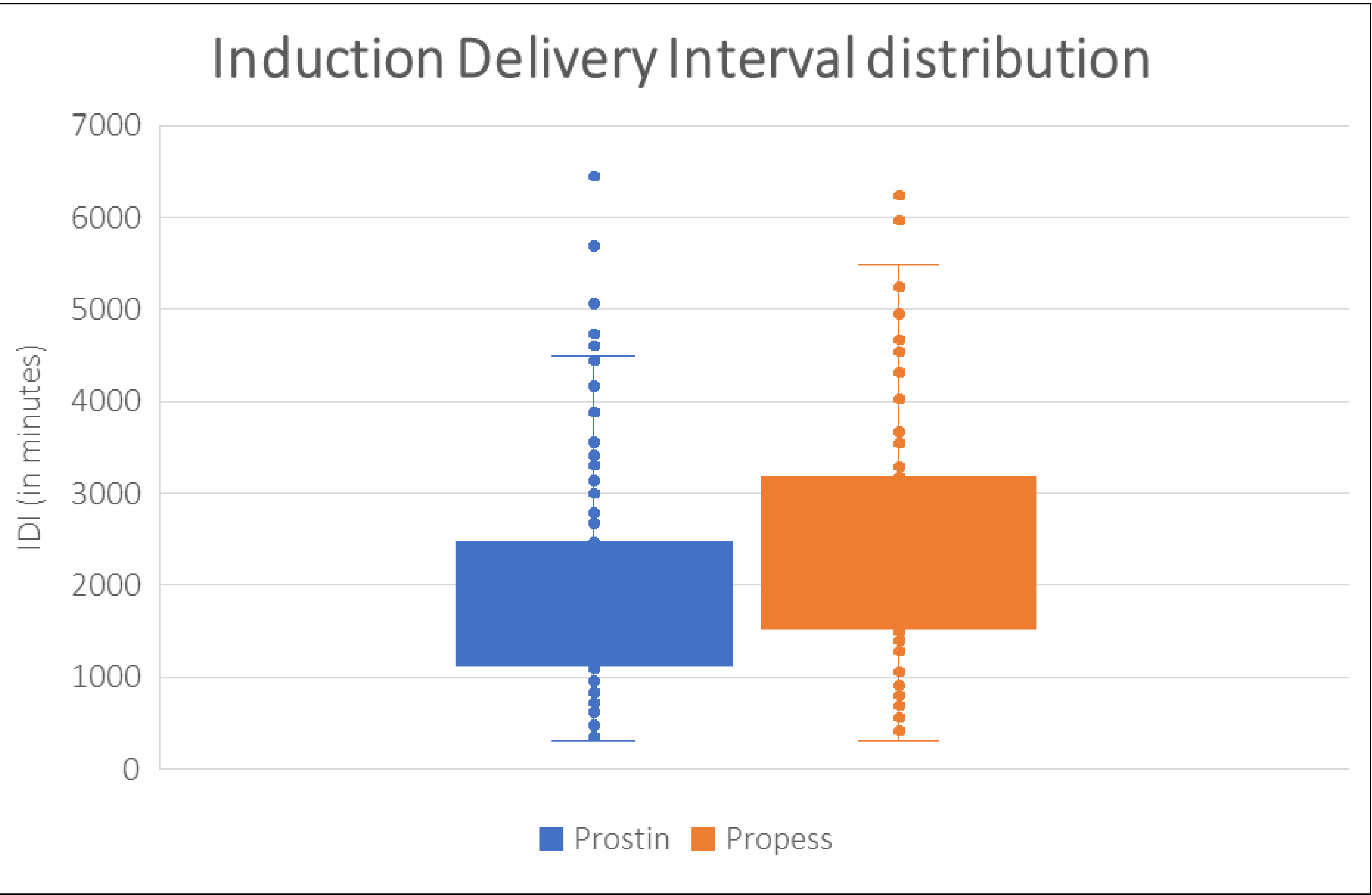
- **Prostin:** Sept–Nov 2021
- **Propess:** Sept–Nov 2024

Each group included 100 term or post-term singleton pregnancies with live cephalic presentations, Bishop scores <6, and low-risk profiles.

Primary outcome: Induction-to-delivery interval

Secondary outcomes: Mode of delivery, chorioamnionitis, uterine hyperstimulation, NICU admissions

Statistical analysis used a two-tailed t-test.

