

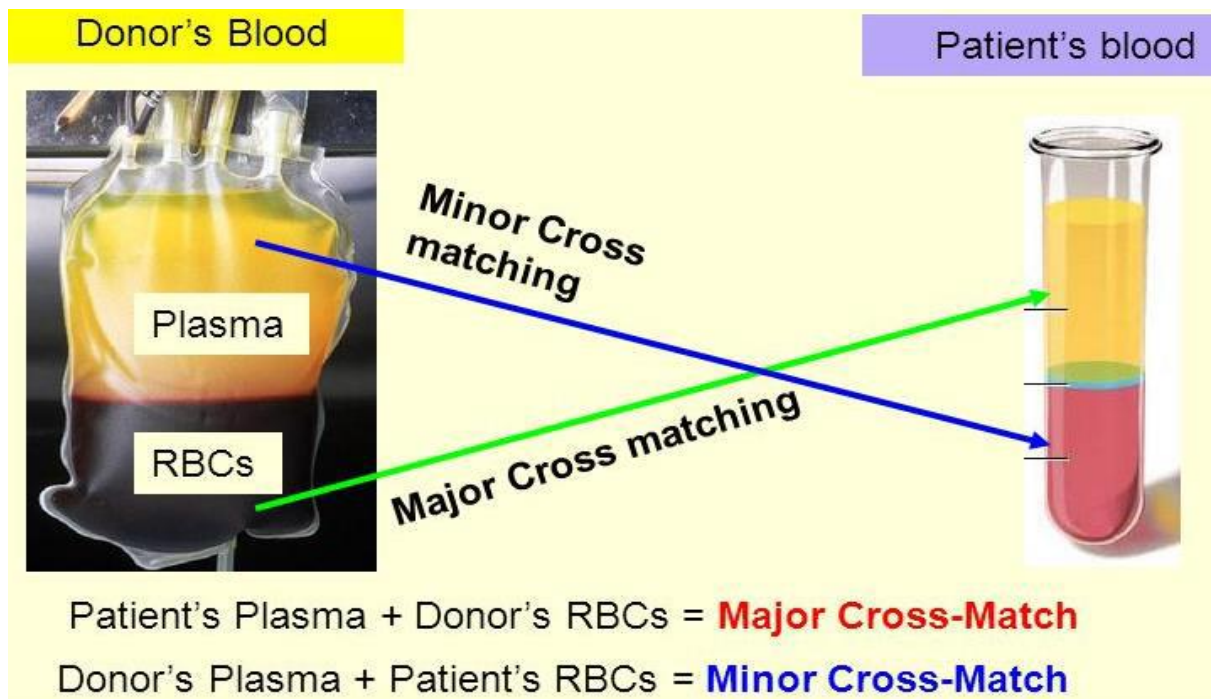
# Crossmatch

**Crossmatch** is the final step in the pre-transfusion testing as part of blood compatibility testing to determine whether donor blood is compatible (or incompatible) with recipient blood. Crossmatch involves the mixing of serum or plasma from the recipient with red cells from the donor or vice versa.

There are **two** types of cross-matches: **Major cross-match** and **Minor cross-match**.

Major cross match detects any serological incompatibility b/w donor's cells and patient's serum to **determine** whether the patient has an antibody which may cause a hemolytic transfusion reaction or decreased cell survival of donor cells. This is the required cross-match prior to release of a unit of packed cell from blood bank. This is the most important cross-match.

Minor cross-match detects any serological incompatibility b/w patient's cells and donor serum to **determine** whether there is an antibody in the donor's plasma directed against an antigen on the patient's cells. This is no longer required. It is assumed that the small amount of donor serum and antibodies left in a unit of packed cells will be diluted in a recipient.

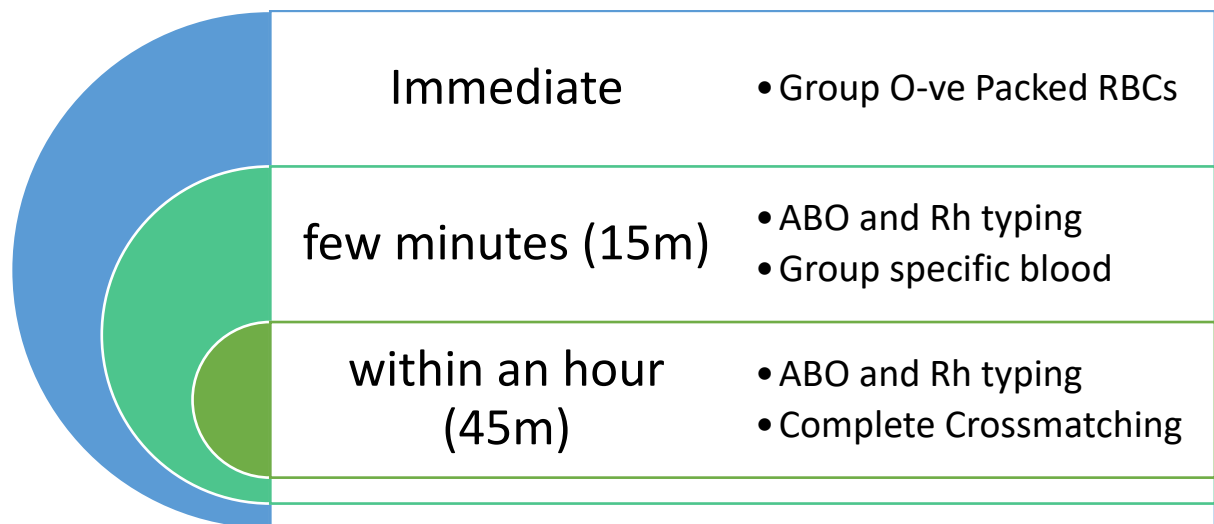


## CROSS-MATCH TECHNIQUES:

- Immediate spin method
- Saline room temperature technique
- Indirect Antiglobulin technique
- Albumin addition technique
- Electronic or computer Technique

In Iraq, there are two most procedure: **Tube** & **Gel Card method**.

### **Special Circumstance Clinical Surgery:**



Immediate	• Group O-ve Packed RBCs
few minutes (15m)	• ABO and Rh typing • Group specific blood
within an hour (45m)	• ABO and Rh typing • Complete Crossmatching