



Roche

Haemophilia is an inherited, serious bleeding disorder where a person's blood does not clot properly, leading to uncontrolled bleeding, which can occur spontaneously or after minor trauma.

It can significantly reduce the quality of life of people affected, as well as their family, friends and caregivers.1

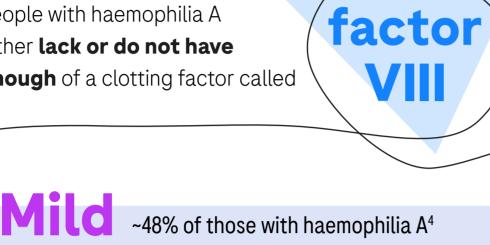
Haemophilia A is the most common form - affecting people worldwide^{2,3}





People with haemophilia A either lack or do not have enough of a clotting factor called

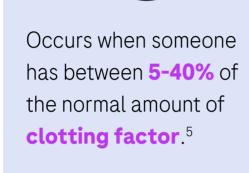
and help stop bleeding.

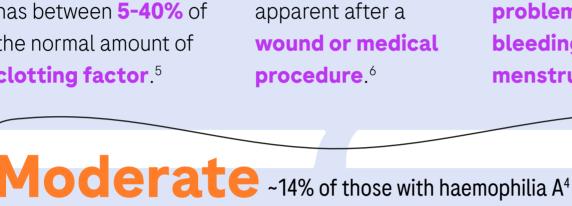


to clot properly.

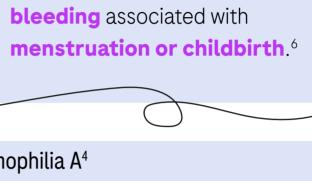
which leads to their

blood not being able



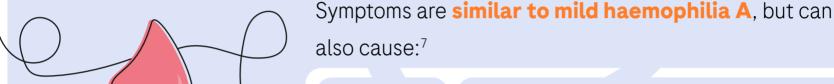


Usually becomes



Women may also have

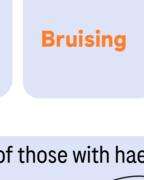
problems controlling

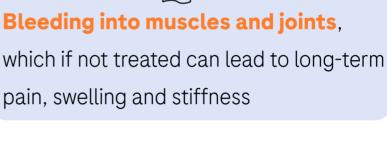












Potentially

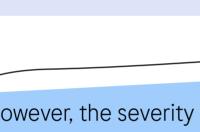
People with



normal amount of

clotting factor.5

has less than 1% of the



life-threatening and

joint bleeding is more

frequent and severe.7

The goal for management

of haemophilia A should be

to eliminate all preventable

bleeds regardless of

disease severity.

severe haemophilia A

spontaneous bleeding.7

also experience

However, the severity of haemophilia A is not always reflective of bleeding behaviour. While the treatment and management of severe haemophilia A are well-established, there is less information available on the burden of

There are many types of haemophilia

treatment:

Prophylaxis

haemophilia.2

moderate and mild haemophilia A.8

Prophylaxis is a preventative, regular treatment involving either factor VIII replacement therapies or non-factor therapies, with the goal to prevent bleeds and allow people with haemophilia to lead active lives and

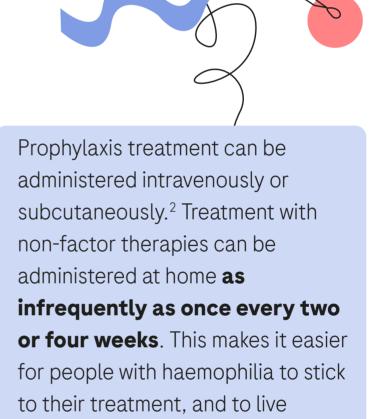
achieve quality of life comparable to

standard of care for people with severe

haemophilia A and some people with moderate

non-haemophilic individuals.2 It is the

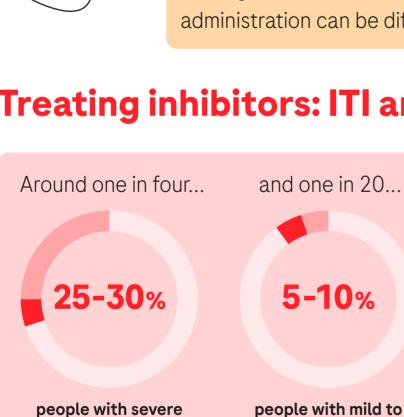
Episodic factor VIII replacement Episodic factor VIII replacement therapy can be taken on-demand (as needed, to treat bleeds) when prophylaxis is not feasible. It needs to be administered intravenously²



relatively normal lives.2

Finding a vein for medicine infusion during intravenous administration can be difficult for some, especially children.9

by the patient or a caregiver.



