NOVARTIS

**For Hematology and Oncology Centers Using Oracle Health (Cerner)**

# Help With Identifying Ph+ CML-CP Patients for Treatment Evaluation

This Guide Provides an Overview for Using Patient Reports and Alerts to Identify Ph+ CML-CP Patients for Evaluation.

Ph+ CML-CP, Philadelphia Chromosome Positive Chronic Myeloid Leukemia Chronic Phase.

## Using This Guide and EHR Worksheets

This Guide is not intended to provide any clinical advice or recommendations, which are solely the responsibility of the health system. Please see the important statistics on the following page that highlight the unmet needs of CML patients who are struggling with drug resistance, unmanageable side effects, or other suboptimal results with treatment.

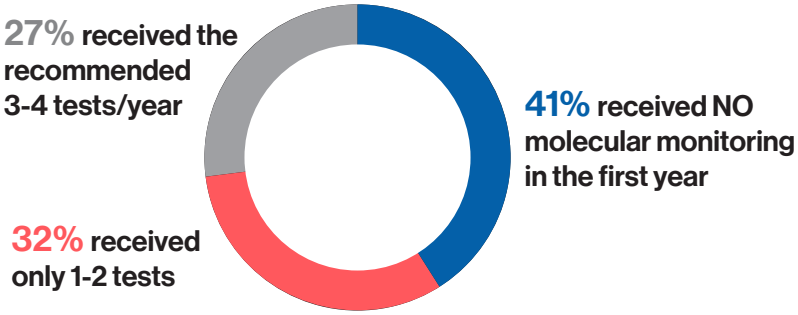
This Guide can help clinical decision makers implement automated EHR functionalities to identify and evaluate care for Ph+ CML-CP patients who may benefit from a treatment switch. It provides examples of Discern Analytics Patient List Reports and Discern Alerts, along with EHR Worksheets. The EHR Worksheets provide a list of criteria and/or actions to consider including when creating Discern Analytics Patient List Reports and Discern Alerts. The EHR Worksheet can be customized, saved, and reused. It does not constitute guidance for medical advice or treatment.

The information listed in this Guide is based upon the most recent version of Oracle Health (Cerner). Functions and features may change as new software versions are released. The Guide and EHR Worksheet are meant to serve as educational examples only and should not replace detailed instructions provided to you by your internal or external EHR support resources. Screen images shown within represent hypothetical screens in Oracle Health (Cerner). Novartis makes no claims or warranties about the applicability or appropriateness of this information and does not endorse specific EHR systems.

EHR, Electronic Health Record.

## Real-world evidence reveals significant underutilization of molecular monitoring

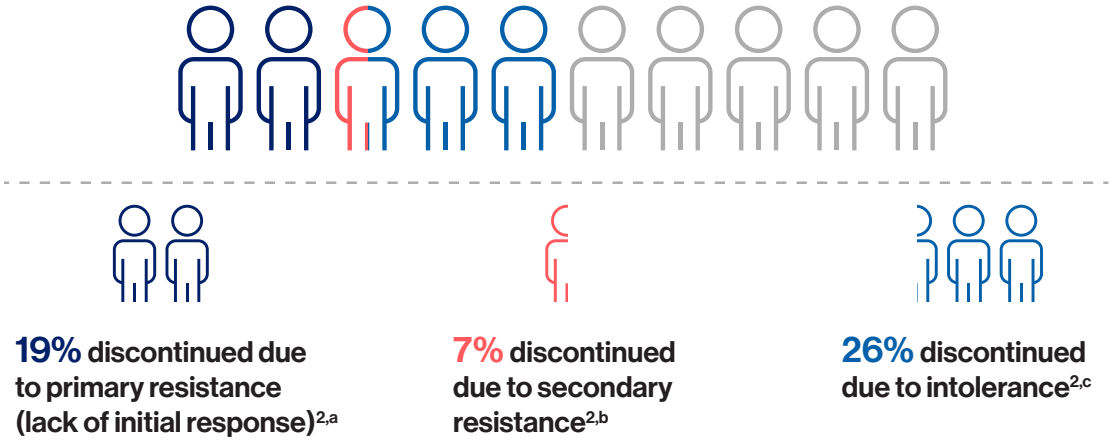
**A claims database review of 1205 patients with newly diagnosed CML found that[1]:**




Studies suggest that <30% of patients with CML are monitored according to clinical practice guidelines during the first year of TKI treatment.[1]

## Lack of initial response, resistance, and intolerance are key drivers of treatment discontinuation of TKI therapy

**In a study of 119 patients with CML-CP treated with 2L TKIs, 52% discontinued 2L TKI due to resistance or intolerance[2]**




TKI, Tyrosine Kinase Inhibitor.

