BACKGROUND:
Following exposure to certain drugs, acute severe thrombocytopenia can occur due to the formation of antibodies that react with platelets in the presence of drug. We have detected IgG and/or IgM antibodies induced by the following drugs:

- Abciximab (ReoPro™)
- Carbamazepine
- Ceftazidime
- Ceftizoxime
- Ceftriaxone
- Eptifibatide (Integrilin™)
- Fentanyl
- Ibuprofen
- Loracarbef
- Naproxen Glc
- Orbofibine
- Phenytoin
- Propoxyphene
- Quinidine
- Quinine
- Ranitidine
- Rifampin
- Sulfamethoxazole
- Sulfisoxazole
- Suramin
- Tirofiban (Aggrastat™)
- Trimethoprim
- Vancomycin
- Xemilofiban

Testing for other drugs is available.

METHOD:
Immunofluorescence by flow cytometry.
Flow cytometry is the most sensitive method available for detection of drug-dependent platelet antibodies. Patient serum is incubated with normal group O target platelets in both the presence and absence of drug and bound immunoglobulin is detected. Fluorescence values obtained in the presence and absence of drug are compared.

LIMITATIONS:
Only serum or citrated plasma is accepted for testing. Positive test results are not absolutely diagnostic of drug-induced thrombocytopenia and must be used in combination with clinical information to make a diagnosis. Negative results do not completely rule out a diagnosis of drug-induced immune thrombocytopenia.

REASONS FOR REFERRAL:
Evaluation of patients who develop thrombocytopenia after exposure to certain drugs is an important component of clinical evaluation.

REFERENCE RANGE:
No drug-dependent platelet antibodies detected. (Fluorescence Ratio < 2.0).
SPECIMEN REQUIREMENTS:
5 ml serum or citrated plasma (the minimum sample volume is 1 ml). Samples may be refrigerated or frozen.

SHIPPING REQUIREMENTS:
Ship on an ice pack. Place the sample and completed test requisition form into plastic bags and seal. Place in an insulated container, then into a sturdy cardboard box, tape securely and ship by an overnight carrier. Ship the package in compliance with your overnight carrier guidelines. Label “Refrigerated Sample” and ship to:

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

TURNAROUND TIME: 3-4 days

CPT CODES: 86022; each additional drug: 86022

REFERENCES: