



**Juravinski  
Hospital and  
Cancer Centre**

HAMILTON HEALTH SCIENCES

# Acute Leukemia Referral Process: Information for Referring Hospitals

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## Purpose

The purpose of this document is to provide information on the process for referring a confirmed or suspected acute leukemia patient to the acute leukemia service site at Juravinski Hospital and Cancer Centre (JHCC).

## When to Initiate a Referral

The diagnosis of acute leukemia is often suspected when circulating blasts are detected on a peripheral blood smear, or unexpectedly on a bone marrow aspirate or biopsy sample. Considering the aggressive and proliferative nature of acute leukemia, a confirmed or suspected case is a medical emergency, and referral to an acute leukemia service site should be initiated immediately.

## How to Initiate a Referral to the Acute Leukemia Service Site at JHCC

- The referring physician must contact the hematologist on-call at JHCC to initiate the referral process (refer to JHCC Acute Leukemia Referral Process – Appendix 1).
- A referral package must be sent by fax to the hematologist on-call. The referral package must include the following information:
  - ✓ Patient demographics (name, address, telephone #, health card number, etc.).
  - ✓ Contact information for patient and next of kin.
  - ✓ Referring physician name and title/position.
  - ✓ Admission note and/or consult note and/or clinic notes.
  - ✓ Trended blood work (CBC, differential, coagulation studies, etc.).
  - ✓ Relevant imaging and diagnostic reports.
  - ✓ Pathology reports (peripheral blood, bone marrow, and/or tissue). **If reports are not yet available, please indicate what testing you have sent specimens for and specify the laboratory processing the specimens.**

### Critical Points

- Referral **must not** be delayed if the above information or documents are not readily available.
- **Do not** wait for results of bone marrow aspirate or biopsy to initiate referral.
- It is important to specify the laboratory processing the bone marrow specimens to ensure timely access to results.

## What to Expect after a Referral

The hematologist on-call at JHCC will triage the referral based on the referral information. At this point, two critical assessments are made:

### 1. Is the patient eligible for intensive induction chemotherapy?

Although treatment of acute leukemia in patients older than 70 years is challenging, age alone is not the sole factor in determining eligibility for intensive induction chemotherapy. The decision is made on a case-by-case basis.

### 2. Is an urgent transfer to JHCC required?

Several factors will determine the urgency of transfer to JHCC including:

- High risk features: blast count higher than  $50 \times 10^9/L$ .
- Suspected APL.
- Presence of coagulopathy.
- Clinical instability (e.g. infection, hemodynamic changes, etc.).
- Supportive services available at referring hospital (e.g. hematologist on site, blood products, etc.).
- Comorbidities (e.g. renal insufficiency, cardiac conditions, etc.).

Based on the triage information (Goy, et. al, 2017), you can expect any of following to occur:

**I. Category 1: High-risk patient requiring immediate transfer to JHCC**

Arrangements will be made to transfer patient to the inpatient ward or ICU at JHCC within 24 hours.

*Examples of a Category 1: 1) A patient presenting with one or more high risk features who is eligible for intensive induction chemotherapy. 2) A patient with suspected diagnosis of APL.*

**II. Category 2: Stable patient requiring non-immediate transfer to JHCC**

Arrangements will be made to transfer the patient to the inpatient hematology ward at JHCC within 48 to 72 hours.

*Example of a Category 2: A clinically stable patient presenting with absence of any of the high risk features, and who is eligible for intensive induction with chemotherapy.*

**III. Category 3: Stable patient not eligible for intensive induction chemotherapy**

Arrangements will be made for patient to be seen as an outpatient consultation at JHCC.

*Example of a Category 3: A clinically stable 78 years old patient with absence of any of the high risk features, and who is not eligible for intensive induction with chemotherapy.*

**Critical Points**

- Patients with a suspected diagnosis of APL are Category 1.
- Decision on timing to transfer is made on a case-by-case basis, and takes into consideration the patient's clinical stability, appropriate care setting required (ward or ICU), and capacity at JHCC.

**Criteria for Transferring Your Patient for an Outpatient Consultation**

Category 3 patients must be assessed for safety and appropriateness for an outpatient consultation to ensure they are cared for safely. Patients must meet the following criteria (Cancer Care Ontario, 2019):

- Patient must be conscious, alert, and oriented.
- Hemodynamically stable:
  - ✓ Blood pressure stable, and patient does not require fluid resuscitation.
  - ✓ Oxygen saturation greater than 93%, and must not be on more than 35% O<sub>2</sub> via mask.
  - ✓ No transfer direct from ICU.
  - ✓ Laboratory values are reviewed, and patient does not require electrolytes replacement during transport to consultation.
  - ✓ No new onset of chest pain.
- Must not require more than one person to assist with mobility.
- Isolation precautions are appropriate for an outpatient setting.
- Has an escort as per ambulance transfer guidelines for patients arriving by ambulance.
- Patient is informed that transfer is to an outpatient setting.