[a]Primary resistance is defined as lack of efficacy (failure to achieve landmark responses) from the onset of treatment.[3]
[b]Secondary resistance, also known as acquired resistance, is considered loss of response to treatment.[4]
[c]Intolerance is considered when a patient develops an adverse event that cannot be managed through dose reduction or treatment of symptoms.[5]

Treatment intolerance may lead to nonadherence in patients receiving TKI therapy

# Treatment intolerance may lead to nonadherence in patients receiving TKI therapy

### Some patients are intolerant to TKIs,

with up to ~25% of patients discontinuing treatment due to an adverse event[6]

### Up to ~30% of patients with CML are nonadherent.[7]

Nonadherence may be a factor associated with higher health care costs, suboptimal response, disease progression, and mortality[8-10]

# EHR Capabilities Can Help to Stratify CML Patients

Clinical champions within an organization can advocate for the configuration of EHR capabilities such as Discern Analytics Patient List Reports and Discern Alerts.

## Role of Discern Analytics Patient List Reports

Discern Analytics Patient List Reports are Oracle Health (Cerner) system reports that can be used to stratify CML patients. Patient List Reports can be generated using Discern Analytics.

Discern Analytics Patient List Reports can be used to demonstrate and champion the need for follow-up care within an organization. They can also be used for planning purposes to understand for which patients a Discern Alert would display.

Available criteria to generate these reports can include patient gender, age, diagnosis, lab result values, and medications.

Total Patients: 25 Patient List:
Updated: Tue Nov 29 2023 15:45:24 View Type: SUMMARY

**Report Title**

| Patient Name | Med Rec# | Age | Sex | Date | BCR::ABL1 Result |
|---|---|---|---|---|---|
| Smith, Betty | 8013335459 | 67 | F | 8/3/2023 | 0.0178 |
| | | | | 2/28/2023 | 0.0189 |
| | | | | 11/18/2023 | 0.0198 |
| Jones, Sam | 8013345789 | 71 | M | 4/20/2023 | 0.0137 |
| | | | | 9/15/2023 | 0.0156 |
| | | | | 6/20/2023 | 0.0198 |
| Abner, Darlene | 8013238521 | 66 | F | 7/20/2023 | 0.0142 |
| | | | | 6/10/2023 | 0.0169 |
| Carlson, Sandra | 8013208132 | 80 | F | 8/14/2023 | 0.0165 |
| | | | | 7/5/2023 | 0.0192 |
| | | | | 5/1/2023 | 0.0198 |

Hypothetical example of a Discern Analytics Patient Report

**Note: In Oracle Health (Cerner), a Discern Analytics Patient List Report can be created by the EHR support team and saved to a folder for on-demand running or scheduling.**

BCR, breakpoint cluster region; ABL, Abelson.

# EHR Capabilities Can Help to Stratify CML Patients (continued)

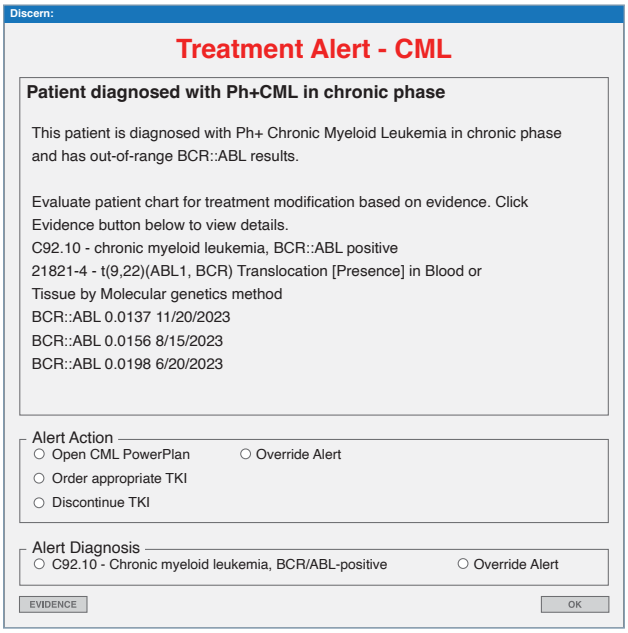
## Role of Discern Alerts

Discern Alerts are displayed at the point of care to remind or alert providers.

