BACKGROUND:
Although the majority of patients who become alloimmunized and refractory to platelet transfusions develop antibodies against Class I HLA antigens that are expressed on platelets, occasionally antibodies to platelet specific human platelet alloantigens (HPA) can contribute to this clinical problem. In particular, platelet specific antibodies may be present in patients who fail to respond to well-matched HLA selected platelet transfusions in the absence of non-immune causes of platelet refractoriness (e.g. sepsis, DIC).

TESTS INCLUDED:
To demonstrate antibody in patient serum:
Platelet antibody detection and identification including alloantibodies reactive with alloantigens HPA-1a,-1b; HPA-2a,-2b; HPA-3a,-3b; HPA-4a; HPA-5a,-5b; HPA-15a,-15b: and other specificities on GPIIb/IIIa, GPIa/IIa, GPIb/IX, and GPIV (CD36). Reactivity against Class I HLA antigens is also detected.

To determine patient's platelet antigen type:
Platelet alloantigen genotyping including alleles of HPA-1 through 6, HPA-9 and HPA-15

METHODS:
Antibody Detection - Flow Cytometry, Platelet Antibody Bead Array (PABA), Monoclonal Antibody Immobilization of Platelet Antigen (MAIPA).
HPA Genotyping - PCR + fluorescent allele – specific hydrolysis probes.

SPECIMEN REQUIREMENTS:
10 mL of serum and 10 ml EDTA whole blood from patient

SHIPPING REQUIREMENTS:
Ship on an ice pack. Protect whole blood from freezing by wrapping in paper towels. Place the specimen and the test requisition into plastic bags and seal. Insert into an insulated container, place in a sturdy cardboard box, tape securely, and ship by overnight carrier. Ship the package in compliance with your overnight carrier guidelines. Label box with the following address:

Client Services/Platelet and Neutrophil Immunology Laboratory
BloodCenter of Wisconsin
638 N. 18th St.
Milwaukee, WI 53233
1-800-245-3117, ext. 6250

TURNAROUND TIME: 10 days

CPT CODES: 81400x8, 86022

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