

Beaumont

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Area **Laboratory-Chemistry**

Applicability **Royal Oak**

Therapeutic Drug Monitoring (TDM) and Drugs of Abuse Urine (DAU) Testing Guide - Royal Oak

Document Type: Procedure

I. PURPOSE AND OBJECTIVE:

To provide a reference for the performance of Therapeutic Drug Monitoring (TDM) and Drugs of Abuse Urine (DAU) testing on the Abbott Line.

II. PROCEDURE:

- A. **Reagents:** Gently mix all reagents before loading on the analyzer.
1. User Defined Reagents
 - a. **Fentanyl (FENTA):** Antibody Substrate Reagent is R1 and Enzyme Reagent is R2
 - b. **Oxycodone (Oxy100Q):** Reagent A is R1 and Reagent E is R2
 - c. **Acetaminophen (ACET):** Enzyme Reagent is R1(1 Bottle) and Color Reagent is R2 (2 Bottles)
 - d. **Methotrexate (MTX):** Antibody Substrate Reagent is R1 and Enzyme Reagent is R2
- B. **Adding a New Lot User Defined reagents/change reagent wedge current lot**
1. Sign in as ADMIN
 2. Select System at the top of the screen, Configuration, Assay Categories.
 3. Select Reagent Settings, Designated Assay and Configure (F-6)
 4. The Configure reagent window displays.

5. Select the New Lot option under lot number. Enter the Lot Number, Expiration and Serial Number. (Note: The serial number is required. Use the date the reagent is put in use.)
6. Define the cartridge size. Select Done.
7. Packs of the same lot can be replaced in the same location as the onboard pack by selecting Reagents, Highlighting the Reagent Pack and Selecting F-8 Reset.
8. To REMOVE old packs- Instrument must be in READY. Reagents, Status, Assign Location. Select pack removed. Click Unload- Done
9. To Add same lot. Instrument must be in READY. Go to Reagents-Status-Assign Location (at bottom). Pick Blank reagent and assign segment and position for R1 and R2. Click Add-Done.

III. QUALITY CONTROL (QC):

- A. Order **UTAK AP** on the analyzer as the control used for DAU. Cannabinoids tend to drift when the reagent is low so when this occurs, put on new reagent. When the QC bottle is low, Cannabinoids are usually the first indicator that a new bottle of QC is needed.
- B. Order Immunoassay Plus Levels 1 through 3, as **IMM PL1, IMM PL2, and IMM PL3**. Immunoassay Plus QC is used for TDM.
- C. Methotrexate controls, **MTX-LMH**, are run daily for Methotrexate. Methotrexate High control requires a dilution weekly. Order MTX DIL on the analyzer weekly for Methotrexate.

IV. SAMPLE TYPES:

- A. **Red Top is the tube of choice for TDM**
- B. Acceptable on SST
 1. Lithium
 2. Digoxin
 3. Theophylline
 4. Valproic Acid
 5. Vancomycin

Approval Signatures

Step Description	Approver	Date
Medical Director	Ann Marie Blenc: System Med Dir, Hematopath	11/1/2022

Policy and Forms Steering Committee Approval (if needed)	Colette Kessler: Mgr, Division Laboratory	10/26/2022
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