As part of an organization's care quality EHR initiative, Discern Alerts can help proactively identify at-risk

Ph+ CML-CP patients with unmet needs when they come in for an appointment.

Discern Alerts can be configured in a meaningful way which specifies the patient criteria and milestones within the EHR workflow, provider types (eg, health care professionals, care managers), and clinical action.




*Hypothetical example of a Discern Alert*

## Optional Use of EHR Worksheets in This Guide

An interactive, digital EHR worksheet that follows is intended to assist health systems in configuring their EHR capabilities to help identify Ph+ CML-CP patients in need of additional care. It outlines the criteria that need to be defined in an IT request for creating Discern Analytics Patient List Reports and Discern Alerts.

The EHR Worksheet can help translate desired clinical parameters for identifying CML patients with suboptimal results from CML treatment into categories and values for EHR functions. Once the EHR Worksheet is completed, it can be saved under a new name. Then, the EHR Worksheet can be reused or edited if the criteria selected results in a patient population that is too broad or too narrow.

The codes are provided for reference purposes only and may not be all inclusive. The responsibility to determine coverage and reimbursement parameters, and appropriate coding for a particular patient and/or procedure, is always the responsibility of the physician. The EHR Worksheet includes categories of selection criteria for health systems to consider when seeking to identify and evaluate appropriate patients.

### Actions for a clinical champion:

1

Start by selecting the inclusion and exclusion criteria to define the specific search parameters for finding and evaluating CML patients with suboptimal results from CML treatment.

2

Then, specify the data that will be displayed on the Discern Analytics Patient List Report by selecting columns for provider evaluation and review. After reviewing the Discern Analytics Patient List Report, clinical champions may wish to broaden or narrow the criteria and values to refine the list of patients according to their preferences.

3

Utilizing the criteria in Step 1, choose the language, display restrictions, and clinical actions for the Discern Alert, that will appear to prompt treatment evaluation by care team members.

### The following pages help identify TKI-resistant and/or intolerant patients with specific criteria:

| | | | |
|---|---|---|---|
| Patients with a missing or overdue BCR::ABL test | Patients who are non-compliant with TKI medication prescriptions that have lapsed | Patients who are not meeting treatment milestones and may be TKI-resistant | Patients who are struggling with side effects and may be TKI-intolerant |

# Patient With a Missing or Overdue BCR::ABL Test

Before you begin to build on this topic, it's important to consider several key technical questions that will influence the impact of your BCR::ABL program.

### Technical Considerations:

**Are results interfaced back to your EHR?**

| OPTION | ACTIONS |
|---|---|
| **Yes** – our results interface returns BCR::ABL results and completes the original order | Proceed with EHR report and Discern Alert build |
| **No** – we don't receive results digitally to our EHR | Do not proceed with build – pursue an interfaced result option with your interfaces team before moving forward |

**If yes above, are interfaced results filed to discrete result values in your EHR?**

| OPTION | ACTIONS |
|---|---|
| **Yes** – our results interface returns BCR::ABL results and completes the original order | Proceed with EHR report and Discern Alert build |
| **No** – we don't receive results digitally to our EHR | Do not proceed with build – pursue an interfaced result option with your interfaces team before moving forward |

### Operational Impact:

If you are not receiving discrete results for your BCR::ABL tests, the build is still possible but there is a greater operational burden placed upon the program.

Reports that are built to identify patients with missing or overdue results will return patients who have had the order completed but the EHR won't be able to return that data. This places the onus of follow-up onto whoever is managing the reports and the population. In other words, operational owners running these reports will need to do manual follow-up in the chart or with the patient directly to determine if the result was completed and then manually key those results into the patient's chart.

Given the relatively small size of the population who would be doing this testing, this may not be a significant lift and may be worth it for your organization. However, it's important to plan for the additional workload.

