Advanced Serologic Techniques in Immunohematology

Course # 612-303-16 / 1.0 credit hours

Lorraine N. Blagg, MA, MLS(ASCP)CMSBB
Education & Development Coordinator, Transfusion Medicine
Program Director, Specialist in Blood Banking Technology Program
The Johns Hopkins Hospital

Level of Instruction: Advanced
Category: Blood Bank/Immunohematology
Target Audience: Technologists, Leads, Supervisors, Managers

Description: Antigen and antibody identification in the immunohematology laboratory may involve varying serologic techniques. This presentation will use case studies to highlight and explain the use of enzymes, chemicals, adsorptions, elutions, and neutralizations to solve complex red blood cell antibody problems.

Objectives:
At the completion of the presentation, the audience will be able to:
- Explain the immunologic assays used in immunohematology
- Name at least two enzymes, chemicals, or neutralizing agents and what antigens or antibodies are destroyed by their use
- Interpret the results of an adsorption/elution study
- Describe how daratumumab interferes with immunohematology testing and recommend a method to resolve it

Questions:
1. List two Blood Bank test that use Antihuman globulin reagent?
2. What chemicals are included in ZZAP reagent?
3. What soluble substance is used to neutralize anti-Sdα?
4. What is the interpretation of this panel tested with an eluate?
5. What method can be used to overcome the interference of daratumumab in Antihuman globulin testing?