Prevalence Of Dea 1 Blood Type In Brisbane Dogs

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This study aimed to determine the prevalence of dog erythrocyte antigen 1 (DEA 1) positive blood type in a referral population of dogs in Brisbane, in order to inform blood banking inventory.

Medical records at a private emergency and referral hospital with two locations in the Brisbane region were retrospectively reviewed for blood typing performed between January 1st, 2020, and January 31st, 2025. Documented DEA 1 blood type results were included. Signalment, DEA 1 type (positive or negative), reason for typing (blood donor screening, transfusion recipient or other), and hospital location were documented. Data was presented as percentage (proportion). Chi-square test was performed to compare blood type at hospital site. $P < 0.05$ was significant.

One hundred and twenty-five (125) dogs were included. DEA 1 type was positive in 59.2% (74/125). Dogs were most commonly typed to receive a blood transfusion (79.2% (99/125)); 9.6% (12/125) were blood donors, and 11.2% (14/125) underwent pre-emptive blood typing. In this population, all Cavoodles (4/4), Miniature Schnauzers (4/4), Pugs (4/4), Rhodesian Ridgebacks (4/4), and English Cocker Spaniels (3/3) were DEA 1 positive. All Beagles (4/4) and French Bulldogs (3/3) were DEA 1 negative. At site 1, 58.9% (53/90) of dogs were DEA 1 positive, compared to 60% (21/35) DEA 1 positive dogs at site 2. There was no difference between sites ($P = 0.91$).

The prevalence of the DEA 1 positive blood type at a Brisbane referral hospital was consistent with previous studies in Australia and globally, and similar across both hospital locations.[1-3]

References

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