# Patient With a Missing or Overdue BCR::ABL Test

## Inclusion Criteria for Patient Report and Discern Alert

INCLUSION CRITERIA

| CATEGORY ("AND" CRITERIA) | ✓ | VALUES | | |
|---|---|---|---|---|
| **Patient Status** | | Alive | | |
| **Population (select one)** | | Only my patients | | |
| | | Seen in my department | | |
| | | All patients who meet the criteria | | |
| | | Other | | |
| **Age (eg ≥18)** | | > < | | |
| | | | | |
| **Diagnosis/ Clinical Findings (select ≥ 1) "or" criteria** | ✓ | **Description** | **Code Set** | **Code[11,12]** |
| | | chronic myeloid leukemia, BCR::ABL positive | ICD-10 | C92.10 |
| | | chronic myeloid leukemia, BCR::ABL positive, in remission | ICD-10 | C92.11 |
| | | chronic myeloid leukemia, BCR::ABL positive, in relapse | ICD-10 | C92.12 |
| | | chronic myeloid leukemia, disease; disorder | SNOMED | 92818009 |
| | | myeloid leukemia in relapse; disorder | SNOMED | 122901000119109 |
| | | relapsing chronic myeloid leukemia; disorder | SNOMED | 415287001 |
| | | chronic myeloid leukemia category; morphologic abnormality | SNOMED | 413841000 |
| | | chronic phase chronic myeloid leukemia; disorder | SNOMED | 413847001 |
| **Lab tests missing or overdue (select a lab test and specify a date range)** | ✓ | **Description** | **Code Set** | **Code[13]** |
| | | t(9,22)(ABL1,BCR) Translocation [Presence] in Blood or Tissue by Molecular genetics method | LOINC | 21821-4 |
| | | | Local | |
| | BCR::ABL Date Range<br>Date of BCR::ABL lab result<br>(eg, greater than 6 months is [>m-6]) | | Date range: - | |

# Patient With a Missing or Overdue BCR::ABL (continued)

## Exclusion Criteria for Patient Report and Discern Alert

| | CATEGORY ("AND" CRITERIA) | ✓ | VALUES | | |
|---|---|---|---|---|---|
| EXCLUSION CRITERIA | **Patients who have had a BCR::ABL ordered in the past X days** | ✓ | **Description** | **Code Set** | **Code[13]** |
| | | | BCR::ABL1 kinase domain targeted mutation analysis | LOINC | 55135-8 |
| | | | | Local | |
| | | BCR::ABL Order Date Range<br>Timeframe for capturing BCR::ABL order<br>(eg, [m-1] for 30 days) | | Date range: - | |
| | **Patients who have had a BCR::ABL result in the past X days (select a lab test and specify a date range)** | ✓ | **Description** | **Code Set** | **Code[13]** |
| | | | t(9,22)(ABL1,BCR) Translocation [Presence] in Blood or Tissue by Molecular genetics method | LOINC | 21821-4 |
| | | | | Local | |
| | | BCR::ABL Date Range<br>Date of BCR::ABL lab result<br>(eg, greater than 6 months is [>m-6]) | | Date range: - | |

# Patient With a Missing or Overdue BCR::ABL (continued)

## Report Output Columns

REPORT OUTPUT COLUMNS

| CATEGORY | ✓ | VALUES | | |
|---|---|---|---|---|
| **Patient Demographics** | | Patient ID (MRN) | | |
| | | Name | | |
| | | DOB | | |
| | | Phone Number | | |
| | | Oracle Health Patient Portal Status | | |
| **Diagnosis/ Clinical Findings** | ✓ | **Description** | **Code Set** | **Code[11,12]** |
| | | chronic myeloid leukemia, BCR::ABL positive | ICD-10 | C92.10 |
| | | chronic myeloid leukemia, BCR::ABL positive, in remission | ICD-10 | C92.11 |
| | | chronic myeloid leukemia, BCR::ABL positive, in relapse | ICD-10 | C92.12 |
| | | chronic myeloid leukemia, disease; disorder | SNOMED | 92818009 |
| | | myeloid leukemia in relapse; disorder | SNOMED | 122901000119109 |
| | | relapsing chronic myeloid leukemia; disorder | SNOMED | 415287001 |
| | | chronic myeloid leukemia category; morphologic abnormality | SNOMED | 413841000 |
| | | chronic phase chronic myeloid leukemia; disorder | SNOMED | 413847001 |
| **Payer** | | Insurance Coverage Name | | |
| **Last Documented BCR::ABL Results** | | LOINC Code | | |
| | | Description | | |
| | | Value | | |
| | | Date | | |
| **Additional Clinical Criteria** | | | | |

