Blood Transfusion: tranexamic acid update

Consultation on draft guideline - Stakeholder comments table
18/11/2025 – 01/12/2025

Stakeholder	Document	Page No	Line No	Comments	Developer's response
British National Formulary (BNF) Partnership	Guideline	General	General	Why were children from 1 month-1 year not included in the recommendations?	Thank you for your comment. This is due to this group being excluded from the scope of NG24, the NICE guideline being updated here. The exclusion in NG24 was agreed following consultation with stakeholders. The NG24 developers explained the rationale as follows in the scope consultation comments table: 'We agree that neonates and infants are an important group in relation to transfusion, however we will not be able to cover such a specialist and complex area as part of this guideline as this is a cross cutting topic focussing on the general principles of transfusion and the appropriate use of blood and not looking at specific clinical issues/areas. These groups would require separate guidance.' The same considerations apply here.
British National Formulary (BNF) Partnership	Guideline	General	General	In patients (adults and children) with renal impairment, should a reduced dose be considered? For the initial dose and/or for additional dosing? Licensed SPCs recommend a reduced dose in renal impairment.	Thank for your comments about the dosing recommendations. These prompted a range of comments from stakeholders. Some related to any additional doses, the issues here relating to quantity, timing of administration, mode of administration, spacing, speed of administration, maximum total dose, and triggers. Other comments related to the first or only dose, covering timing relative to skin incision, dose reduction in renal impairment, the 2mg/kg/hr infusion mentioned in the Joint Royal Colleges Guideline on tranexamic acid. With respect to the comments related to any additional doses, the committee has have removed the bullets about additional doses from the dosing recommendations. The dosing recommendations now simply cover the first or only dose which should be

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					to all the types of surgery in children which lie at the conjunction of the 3 criteria the committee mentions in its recommendation. 4. Speed of administration - the committee's recommendation advise administration by slow intravenous injection.
British National Formulary (BNF) Partnership	Guideline	009-010	027-002	For children ages 16 and 17 years, no recommendation has been made, but in practice this will leave a gap which is unhelpful for clinicians.	Thank you for your comment. This is an update of NICE's blood transfusion guideline NG24 and inherits its approach to 16-17 year olds. This is articulated in the terms used section of the guideline, where it is clarified: 'Young people: 16 years to under 18 years. No evidence was found on transfusions specifically for young people. Recommendations for adults in this guideline will generally apply to young people as well, but healthcare professionals should use their clinical judgement on when this is not appropriate for individual patients.' We appreciate that this may not have been sufficiently clear at consultation and hope this response provides reassurance that we are covering 16-17 year olds.
British National Formulary (BNF) Partnership	Guideline	005	005 and 022	How long before the start of surgery could dosing be given: immediately, or within a certain timeframe?	Thank for your comments about the dosing recommendations. These prompted a range of comments from stakeholders. Some related to any additional doses, the issues here relating to quantity, timing of administration, mode of administration, spacing, speed of administration, maximum total dose, and triggers. Other comments related to the first or only dose, covering timing relative to skin incision, dose reduction in renal impairment, the 2mg/kg/hr infusion mentioned in the Joint Royal Colleges Guideline on tranexamic acid. With respect to the comments related to any additional

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British National Formulary (BNF) Partnership	Guideline	005	007	For additional doses during surgery in adults, are these also 1g?	Thank for your comments about the dosing recommendations. These prompted a range of comments from stakeholders. Some related to any additional doses, the issues here relating to quantity, timing of administration, mode of administration, spacing, speed of administration, maximum total dose, and triggers. Other comments related to the first or only dose, covering timing relative to skin incision, dose reduction in renal impairment, the 2mg/kg/hr infusion mentioned in the Joint Royal Colleges Guideline on tranexamic acid. With respect to the comments related to any additional doses, the committee has have removed the bullets about additional doses from the dosing recommendations. The dosing recommendations now simply cover the first or only dose which should be given. Given the very large volume and variety of procedures which will meet the 3 criteria at the conjunction of which the committee is recommending the use of tranexamic acid, and the additional complexity which can apply in individual cases, the committee now

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British National Formulary (BNF) Partnership	Guideline	005	007	For additional doses during surgery in adults, how far apart should these doses be spaced e.g. every 6-8 hours?	Thank for your comments about the dosing recommendations. These prompted a range of comments from stakeholders. Some related to any additional doses, the issues here relating to quantity, timing of administration, mode of administration, spacing, speed of administration, maximum total dose, and triggers. Other comments related to the first or only dose, covering timing relative to skin incision, dose reduction in renal impairment, the 2mg/kg/hr infusion mentioned in the Joint Royal Colleges Guideline on tranexamic acid. With respect to the comments related to any additional doses, the committee has have removed the bullets about additional doses from the dosing recommendations. The dosing recommendations now simply cover the first or only dose which should be given. Given the very large volume and variety of procedures which will meet the 3 criteria at the conjunction of which the committee is recommending the use of tranexamic acid, and the additional complexity which can apply in individual cases, the committee now refers to additional dosing only in the new 'principles' subsection, where we recognise that there can be reasons to give additional doses but that, where this applies, the benefits should be weighed against any risks. Questions of quantity, timing, spacing, mode of administration, speed of administration, maximum total dose, and triggers relating to any additional doses will be matters for clinical judgement in individual cases.

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British National Formulary (BNF) Partnership	Guideline	005	007	For additional doses during surgery in adults, is there a maximum total dose that should not be exceeded?	Thank for your comments about the dosing recommendations. These prompted a range of comments from stakeholders. Some related to any additional doses, the issues here relating to quantity, timing of administration, mode of administration,

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British National Formulary (BNF) Partnership	Guideline	005	007	For additional doses during surgery in adults, should these be given as a bolus IV injection? We note that in trauma the additional dose is infused over 8 hours	Thank for your comments about the dosing recommendations. These prompted a range of comments from stakeholders. Some related to any additional doses, the issues here relating to quantity, timing of administration, mode of administration, spacing, speed of administration, maximum total dose, and triggers. Other comments related to the first or only dose, covering timing relative to skin incision, dose reduction in renal impairment, the 2mg/kg/hr infusion mentioned in the Joint Royal Colleges Guideline on tranexamic acid. With respect to the comments related to any additional doses, the committee has have removed the bullets

