

FLUID CYT LOGY

An Indispensable Tool to Detect Tumor & Beyond

Ascitic/Peritoneal fluid | Pericardial fluid

Pleural fluid | CSF | Urine

Why Choose Fluid Cytology for malignant cells?



Least invasive as compared to a biopsy.



Effusion fluid easily collected in large quantity as a part of therapeutic procedure.



Certain sites are difficult to access for a biopsy/Fnac.



Cell blocks help in establishing proper morphology.

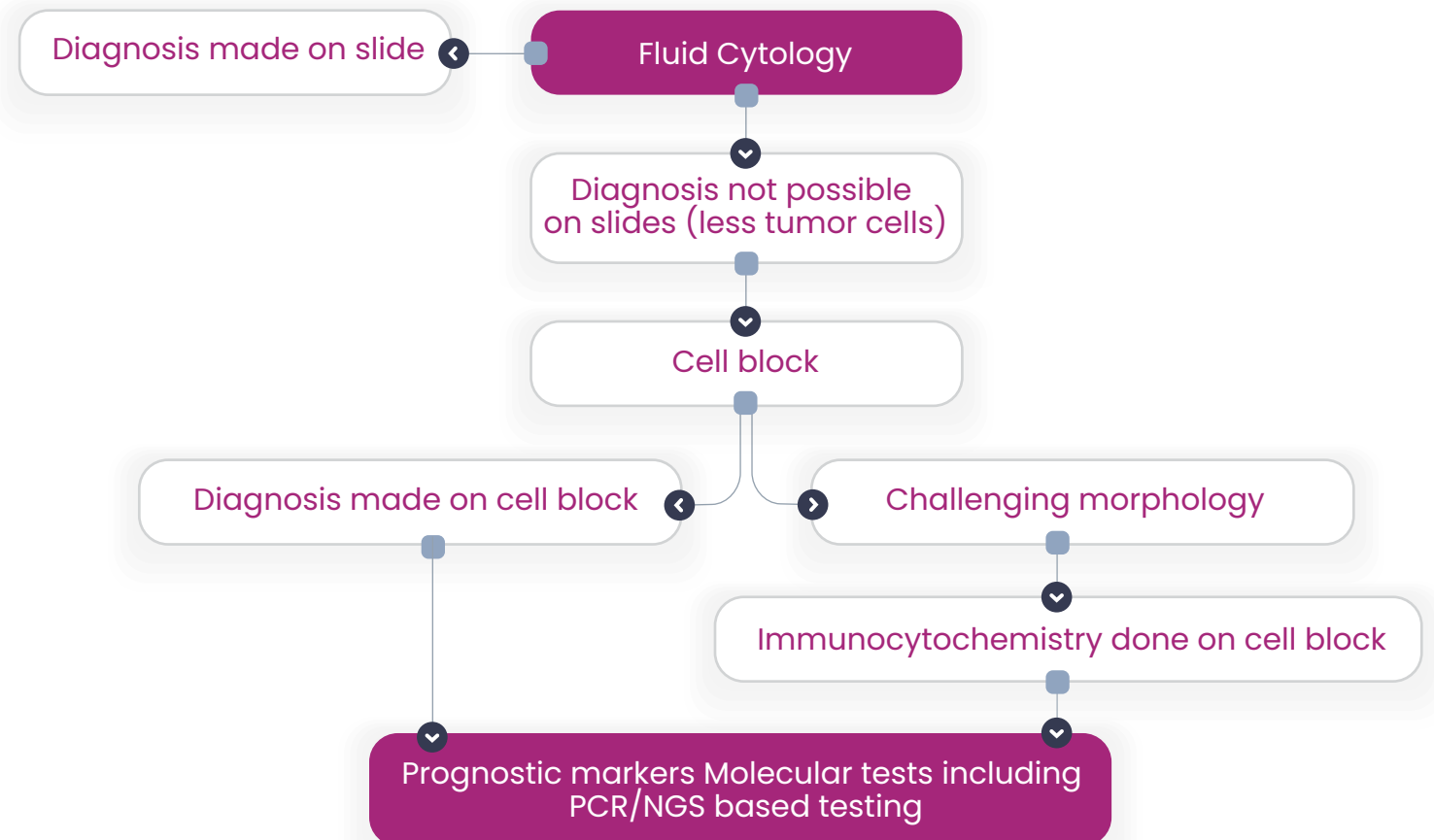


Immunocytochemistry can be done.



All molecular based tests can also be done when significant material is obtained.

Approach to Fluid Cytology & Tumor Identification



What makes fluid cytology the better choice over biopsy?



Pleural Fluid / Pericardial Fluid

In a patient with pleural effusion, cytological study (CS) is one of the most useful investigations, especially when malignancy is suspected. Instead of applying only cytology, the pleural fluid can be further processed using the cell block (CB) technique, which may augment the diagnostic utility



Ascitic/ Peritoneal Fluid

- Most common—Ovarian carcinoma, Gastric carcinoma, Colorectal carcinoma, Hepatocellular carcinoma, Neuroendocrine carcinoma
- Further ICC on slides or cellblock based diagnosis.
- More easily available fluid in large quantity



CSF

- Lymphoma/ Leukemia/ Any other tumors (metastasis from solid organ tumors)
- Cell block for confirmation of the same. In case of unknown carcinoma Mets, ICC to identify the same



Molecular Testing

- Once the diagnosis established with significant material
- Molecular tests including PCR and NGS based testing for the tumors will follow from the material extracted in the cell blocks
- **Other Prognostic markers**
 - Adenocarcinoma lung- TTF 1, Napsin A, CK7 p40 in Immunocytochemistry
 - Squamous cell carcinoma- p40, TTF1
 - Mesothelioma- WT1, Calretinin, BAP-1
 - Other causes Lymphocytic effusion- Lymphoma- (CD3, CD5, CD 20, etc)



Urine

- To rule out urinary bladder carcinoma in suspected individuals
- Morphology sometimes deterred by neutrophils or debris
- Cellblock assists in better confirmation of the bladder carcinoma

What can be done on fluid cytology?



Morphology
To identify the Carcinoma



Immunocytochemistry
on slides



Cell block
for Immunocytochemistry/
RT-PCR/ NGS diagnosis



Test Ordering Information

Test Code	Test Name	Specimen Type	TAT
C0045	Cytology for Malignant Cells	5 ml Body fluids sterile container	3 Days
F0012	Fine needle aspiration cytology	Minimum 3 FNAC slides	Next Day
Cyto001	Fluid cytology	3 ml Pleural Fluid/Ascitic Fluid/CSF	Next Day
L0003	LBC-PAP Smear, Cervical/vaginal Swab	14ml cervical/vaginal swab	3 Days

Report Illustration

Type of fluid : **Pleural** | **Sputum** | **Ascitic** | **Pericardial** | **Synovial** | **CSF** | **Urine**

Volume of fluid : _____ ml

Nature of fluid : **color/ consistency**

Clinical diagnosis :

Microscopic examination :

Differential count :

Impression :

Reference: Comprehensive Cytopathology, Fourth edition, Marluce Bibbo and David Wilbur.

Name of Salesperson: Contact:

 support@mfine.co

 www.mfine.co