

# Tranexamic acid for PPH: what, who and when

**Postpartum Hemorrhage Community of Practice Annual Meeting 2022**

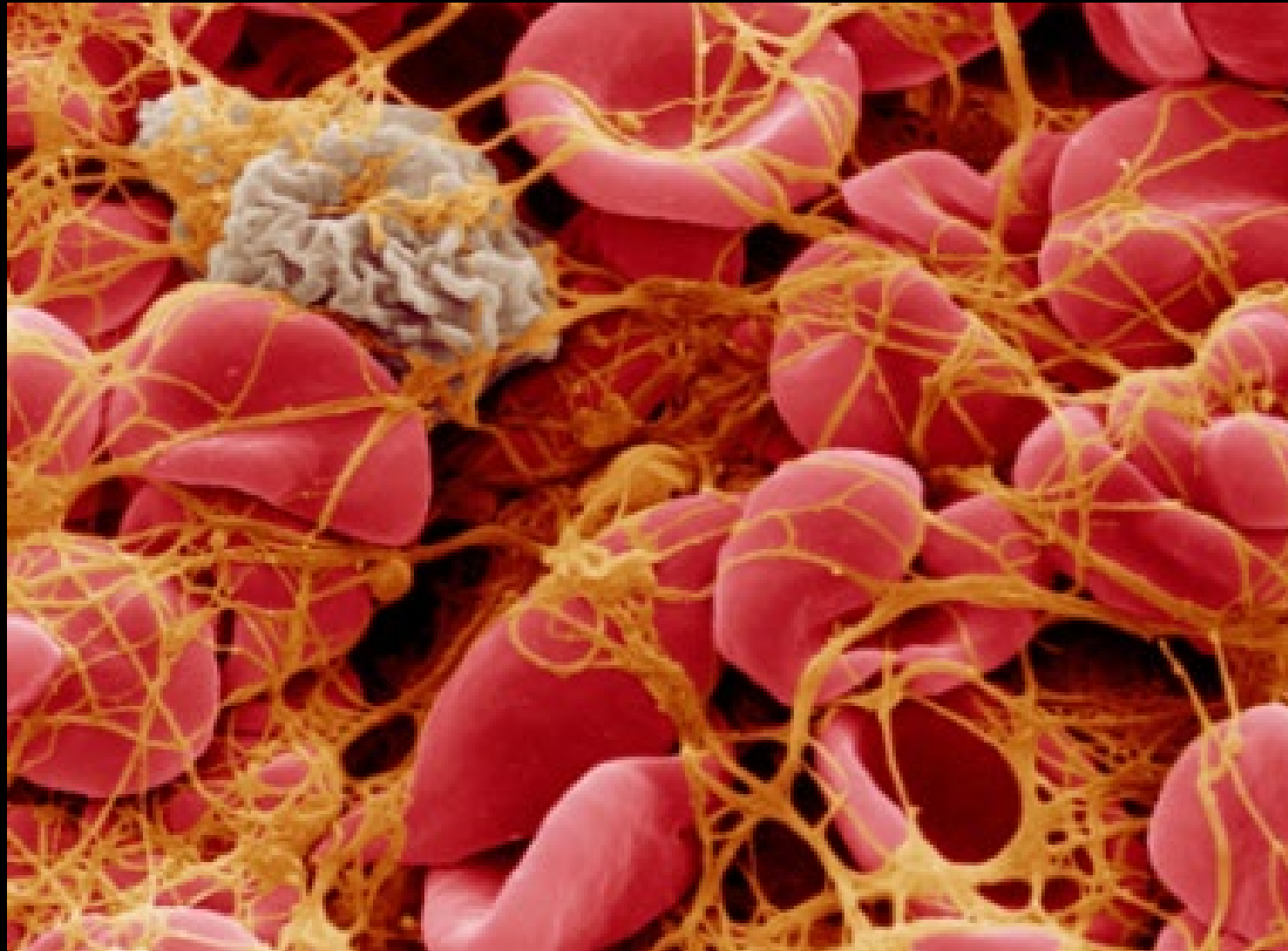
Amy Brenner

Epidemiologist, London School of Hygiene & Tropical Medicine

# What is tranexamic acid?



How does it stop bleeding?