**Critical Point**

- If a patient does not meet at least one of the above criteria, JHCC hematologist on-call must be contacted to determine the safest setting for the consult to take place.
- Appropriateness of virtual consultation will be considered on a case-by-case basis.

## References

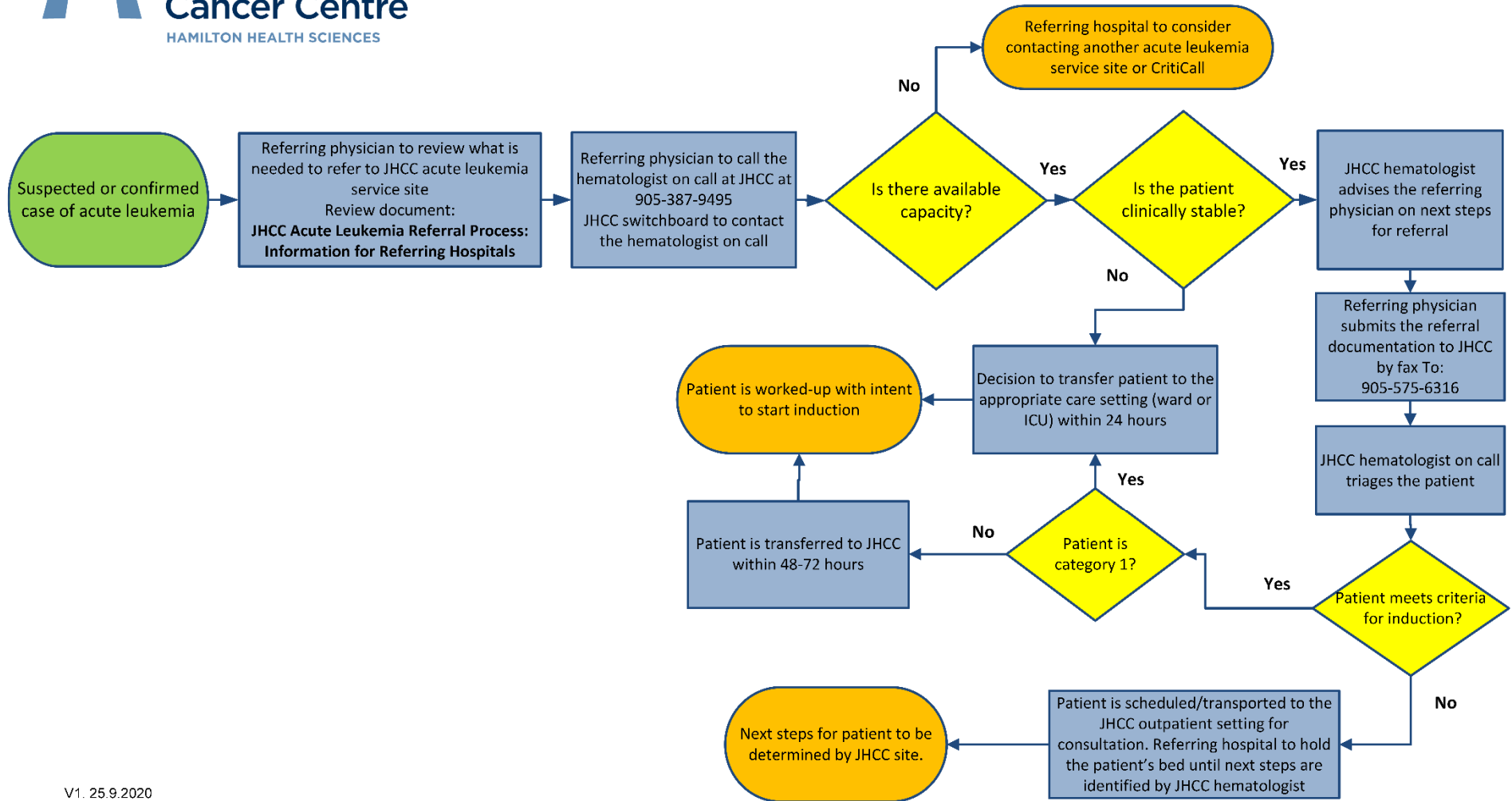
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2. Referral Information for Acute Leukemia (2019), Cancer Care Ontario. Accessed on July 15, 2020 at <https://www.cancercareontario.ca/en/cancer-care-ontario/programs/clinical-services/specialized-services-oversight/acute-leukemia/referral-informatio>



## Appendix 1



### Referral Process to The Acute Leukemia Service Site at Juravinski Hospital and Cancer Centre



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