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**Reporting Title:** Adult ALL (T-cell), FISH**Performing Location:** Rochester**Ordering Guidance:**

This test is only performed on specimens from patients with T-cell acute lymphoblastic leukemia (T-ALL) who are 31 years and older.

This test is intended for instances when the entire T- ALL fluorescence in situ hybridization (FISH) panel is needed for an adult patient.

-If this test is ordered on a patient 30 years of age or younger, this test will be canceled and automatically reordered by the laboratory as TALPF / T-Cell Acute Lymphoblastic Leukemia/Lymphoma (ALL), FISH, Pediatric, Varies.

-If this test is ordered and the laboratory is informed that the patient is on a Children's Oncology Group (COG) protocol, this test will be canceled and automatically reordered by the laboratory as COGTF / T-Cell Acute Lymphoblastic Leukemia/Lymphoma (ALL), Children's Oncology Group Enrollment Testing, FISH, Varies.

-If BALAF / B-Cell Acute Lymphoblastic Leukemia/Lymphoma (ALL), Adult, FISH, Varies is ordered concurrently with this test, the laboratory may cancel TALAF and automatically reorder as TALMF / T-Cell Acute Lymphoblastic Leukemia/Lymphoma (ALL), Specified FISH, Varies with the following FISH probes: TLX3/BCL11B, break-apart TRB, break-apart TRAD, MLLT10/PICALM, TAL1/STIL. If an abnormality is identified that would result in reflex testing in TALAF, the same reflex testing will be performed in the TALMF. This cancellation is necessary to avoid duplicate testing. Probes for break-apart PDGFRB, break-apart JAK2, CDKN2A/D9Z1, ABL1/BCR, break-apart ABL1, break-apart MLL, TP53/D17Z1 will still be performed as part of the adult B-ALL FISH panel.

If limited T-cell ALL FISH probes are preferred, order TALMF / T-Cell Acute Lymphoblastic Leukemia/Lymphoma (ALL), Specified FISH, Varies.

At follow-up, conventional cytogenetic studies (CHRBM / Chromosome Analysis, Hematologic Disorders, Bone Marrow) and targeted T-ALL FISH probes can be evaluated based on the abnormalities identified in the diagnostic study. Order TALMF / T-Cell Acute Lymphoblastic Leukemia/Lymphoma (ALL), Specified FISH, Varies and request specific probes or abnormalities.

If the patient clinically relapses, a conventional chromosome study is useful to identify cytogenetic changes in the neoplastic clone or the possible emergence of a new therapy-related myeloid clone.

For patients with T-cell lymphoma, order TLPDF / T-Cell Lymphoma, Diagnostic FISH, Varies.

For testing paraffin-embedded tissue samples from patients with T-cell lymphoblastic lymphoma, order TLBLF / T-Lymphoblastic Leukemia/Lymphoma, FISH, Tissue. If a paraffin-embedded tissue sample is submitted for this test, testing will be canceled and TLBLF will be added and performed as the appropriate test.

**Additional Testing Requirements:**

At diagnosis, conventional cytogenetic studies (CHRBM / Chromosome Analysis, Hematologic Disorders, Bone Marrow) and this fluorescence in situ hybridization (FISH) panel should be performed. If there is limited specimen available, only this test will be performed.

**Shipping Instructions:**

Advise Express Mail or equivalent if not on courier service.

**Necessary Information:**

A reason for testing and a flow cytometry and/or a bone marrow pathology report should be submitted with each specimen. The laboratory will not reject testing if this information is not provided; however, appropriate testing and interpretation may be compromised or delayed. If not provided, an appropriate indication for testing may be entered by Mayo Clinic Laboratories.

**Specimen Requirements:**

Submit only 1 of the following specimens:

**Preferred**

Specimen Type: Bone marrow

Container/Tube:

Preferred: Yellow top (ACD)

Acceptable: Green top (heparin) or lavender top (EDTA)

Specimen Volume: 2 to 3 mL

Collection Instructions:

1. It is preferable to send the first aspirate from the bone marrow collection.
2. Invert several times to mix bone marrow.
3. Send bone marrow specimen in original tube. Do not aliquot.

**Acceptable**

Specimen Type: Blood

Container/Tube:

Preferred: Yellow top (ACD)

Acceptable: Green top (heparin) or lavender top (EDTA)

Specimen Volume: 6 mL

Collection Instructions:

1. Invert several times to mix blood.
2. Send whole blood specimen in original tube. Do not aliquot.

**Specimen Minimum Volume:**

Blood: 2 mL

Bone Marrow: 1 mL

**Forms:**

If not ordering electronically, complete, print, and send a Hematopathology/Cytogenetics Test Request (T726) with the specimen.

Specimen Type	Temperature	Time	Special Container
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Varies	Ambient (preferred)	
	Refrigerated	

## Ask at Order Entry (AOE) Questions:

Test ID	Question ID	Description	Type	Reportable
TALAF	GC071	Reason for Referral	Plain Text	Yes
TALAF	GC072	Specimen: • Whole blood ACD • Bone marrow ACD • Whole blood Na Hep • Bone marrow Na Hep • Whole blood EDTA • Bone marrow EDTA	Answer List	Yes

## Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
609558	Result Summary	Alphanumeric		50397-9
609559	Interpretation	Alphanumeric		69965-2
609560	Result Table	Alphanumeric		93356-4
609561	Result	Alphanumeric		62356-1
GC071	Reason for Referral	Alphanumeric		42349-1
GC072	Specimen	Alphanumeric		31208-2
609562	Source	Alphanumeric		31208-2
609563	Method	Alphanumeric		85069-3
609564	Additional Information	Alphanumeric		48767-8
609565	Disclaimer	Alphanumeric		62364-5
609566	Released By	Alphanumeric		18771-6

LOINC and CPT codes are provided by the performing laboratory.

## Supplemental Report:

No

## CPT Code Information:

88271x20, 88275x10, 88291x1-FISH Probe, Analysis, Interpretation; 10 probe sets

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88271x2, 88275x1-FISH Probe, Analysis; each additional probe set (if appropriate)

**Reflex Tests:**

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
TALAB	Probe, Each Additional (TALAF)			No	No (Bill Only)

**Reference Values:**

An interpretive report will be provided.