ROLE OF FIBRINOGEN

- strong evidence that low fibrinogen (<2g/L) is accurate biomarker for progression from moderate to severe PPH

Table 2 Clauss fibrinogen as a biomarker for predicting progression of postpartum haemorrhage (PPH). Values are median (IQR) or mean (SD).

Reference	Number studied	Entry criteria	Definition of progression	Fibrinogen level; $g.l^{-1}$	
				Non-progression	Progression
Charbit et al. [25]	128	Second line uterotonic after manual evacuation	Fall in Hb > 40 $g.l^{-1}$, ≥ 4 units RBC, need for invasive procedure*	4.4 (3.7–5.1)	3.3 (2.5–4.2)
Cortet et al. [35]	738	Vaginal delivery > 500 ml PPH Excluding genital tract trauma, uterine rupture, accreta and praevia	Fall in Hb > 40 $g.l^{-1}$, any red cell transfusion, need for invasive procedure, admission to ICU	4.2 (1.2)	3.4 (0.9)
Gayat et al. [37]	257	Admission to referral centre for PPH†	Need for an invasive procedure	2.65 (2.08–3.46)†	1.8 (1.09–2.52)†
De Lloyd et al. [36]	240	Any cause of PPH and time of first coagulation test	Need for ≥ 4 units red cells or PPH > 2500 ml	4.4 (1.1)	3.1 (1.0)
Collins et al. [27]	346	Any cause of PPH 1000–1500 ml	Need for ≥ 4 units red cells or PPH > 2500 ml	3.9 (3.2–4.5)	2.8 (2.1–3.8)

*Most defined as progressing based on fall of Hb > 40 $g.l^{-1}$.
†Fibrinogen was taken on average 4 h after the onset of bleeding on admission to a referral centre and this contributes to the lower fibrinogen levels in this cohort.

MONITORING HAEMOSTASIS

- clinical observation
- empirical/formulaic blood product replacement
- lab-based
  - slow
  - PT/APTT limited sensitivity
- POCT
  - resources