# Patient With a Missing or Overdue BCR::ABL (continued)

## Discern Alert Content

| | CATEGORY | ✓ | VALUES |
|---|---|---|---|
| DISCERN ALERT CONTENT | **Discern Alert Name (eg, Patients with missing/ overdue BCR::ABL.)** | | |
| | **Message to include in Discern Alert (eg, "This patient with CML has missing BCR::ABL lab tests.")** | | |
| | **Data to include in Discern Alert** | | Most recent BCR::ABL lab value |
| | | | Diagnosis |
| | | | Additional Clinical Criteria |
| | **Clinical actions to take based on the Discern Alert** | | CML PowerPlan Name # |
| | | | Order BCR::ABL lab test |
| | | | Order Appropriate Medication |
| | | | Add Diagnosis C92.10 |
| | | | Additional Orderable Items to Include |

## Noncompliant Patient

Before you begin to build on this topic, it's important to consider several key technical questions that will influence the impact of your BCR::ABL program.

### Technical Considerations:

Is medication adherence data returned by your e-prescribing vendor (ie, Surescripts)?

| OPTION | ACTIONS |
|---|---|
| **Yes** – we receive data back from our eRx vendor on fills and other adherence items | Proceed with EHR report and Discern Alert build |
| **No** – we don't receive any med adherence data | Proceed with EHR report and Discern Alert build but note operational impact below |

### Operational Impact:

If you are not receiving TKI medication adherence data back from your vendor, the build is still possible but there is a greater operational burden placed upon the program.

Reports that are built to identify patients with late or missing medication fill data will return patients who may have had the medication filled despite data showing the opposite. This places the onus of follow-up onto whoever is managing the reports and the population. In other words, operational owners running these reports will need to do manual follow-up in the chart or with the patient directly to determine if the medication was filled.

Given the relatively small size of the population, this may not be a significant lift and may be worth it for your organization. However, it's important to plan for the additional workload.

# Noncompliant Patient

## Inclusion Criteria for Patient Report and Discern Alert

INCLUSION CRITERIA

| CATEGORY ("AND" CRITERIA) | ✓ | VALUES | | |
|---|---|---|---|---|
| **Patient Status** | | Alive | | |
| **Population (select one)** | | Only my patients | | |
| | | Seen in my department | | |
| | | All patients who meet the criteria | | |
| | | Other | | |
| **Age (eg ≥18)** | | > < | | |
| | | | | |
| **Diagnosis/ Clinical Findings (select ≥ 1) "or" criteria** | ✓ | **Description** | **Code Set** | **Code[11,12]** |
| | | chronic myeloid leukemia, BCR::ABL positive | ICD-10 | C92.10 |
| | | chronic myeloid leukemia, BCR::ABL positive, in remission | ICD-10 | C92.11 |
| | | chronic myeloid leukemia, BCR::ABL positive, in relapse | ICD-10 | C92.12 |
| | | chronic myeloid leukemia, disease; disorder | SNOMED | 92818009 |
| | | myeloid leukemia in relapse; disorder | SNOMED | 122901000119109 |
| | | relapsing chronic myeloid leukemia; disorder | SNOMED | 415287001 |
| | | chronic myeloid leukemia category; morphologic abnormality | SNOMED | 413841000 |
| | | chronic phase chronic myeloid leukemia; disorder | SNOMED | 413847001 |
| **Medications (to identify patients who have lapsed TKI therapies and may be struggling with side effects) "or" criteria**<br><br>**Note: Insert FDA approved TKIs (or other medications) here.** | ✓ | **Description** | **Code Set** | **Code** |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | Patients who have TKI medications that have lapsed (eg, 30-day prescription + 2 refills = 90 days supply, current date is >90 days from the original prescription, and not renewed with additional refills) | | Lookback period: (starting today)<br><br>or<br><br>Date range: - |

# Noncompliant Patient (continued)

## Exclusion Criteria for Patient Report and Discern Alert

| EXCLUSION CRITERIA | CATEGORY | ✓ | VALUES | | |
|---|---|---|---|---|---|
| | Health system to add exclusion criteria if desired | ✓ | Description | Code Set | Code |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