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British National Formulary (BNF) Partnership	Guideline	005	012-015	BNFC currently has an unlicensed indication for 'Reduction of blood loss during cardiac surgery' Does recommendation 1.1.9 cover cardiac surgery?	Thank you for your comment. The NICE recommendations are about surgery in general and the doses given are mentioned as typical. We are aware that the BNFC states 'consult local protocol' in the specific case of cardiac surgery in children, and our guidance should not be understood as requiring a change to this position..
British National Formulary (BNF) Partnership	Guideline	005	024	For additional doses during surgery in children, are these also 15mg/kg (max 1g)?	Thank for your comments about the dosing recommendations. These prompted a range of comments from stakeholders. Some related to any additional doses, the issues here relating to quantity, timing of administration, mode of administration, spacing, speed of administration, maximum total dose, and triggers. Other comments related to the first or only dose, covering timing relative to skin incision, dose reduction in renal impairment, the 2mg/kg/hr infusion mentioned in the Joint Royal Colleges Guideline on tranexamic acid. With respect to the comments related to any additional doses, the committee has have removed the bullets about additional doses from the dosing recommendations. The dosing recommendations now

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British National Formulary (BNF) Partnership	Guideline	005	024	For additional doses during surgery in children, how far apart should these doses be spaced e.g. every 6-8 hours?	Thank for your comments about the dosing recommendations. These prompted a range of comments from stakeholders. Some related to any additional doses, the issues here relating to quantity, timing of administration, mode of administration, spacing, speed of administration, maximum total dose, and triggers. Other comments related to the first or only dose, covering timing relative to skin incision, dose reduction in renal impairment, the 2mg/kg/hr infusion mentioned in the Joint Royal Colleges Guideline on tranexamic acid. With respect to the comments related to any additional doses, the committee has have removed the bullets about additional doses from the dosing recommendations. The dosing recommendations now simply cover the first or only dose which should be given. Given the very large volume and variety of procedures which will meet the 3 criteria at the conjunction of which the committee is recommending the use of tranexamic acid, and the additional complexity which can apply in individual cases, the committee now refers to additional dosing only in the new 'principles' subsection, where we recognise that there can be reasons to give additional doses but that, where this

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British National Formulary (BNF) Partnership	Guideline	005	024	For additional doses during surgery in children, is there a maximum dose that should not be exceeded?	Thank for your comments about the dosing recommendations. These prompted a range of comments from stakeholders. Some related to any additional doses, the issues here relating to quantity, timing of administration, mode of administration, spacing, speed of administration, maximum total dose, and triggers. Other comments related to the first or only dose, covering timing relative to skin incision, dose reduction in renal impairment, the 2mg/kg/hr infusion mentioned in the Joint Royal Colleges Guideline on tranexamic acid. With respect to the comments related to any additional doses, the committee has have removed the bullets about additional doses from the dosing recommendations. The dosing recommendations now simply cover the first or only dose which should be given. Given the very large volume and variety of procedures which will meet the 3 criteria at the conjunction of which the committee is recommending the use of tranexamic acid, and the additional complexity which can apply in individual cases, the committee now refers to additional dosing only in the new 'principles' subsection, where we recognise that there can be reasons to give additional doses but that, where this applies, the benefits should be weighed against any risks. Questions of quantity, timing, spacing, mode of administration, speed of administration, maximum total dose, and triggers relating to any additional doses will be matters for clinical judgement in individual cases. With respect to the comments related to the first or only

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British National Formulary (BNF) Partnership	Guideline	005	024	For additional doses during surgery in children, should these be given as a bolus IV injection? We note that in trauma the additional dose is infused over at least 8 hours	Thank for your comments about the dosing recommendations. These prompted a range of comments from stakeholders. Some related to any additional doses, the issues here relating to quantity, timing of administration, mode of administration, spacing, speed of administration, maximum total dose, and triggers. Other comments related to the first or only

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British Society for Haematology, Transfusion Task Force	Guideline	General	General	Thank you for the opportunity to review this draft guideline.	Thank you for your comment.
British Society for Haematology, Transfusion Task Force	Guideline	004	005	This new recommendation aiming to widen the use of tranexamic acid to all patients including those at risk of small volume blood loss does not take into account patient groups where there may not be sufficient evidence to support its use (for example vascular surgery patients as acknowledged by research recommendation). Would it be possible to consider such subgroups and make recommendations for these separately?	Thank you for your comment. We appreciate the availability of evidence is not uniform across all groups covered in this guidance. The committee have intended to make general recommendations for all people in this guidance, instead of condition and surgery specific recommendations. Given this, and to continue to communicate the main message of the benefits of tranexamic acid for most people, they have maintained a single recommendation here. However, they have added a recommendation to weigh benefits and risks in situation where additional doses may be considered.

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British Society for Haematology, Transfusion Task Force	Guideline	005	020	What is the rationale for not mentioning the infusion of 2mg/kg/hr ? This is commonly used in paediatric cardiothoracic and spinal surgery following the initial bolus. Is it worth mentioning this	Thank you for your comment. The committee has not mentioned the 2mg/kg/hr infusion mentioned in the guidance from the Joint Royal Colleges Tranexamic Acid Implementation Group because it would not apply to all surgery in children covered by the committee's recommendations. The committee's guidance should not be interpreted to mean it disagrees with the 2mg/kg/hr infusion.
British Society for Haematology, Transfusion Task Force	Guideline	005	007	'additional doses during surgery, if needed, based on the duration of 8 surgery and measured volume of blood lost.' Further guidance on the triggers for further doses, as well as any maximum dose would be helpful here, also at line 24 where the equivalent recommendation is made for children.	Thank for your comments about the dosing recommendations. These prompted a range of comments from stakeholders. Some related to any additional doses, the issues here relating to quantity, timing of administration, mode of administration, spacing, speed of administration, maximum total dose, and triggers. Other comments related to the first or only dose, covering timing relative to skin incision, dose reduction in renal impairment, the 2mg/kg/hr infusion mentioned in the Joint Royal Colleges Guideline on tranexamic acid. With respect to the comments related to any additional doses, the committee has have removed the bullets about additional doses from the dosing

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British Society for Haematology, Transfusion Task Force	Guideline	006	010	Regarding the research recommendations- trials of Tranexamic acid in young children (<1 year and neonates) are to be encouraged. However, it becomes quite tricky in older children when the evidence from the available small studies and adult practice is so compelling in favour of its use.	Thank you for your comment. NICE only recommends research on questions which it has explored through an evidence review, finding an important uncertainty. Since children younger than 1 year and neonates were excluded from the scope of this update, NICE cannot make a research recommendation about this group. We acknowledge that there is overlap between the evidence for young people and adults. However, as there is no independent studies that show that young people have the same response as adults, we cannot use evidence to state that this is the case. Therefore, the committee agreed that research could have some benefit here to provide certainty.
British Society for Haematology, Transfusion Task Force	Guideline	009	207	This is not clear. Is this referring to procedures with minor blood loss only or is this referring to all procedures? There are several (although small) studies in different surgical settings e.g spinal, craniofacial, ENT	Thank you for your comment. There is no line 207 on page 9 of the guideline, and we have been unable to identify what your comment refers to.
British Society for Haematology, Transfusion Task Force	Guideline	009	016	What is the evidence that the risk of Tranexamic acid in children is higher? We are not aware of this evidence and feel this is a strong statement which at present is not substantiated.	Thank you for your comment and feedback. We have adjusted the wording to say 'could' instead of 'can' to reflect the uncertainty about this point that you have raised. Given the limited evidence identified, we are unsure about the risk of tranexamic acid specifically being higher in children. On consensus, the committee

