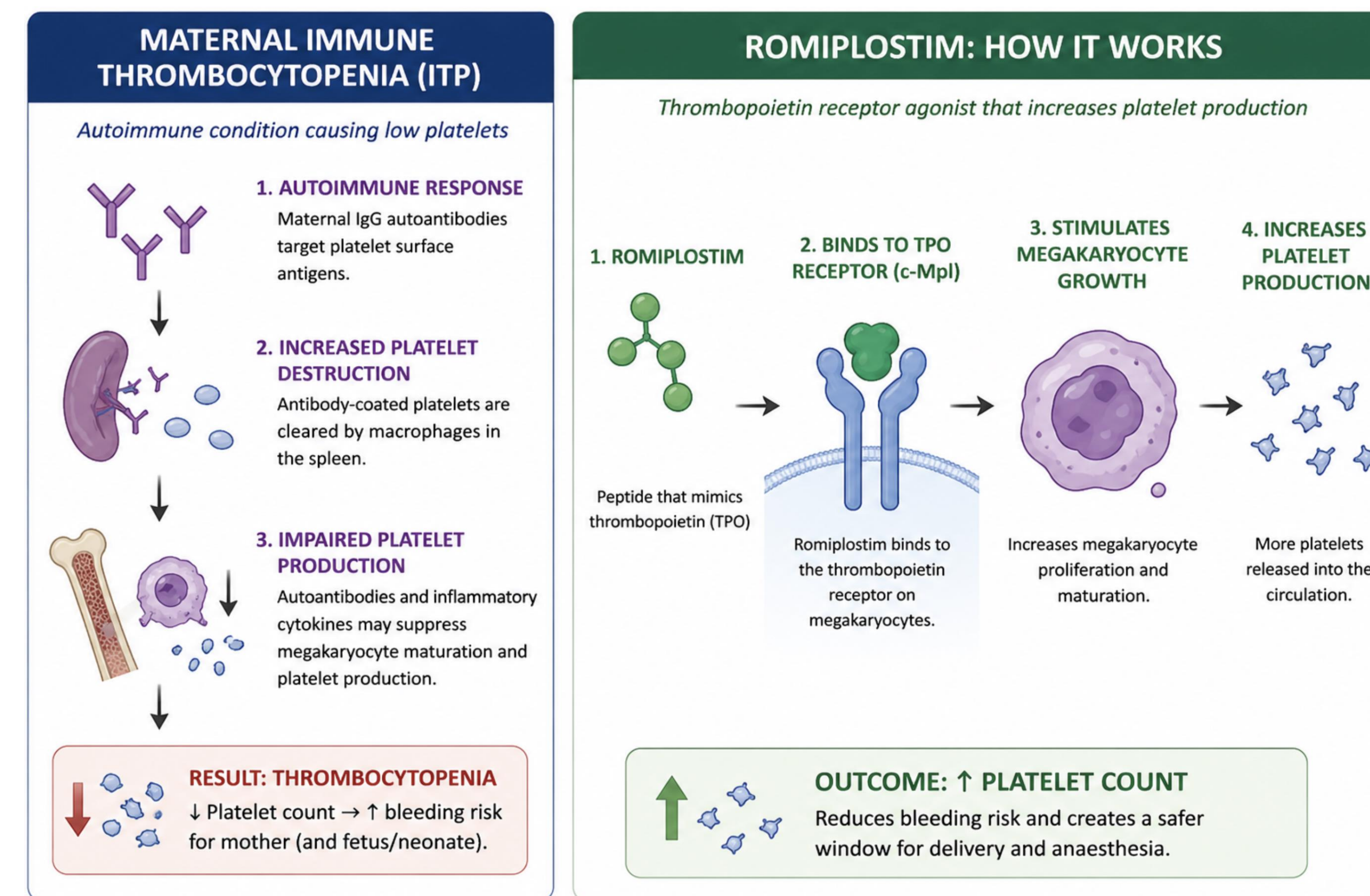


INTRODUCTION

- Immune thrombocytopenia (ITP) is an **autoimmune disorder** characterised by platelet destruction and impaired production
- In pregnancy, ITP is associated with increased maternal **bleeding risk** and may complicate timing and mode of delivery
- Platelet counts can be **unpredictable** and rapidly fluctuating, posing challenges for anaesthetic planning
- First-line** treatments include **corticosteroids** and intravenous immunoglobulin (**IVIg**); platelet transfusion may provide transient benefit
- Management of refractory ITP is complex, requiring multidisciplinary decision-making
- Romiplostim**, a thrombopoietin receptor agonist, is an emerging option for **refractory ITP**, with limited pregnancy data
- We present a case of refractory maternal ITP successfully treated with novel agent **Romiplostim**



CASE REPORT

A 37-year-old G4P1 was referred to our tertiary centre at 36 weeks' gestation with newly diagnosed, rapidly progressive ITP. Obstetric history included a preterm delivery at 28 weeks due to severe pre-eclampsia with no associated platelet dysfunction. There was no significant past medical, family or travel history. Platelets at booking were normal, and rapidly declined in the third trimester to a nadir of $6 \times 10^9/L$. There were no features of pre-eclampsia, HELLP syndrome, infection or thrombotic microangiopathy.

