

DNA-Guided Psychotropic Drug Management with the *HILOmet CYP* DNA Typing System

The *HILOmet CYP* DNA Typing System tests the Cytochrome P450 (CYP450) genes most relevant to psychiatry and neurology: **CYP2D6**, **CYP2C9**, **CYP2C19**. The corresponding hepatic isoenzymes metabolize many antidepressants, antipsychotics, analgesics, stimulants and anti-epileptics. These isoenzymes are highly polymorphic in gene sequence and protein structure. Their resultant variable biochemical properties substantially alter individual patient response to many psychotropic drugs.

By DNA typing, the innate metabolic capacity of the patient relevant to psychotropic drug treatment can be predicted and diagnosed simply from a blood sample. Patients with deficient or null capacity to metabolize various psychotropics can be diagnosed by DNA typing to improve drug safety and efficacy. Therapy can be directed to drugs whose primary metabolic pathway is least deficient or normal in an individual patient.

ORDERING THE *HILOmet CYP* TESTS

The *HILOmet CYP* tests are available from Clinical Laboratory Partners (CLP) with locations throughout Connecticut and are reimbursed by Medicare and major insurance carriers for clinically relevant cases. More information, CLP locations, and order forms are available at www.genomas.net/LPH or contact us at lph@genomas.net or 860-545-4589.

DRUG METABOLISM *HILOmet CYP* SYSTEM

CYP2D6 (Test Code 70002, *HILOmet 2D6*)

Antidepressants	Amitriptyline (<i>Elavil</i> ®) Mirtazapine (<i>Remeron</i> ®) Fluvoxamine (<i>Luvox</i> ®) Duloxetine (<i>Cymbalta</i> ®) Venlafaxine (<i>Effexor</i> ® XR) Paroxetine (<i>Paxil</i> ®)
Antipsychotics	Haloperidol (<i>Haldol</i> ®) Aripiprazole (<i>Abilify</i> ®) Risperidone (<i>Risperdal</i> ®)
Stimulants	Atomoxetine (<i>Strattera</i> ®) Amphetamine (<i>Adderall</i> ® XR)
Analgesic	Codeine

CYP2C9 (Test Code 70000, *HILOmet 2C9*)

Antidepressants	Fluoxetine (<i>Prozac</i> ®) Sertraline (<i>Zoloft</i> ®)
Analgesics	Celecoxib (<i>Celebrex</i> ®) Ibuprofen (<i>Advil</i> ®) Naproxen (<i>Naprosyn</i> ®)

CYP2C19 (Test Code 70001, *HILOmet 2C19*)

Antidepressants	Escitalopram (<i>Lexapro</i> ®) Citalopram (<i>Celexa</i> ®)
Anti-epileptics	Phenytoin (<i>Dilantin</i> ®) Diazepam (<i>Valium</i> ®)

LABORATORY OF PERSONALIZED HEALTH



Division of Genomas, Inc.

HILOmet DNA Typing is performed at the Genomas Laboratory of Personalized Health (LPH), located at Hartford Hospital. CT Dept. of Public Health license # CL-0644. Centers for Medicare and Medicaid Services certification # 07D1036625.

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