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					agreed that the risk of adverse events could be higher due to uncertainties about dosing between each individual and the effect that a small amount over or under the optimal amount for that person could have on causing adverse events from the drug or from bleeding. There are general risks for prescribing for paediatric populations (for example, higher risks of prescribing errors - LINK: https://adc.bmj.com/content/95/2/113). Given this, a more cautious approach has been used.
Infected Blood Inquiry Benchmarking and Tranexamic Subgroups, NHS England	Guideline	General	General	We welcome the expansion of the tranexamic acid guidelines to include children and to expand the use of tranexamic acid for patients undergoing surgery even if the surgery has a low risk of bleeding.	Thank you for your comment.
Infected Blood Inquiry Benchmarking and Tranexamic Subgroups, NHS England	Guideline	General	General	We welcome the recommendation that additional research is required for vascular surgery in reducing thromboembolic events and infection and for research on effectiveness for children and young people	Thank you for your comment.
Infected Blood Inquiry Benchmarking and Tranexamic Subgroups, NHS England	Guideline	000	07-008	Recommendation for additional doses is vague. Could the guidance provide more information about dosing of TXA. For example, dosing recommendations for additional doses.	Thank for your comments about the dosing recommendations. These prompted a range of comments from stakeholders. Some related to any additional doses, the issues here relating to quantity, timing of administration, mode of administration, spacing, speed of administration, maximum total dose, and triggers. Other comments related to the first or only dose, covering timing relative to skin incision, dose reduction in renal impairment, the 2mg/kg/hr infusion

					mentioned in the Joint Royal Colleges Guideline on tranexamic acid. With respect to the comments related to any additional doses, the committee has have removed the bullets about additional doses from the dosing recommendations. The dosing recommendations now simply cover the first or only dose which should be given. Given the very large volume and variety of procedures which will meet the 3 criteria at the conjunction of which the committee is recommending the use of tranexamic acid, and the additional complexity which can apply in individual cases, the committee now refers to additional dosing only in the new 'principles' subsection, where we recognise that there can be reasons to give additional doses but that, where this applies, the benefits should be weighed against any risks. Questions of quantity, timing, spacing, mode of administration, speed of administration, maximum total dose, and triggers relating to any additional doses will be matters for clinical judgement in individual cases. With respect to the comments related to the first or only dose, the committee has responded as follows: 1. Timing relative to skin incision - the committee has clarified the dose should be given just before the start of surgery. 2. Dose reduction in renal impairment.. Renal impairment has been mentioned as an example of a situation where the benefits of an additional dose need to be weighed against risks. The committee also noted the advice from the Joint Royal College Tranexamic Acid Implementation Group, which is that tranexamic acid is eliminated by renal excretion and there is a risk of

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					accumulation with repeated dosing in patients with renal impairment. However, there would not be a risk of accumulation when giving a single 1g dose just prior to surgery [in an adult].' This aligns with the dose regimen recommended in the NICE guideline for adults. 3. 2mg/kg/hr infusion in children - the committee has not included this in its recommendation about tranexamic acid in children having surgery because it will not apply to all the types of surgery in children which lie at the conjunction of the 3 criteria the committee mentions in its recommendation. 4. Speed of administration - the committee's recommendation advise administration by slow intravenous injection.
Infected Blood Inquiry Benchmarking and Tranexamic Subgroups, NHS England	Guideline	004	006	The proposed wording needs to provide more guidance on types of surgery where there is a risk of bleeding. From the updated evidence reviewed this includes a low risk of bleeding. Could this be clarified further to enable auditing and to reduce discussion about the type of bleeding included. E.g "There is a risk of any bleeding, including low risk procedures".	Thank you for your comment. We have clarified this criterion as you suggest. It now refers to 'any risk of bleeding.'
Infected Blood Inquiry Benchmarking and Tranexamic Subgroups, NHS England	Guideline	005	004	Could the guideline make a reference to contraindications to tranexamic acid, or link to a resource providing these?	Thank you for your comments. All NICE recommendations regarding drugs are intended to be read and implemented in conjunction with the relevant Summaries of Product Characteristics (SmPC). These provides full and up-to-date about contraindications and other important matters.
Maternity and Newborn Safety	Guideline	General	General	The use of tranexamic acid in pregnancy Tranexamic acid | Drugs | BNF | NICE is advised if 'potential benefit outweighs risk – crosses	Thank you for your comment. We have now made it clear that, as per page 22 of the full version of NG24 (available at:

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Investigations (MNSI) Programme				placenta'. We wonder if the use recommended in this draft guidance would constitute an unlicensed indication and also that timing in relation to cord clamping is not considered, or referenced, here.	https://www.nice.org.uk/guidance/ng24/evidence/full-guideline-pdf-2177160733) , pregnant women are outside of the scope of both NG24 and this update of it.
Maternity and Newborn Safety Investigations (MNSI) Programme	Guideline	004	005-007	This seems to contradict the new WHO publication - Consolidated guidelines for the prevention, diagnosis and treatment of postpartum haemorrhage which says Recommendation 15. Tranexamic acid is not recommended for the prevention of postpartum haemorrhage at caesarean birth.	Thank you for your comment. We have now made it clear that, as per page 22 of the full version of NG24 (available at: https://www.nice.org.uk/guidance/ng24/evidence/full-guideline-pdf-2177160733) , pregnant women are outside of the scope of both NG24 and this update of it.
Maternity and Newborn Safety Investigations (MNSI) Programme	Guideline	004	005-007	This also contradicts the recent Cochrane review (2024): What are the benefits and risks of tranexamic acid for preventing heavy bleeding after caesarean births? | Cochrane Rohwer C, Rohwer A, Cluver C, Ker K, Hofmeyr GJ. Tranexamic acid for preventing postpartum haemorrhage after caesarean section. Cochrane Database of Systematic Reviews 2024, Issue 11. Art. No.: CD016278. DOI: 10.1002/14651858.CD016278.	Thank you for your comment. We did not include this Cochrane review in the safety review as, while it included some relevant studies, some of the studies had less than 500 participants in both study arms and so would not be eligible for inclusion. The studies that were eligible are included in the review. The studies included in the Cochrane review consider at least moderate blood loss (at least 500 mL) and so would not have been considered in the effectiveness review. Where the Cochrane review draws conclusions about the safety of tranexamic acid (saying there is very low quality evidence for thromboembolic events) we have concluded there is low quality evidence of a clinically important benefit because we have included additional studies where caesarean sections were not performed. This is within the protocol for the review so is a difference in conclusion from the available evidence. Following your comment, it has been made explicit in the

