

Blood Transfusion in Cats*

Feline Blood Types and Reactions

Only one blood group system has been identified in cats - the AB system. Cats are

either A, B or AB.

There is no universal donor in cats, therefore all transfusion recipients must be blood typed or cross matched.

The death rate in cats receiving incompatible blood is 30%.

Type A cells administered to a Type B cat have a half-life of 1.3 hours and as little as 1mL can cause an acute haemolytic transfusion reaction (hypotension, bradycardia, apnoea, urination, defaecation, vomiting, depression and death). Type B cells administered to a Type A cat have a half-life of 2 days and transfusion reactions are less severe.

AB cats are considered to be universal recipients. However, because B cats possess anti-A antibodies, haemolysis can occur in type AB cats receiving blood from a B cat.

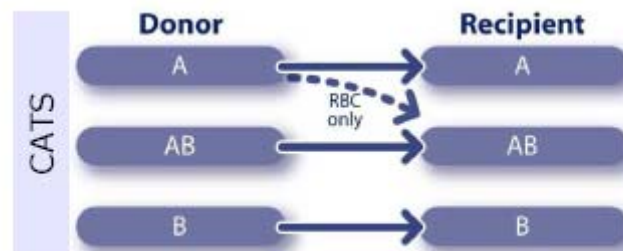
Matched transfusion cells (A to A, B to B) have a half-life of 29 to 39 days.

How feline blood types affect a veterinarian

The blood type of all cats participating in transfusions should be known before proceeding.

A lack of a universal donor means that a feline blood donor program should have cats of both type A and B available.

Veterinarians should advise cat breeders that B queens bred to A males will result in 75 to 100% of A kittens. Such kittens should be foster nursed or fed kitten milk replacer for the first 24 hours of life or neonatal isoerythrolysis will occur in the A kittens.



Plasvacc now distribute "Quick Test" for fast accurate determination of cat blood type. For information and technical support contact "1 800 PLASMA".

*Hohenhaus. Importance of blood groups and blood group antibodies in companion animals. Transfusion Medicine Reviews. 18(2): 117-126. 2004. A copy of this reference can be provided upon request.