

From Framework to Practice: PQIs in Action and NCODA Resources

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Medically Integrated Pharmacy (MIP): Enhancing Cancer Care Delivery

A patient-centered, multidisciplinary approach within oncology centers of excellence.

Definition

A dispensing pharmacy situated within an oncology center of excellence, fostering a patient-centered, multidisciplinary team approach.

Key Benefits

Provides seamless coordination, personalized patient support, improved treatment outcomes (adherence, and affordability), and timely access to oral anti-cancer medications.

NCODA's Pillars of MIP

Includes abandonment, adherence, access & affordability, time to fill, education, satisfaction, and cost avoidance.

MIPs streamline processes and provide proactive interventions, ensuring patients stay on track with treatment, minimizing financial burdens, and achieving better overall care.

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2026 Program & Initiative Updates

RECENTLY UPDATED

- Relax in-person standards for membership application
- Relax NCODA standards published

NCODA Professional Educators Network

- Collaboration and high-impact NCODA resources leading to a network of professional PQIs, Action, advice, serving on committees and managing pharmacy systems
- Over 400 members have joined the network

OncoQOL Optimal United Distribution (OUID)

The NCODA member-led program was selected as the 2025 National Health Care Innovation Award. This program will help providers in regions where the supply of patients is insufficient to provide care. The program is patient-centered, and patients can receive care in their homes or at a local pharmacy. NCODA members are able to improve patient care and reduce the burden on the local health system.

NCODA MIP Core Chain

NCODA member-led program that supports MIPs in their efforts to improve patient care, quality, and patient experience.

150+ PQIs Published

15 Official publications of NCODA

Over 100 virtual webinars

NCODA CENTER OF EXCELLENCE

If you have joined the NCODA Center of Excellence Medically Integrated Pharmacy organization, you will receive a virtual webinar every 2 weeks. The webinars are recorded and available on-demand. The webinars are designed to provide education and support to MIPs across the United States.

Positive Quality Intervention (PQI) documents

150+ PQIs Published

PROFESSIONAL STUDENT ORGANIZATION

- 2025 members: 100, 2024: 100
- Provided on-site education to over 1000 students, residents, and fellows
- Over 1000 members
- Over 1000 members

Positive Quality Intervention in Action (PQI in Action) documents

60+ PQI in Action documents

Patient Satisfaction Survey

2,000+ collected surveys with a **93 NPS** score from patients

Membership Growth

14,500+ Total of Care
6,000+ Sites of Care
1,600+ Practices

Published Articles & Abstracts

100+ articles published in peer-reviewed journals

External Stakeholder Collaborations

NCODA member-led program that supports MIPs in their efforts to improve patient care, quality, and patient experience.

INTERNATIONAL MEETINGS

- Expanded participation - Over 500% growth in attendance
- Established and continued the annual OncoQOL conference series in oncology practices
- Successfully continued the OncoQOL Cancer Research Annual Meeting for pharmacy students, residents and fellows
- Expanded program, including attendees in 2024-2025 with 3,200+ participants

275 Years of CE provided since 2022

Treatment Support Kits

- Over 1000 NCODA member practices have received treatment support kits
- 100+ hospitals & manufacturers

35,000+ members

Patient Education Sheets

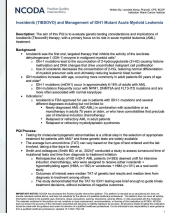
350+ published sheets
32,000+ average monthly items
28%+ increase in engagement monthly with the launch of the new PEs website and redesigned resource sheets.

nmdp \$48,500+

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What is a PQI?

- Positive Quality Intervention (PQI): a peer-reviewed clinical guidance resource




Content

- Clinical guidance document which provides concise, precise, and step by step guidance on:
 - Oral and IV oncolytic therapies
 - Supportive care
 - Disease state management

Sections

- Description
- Background
- PQI Process
- Patient-Centered Activities



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PQI Description and Background

NCODA Positive Quality Intervention


Written By: Lenette Kang, PharmD, CHE, BCCP
Institution: Miami Cancer Institute

Ivosidenib (TIBSOVO) and Management of IDH1 Mutant Acute Myeloid Leukemia

Description: The aim of this PQI is to evaluate genetic testing considerations and implications of ivosidenib (Tibsovo®) therapy, with a primary focus on its role in acute myeloid leukemia (AML) treatment.

Background:

- Ivosidenib was the first oral, targeted therapy that inhibits the activity of the isocitrate dehydrogenase-1 (IDH-1) enzyme in malignant myeloid cells
 - IDH-1 mutations lead to the accumulation of 2-hydroxyglutarate (2-HG) causing histone methylation and DNA changes that drive uncontrolled malignant cell proliferation
 - Use of ivosidenib decreases the concentration of 2-HG, restoring normal differentiation of myeloid precursor cells and ultimately reducing leukemic blast burden
- IDH mutations increase with age, occurring more commonly in adult patients 60 years of age and older
 - IDH-1 mutations (mIDH1) occur in approximately 6-16% of adults with AML
 - IDH mutations frequently occur with NPM1, DNMT3A and FLT3-ITD mutations and are more often associated with normal karyotype
- Indications
 - Ivosidenib is FDA approved for use in patients with IDH-1 mutations and several different diagnoses including but not limited to:
 - Newly diagnosed AML (ND AML) in combination with azacitidine or as monotherapy in adults 75 years or older, or who have comorbidities that preclude use of intensive induction chemotherapy
 - Relapsed or refractory AML in adult patients
 - Relapsed or refractory myelodysplastic syndromes