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					guideline that tranexamic acid in pregnancy is not included in the guideline. The committee have reviewed the evidence for tranexamic acid for pregnant women, trans men and non-binary people and consider this reassuring that there is not an increased risk of thromboembolic events. Given this, they are not concerned about tranexamic acid for people having surgery for reasons unrelated to their pregnancy. This has been noted in the committee discussion of the report document.
Maternity and Newborn Safety Investigations (MNSI) Programme	Guideline	0004	05-007	This does not align with other current guidance; maternity professionals are more likely to access Overview | Intrapartum care | Guidance | NICE. It does not align with guidance in Obstetrics | Treatment summaries | BNF | NICE, which states 'Tranexamic acid should be given in addition to uterotonic drugs to manage postpartum haemorrhage.'	Thank you for your comment. We have now made it clear that, as per page 22 of the full version of NG24 (available at: https://www.nice.org.uk/guidance/ng24/evidence/full-guideline-pdf-2177160733) , pregnant women are outside of the scope of both NG24 and this update of it.
Maternity and Newborn Safety Investigations (MNSI) Programme	Guideline	005	005	The example dose of 1g does not take into account contraindications to this dose, or dosing in patients with renal failure.	Thank you. All NICE recommendations regarding drugs are intended to be read and implemented in conjunction with the relevant Summaries of Product Characteristics (SmPC). These provide full and up-to-date information about contraindications and other important matters. Regarding dose reduction in renal impairment, the SmPC for tranexamic acid already covers the requirement to reduce the dose in renal impairment in all cases, although renal impairment is now mentioned as an example of a situation where the benefits of any additional doses need to be weighed against harms. The committee also noted the advice from the Joint Royal College Tranexamic Acid Implementation Group,

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					which is that tranexamic acid is eliminated by renal excretion and there is a risk of accumulation with repeated dosing in patients with renal impairment. However, there would not be a risk of accumulation when giving a single 1g dose just prior to surgery [in an adult].' This aligns with the dose regimen recommended in the NICE guideline for adults.
Maternity and Newborn Safety Investigations (MNSI) Programme	Guideline	006	007	We consider that the use to tranexamic acid for prevention of bleeding in operative births is an area of ongoing research, as is the timing of its administration in relation to umbilical cord clamping.	Thank you for your comment. We have now made it clear that, as per page 22 of the full version of NG24 (available at: https://www.nice.org.uk/guidance/ng24/evidence/full-guideline-pdf-2177160733) , pregnant women are outside of the scope of both NG24 and this update of it.
NHS Wales Blood Health National Oversight Group	Guideline	General	General	No comments.	Thank you for your comment.
NIHR Blood and Transplant Research Unit in Data Driven Transfusion Practice	Guideline	General	General	The broadened eligibility criteria will lead to a significant expansion in national TXA use. We recommend acknowledging this in the guidance and advising organisations to prepare for the operational implications, including reviewing procurement and stockholding, mitigating risks of supply pressures during adoption of the guideline and updating EHR order sets, perioperative checklists and default dosing templates. Recognising these practical considerations will support smooth, safe implementation across the NHS.	Thank you for your comment. Producing specific recommendation within the guideline of the sort which you refer to would be beyond the scope of this update. However, national partners are already aware of the implications of this update. NICE will provide implementation support in the normal way. NICE is also liaising with the NIHR BTRU to support implementation.

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NIHR Blood and Transplant Research Unit in Data Driven Transfusion Practice	Guideline	General	General	We are aware that audits and research continue to demonstrate substantial variation in TXA use between specialties, such as vascular surgery, colorectal surgery and obstetrics. We support the call on further research to be undertaken on vascular surgery to help support behaviour change and implementation. To help reduce unwarranted variation, we suggest that NICE include brief advice on multidisciplinary implementation, and where feasible, specialty-specific examples or guidance. This would help ensure more equitable and consistent adoption across the surgical specialties.	Thank you for your comment. Your suggestion for brief advice on multidisciplinary implementation including, where feasible, specialty-specific examples or guidance has been passed to NICE's implementation support team. In planning the update, NICE considered if specialty-specific guidance might be possible but, given the limitations of the evidence and it not being possible to have all relevant surgical subspecialties represented on a single NICE committee, it was concluded that this was not feasible.
NIHR Blood and Transplant Research Unit in Data Driven Transfusion Practice	Guideline	General	General	The draft guideline implies that benefits may be limited for day-case procedures. However, many major operations with potential for major bleeding are now routinely performed as day cases and clearly warrant TXA. The benefits of TXA use in this group are highlighted by the committee. We suggest highlighting the benefits such as in incidence of pain, haematomas, ability to restart antiplatelets/anticoagulation in these groups and also to sign-post the need for TXA use being indicated in cases where there is a higher bleeding risk such as hysterectomies.	Thank you for your comment and for highlighting the benefits for day case procedures. We are unclear which part of the guideline you think implies that benefits may be limited for day-case procedures. Many day-case procedures take place in an operating theatre, so they may well fall under the recommendation we have made in favour of tranexamic acid. A range of benefits from tranexamic acid is mentioned in the committee's discussion. Further, day-case procedures happening outside an operating theatre may fall under our additional recommendation about surgery outside an operating theatre but, as per the 2015 guidance, this will depend on the volume of blood expected to be lost. Therefore, we believe that the current recommendations support your comment.
NIHR Blood and Transplant Research Unit in Data Driven	Guideline	General	General	Product and patient information sheets as well as guidance on the BMJ, NICE and NHS websites related TXA should be reviewed and updated to	Thank you for your comment. NICE does not control what is included in product and patient information sheets or on NHS or BMJ websites. However, NICE will ensure that information on its own website is up-to-date.

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Transfusion Practice				ensure consistency of messaging and ensure this recommendation is impactful	
NIHR Blood and Transplant Research Unit in Data Driven Transfusion Practice	Guideline	General	General	[redacted]	Thank you for your comment. NICE is happy for you to share further work relevant to the implementation of tranexamic acid in surgery.
NIHR Blood and Transplant Research Unit in Data Driven Transfusion Practice	Guideline	004	006	Greater clarity is required on the term 'risk of bleeding'. 'Risk of bleeding' could apply to almost all procedures that breach the skin. Additional guidance on how this threshold should be interpreted would support consistent decision making	Thank you for your comment and your feedback. This has been adjusted to 'any risk of bleeding' based on all feedback. The committee agreed that any risk of bleeding was included in this definition. They were excluding cases where bleeding may not be possible (for example: corneal incision where there is no blood supply). Given this, they agreed that this was a descriptive term that had meaning. The intention from the committee is for this to be a broad category allowing for more people to be offered tranexamic acid.
NIHR Blood and Transplant Research Unit in Data Driven Transfusion Practice	Guideline	005	001	We recognise that the term 'offer' is NICE's standard wording for a strong recommendation. However, TXA is administered while the patient is anaesthetised, and any discussion about risks and benefits occurs during the preoperative consent process. We suggest clarifying whether 'offer' in this context means discussing TXA as part of preoperative consent process, discussion during the WHO surgical safety briefing (prompted by the WHO checklist) and routine peri-operative	Thank you for your comment. We agree that tranexamic acid is administered when the patient is anaesthetised. From this, we think it will be sufficiently clear to users that the 'offer' is to be made in advance of surgery as part of the preoperative consent process We have not received any feedback that 'offer tranexamic acid ' has been found confusing in the way you describe over the last 10 years or from any other stakeholders as part of this consultation, so we do not think a clarification is necessary on this occasion.