# What is the evidence for use in PPH?

## TRANEXAMIC ACID

*A drug that stops bleeding*

Results from the WOMAN trial



The drug could save

# 1/3

women who would otherwise bleed to death after childbirth

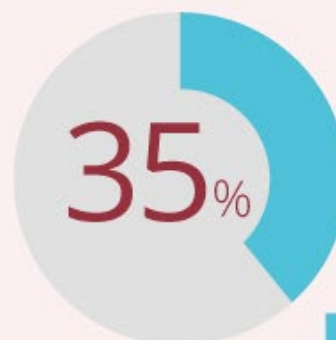
An estimated **100,000** women die from severe bleeding after giving birth every year



**20,000** WOMEN  
**21** COUNTRIES  
**193** HOSPITALS



The drug reduced the number of women bleeding to death after childbirth by more than 30%



The drug reduced the need for urgent surgery to control bleeding by more than 35%

# £2 (\$2.5)

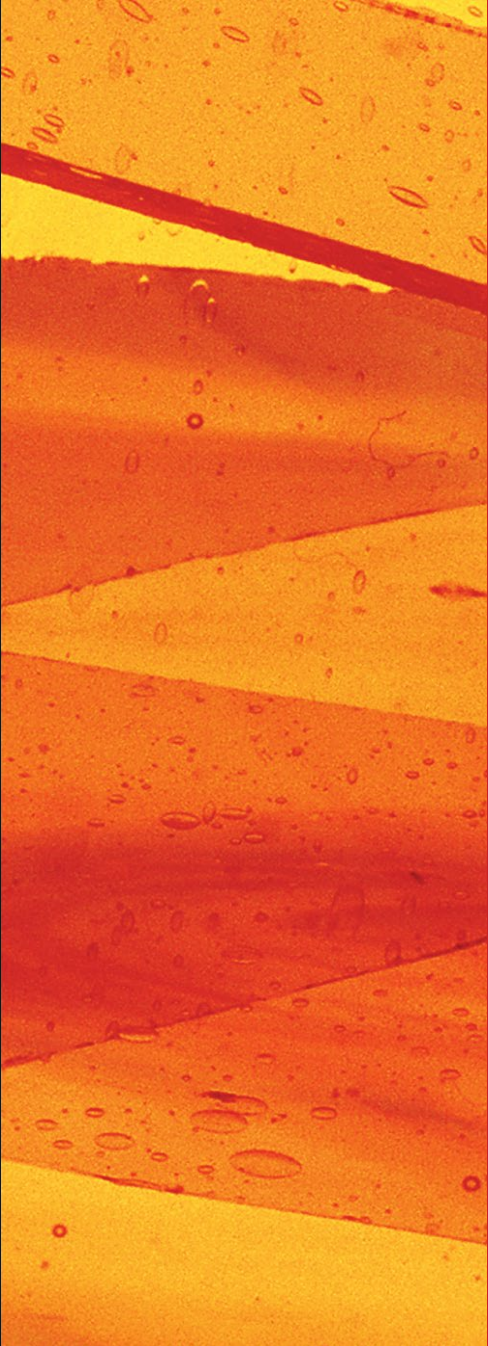
The cost of tranexamic acid in most countries

Source: The WOMAN trial (2017)  
Credit: Rebecca Robinson/LSHTM

▶ Find out more at [womantrial.lshtm.ac.uk](http://womantrial.lshtm.ac.uk)

# WOMAN trial results

<b>Outcome</b>	<b>TXA n (%)</b>	<b>Placebo n (%)</b>	<b>Risk ratio (95% CI)</b>
Death due to bleeding <i>(all women)</i>	155 (1.5%)	191 (1.9%)	0.81 (0.65-1.00)
Death due to bleeding <i>(women randomised &lt;3h of birth)</i>	89 (1.2%)	127 (1.7%)	0.69 (0.52-0.91)
Re-operation for bleeding	82 (0.8%)	127 (1.3%)	0.64 (0.49-0.85)
Thromboembolic event	30 (0.3%)	34 (0.3%)	0.88 (0.54-1.43)



Updated WHO recommendation  
on intravenous tranexamic acid  
for the treatment of  
postpartum haemorrhage

# WHO 2017 PPH Guideline Recommendations

**WHO strongly recommend early TXA treatment for PPH:**

- within 3 hours of birth
- in addition to standard care including uterotonics, surgical and non-surgical interventions
- for all women with clinically diagnosed PPH
- following either vaginal birth or caesarean section
- regardless of the cause of haemorrhage