haemophilia A

people with mild to moderate haemophilia A

Treating inhibitors: ITI and bypassing agents ... develop inhibitors to factor VIII replacement

therapies, respectively. 10

Inhibitors are antibodies that attack and destroy the replaced factor VIII, because it is recognised as 'foreign'. 11 As a serious complication of

People with haemophilia A with inhibitors can be treated with non-factor therapy **prophylaxis.**² When non-factor therapy prophylaxis is not available, or for breakthrough bleeds (bleeds which occur during prophylaxis), treatment infusions of factor VIII replacement may be needed, as well as a trial of 'immune tolerance induction' (ITI), where the patient is given

very high doses of factor VIII over a long period of time.²

ITI can take many years, is very costly and is ineffective in

of people. 13,14

treatment, 12 many people with haemophilia A live in fear of developing inhibitors.

> 'Bypassing agents' are another treatment option for people with inhibitors, often used after ITI fails. However, these are short-acting, need to be taken often, and give variable bleeding control. 15

References

ITER Study). Haemophilia 2015: 10.

European Journal of Haematology 2014; 93: Suppl. 75, 9-18.

1. Flood E, et al. Illustrating the impact of mild/moderate and severe haemophilia on health-related quality of life: hypothesised conceptual models.

2. Srivastava, A, Santagostino, E, Dougall, A, et al. WFH Guidelines for the Management of Hemophilia, 3rd edition. Haemophilia. 2020: 26 (Suppl 6): 1-

- 3. Iorio A et al. Establishing the Prevalence and Prevalence at Birth of Hemophilia in Males. Ann Intern Med 2019 Oct 15;171(8):540-546. 4. World Federation of Hemophilia. Report on the annual global survey 2020. [Internet; cited 2022 February] Available from:
- http://www1.wfh.org/publications/files/pdf-2045.pdf White GC, et al. Definitions in hemophilia. Recommendation of the scientific subcommittee on factor VIII and factor IX of the scientific and standardization committee of the International Society on Thrombosis and Haemostasis. Thromb Haemost. 2001 Mar;85(3):560.
- 6. Haemophilia Foundation Australia. Living with mild haemophilia. [Internet; cited 2022 February] Available from: https://www.haemophilia.org.au/HFA/media/Documents/Haemophilia/Mild%20haemophilia/Understanding-mild-haemophilia.pdf. 7. NHS. Symptoms of haemophilia [Internet; cited 2022 February]. Available from: https://www.nhs.uk/conditions/haemophilia/symptoms/.
- 8. Walsh C et al. Identified unmet needs and proposed solutions in mild-to-moderate haemophilia: A summary of opinions from a roundtable of haemophilia experts. Haemophilia. 2021 February 01; 27(S1):25-32.
- 9. Ljung R. The risk associated with indwelling catheters in children with haemophilia. British Journal of Haematology 2007; 138: 580-586. 10. Gomez K, et al. Key issues in inhibitor management in patients with haemophilia. Blood Transfus. 2014; 12: s319-s329.
- 11. Whelan SF, et al. Distinct characteristics of antibody responses against factor VIII in healthy individuals and in different cohorts of hemophilia A patients. Blood 2013; 121: 1039-48. 12. Astermark J. Overview of Inhibitors. Semin Hematol 2006; 43 (suppl 4):S3-S7.
- 14. Mancuso ME, et al. US Immune tolerance induction in haemophilia. Clinical Investigation. 2015; 5(3), 321–335.
- M-XX-00004042

15. Berntorp, E. Differential response to bypassing agents complicates treatment in patients with haemophilia and inhibitors. Haemophilia. 2009; 15: 3-10.

13. Rocino A, et al. Immune tolerance induction in patients with haemophilia a and inhibitors: effectiveness and cost analysis in an European Cohort (The