

DETERMINATION OF ABO BLOOD TYPE RESULTS AND ANTIBODY SCREENING IN BLOOD DONORS AT INDONESIA RED CROSS, DEPOK CITY, WEST JAVA

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Article Info	ABSTRAK
Article History: Received 06/05/2026. Revised - Accepted 14/07/2026	<i>Background: ABO blood type confirmation and donor antibody screening are critical components of the safety of pre-transfusion screening. However, the evaluation of these examinations in immunohematology laboratories is still limited, especially in developing areas. The study aimed to look at the results of ABO confirmation and screening of donor irregular antibodies. Methods: A retrospective descriptive evaluation was conducted at the Indonesian Red Cross, Depok City from July to December 2025. Routine immunohematology testing data was analyzed, including total donors tested, ABO and Rh blood type results, ABO differences, and antibody screening results. ABO confirmation was carried out using cell typing and serum grouping, while antibody screening used indirect antiglobulin tests (IAT). Data were analyzed descriptively using cumulative and monthly tabulation. Results: A total of 22,578 validated donor records were included in the final ABO distribution analysis. The complete fit between cell typing and serum groupings resulted in a zero ABO difference rate (0.00%) throughout the study period. Blood type B is the most common type, and the majority of donors are Rh-positive. A total of 22,884 donors underwent antibody screening, with 92 reactive results (0.40%). The monthly positivity rate ranges from 0.11% to 0.48%. Conclusion: ABO confirmation testing showed conformity with a zero (0.00%). Antibody screening showed a low positivity rate of 0.40%. These findings demonstrate stable laboratory performance and support the importance of continuous monitoring in maintaining transfusion safety.</i>
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