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				administration unless contraindicated. This would avoid ambiguity and ensure consistent interpretation across surgical teams.	
NIHR Blood and Transplant Research Unit in Data Driven Transfusion Practice	Guideline	005	003	Greater clarity is required on the use of TXA to patients outside of OR 'expected' to lose more than 500mls.Clarification is required on the term expected. Qualitative work (ref Murphy) shows that loose definitions including the word 'expected' mean that appropriate patients may miss out on TXA, especially where up to date data does not exist on expected blood losses.	Thank you for your comment. NICE hopes that, by establishing the effectiveness and cost-effectiveness of tranexamic acid in surgery where less than 500 ml of blood loss is expected and by widening its recommended use of tranexamic acid in surgery, this update has addressed the majority of any confusion which the previous 500 ml threshold may have caused. Unfortunately, however, it is not possible to eliminate all references to this threshold. The whole purpose of the recommendation you are referring to is retain part of the meaning of the existing recommendations about higher blood loss surgery, which are strictly outside the minor blood loss scope of this update. For this reason, it is necessary to retain the existing wording here.
Pharmacosmos UK	Evidence review A	009	(and onwards in evidence table until page 35)	This study has currently not been included or excluded in the evidence review for tranexamic acid for anticipated minor blood loss after surgery.	Thank you for your comment and sharing your interesting research with us. The effectiveness review (evidence review A) focussed on minor blood loss (less than 500 mL). While this study does not specify the amount of blood loss, blood loss from hip fractures is generally considered to be at or above 500 mL, which aligns with the number of blood transfusions being given in the trial. There are less than 500 participants in each study arm so the trial is not applicable for the safety review (evidence review B). Therefore, we are not able to include the study in our analysis.
Pharmacosmos UK	Evidence review A technical appendices	005		As specified in the technical appendices for tranexamic acid for anticipated minor blood loss after surgery, evidence from OECD countries with predominantly public health insurance systems	Thank you for your comment and sharing your interesting research with us. The effectiveness review (evidence review A) focussed on minor blood loss (less than 500 mL). While this study does not specify the

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				(for example, France, Germany, Sweden) can be included (and position well), as specified on page 5. The HiFIT study took place in 12 medical centres in France, therefore we believe it can be considered for review in the evidence, as mentioned in point 2 above.	amount of blood loss, blood loss from hip fractures is generally considered to be at or above 500 mL, which aligns with the number of blood transfusions being given in the trial. There are less than 500 participants in each study arm so the trial is not applicable for the safety review (evidence review B). Therefore, we are not able to include the study in our analysis.
Pharmacosmos UK	Guideline	General	General	If the IV Iron Ferric Derisomaltose will be reference in the guideline, please consider inclusion of branded name Monofer alongside this. Please see confidential communication below to illustrate the importance behind this. [redacted]	Thank you for your comment and sharing your interesting research with us. Offering intravenous iron alongside tranexamic acid is out of scope for this guideline update. Therefore, we will not be commenting on this at this time. We will pass on this information to the surveillance team for consideration for relevance for future work

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				[redacted]	
Pharmacosmos UK	Guideline	004	002-007	We believe there may be place in this guidance to illustrate the role of IV Iron alongside Tranexamic acid where blood loss can be expected. Prior to surgery, correcting iron deficiency/iron deficiency anaemia with intravenous iron therapy can help to optimise erythropoiesis, as described in the 3 pillars of patient blood management. Below we describe a trial where, the combination of tranexamic acid and intravenous iron pre-operatively, significantly reduces the likelihood of post-operative blood transfusions when tranexamic acid is also used peri-operatively. The HiFIT trial is a multicentre, double-blind, 2×2 factorial randomised controlled study evaluating whether preoperative intravenous iron (ferric derisomaltose 20 mg/kg) and tranexamic acid (intravenous plus topical) reduce allogeneic blood transfusion in hip-fracture patients. 780 adults with osteoporotic hip fractures and haemoglobin of 95–130 g/L were randomised equally into four groups: iron, tranexamic acid, both, or double placebo. The primary endpoint was the proportion of patients needing transfusion from day of surgery to discharge (or day 30 if still hospitalised). Secondary outcomes included haemoglobin trends, blood loss, complications, rehabilitation, and quality of life.	Thank you for your comment and sharing your interesting research with us. Offering intravenous iron alongside tranexamic acid is out of scope for this guideline update. Therefore, we will not be commenting on this at this time. We will pass on this information to the surveillance team for consideration for relevance for future work.

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				The HiFIT trial found that only the combination of intravenous iron (ferric derisomaltose) and tranexamic acid significantly reduced blood transfusion after hip-fracture surgery, halving transfusion rates from 30% (placebo) to 15%. Neither iron nor tranexamic acid alone reduced transfusion requirements. The combined therapy also resulted in higher postoperative haemoglobin levels at days 3, 7, and 30. Safety outcomes were similar across groups, with severe postoperative anaemia more common in the placebo arm. Overall, the results suggest that targeting both erythropoiesis (iron) and blood loss (tranexamic acid) provides additive benefit in patient blood management. We hope this could be considered for the evidence review and potential inclusion of wording around the use of IV iron alongside tranexamic acid as described. Please note the study refers to the IV iron as iron isomaltoside (IIM), the naming now used for this IV iron formulation is Ferric derisomaltose (Monofer). Suggested wording for guideline: **Tranexamic acid** Prior to surgery, correct iron deficiency/iron deficiency anaemia with intravenous iron therapy	

