## **Clinical pathology selected abstracts**

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## Recognizing and addressing workplace bullying in pathology and laboratory medicine

September 2023—Approximately 30 percent of U.S. employees report that they have been bullied in the workplace, and these numbers are even higher for remote workers. Bullying is defined as any act or situation in which someone is subjected to recurrent, systematic, serious negative or hostile behavior and long-lasting acts designed to oppress or abuse another person. This behavior may include belittling, humiliating, personally attacking, verbally criticizing, or intentionally excluding a coworker. Bullying can harm both the target of the attack and the organization that employs the bully and the targeted person. The potential negative effects on an organization can be high staff turnover, a decrease in employee performance and productivity, and an increase in errors and medical mistakes. The person being bullied can experience mental distress, anxiety, depression, chronic pain and headaches, musculoskeletal problems, and symptoms consistent with post-traumatic stress. Even people that witness workplace bullying can experience adverse reactions. The authors conducted a study to examine the prevalence of bullying in a laboratory workforce made up of pathologists, doctoral-level clinical scientists and other scientists, technologists, technicians, and support staff. The study also addressed types of bullying, the impact of bullying on an individual's wellness and productivity, and organizational solutions to mitigate bullying. The authors distributed invitations containing a survey link to the clinical laboratory community using email addresses obtained from professional organizations and alumni networks and by posting invitations on professional organizations' online forums and listservs. The authors also encouraged participants to forward the survey invitation to other laboratory professionals to maximize participation. The survey was available online for approximately three weeks. All participants completing the survey were offered the opportunity to participate in a future online education course on bullying and were eligible for a drawing for an Amazon gift card. The authors collected cross-sectional data through the Web-based survey to gather exploratory demographic information and assess the association between intensity of exposure to bullying and laboratory productivity. The survey also explored workplace resources for employees and their impact on productivity and job fulfillment. The results showed that 68.6 percent of laboratorians were victims of workplace bullying, and 55.3 percent of bullies were a peer of the victim. The types of negative workplace acts—having opinions ignored, being given an unmanageable workload, or being personally ignored or excluded—were consistent with the experiences of other health care professionals, but the frequency reported by laboratory professionals was significantly higher. The study also showed that the intensity of workplace incivility correlated with the number of sick days taken by laboratory professionals. Laboratorians employed by facilities with a more supportive work environment took fewer sick or mental health days. The authors recommend that organizations state in written hiring contracts that they have zero tolerance for bullying to demonstrate to employees and management their commitment to resolving this issue.

Chiou PZ, Mulder L, Jia Y. Workplace bullying in pathology and laboratory medicine. *Am J Clin Pathol*. 2023;159:358–366.

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## Analysis of ABO nonidentical platelet transfusions in relation to patient outcomes

It is estimated that 40 percent of platelet transfusions in the United States are ABO mismatched to the recipient. In the United States, platelets are primarily collected by apheresis, which helps limit the amount of incompatible plasma transfused to the recipient when using ABO-mismatched platelets. Reasons for transfusing ABO minor and major incompatible platelets include supply-and-demand issues, limited platelet shelf life, and variability in

institutional policies and practices. Major mismatch platelets are when the donor platelets carry A/B antigen that is not compatible with the recipient ABO type—for example, type A donor and type O recipient. Minor mismatch is when the platelet plasma is not compatible with the recipient ABO type-for example, type O platelet donor and type A recipient. Studies have examined outcomes for ABO-mismatched platelets, yet guidelines vary significantly. The authors conducted a study using the large four-year publicly available Recipient Epidemiology and Donor Evaluation Study-III database to identify associations between ABO nonidentical platelet transfusions and the clinical outcomes of mortality, sepsis, and thrombosis, with the intent of helping to shape future platelet transfusion guidelines. They investigated patient outcomes associated with ABO nonidentical platelets from January 2013 through December 2016. There were 26,902 encounters identified among the study cohort of 21,176 patients, who received 79,473 platelet transfusions. An encounter was defined as an inpatient receiving a platelet transfusion. Platelet transfusions were defined as ABO identical, major mismatched, minor mismatched, or bidirectional mismatched (donor platelets and plasma are not compatible with the recipient—for example, type A donor and type B recipient). After the statistical analysis was adjusted for possible confounding factors, the data showed no statistically significant association between ABO nonidentical platelet transfusion and increased risk of mortality. However, when diagnostic category and recipient ABO group were examined, mortality for major mismatched transfusions in two of the eight subpopulations increased. These subpopulations were hematology/oncology blood groups A and B (but not group O) recipients with a hazard ratio (HR) of 1.29 and intracerebral hemorrhage group O (but not groups A and B) recipients with a HR of 1.75. The authors also found that major mismatched transfusions were associated with increased odds of receiving additional platelet transfusions each day through day five, regardless of the recipient's ABO group. They concluded that prospective studies are needed to determine which patient populations may benefit from receiving only ABO-identical platelets and that ABO-identical platelet products minimize patient exposure to additional platelet doses.

Bougie DW, Reese SE, Birch RJ, et al. Associations between ABO non-identical platelet transfusions and patient outcomes—a multicenter retrospective analysis. *Transfusion*. 2023;63:960–972.

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