

DRUG-DEPENDENT PLATELET ANTIBODY

BloodCenter of Wisconsin Platelet & Neutrophil Immunology Laboratory offers a flow cytometric assay for detection of Drug-Dependent Platelet Antibodies.

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™)	Loracarbef	Sulfamethoxazole
Carbamazepine	Naproxen Glc	Sulfisoxazole
Ceftazidime	Orbofiban	Suramin
Ceftizoxime	Phenytoin	Tirofiban (Aggrastat™)
Ceftriaxone	Propoxyphene Quinidine	Trimethoprim
Eptifibatide (Integrelin™)	Quinine	Vancomycin
Fentanyl	Ranitidine	Xemilofiban
Ibuprofen	Rifampin	

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 \leq 2.0).

SPECIMEN REQUIREMENTS:

5 ml serum or citrated plasma (the minimum sample volume is 1 ml). Samples may be refrigerated or frozen.

TESTING SCHEDULE:

Testing is performed twice each week.

TURNAROUND TIME: 3-4 days

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

DRUG DEPENDENT PLATELET ANTIBODY:

	1-3 Drugs	Each Additional Drug	Abciximab
CPT Code:	86022 x 4	86022 x 2	86022 x 12

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