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				to optimise erythropoiesis. The combination of tranexamic acid and intravenous iron pre-operatively significantly reduces the likelihood of post-operative blood transfusions when tranexamic acid is also used peri-operatively. 1.1.5 Offer tranexamic acid to adults having surgery in an operating theatre if: - there is a risk of bleeding and - the procedure will breach the skin or mucous membranes. **[2025]** 1.1.6 Offer tranexamic acid to adults having surgery outside an operating 1 theatre (for example, interventional radiology or A&E) who are expected to 2 lose more than 500 ml of blood. **[2025]**	
Royal College of Anaesthetists	Evidence review A	037	017	The authors note that the evidence is very uncertain for the effect of TXA on surgical bleeding compared to control for patients with small amounts of bleeding. It will be in this group of patients in whom the change of practice will largely lie with the implementation of the new guidelines, and thus the evidence for potential benefits for these patients must be most clearly described.	Thank you for your comment. The benefits and the risks of tranexamic acid in patients undergoing surgery where minor blood loss is expected are described in Evidence Review A. See in particular section 1.1.5 Summary of Effectiveness Evidence. The outcomes discussed there include volume of blood transfused, number of those needing a blood transfusion, number of units of blood transfused, serious adverse events, all-cause mortality, surgical bleeding, and length of hospital stay.
Royal College of Anaesthetists	Evidence review B	033	003	The authors determined that whist there are negative safety outcomes including 9-11 more DVTs per 10,000 people and 15-26 more seizure	Thank you for your comment. Your summary of what we found regarding the safety of tranexamic acid is accurate. Please see page 33 of Evidence Review B.

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				events per 10,000 people; there are clinically desirable outcomes on all cause mortality 21-41 fewer events per 10,000 and reoperations (108 fewer per 10,000); and inconsistent results for thromboembolic events after surgery, PE, MI and ischaemic stroke. It is concluded that weighing up the benefits and the harms of TXA, it is safe for most patients having surgery, the benefits outweigh the harms.	
Royal College of Anaesthetists	Guideline	General	General	The new NICE guidance extends its previous advice that TXA be given just to those surgeries at risk of >500ml blood loss, to all surgery where the skin or mucosa is breached. By widening the criteria to most surgery taking place in an operating theatre, this should increase the numbers of patients who go on to lose 500ml or more blood who are given tranexamic acid, in whom national audits have shown significant numbers of patients having eligible surgery are not given TXA, as well as increasing the numbers of patients who unexpectedly lose greater volumes of blood (or are inappropriately deemed unlikely to lose >500ml of blood) who are given TXA – and thus gaining its benefit in reducing bleeding. There is a robust evidence base for the efficacy of TXA in reducing the risk of blood transfusion in those patients. However, the benefit of TXA for other surgeries where blood transfusion is a much more unlikely outcome due to lower volumes of blood being lost is considered. The other potential benefits to these patients beyond just the risk of blood transfusion	Thank you for your comment. It is a good summary of what has been considered in this update, and of the change to NICE's guidance. It also captures well the expected benefits, including hopefully an increase of the patients with at least moderate blood loss who receive tranexamic acid. The national audit findings you refer to informed the decision to carry out this update. You are also right to note that the benefits of tranexamic acid go beyond simply reducing blood loss.

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				from reduced blood loss including reduced pain, haematoma formation and infection, as well as length of stay is a significant change from the previous guidance. The guidance is similarly broadened include the wider use of TXA in children undergoing surgery.	
Scottish National Blood Transfusion Service	Evidence review A	037	001	Given uncertainty of evidence about the effect of TXA on surgical bleeding for people with small amounts of bleeding, undergoing procedures outwith the operating theatre, is the additional cost of TXA administration warranted for this population?	Thank you for your comment. The draft recommendations for adults were to "Offer tranexamic acid to adults having surgery in an operating theatre if: • there is a risk of bleeding and • the procedure will breach the skin or mucous membranes. [2025]" OR "Offer tranexamic acid to adults having surgery outside an operating theatre (for example, interventional radiology or A&E) who are expected to lose more than 500 ml of blood. [2025]". There is no recommendation to offer TXA outside of operating theatres if there are small amounts of bleeding. The section your comment references is a summary of the clinical evidence identified as part of the systematic review. Please see p49 lines10-16 for a summary of committee discussion relating to your comment.
Scottish National Blood Transfusion Service	Guideline	General	General	Thank you for the opportunity to review this draft guideline. This seems a practical approach to increase administration rates of tranexamic acid to eligible surgical patients, which, at present is sub optimally undertaken, as evidenced by the recent National Comparative Audit.	Thank you for your comment.
Scottish National Blood Transfusion Service	Guideline	005	005	Will the guidance include required time of dose in relation to 'knife to skin' time or similar? What should be done if the pre-op dose has been given	Thank you for your comment. The dosing recommendations now clarify that administration of the first or only dose should be just before the start of surgery. Regarding the scenario you ask about, no

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				but then surgery delayed (in terms of timing of repeat dose, if needed)?	answer can be given to this in a general guideline. It would be a matter for professional judgement.
Scottish National Blood Transfusion Service	Guideline	005	007	What is meant by 'if needed' (what is the intended indication?) – and will the guidance include helpful detail such as subsequent dosing/frequency/specific triggers?	Thank for your comments about the dosing recommendations. These prompted a range of comments from stakeholders. Some related to any additional doses, the issues here relating to quantity, timing of administration, mode of administration, spacing, speed of administration, maximum total dose, and triggers. Other comments related to the first or only dose, covering timing relative to skin incision, dose reduction in renal impairment, the 2mg/kg/hr infusion mentioned in the Joint Royal Colleges Guideline on tranexamic acid. With respect to the comments related to any additional doses, the committee has have removed the bullets about additional doses from the dosing recommendations. The dosing recommendations now simply cover the first or only dose which should be given. Given the very large volume and variety of procedures which will meet the 3 criteria at the conjunction of which the committee is recommending the use of tranexamic acid, and the additional complexity which can apply in individual cases, the committee now refers to additional dosing only in the new 'principles' subsection, where we recognise that there can be reasons to give additional doses but that, where this applies, the benefits should be weighed against any risks. Questions of quantity, timing, spacing, mode of administration, speed of administration, maximum total dose, and triggers relating to any additional doses will be matters for clinical judgement in individual cases.

