

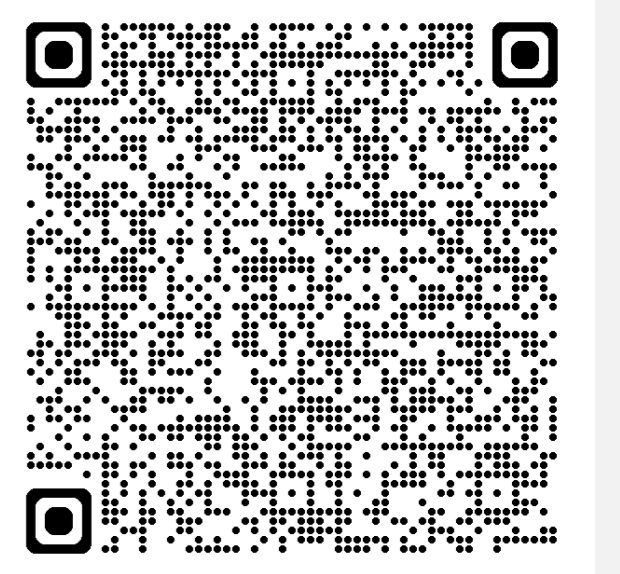
Plain Language Summary: What is Extravascular Distribution of Factor IX and How Does it Affect Management of Those With Haemophilia B?

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INTRODUCTION

- People with haemophilia B have low levels of a protein called 'factor IX' (FIX), or the FIX they do have does not function properly.^{1,2}
- FIX is found in blood vessels (the 'bloodstream' or 'vasculature') but can also move into other parts of the body; this is called 'extravascular distribution'.^{3,4}
- FIX has a role in helping blood to clot.⁵ Products containing FIX are used as treatment to prevent/stop bleeding in people with haemophilia B.⁶ For continued protection from bleeding, ongoing regular therapy ('prophylaxis') is needed.⁶
- There are different types of FIX products. Some, termed 'extended half-life', are modified to stay longer in the body so can be given less often.^{6,7} However, these modifications can influence how much product remains in the bloodstream or is extravascular, as shown by several studies.⁸⁻¹¹

AIM

- To collect information from scientific literature to help understand the implications of the extravascular distribution of FIX when treating people with haemophilia B.

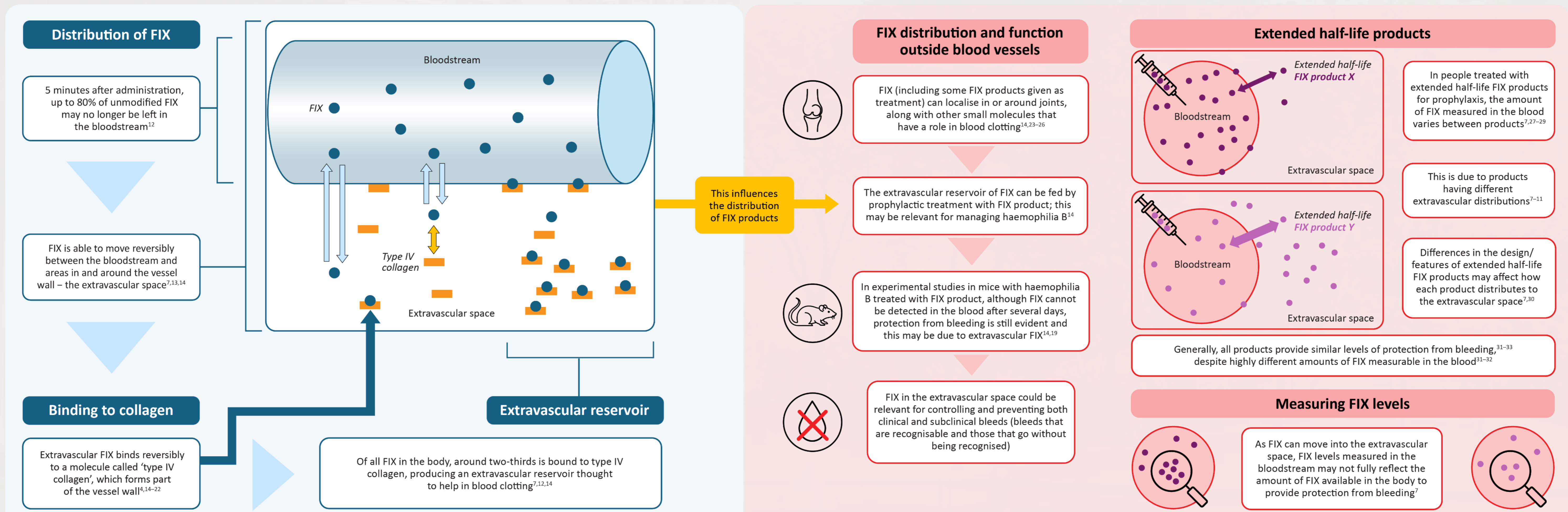
METHODS

- We searched the scientific literature to find articles about the extravascular distribution of FIX/FIX products and its relevance for preventing bleeding.
- A total of 476 articles were found, published between 1957 and October 2025.
- After the title and summary of each article were screened, seven reviewers from seven countries with expertise in haemophilia B collected and critically reviewed and evaluated information from selected articles.
- We summarised our findings from the selected articles and any additional material, as required, and considered what this means for treating people with haemophilia B.

RESULTS

- Our summary of the information collected from the literature is shown below.

Extravascular distribution of FIX and management of haemophilia B



CONCLUSIONS

- Evidence suggests FIX has a role in blood clotting outside of the bloodstream. The extravascular presence of FIX may provide protection from bleeding, with benefits for treatment of haemophilia B.
- FIX measured in blood may not fully reflect the degree of protection from bleeding; it is not currently possible to measure FIX in the extravascular space. Measuring other outcomes, such as how often bleeds occur, joint health and function and quality of life, will provide valuable information about how well treatment is working.

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