

**RECOMMENDED LABORATORY MONITORING FOR PSYCHIATRIC MEDICATIONS**  
**ATYPICAL ANTIPSYCHOTICS Revised: May 17, 2006**

"Ordering of lab monitoring is based on clinical assessment. The frequency of testing depends on the individual patient and the physician's assessment and may be greater or less than these recommendations. Geriatric patients in particular may require more frequent monitoring."

Generic/Brand	Clozapine (Apo, Gen, Clozaril)	Olanzapine (Zyprexa)	Risperidone (Risperdal)	Quetiapine (Seroquel)	Aripiprazole** (Abilify) (USA/UK)	Amisulpride*** (Solian) (UK)	Sulpiride** (Dogmatil) (EU)
<b>CBC</b>	Baseline, wkly x 6 mos then Q2W	Baseline and annual	Baseline, and annual	Baseline and annual	Baseline and annual	Baseline and annual	Baseline and annual
<b>Renal (Urea, Creatinine)</b>	Baseline and annual	Baseline and annual	Baseline and annual	Baseline and annual	Baseline and annual	Baseline & Q6M	Baseline and Q6M
<b>Electrolytes</b>	Baseline & annual	Baseline and annual	Baseline and annual	Baseline and annual	Baseline and annual	Baseline and Q6M	Baseline and Q6M
<b>LFT (ALT, AST)</b>	Baseline1, 3,6M and annual	Baseline1, 3,6M and annual	Baseline1, 3,6M and annual	Baseline1, 3,6M and annual	Baseline1, 3,6M and annual	Baseline1, 3,6M and annual	Baseline1, 3,6M and annual
<b>TSH, T4</b>	Baseline	Baseline	Baseline	Baseline, then annual	Baseline	Baseline	Baseline
<b>Fasting Glucose</b>	Baseline & QM x 3, then Q2-3M	Baseline, 1,3,6M then Q6M	Baseline, 1,3,6M then Q6M	Baseline, 1,3,6M then Q6M	Baseline, 1,3,6M then Q6M	Baseline, 1,3,6M then Q6M	Baseline, 1,3,6M then Q6M
<b>Lipid Profile</b>	Baseline and Q3M x 6 months then yearly for all						
<b>Urinalysis</b>	Baseline and annual as part of annual physical exam						
<b>EKG</b>	Baseline & during titration	Baseline, 1 and 6 months in high-risk groups √	Baseline, 1 and 6 months in high-risk groups √	Baseline, 1 and 6 months in high-risk groups √	Baseline, 1 and 6 months in high-risk groups √	Baseline, 1 and 6 months/see comment***	Baseline, 1 and 6 months in high-risk groups √
<b>Prolactin</b>		Baseline and if symptomatic	Baseline and if symptomatic			Baseline and if symptomatic	Baseline and if symptomatic
<b>Ophthalmic</b>	Yearly ocular evaluation > 40; Q2Y under 40	Yearly ocular evaluation > 40; Q2Y under 40	Yearly ocular evaluation > 40; Q2Y under 40	ΔYearly ocular evaluation > 40; Q2Y under 40	ΔYearly ocular evaluation > 40; Q2Y under 40	Yearly ocular evaluation > 40; Q2Y under 40	Yearly ocular evaluation > 40; Q2Y under 40
<b>BP and pulse</b>	BP & pulse qd x7 after each ↑.	-	BP & pulse during titration	BP & pulse during titration	BP & pulse during titration	-	-
<b>Weight/BMI/ Waist Circum.</b>	Baseline and monthly – less often if stable						
<b>Serum drug levels</b>	Clozapine - Suggested threshold level 1050nmol/L All – consider baseline when clinically stable; Levels may be useful to check for compliance				none	none	none

Prepared by Jane Dumontet Pharm D; Approved by Riverview Hospital Priorities and Evaluation Committee and Medical Advisory Committee 2006

\*\* - Only available in Canada through the Special Access Program \*\*\*Amisulpride - Health Canada warning re QTc requires justification of risk – no new patients to start

USA – United States; UK – United Kingdom; Eu - Europe

Δ Quetiapine slitlamp exam Q6M in product monograph; however, not recommended routinely by the PEC committee as no objective evidence of increased clinical risk beyond other neuroleptics, therefore left to clinical judgment

√ High risk groups : age > 40, 3 CVD risk factors

YEARLY PHYSICAL EXAM ROUTINE BLOODWORK: ECG annually for patients over 40 or as indicated; chest X-ray if clinically indicated; If not already done: Electrolytes, Urea, Creatinine,

TSH (if indicated) FBS, LFT, CBC, Urinalysis.

**REFERENCES:**

1. Repchinsky, C, Welbanks, L, Bisson, R, editors. Compendium of Pharmaceuticals and Specialties. Ottawa; Canadian Pharmacists Association; 2004.
2. Bezchilbnyk-Butler, KZ, Jeffries, JJ, editors. Clinical Handbook of Psychotropic Drugs. 14<sup>th</sup> ed. Toronto: Hogrefe & Huber Publishers; 2004.
3. Clinical Practice Guidelines – Treatment of Schizophrenia. Can J Psychiatry. 2005; 50(9).
4. Marder SR, Essock SM, Miller AL, Buchanan RW, Casey DE, Davis JM, et al. 2004 Physical health monitoring of patients with schizophrenia. Am J Psychiatry. 2004; 161.
5. Poulin, MJ, Cortese, L, Williams, MB, Wine, N, McIntyre, RS. Atypical Antipsychotics in Psychiatric Practice: Practical Implications for Clinical Monitoring. Can J Psychiatry. 2005; 50(9).
6. Taylor, D, Paton, C, Kerwin, R. Maudsley Prescribing Guidelines 2005-2006. 8<sup>th</sup> ed. London: Taylor and Francis; 2005.
7. Drug Information for the Health Care Professional. 25<sup>th</sup> ed. Taunton: Thomson Micromedex; 2005.
8. McEvoy, GK, editor. AHFS Drug Information 2005. Bethesda: American Society of Health-System Pharmacists; 2005.
9. Riverview Hospital Clozapine Protocol 2005.
10. Health Canada verbal communication re Amisulpride Jan 2006