

Technical Bulletin

SCPMG Laboratory System - Regional Reference Laboratories

(Revised)

Molecular and Cytopathology Services – 06/25/13

Thyroid Molecular Testing

Beginning June 17, 2013, the Regional Reference Laboratories' Cytopathology Department will process certain fine needle aspirate (FNA) samples for molecular testing with the Asuragen miR*Inform*[®] Thyroid panel.

- Per National Comprehensive Cancer Network guidelines and agreement with SCPMG Endocrinologists, **only patients with a repeat diagnosis of indeterminate thyroid FNA** [Bethesda System Category III: Atypia of Undetermined Significance / Follicular lesion of undetermined significance (AUS/FLUS)] will be tested.
- Initial FNA reports of (AUS/FLUS) will include a comment about submission of a repeat biopsy sample for molecular testing, if clinically indicated.
- The provider will again order **CYTOLOGY AND CELL BLOCK, NON-GYN [88104E]**. The repeat FNA sample for Cytopathology will be submitted together with additional FNA sample in a vial (containing RNA *Retain*[®] preservative solution) for potential reflex molecular testing.
- **If a second AUS/FLUS interpretation is rendered**, molecular studies will be ordered **by the Cytopathologist**, and the vial will be forwarded to Asuragen for molecular studies via the Regional Laboratories' Specimen Processing Department.
- Regional Laboratories' Client Service Center will send the molecular report to ordering provider and to chart room for scanning into KPHC media tab.
- Links to view instructional notes and supporting documents are available through LabNet. Search the test menu for the test *CYTOLOGY AND CELL BLOCK, NON-GYN*. (**Source/site: Thyroid with laterality**)<http://kpnet.kp.org:81/california/scpmg/labnet/testmenu/testmenu.jsp?jsessionid=4FC8DBB568493FCB78A33F135DBD8F06?TID=2290&TNAME=CYTOLOGY+AND+CELL+BLOCK%2C+NON-GYN>

Instructions for FNA collection in RNA *Retain*[®] preservative solution



Unscrew top of small vial (containing RNA *Retain*[®] preservative solution)

