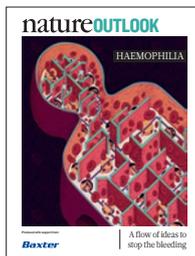


# natureOUTLOOK

## HAEMOPHILIA

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Cover art: Jessica Fortner

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Herb Brody,  
Michelle Grayson,  
Kathryn Miller,  
Eleanor Lawrence

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Mohamed Ashour,  
Kieran McCann,  
Andrea Duffy

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In any complex machine, the lack of a single part can lead to big trouble. That is the problem faced by the 170,000 people globally who have the bleeding disorder known as haemophilia. A genetic mutation (usually inherited) suppresses the production of proteins that make blood coagulate (see page S158). Internal bleeding into the joints causes bone degradation and excruciating pain (S170), and even mild injuries can be life-threatening.

The standard therapy is frequent infusions with blood-clotting promoters. These treatments are uncomfortable and expensive, so it is welcome news that several longer-lasting clotting factors have been developed (S162). Many people develop an immune resistance to these infused factors, but relief may be on the way in the form of anti-inhibitory pills made from plants (S166). Development of these pills depends on colonies of haemophilic dogs that serve as cooperative test subjects (S172).

Clotting-factor infusions treat symptoms of haemophilia, but gene therapy could provide a cure (S160). Research is also moving ahead on an alternative treatment strategy to remove or disable the body's anticoagulants (S168) rather than adding clotting factors.

The haemophilia community is still haunted by the traumas of blood supplies that were contaminated with HIV and hepatitis C. These experiences have led to reluctance to accept the good news that may soon be on offer, says medical historian Stephen Pemberton (S165).

To maximize its impact, this Outlook is being published in both *Nature* and *Scientific American*.

We are pleased to acknowledge the financial support of Baxter Healthcare Corporation in producing this Outlook. As always, *Nature* has sole responsibility for all editorial content.

**Herb Brody**

*Supplements Editor*

## CONTENTS

### S158 AETIOLOGY

#### Born in the blood

The coagulation cascade

### S160 GENE THERAPY

#### Genie in a vector

Ingenious ways to repair faulty genes

### S162 CLOTTING FACTORS

#### Stretching time

Lengthening the gap between treatments could improve quality of life

### S165 PERSPECTIVE

#### The fix is in

Stephen Pemberton on the ethical considerations of haemophilia therapy

### S166 IMMUNOLOGY

#### Oral solutions

Lettuce could solve a serious problem

### S168 THROMBOSIS

#### Balancing act

A novel method to control clotting

### S170 ORTHOPAEDICS

#### Joint effort

Internal bleeding causes agonizing pain, but treatment is limited

### S172 ANIMAL MODELS

#### Dogged pursuit

A colony of haemophilic canines is helping to advance treatments

## COLLECTION

**S174 Intron 22 homologous regions are implicated in exons 1–22 duplications of the F8 gene**  
*N Lannoy et al.*

**S181 Integration-deficient lentiviral vectors expressing codon-optimized R338L human FIX restore normal hemostasis in hemophilia B mice**  
*T Suwanmanee et al.*

**S189 In vivo genome editing restores haemostasis in a mouse model of haemophilia**  
*H Li et al.*

**S194 A bispecific antibody to factors IXa and X restores factor VIII hemostatic activity in a hemophilia A model**  
*T Kitazawa et al.*

**S199 A complex substitute: antibody therapy for hemophilia**  
*D Lillicrap*

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