# Noncompliant Patient (continued)

## Report Output Columns

REPORT OUTPUT COLUMNS

| CATEGORY | ✓ | VALUES | | |
|---|---|---|---|---|
| **Patient Demographics** | | Patient ID (MRN) | | |
| | | Name | | |
| | | DOB | | |
| | | Phone Number | | |
| | | Oracle Health Patient Portal Status | | |
| **Diagnosis/ Clinical Findings** | ✓ | **Description** | **Code Set** | **Code[11,12]** |
| | | chronic myeloid leukemia, BCR::ABL positive | ICD-10 | C92.10 |
| | | chronic myeloid leukemia, BCR::ABL positive, in remission | ICD-10 | C92.11 |
| | | chronic myeloid leukemia, BCR::ABL positive, in relapse | ICD-10 | C92.12 |
| | | chronic myeloid leukemia, disease; disorder | SNOMED | 92818009 |
| | | myeloid leukemia in relapse; disorder | SNOMED | 122901000119109 |
| | | relapsing chronic myeloid leukemia; disorder | SNOMED | 415287001 |
| | | chronic myeloid leukemia category; morphologic abnormality | SNOMED | 413841000 |
| | | chronic phase chronic myeloid leukemia; disorder | SNOMED | 413847001 |
| **Payer** | | Insurance Coverage Name | | |
| **Last Documented BCR::ABL** | | LOINC Code | | |
| | | Description | | |
| | | Value | | |
| | | Date | | |
| **TKI Prescription Activity** | | Active TKI Medication Name | | |
| | | Date Prescribed | | |
| | | End Date | | |
| | | Previous TKI Medication Name | | |
| | | Date Prescribed | | |
| | | End Date | | |
| **Care Team Member** | | Care Team Member Name | | |
| **Additional Clinical Criteria** | | | | |

# Noncompliant Patient (continued)

## Discern Alert Content

| | CATEGORY | ✓ | VALUES |
|---|---|---|---|
| DISCERN ALERT CONTENT | **Discern Alert Name (eg, Patients who are non-compliant.)** | | |
| | **Message to include in Discern Alert (eg, "This patient with CML has TKI medications that have lapsed.")** | | |
| | **Data to include in Discern Alert** | | Current TKI Prescription |
| | | | Date TKI Prescribed |
| | | | Additional Clinical Criteria |
| | **Clinical actions to take based on the Discern Alert** | | CML PowerPlan Name # |
| | | | Order BCR::ABL lab test |
| | | | Order Appropriate Medication |
| | | | Add Diagnosis C92.10 |
| | | | Additional Orderable Items to Include |

# Patient Not Meeting Milestones

Before you begin to build on this topic, it's important to consider several key technical questions that will influence the impact of your BCR::ABL program.

### Technical Considerations:

Are results interfaced back to your EHR?

| OPTION | ACTIONS |
|---|---|
| **Yes** – our results interface returns BCR::ABL results and completes the original order | Proceed with EHR report and Discern Alert build |
| **No** – we don't receive results digitally to our EHR | Do not proceed with build – pursue an interfaced result option with your interfaces team before moving forward |

If yes above, are interfaced results filed to discrete result values in your EHR?

| OPTION | ACTIONS |
|---|---|
| **Yes** – results file to discrete components in the patients chart in a usable data format | Proceed with EHR report and Discern Alert build |
| **No** – results file as a PDF/image to the chart in a generic, non-reportable format | Proceed with EHR report and Discern Alert build but note operational impact below |

### Operational Impact:

If you are not receiving discrete results for your BCR::ABL tests, the build is still possible but there is a greater operational burden placed upon the program.

Reports that are built to identify patients with missing or overdue results will return patients who have had the order completed but the EHR won't be able to return that data. This places the onus of follow-up onto whoever is managing the reports and the population. In other words, operational owners running these reports will need to do manual follow-up in the chart or with the patient directly to determine if the result was completed and then manually key those results into the patients chart.

Given the relatively small size of the population who would be doing this testing, this may not be a significant lift and may be worth it for your organization. However, it's important to plan for the additional workload.