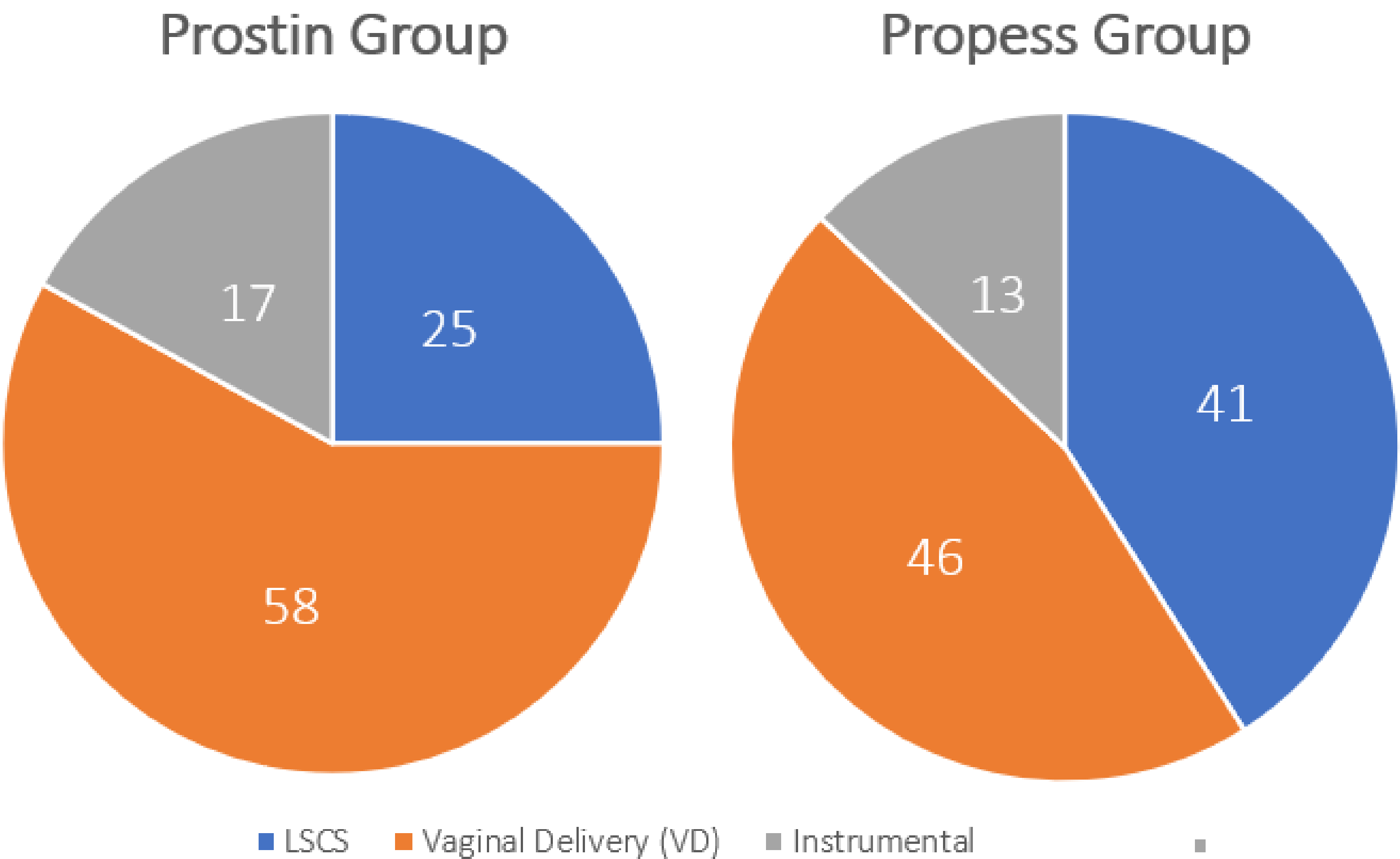


RESULTS

Baseline demographics (age, BMI) were similar.

Key findings:

- Induction-to-delivery interval:
Propess = 2474 mins | Prostin = 2030 mins (p = 0.0158)
- Cesarean rate:
Propess = 41% | Prostin = 25%
- Vaginal deliveries (incl. instrumental):
Propess = 59% | Prostin = 75%
- NICU admissions:
Negligible in the Prostin group



CONCLUSION

Prostin was associated with significantly shorter induction-to-delivery times and fewer cesarean sections. A cost-effectiveness analysis (based on NHS National Tariff) also favoured Prostin, largely due to reduced hospital stay. Overall, Prostin may offer a more efficient, safer, and cost-effective option for labour induction.