

# REGIONAL REGISTRY OF PATIENT ALLOANTIBODIES

## FIRST YEAR EXPERIENCE

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**BACKGROUND:** Non-ABO hemolytic transfusion reactions are the second leading cause of transfusion-associated-fatality reported currently to the FDA. Alloantibody titers diminish over time and recur anamnestically following transfusion. We created an on-line regional registry, as a resource for area transfusion services that contains names of patients with known alloantibodies and the antibodies identified. We report the experience of this registry during its initial operating year.

**STUDY:** More than 5000 patient alloantibody records have been entered. The registry has been accessed more than 3100 times with records being viewed for 1452 patients. 68 hospitals have access to view records. 13 of these hospitals have access to enter their own patient antibodies.

Hospital transfusion services may use the registry in different ways:

- For all patients with Type and Screen
- For all patients with a positive Antibody Screen
- For all patients with crossmatches ordered.

Hospitals report the following benefits of the registry:

- Prevention of delayed transfusion reactions
- Reduction in sample needed for work-up
- Decreased turn around time for work-up

**CONCLUSION:** In summary, the Registry has gained acceptance and is being used in various modes. Several potential delayed hemolytic reactions have been avoided. We expect Registry usage will increase and more patient records will be entered.

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### BENEFITS OF THE ANTIBODY REGISTRY AS REPORTED BY REGIONAL HOSPITAL TRANSFUSION SERVICES

60 year old male  
with esophageal cancer.

**History of Anti-K, C and V.**

"This patient's antibody screen was negative when performed at our hospital. This prevented a delayed transfusion reaction."

69 year old female  
with anemia.

**History of Anti-K.**

"Possible prevention of delayed transfusion reaction."

47 year old female  
with rectal bleeding.

**History of Anti-K, E and c.**

"Only Anti-K reacting at this time. Possible prevention of delayed transfusion reaction"

78 year old male  
with atrial tachycardia.

**History of Anti-E and c.**

"Was able to ID anti-c with blood we had. Did not need to have patient return to have more blood drawn. Did not need to send to CBC to ID."

57 year old male  
with bleeding.

**History of Anti-E.**

"Checking the registry made me aware of the antibody the patient already had, therefore making his lab workup a smoother process."

84 year old female  
with anemia.

**History of Anti-E and Fy<sup>b</sup>.**

"History in antibody registry showed patient had Anti-E and Anti-Fy<sup>b</sup>. Current testing on patient's sample did not demonstrate the anti-Fy<sup>b</sup>. Antigen negative blood for E and Fy<sup>b</sup> was ordered from CBC. Prevented a delayed transfusion reaction."

56 year old female with  
Pickwickian Syndrome.

**History of Anti-E and c.**

"Decreased turn around time to obtain compatible blood."

68 year old male with  
prosthetic valve thrombus.

**History of Anti-E.**

"In addition to identifying an Anti-E, I also obtained a positive control and DAT. Because the Antibody Registry listed the date and location of the hospital that had previously ID'ed Anti-E, I was able to obtain the needed recent transfusion history by calling the proper hospital. Thanks!"

### PATIENTS WHO COULD HAVE BENEFITTED FROM THE ANTIBODY REGISTRY

79 year old female  
with renal failure.

**History of Anti-Lu<sup>b</sup> and S.**

Current antibody screen was negative. Antibody Registry history was not checked. Patient received 2 units of RBCs positive for Lu<sup>b</sup> and had a transfusion reaction.

55 year old male.

**History of Anti-Tc<sup>a</sup>.**

Anti-Tc<sup>a</sup> was not identified by hospital and Antibody Registry history was not checked. Patient was transfused and had a transfusion reaction due to Anti-Tc<sup>a</sup>.

65 year old male.

**History of Anti-C, E, Le<sup>a</sup> and warm auto.**

Antibody Screen was negative. Antibody Registry history was not checked. Patient received a unit not typed for C and E and had a transfusion reaction.