# Patient Not Meeting Milestones

## Inclusion Criteria for Patient Report and Discern Alert

| | CATEGORY ("AND" CRITERIA) | ✓ | VALUES | | |
|---|---|---|---|---|---|
| INCLUSION CRITERIA | **Patient Status** | | Alive | | |
| | **Population (select one)** | | Only my patients | | |
| | | | Seen in my department | | |
| | | | All patients who meet the criteria | | |
| | | | Other | | |
| | **Age (eg ≥18)** | | > < | | |
| | | | | | |
| | **Diagnosis/ Clinical Findings (select ≥ 1) "or" criteria** | ✓ | **Description** | **Code Set** | **Code[11,12]** |
| | | | chronic myeloid leukemia, BCR::ABL positive | ICD-10 | C92.10 |
| | | | chronic myeloid leukemia, BCR::ABL positive, in remission | ICD-10 | C92.11 |
| | | | chronic myeloid leukemia, BCR::ABL positive, in relapse | ICD-10 | C92.12 |
| | | | chronic myeloid leukemia, disease; disorder | SNOMED | 92818009 |
| | | | myeloid leukemia in relapse; disorder | SNOMED | 122901000119109 |
| | | | relapsing chronic myeloid leukemia; disorder | SNOMED | 415287001 |
| | | | chronic myeloid leukemia category; morphologic abnormality | SNOMED | 413841000 |
| | | | chronic phase chronic myeloid leukemia; disorder | SNOMED | 413847001 |

# Patient Not Meeting Milestones (continued)

## Inclusion Criteria for Patient Report and Discern Alert (continued)

| | CATEGORY ("AND" CRITERIA) | ✓ | VALUES | | |
|---|---|---|---|---|---|
| INCLUSION CRITERIA | **Lab Tests** | ✓ | **Description** | **Code Set** | **Code[13]** |
| | | | BCR::ABL1 kinase domain targeted mutation analysis | LOINC | 55135-8 |
| | | | | Local | |
| | | | BCR::ABL Date Range<br>Date of BCR::ABL lab result<br>(eg, greater than 6 months is [>m-6]) | Lookback period:<br>(starting today)<br><br>or<br><br>Date range: - | |
| | | | BCR::ABL Lab Value Range<br>Capturing out-of-range BCR::ABL lab test<br>(eg, >0.1%, 0.1% - 1%, >1%) | Value: > < | |
| | **Patients TKI activity** | ✓ | **# of Current and Previous TKI Therapies** | | |
| | | | ≥ | | |

# Patient Not Meeting Milestones (continued)

## Exclusion Criteria for Patient Report and Discern Alert

| EXCLUSION CRITERIA | CATEGORY ("AND" CRITERIA) | ✓ | VALUES | | |
|---|---|---|---|---|---|
| | **Exclude patients with TKI history (eg, <2)** | ✓ | **# of Current and Previous TKI Therapies** | | |
| | | | < | | |
| | **Exclude patients who have had a recent BCR::ABL ordered within 3 or 6 months** | ✓ | **Description** | **Code Set** | **Code[13]** |
| | | | BCR::ABL1 kinase domain targeted mutation analysis | LOINC | 55135-8 |
| | | | | Local | |
| | | BCR::ABL Future Date Range<br>Timeframe for capturing BCR::ABL order<br>(eg, m-6) | | Lookback period:<br>(starting today)<br><br>or<br><br>Date range: - | |

# Patient Not Meeting Milestones (continued)

## Report Output Columns

REPORT OUTPUT COLUMNS

| CATEGORY | ✓ | VALUES | | |
|---|---|---|---|---|
| **Patient Demographics** | | Patient ID (MRN) | | |
| | | Name | | |
| | | DOB | | |
| | | Phone Number | | |
| | | Oracle Health Patient Portal Status | | |
| **Diagnosis/ Clinical Findings** | ✓ | **Description** | **Code Set** | **Code[11,12]** |
| | | chronic myeloid leukemia, BCR::ABL positive | ICD-10 | C92.10 |
| | | chronic myeloid leukemia, BCR::ABL positive, in remission | ICD-10 | C92.11 |
| | | chronic myeloid leukemia, BCR::ABL positive, in relapse | ICD-10 | C92.12 |
| | | chronic myeloid leukemia, disease; disorder | SNOMED | 92818009 |
| | | myeloid leukemia in relapse; disorder | SNOMED | 122901000119109 |
| | | relapsing chronic myeloid leukemia; disorder | SNOMED | 415287001 |
| | | chronic myeloid leukemia category; morphologic abnormality | SNOMED | 413841000 |
| | | chronic phase chronic myeloid leukemia; disorder | SNOMED | 413847001 |
| **Payer** | | Insurance Coverage Name | | |
| **All BCR::ABL lab results in last 24 months** | | LOINC Code | | |
| | | Description | | |
| | | Value | | |
| | | Date | | |
| **TKI Prescription Activity** | | Date Prescribed | | |
| | | Name of TKI Prescribed | | |
| **Additional Clinical Criteria** | | | | |