TIMELINE

Booking: Platelet count within **normal** range at initial antenatal assessment

Third trimester: Progressive and rapid decline in platelet count to $6 \times 10^9/L$, raising concern for severe ITP at 34/40

Initial treatment 36/40 : Commenced on **high dose prednisolone** and **IVIg** with minimal clinical or laboratory response

Platelet transfusion: Transient increase from $5 \rightarrow 6 \times 10^9/L$, suggesting an ongoing **consumptive process** (gum bleeding)

Second IVIg course: Temporary improvement with platelet count rising to $49 \times 10^9/L$

Relapse 37/40: Subsequent fall in platelet count to $5 \times 10^9/L$, indicating refractory disease

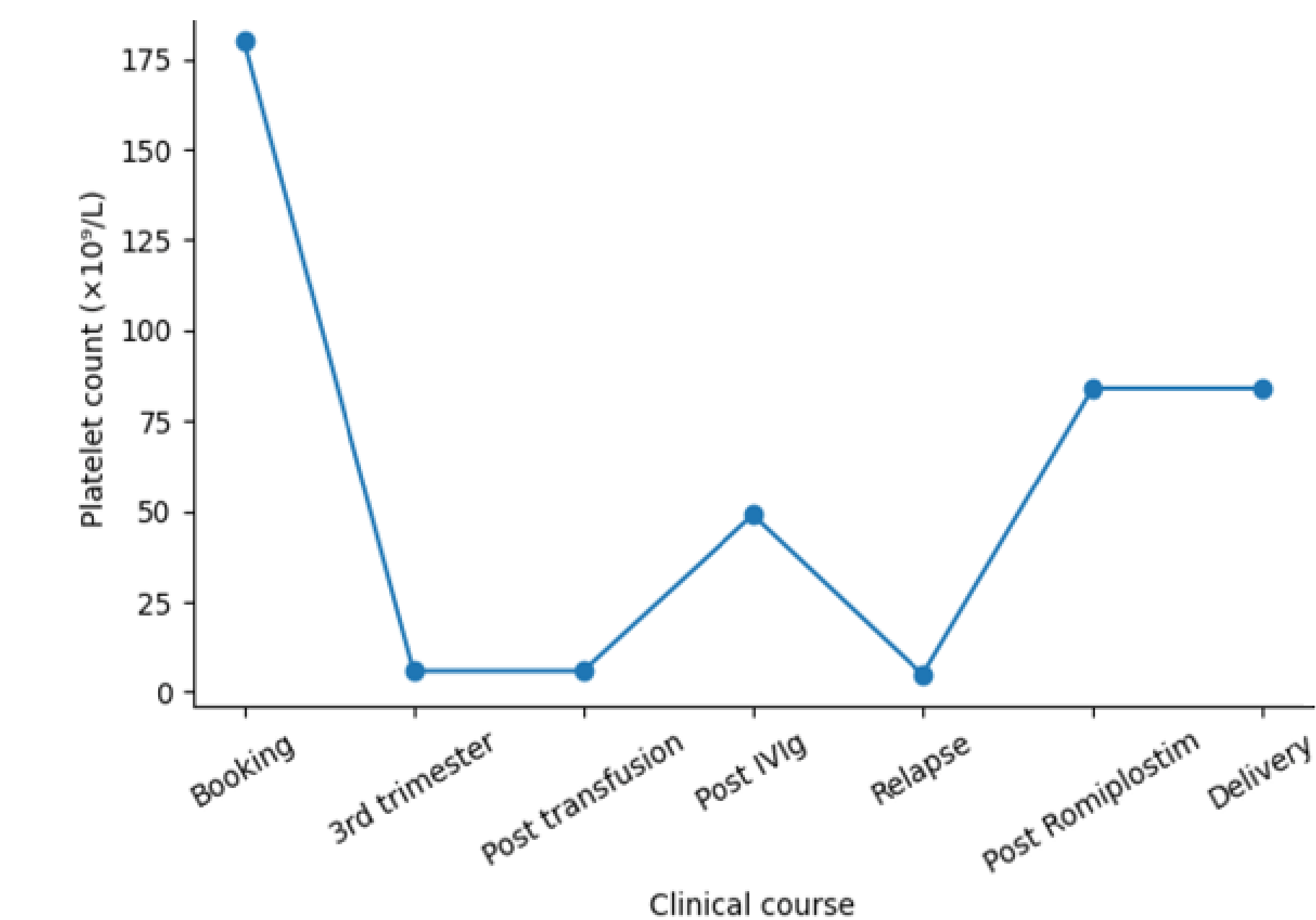
MDT decision point: Multidisciplinary discussion regarding escalation of therapy; rituximab considered (limited by delayed onset and potential risks), decision made to commence **romiplostim**

Response (Day 6): Rapid increase in platelet count to $84 \times 10^9/L$, creating a safe operative window for delivery

Delivery: Elective lower segment caesarean section performed under **general anaesthesia**, with neuraxial techniques avoided due to platelet instability

Outcome: Estimated blood loss 950 mL, with no requirement for blood product transfusion

PLATELET TREND



DISCUSSION

- Refractory maternal ITP requires **early MDT escalation and forward planning**
- Platelet trajectory > absolute count** when assessing bleeding and neuraxial risk
- Consumptive ITP may limit effectiveness of **platelet transfusion and standard therapies**
- Romiplostim can provide rapid, clinically meaningful platelet recovery** in selected cases
- This case adds to growing evidence supporting **TPO receptor agonists in pregnancy**