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					With respect to the comments related to the first or only dose, the committee has responded as follows: 1. Timing relative to skin incision - the committee has clarified the dose should be given just before the start of surgery. 2. Dose reduction in renal impairment.. Renal impairment has been mentioned as an example of a situation where the benefits of an additional dose need to be weighed against risks. The committee also noted the advice from the Joint Royal College Tranexamic Acid Implementation Group, which is that tranexamic acid is eliminated by renal excretion and there is a risk of accumulation with repeated dosing in patients with renal impairment. However, there would not be a risk of accumulation when giving a single 1g dose just prior to surgery [in an adult].' This aligns with the dose regimen recommended in the NICE guideline for adults. 3. 2mg/kg/hr infusion in children - the committee has not included this in its recommendation about tranexamic acid in children having surgery because it will not apply to all the types of surgery in children which lie at the conjunction of the 3 criteria the committee mentions in its recommendation. 4. Speed of administration - the committee's recommendation advise administration by slow intravenous injection.
Scottish National Blood Transfusion Service	Recs for research	007	001	The need for further research for effectiveness for vascular surgery is identified but there are other specialties where there appears to be a reluctance to use TXA for example urology where there is also limited evidence to guide practice.	Thank you for your comment. The committee agrees that national audit shows a spectrum of compliance with the 2015 guidance. This was one of the reasons for this update. The committee also agrees that the availability of evidence for tranexamic acid is not uniform across all

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				We suggest this be considered for addition as a research recommendation.	surgical subspecialties. However, the committee hopes that the new evidence on safety, effectiveness and cost-effectiveness from this update and the recommendations which have been made will increase the use of tranexamic acid in all subspecialties where compliance has been lower. The committee does not disagree with your suggestion that additional research in urological surgery may be useful but has chosen to prioritise its subspecialty-related research recommendation on vascular surgery as this is where compliance with the 2015 guidance has been lowest according to the national audit and it is where the committee felt additional evidence could help the most.
Society of British Neurological Surgeons	Guideline	General	General	I am writing in my role as the NICE Coordinator for the SBNS (Society of British Neurological Surgeons). Our President, Prof Hutchinson passed on your request via the FSSA President to me for comments regarding neurosurgical practice. In doing so, I have consulted with Prof Ian Kamaly who is a senior paediatric neurosurgeon and a member of the RCS Council. The use of TXA for reducing blood loss is probably not strongly embedded in neurosurgical practice in the UK (this stamen is not evidence based but merely observational). I use it almost routinely for meningiomas to reduce blood loss and surgical time and some of my colleagues do but not based on > 500ml of anticipated blood loss.	Thank you for your comments and for the interesting research. Both Clynch 2023 and Ng 2025 would not be included in the safety review (evidence review B) as the number of participants in each study was below 500 participants in each study arm. Clynch 2023 would not be eligible for the effectiveness review (evidence review A) as it was a systematic review of existing evidence and the trials included all had at least one arm where the blood loss exceeded 500 mL in the original trial publications (though in the systematic review the control arm of Rebai 2021 reports a blood loss just under 500 mL) meaning they may not have been considered a minor blood loss procedures by the original authors. Ng 2025 would not be eligible for the effectiveness review as it was an observational trial rather than a randomised controlled trial. We agree that additional ways to emphasise the message are important and your suggestions sound like very positive actions.

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				A 2023 review by Clynch et al. found that intraoperative use of tranexamic acid in meningioma surgery significantly reduces blood loss and may decrease the need for blood transfusions. The drug helps prevent blood clots from breaking down, leading to better surgical field haemostasis, and is considered safe, with no significant increase in serious complications like thromboembolic events in most studies. JH Ng from the Beamont in Dublin published an analysis in the Irish Medical Journal noting that the use of TXA was infrequent and in brain surgery only 16% of patients had TXA used during brain neurosurgery and 4% in spinal surgery. The communications from the RCS and Prof Ian Roberts were intended to convey the message to encourage surgeons to consider using TXA. https://www.rcseng.ac.uk/news-and-events/news/archive/tranexamic-acid-to-reduce-surgical-bleeding/ Wider use of tranexamic acid to reduce surgical bleeding could benefit patients and health systems BMJ 2024; 385 doi: https://doi.org/10.1136/bmj-2024-079444 (Published 12 June 2024)Cite this as: BMJ 2024;385:e079444	

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				It appears that we need to find additional ways to emphasise the message to surgeons regarding the benefit and safety and perhaps introduce it for routine mention at Team brief in OR. The anaesthetists can also encourage surgeons and raise awareness.	
Terumo Blood and Cell Technologies	EIA	004	002	Point 4.4 – we agree with the recommendations and the acknowledgement of the uncertain data	Thank you for your comment.
Terumo Blood and Cell Technologies	Evidence review A	037-050	General	The Jaiswal 2025 review and analysis, while they have some limitations relating to the available studies for assessment. The lack of UK studies is identified here and is a recommendation in the draft guidance.	Thank you for your comment. We agree that none of the included studies in Evidence Review A were conducted in the UK. These came from a range of other countries. These included USA, Canada, Sweden, and New Zealand. However, UK studies were included in the Evidence Review B on safety and UK specific costs were used in the economic model. The limitations of the included evidence are fully described in Evidence Review A. The NICE committee concluded that, on balance, the evidence in favour of tranexamic acid's safety and its effectiveness and cost-effectiveness in minor blood loss surgery supported an extension of NICE's existing position of the use of tranexamic acid in surgery. We note that in a separate comment you agree with the recommendations.
Terumo Blood and Cell Technologies	Evidence review A	050	018	The identification and highlighting the potential impact on specific subgroups some who have rare blood types is welcomed.	Thank you for your comment.
Terumo Blood and Cell Technologies	Guideline	General	General	We believe the recommendations add clarity to decision making in line with the available evidence summarised in evidence review documents A and B.	Thank you for your comment.

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Terumo Blood and Cell Technologies	Guideline	006	007	The recommendations for future research are appropriate and will address limitations with the currently available evidence.	Thank you for your comment.
The UK Joint Royal Colleges Tranexamic Acid in Surgery Implementation Group	Guideline	General	General	The UK Joint Royal Colleges Tranexamic Acid in Surgery Implementation Group welcomes the draft NICE Guideline on Blood transfusion that addresses the role of tranexamic acid in surgery. The revised guideline removes much of the uncertainty inherent in the previous version and provides a simple criterion to identify who would benefit. The simplification should increase the use of TXA in surgery and based on the available evidence this will have important benefits for patients and the NHS. We offer the following suggestions: 1. We caution against repeat dosing based on the duration of surgery. Pharmacokinetic studies show that a single 1g intravenous dose of TXA should inhibit fibrinolysis for three to four hours. Once fibrinolysis is near completely inhibited, further doses of TXA will not help but may increase the risk of seizures. A single 1g TXA dose prior to incision should suffice. 2. We suggest that the balance of risks and benefits of TXA for Caesarean birth is currently uncertain and that this would be	Thank you for your positive comments. This update has attempted to remove the uncertainty you mention, and we are pleased to hear you think it achieves this. We agree that the update should increase the use of tranexamic acid in surgery, including among currently eligible surgical patients and that this will have important benefits for both patients and the NHS. Thank you for your helpful suggestions. Our responses to them are as follows. 1. repeat dosing: we have removed the bullets about additional doses from the dosing recommendations as we think these may have created a misleading impression of the committee's intent. The dosing recommendations now simply cover the first or only dose which should be given. Given the very large volume and variety of procedures which will meet the 3 criteria at the conjunction of which the committee is recommending the use of tranexamic acid, and the additional complexity which can apply in individual cases, we now refer to additional dosing only in the new 'principles' subsection, where we recognise that there can be reasons to give additional doses but that, where this applies, the benefits should be weighed against any risks. 2. Tranexamic acid for caesarean birth: a number of stakeholders understood the draft guidance to apply to caesarean birth and have raised similar queries to yours. We have now made it clear that, as per page 22 of the