# Patient Not Meeting Milestones (continued)

## Discern Alert Content

DISCERN ALERT CONTENT

| CATEGORY | ✓ | VALUES |
|---|---|---|
| **Discern Alert Name (eg, Patients who are resistant to TKI therapy.)** | | |
| **Message to include in Discern Alert (eg, "This patient with CML has outdated lab values or This patient has out-of-range lab values.")** | | |
| **Data to include in Discern Alert** | | Current TKI Prescription |
| | | Date TKI Prescribed |
| | | BCR::ABL LOINC code |
| | | Description |
| | | Value (list all values for last 24 months) |
| | | Date (list all dates for last 24 months) |
| | | Additional Clinical Criteria |
| **Display Restrictions** | | Care team member |
| | | Other |
| **Clinical actions to take based on the Discern Alert** | | CML PowerPlan Name # |
| | | Order BCR::ABL lab test |
| | | Order Appropriate Medication |
| | | Add Diagnosis C92.10 |
| | | Additional Orderable Items to Include |

# Establishing a Flowsheet

## Documenting TKI Side Effects

Identifying a TKI-intolerant patient is supported by the gathering of discrete side effect data. Early screening and tracking of those side effects in the EHR are important for effective treatment.

One method of side effect tracking is to create a review/entry Flowsheet.

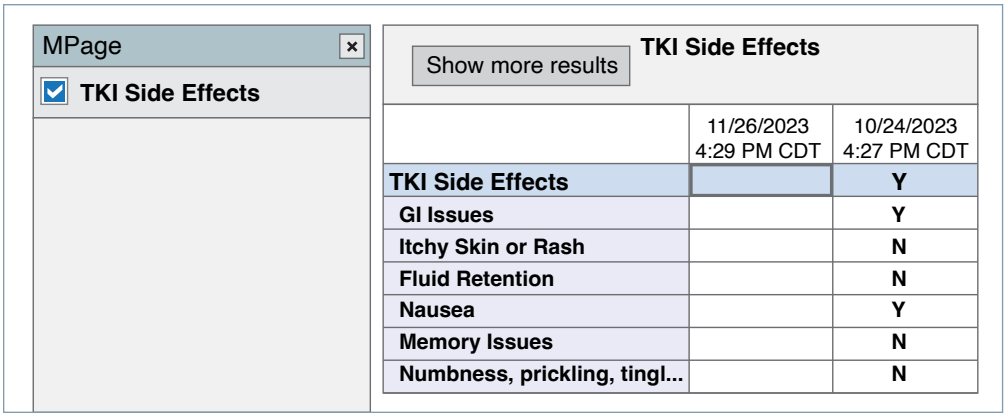
Flowsheets are set up by the health system IT team, following the Health System's review and approval process for EHR enhancement requests.

An IT request which contains clear and concise requirements ensures that the request will be able to be fulfilled with few delays for clarifications. To set up a Flowsheet to view/document TKI Side Effects the IT request should contain the following information.

Hypothetical example of data to be included in the Flowsheet:

| DATA POINT | VALUE |
|---|---|
| GI Issues | Y/N |
| Itchy Skin or Rash | Y/N |
| Fluid Retention | Y/N |
| Nausea | Y/N |
| Memory Issues | Y/N |
| Numbness, prickling, tingling | Y/N |

The IT team will use the All Specialty sections note to create a new Event Set for each of the Side Effects to be tracked, unless an Event Set(s) already exist. Tasks will be reviewed to ensure appropriate Application Group associations and access is granted as appropriate. Privileges are also reviewed for each position, and access is grated as appropriate. The newly created Event Set is assigned to a new Flowsheet for display within workflow.




*Hypothetical example of the new TKI Side Effects Flowsheet*

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