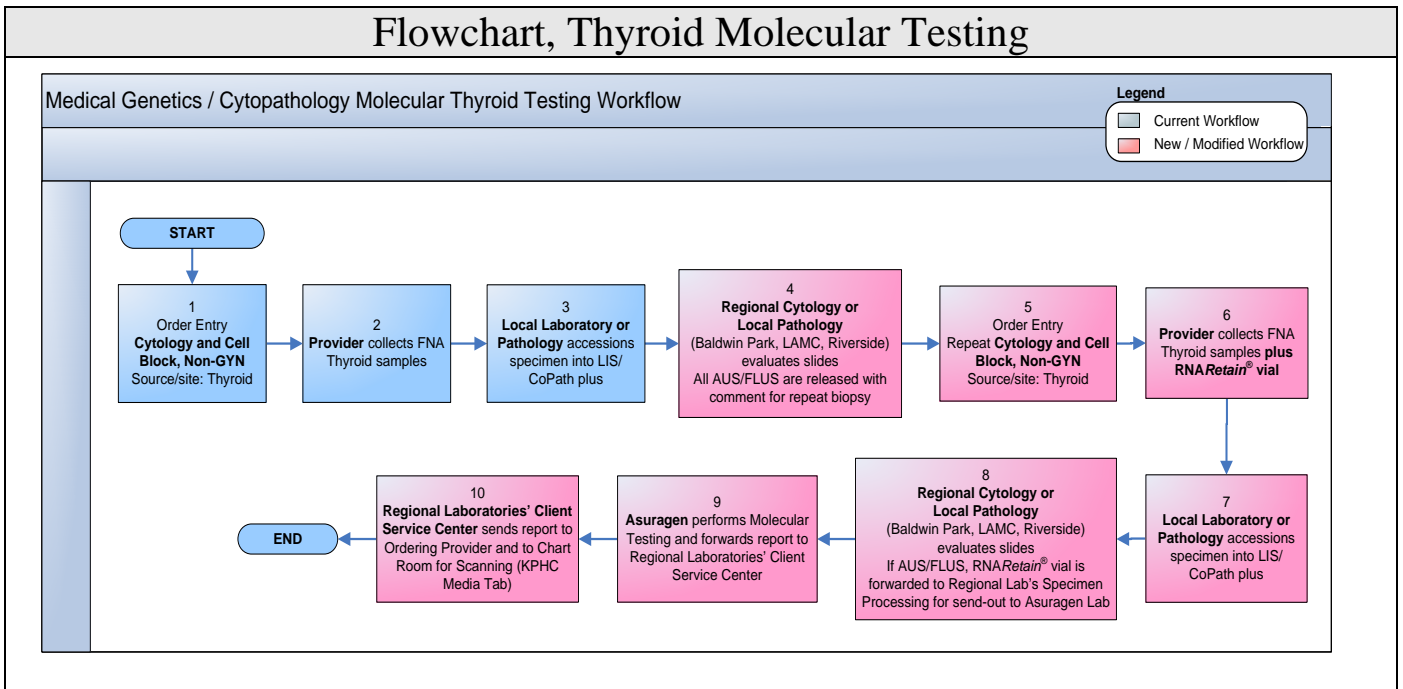


Add remaining aspirated material (minimum 1-2 drops) to vial, washing the needle only, 1-2 times



Screw top back on vial. Label the vial with the patient's name, medical record number and specimen source. Invert vial 2-3 times to mix contents

Flowchart, Thyroid Molecular Testing



Questions?

- Client Service Center, 1-888-4LABNFO, or tie line 397-7077
- Kathy M. Smith, Asst. Lab Manager, Cytopathology Department, 818-503-6996, tie line 397
- Jane Tongson-Ignacio, M.D., Physician In-Charge of Cytopathology, 818-503-6974, tie line 397
- Ruan T. Ramjit, M.D., Assistant Medical Director, Molecular Pathology, 818-502-5959

Specimen collection, Preparation and Transport

Providers

Collection procedure for Thyroid FNA with potential reflex to molecular testing

Note: Additional FNA sample will need to be obtained for the submission of the vial (containing RNA *Retain*[®] preservative solution) for potential reflex to molecular testing. Collect enough total sample for Cytopathology to prepare mirror image smeared slides and a designated aspirate placed in a vial (1-2 drops).

Health Connect Order Code:	CYTOLOGY AND CELL BLOCK, NON-GYN [88104E]
Preparation of slides:	<ol style="list-style-type: none"> 1. After the aspiration is completed, express 1 or 2 drops of the specimen onto the middle of a glass slide with the patient's name, medical record number and specimen source indicating the appropriate laterality written on the frosted end of the slide. 2. Invert another labeled glass slide over the specimen and pull the two slides apart horizontally in a single gentle motion. 3. Fix one of the slides immediately in a Coplin jar with 95% alcohol. 4. Air dry the mirror image slide. When dry, these slides are placed in cardboard folders for transport. 5. Repeat this procedure for all of the slides (suggested number of slides 6 to 8 slides). 6. Any remaining aspirated material may be placed in a container with 10% neutral buffered formalin for cell block preparation. Note: Retain enough contents (1-2 drops) for preparation of the vial. 7. If no slides are prepared, express the entire contents of the syringe into the specimen container with an equal amount of 50% ethyl alcohol. Note: Retain enough contents (1-2 drops) for preparation of the vial. 8. Label the container with the patient's name, medical record number and specimen source with corresponding laterality
Preparation of vial for molecular testing:	<ol style="list-style-type: none"> 1. After preparation of slides, unscrew top of small vial (containing RNA <i>Retain</i>[®] preservative solution) 2. Add remaining aspirated material (minimum 1-2 drops) to vial, washing the needle only, 1-2 times. 3. Screw top back on vial 4. Label the vial with the patient's name, medical record number and specimen source. 5. Invert vial 2-3 times to mix contents <p>(Refer to attached instructions - <i>Instructions for FNA collection in RNA Retain[®] preservative solution</i>)</p>
Preparation and Transport:	<ol style="list-style-type: none"> 1. Complete a Non-Gynecologic Cytology Requisition with the patient's name, medical record number, specimen source with corresponding laterality, and clinical history. 2. Place samples and completed Non-Gynecologic Cytology Requisition into specially designated Cytology Poly Bag (specially designated for Thyroid FNA with molecular testing) and send to your medical center laboratory.
Supplies:	Additional RNA <i>Retain</i> [®] vials may be ordered by contacting Regional Specimen Processing at (818) 503-7077 [tie line 8-397]

Laboratories

KPDS Procedure Code:	NON-GYN CYTOLOGY [8811011]
Preparation and Transport:	After accessioning, return specimen container/slide holder, vial and Non-Gynecologic Cytology Requisition into specially designated Cytology Poly Bag
Transport Temperature:	Ambient
Transport Instructions:	Send specimen to the Regional Laboratories' Specimen Processing Department.