



# 4

## Clinical Use of Blood Components



### Chapter summary

- Having considered the basic composition and function of blood, particularly the red cells and platelets, it is clear why these blood components are needed for transfusion: red cells to maintain or increase the oxygen carrying capacity of the blood, and platelets to prevent bleeding.
- Other clotting factors can be replaced either by using fresh frozen plasma (FFP) or cryoprecipitate which is rich in fibrinogen and Factor VIII.
- However, transfusion is not without risks, which have to be considered before deciding to transfuse.
- Allogeneic, or donor, blood can, in some surgical operations, be replaced by autologous blood salvaging techniques, such as by collecting blood from the patient either before or during the operation and re-infusing it afterwards.
- There are also some pharmacological approaches to reducing blood loss.
- Blood can be a life-saver but it is not a panacea.