Give as soon as possible to maximize benefits

Use beyond 3 hours of birth does not confer any clinical benefit

# Impact of treatment delay for severe bleeding

Tranexamic acid must be given urgently to save lives

Immediate  
treatment



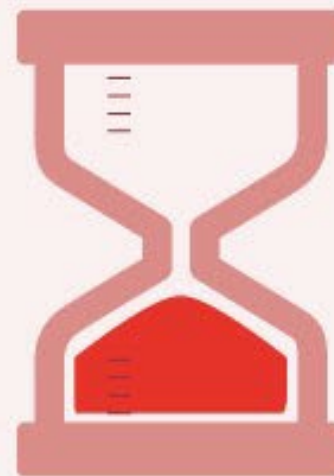
**70%**  
improvement  
in survival

For every  
15 minute delay



**10%**  
decrease in  
survival benefit

After  
3 hours



No benefit

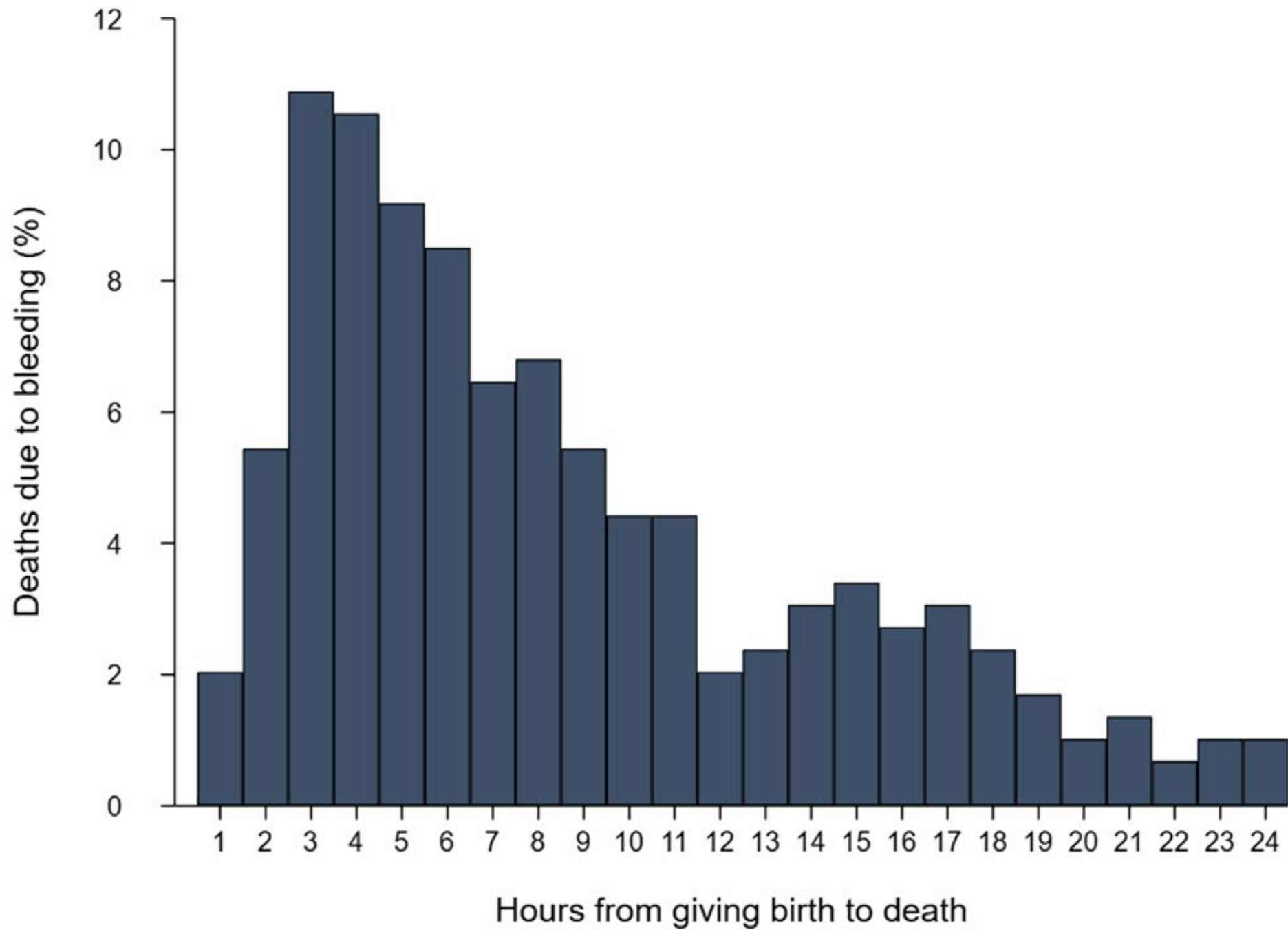
Source: The Lancet (2017). Analysis of data for 40,000 trauma patients and women with severe bleeding after childbirth

Credit: Rebecca Robinson/LSHTM



Find out more at [TXAcetral.org](http://TXAcetral.org)





# Dosage and administration

- Fixed dose of 1 g in 10 mL (100 mg/mL) intravenously at a rate of 1 mL/min
- Second dose if bleeding continues after 30 min or restarts within 24h of 1st dose
- Should not be mixed with blood for transfusion or solutions containing mannitol or penicillin



# Conclusions

---

**WHAT:** TXA is a safe, affordable, live-saving treatment for PPH

Antifibrinolytic drug that inhibits blood clot breakdown (not a uterotonic)

---

**WHO:** Give 1 g TXA intravenously to all women with clinically diagnosed PPH after CS or vaginal birth, alongside other proven interventions, regardless of cause of bleeding

---

**WHEN:** Urgent treatment is critical (women bleed to death quickly and early TXA is effective)

Give within 3 hours of childbirth

---

Should be readily available at all times in emergency obstetric care facilities

(heat stable - store at room temperature)

---

Thank you!

Questions?