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				a suitable research question. Because TXA crosses the placenta and is detectable in the infant (albeit at low levels), many obstetricians delay TXA administration until after cord clamping. Possibly as a result, randomised trials of TXA at the time of cord clamping have shown no clear treatment benefits. A large randomised trial of TXA at skin incision is underway in Sub-Saharan Africa and South Asia (The IM Woman trial) https://pubmed.ncbi.nlm.nih.gov/38044460/ and this trial will reduce the uncertainty. Nevertheless, the balance of risks and benefits in high income settings is likely to be very different since the risk of death during Caesarean birth is very much lower in the UK than in LIMCs. A randomised trial of TXA in Caesarean birth in the UK with a focus on patient morbidity and wellbeing would be of value. This might be considered as another topic for research. 3. Although TXA is remarkably safe, the inadvertent intrathecal injection of TXA can be fatal. We recommend that the need to stake steps to avoid this risk is highlighted in the NICE guidance.	full version of NG24 (available at: https://www.nice.org.uk/guidance/ng24/evidence/full-guideline-pdf-2177160733) , pregnant women are outside of the scope of both NG24 and this update of it. New evidence on tranexamic acid in caesarean birth might be addressed in either a future update of NG24 or in an update of NICE's caesarean birth guideline, which covers other procedural aspects of caesarean birth. 3. Accidental intrathecal injection of tranexamic acid: given how serious this error can be and given that this update proposes that use of tranexamic acid be widened, we agree the need to take steps to avoid this error should be highlighted. We have added a recommendation which does this to the new principles section. 4. Data collection: The committee is not opposed to further data collection or audit but has decided to keep its research recommendations largely as they were, focussed on children and specific vascular surgery procedures where the evidence in its reviews and the committee's expert knowledge indicated there may be value in additional evidence and inform a future update. The committee did not think it could justify calling for data collection on all tranexamic acid use in surgery in the context of a strong recommendation for tranexamic acid in adults having surgery.

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				4. NICE recommends that organisations record peri-operative use of tranexamic acid in a structured, extractable format within electronic peri-operative records or EPRs. Key fields should include indication (prophylactic vs therapeutic), dose, route, time of administration relative to incision, cumulative intra-operative dose, and immediate adverse events. Organisations should use these data for local audit, safety monitoring and to inform procurement and implementation evaluation	
Vascular Society of Great Britain and Ireland	Guideline	General	General	There is limited evidence specific to vascular surgery. So, an opinion on this NICE guidance depends on how you view things; either no evidence so do not use tranexamic acid for vascular procedures, or benefit for trauma and other major surgery and low risk for harm – specifically thrombotic events (bypass graft or stent occlusion)- in vascular surgery so we should use.	Thank you for your comment. It is correct that there was no direct evidence from vascular surgery specifically included in the effectiveness review. While the committee, which included a vascular surgeon, concluded from the evidence and its experience that tranexamic acid was a safe intervention at the doses the committee recommends and that the use of tranexamic acid would be effective and cost-effectiveness in the vast majority of surgical scenarios lying at the conjunction of the committee's 3 criteria, the committee acknowledged the availability and strength of the evidence for tranexamic acid use was not the same across all surgical subspecialties. It recognised further that its recommendations cover a very large volume and variety of surgical procedures. For these reasons, the committee has added to the rationale to emphasise the the importance of clinical judgement when deciding

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					whether to use tranexamic acid in individual cases. The committee has also made a research recommendation regarding tranexamic acid use in specific vascular surgical procedures.
Vascular Society of Great Britain and Ireland	Guideline	006	1.1.12	The Vascular Society Elected Council supports the recommendation that tranexamic acid "should be considered" in vascular surgical procedures with a risk of a very high volume of blood.	Thank you for your comment. The use of tranexamic acid in surgery where a high volume of blood loss is expected was outside the scope of this update, which has focussed on minor blood loss. Tranexamic acid use where at least moderate blood loss is expected is covered by the 2015 guidance. The messages in that guidance have been retained in this update.
Vascular Society of Great Britain and Ireland	Guideline	007	2.2	Reads "*What is the clinical and cost-effectiveness of tranexamic acid compared to placebo for people having specific vascular surgery procedures in reducing limb-related thromboembolic events and infection?".* **"*in reducing limb-related thromboembolic events and infection*" is not correct, so this part of the sentence should be deleted.**	Thank you for your comment. The term 'limb-related thromboembolic events' has been clarified to 'vessel-related thromboembolic events' for clarity. The full protocol for the research recommendation can be found in the evidence review A - low blood loss appendix. This includes additional adverse events that are important, including: all-cause mortality, quality of life, pain, limb ischaemia, surgical site infection, graft or stent occlusion, amputation, length of stay and cost effectiveness. The research recommendation states a summary of the important outcomes to match the PICO style of research question writing.
Vascular Society of Great Britain and Ireland	Guideline	007	2.2	The Vascular Society recommends that the guidance call for **monitoring by the National Vascular Registry (NVR)** to happen immediately (it is one small data field change) and from the NVR to provide a report on the safety of tranexamic acid use in vascular index procedures within 2 years with respect to post-operative bleeding, thromboembolic complications (i.e. bypass graft or stent occlusion) and in hospital	Thank you for your comment. The committee considered your suggestion and is not opposed to data collection. However, it did not consider it necessary for it to convey a suggestion from the Vascular Society to the National Vascular Registry.

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				mortality. (The NVR does not currently collect data on estimated blood loss or red blood cell transfusion.)	
Vascular Society of Great Britain and Ireland	Guideline	010	012	*"However, they recognised that further research was required and so made a recommendation for research on the effectiveness of tranexamic acid for **specific vascular surgery procedures**."* 1.Make clear that these might be **open surgical or endovascular procedures (including embolization for haemorrhage)**. 2. Highlight those vascular procedures with significant blood loss is anticipated and/or when a thrombotic event would have significant impact (i.e. stroke, bowel ischaemia or limb loss): - Ruptured aortic aneurysm: Open repair or Endovascular aortic stent graft - Percutaneous embolization for bleeding - Lower limb arterial bypass surgery And possibly include lower limb major amputation (trans tibial, through knee or transfemoral.	Thank you for your comment. These factors are highlighted in the research recommendation protocol in the evidence review A - low blood loss appendix. The committee have agreed to not add percutaneous embolization for bleeding as they agreed that this may be used in other clinical settings (for example: trauma) where it is indicated and there would be no concerns with using it. Therefore, a research recommendation for this would not be warranted.