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PQI Process

PQI Process:


- Testing for molecular/cytogenetic abnormalities is a critical step in the selection of appropriate treatment for patients with AML and these genetic tests are widely available
- The average turn-around-time (TAT) can vary based on the type of test ordered and the lab involved, taking a few days to weeks
- Smith and colleagues (Smith RD, et al., 2024)³ conducted a study to assess turnaround time of mutational tests and time from diagnosis to treatment initiation
 - Retrospective study of ND mIDH1 AML patients (n=283) deemed unfit for intensive induction chemotherapy, who were assigned to receive either ivosidenib + hypomethylating agent (HMA; n=182) or venetoclax + HMA (n=101) as a real-world study
 - Outcomes of interest were median TAT of genetic test results and median time from diagnosis to treatment among others
 - The study demonstrated that the TAT for IDH1 testing was brief enough to guide timely treatment decisions, without evidence of negative outcomes
- Median TAT from IDH1 test to results was 7 days in both cohorts, with an interquartile range of 6 – 14 days in the entire patient population
- Median time from IDH1 test result to treatment initiation was 1 day for ivosidenib and 4 days for venetoclax
- Median time from diagnosis to treatment was 14 days for ivosidenib and 20 days for venetoclax (P=0.032)
- 66% of patients received test results within less than 11 days, allowing for earlier start of appropriate treatment
- Over two-thirds (66%) of patients with ND AML (unfit for intensive therapy) received mutational test results well within the common timeframe from diagnosis to treatment initiation.



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PQI Process

- Improved efficacy and disease response have been demonstrated when patients with mIDH1 AML are treated with IDH1 targeted therapy
 - AGILE was the pivotal phase 3 study that lead to the approval of ivosidenib in combination with azacitidine (AZA) for ND AML with mIDH1 – long-term data now available (median follow-up of 28.6 months)⁴
 - Ivosidenib + AZA (n = 73) vs placebo + AZA (n = 75)
 - Median OS was significantly longer with ivosidenib (29.3 months; 95% CI 13.2, not reached) than with placebo (7.9 months; 95% CI 4.1, 11.3; hazard ratio 0.42 [0.27, 0.65]; p<.0001)
 - Median time to complete remission was 4.3 months with ivosidenib + azacitidine versus 3.8 months with placebo + azacitidine
 - 53.4% of patients were red blood cell and/or platelet transfusion dependent in the ivosidenib + AZA arm and 54.7% in the placebo + AZA arm. A greater proportion of these patients became transfusion independent during treatment with ivosidenib+AZA (21/39, 53.8%) vs placebo+AZA (7/41, 17.1%; one-sided p=.0004)
 - Data for triplet therapy with IDH-targeted agent + venetoclax (VEN) + AZA has also demonstrated efficacy but has not yet been verified in a randomized control trial⁵
 - DiNardo and colleagues studied triplet regimens for ND mIDH1 AML
 - 60 patients received either ivosidenib + AZA + VEN (IDH1-mutated patients only) or oral decitabine + VEN + ivosidenib/ivosidenib (arms for IDH1- and IDH2-mutant disease, respectively)
 - The composite complete remission rate (CRc) was 92% (55/60), with an overall response rate of 95% (57/60)
 - Median overall survival (OS) has not yet been reached with a median follow-up of 27.4 months
 - 2-year OS was 69% with a 2-year cumulative incidence of relapse of 24%




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Patient-Centered Activities

Patient-Centered Activities:


- Communicate with patient regarding need for testing to identify any possible genetic mutations and what implications that could have for treatment
- Advise patient that it can take several days for genetic tests to result, but this has not been shown to negatively impact treatment efficacy or outcomes
- If patient is a candidate for ivosidenib therapy:
 - Provide them with ivosidenib [Patient Education Sheet](#)
 - Review symptoms of differentiation syndrome and when they should contact the care team and/or report for evaluation
 - Patient support materials available via [ServierONE Patient Support Services](#)


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The PQI in Action

- Explores how medically integrated oncology teams at practice sites incorporate PQI in their clinics
- Emphasizes the significance of a collaborative, team-based approach to cancer care
- Walks through the PQI and demonstrates best practices



Sutimlimab-jome (Enjaymo) for the Management of Hemolysis in Cold Agglutinin Disease (CAD)
 April 2024



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Capivasertib Dosing

DOSING CONSIDERATIONS FOR CAPIVASERTIB ¹	
Dosage form	Tablet, Oral – 160 mg, 200 mg Blister pack – 160 mg, 200 mg (each carton has 4 blister packs (64 tabs total) - each blister pack contains 16 tabs)
Usual starting dose	400 mg twice daily (~12 hours apart) for 4 consecutive days, followed by 3 days off (administer capivasertib on days 1 to 4 of each week), in combination with fulvestrant; continue until disease progression or unacceptable toxicity
Dose adjustments (renal/hepatic)	Capivasertib has not been studied in patients with severe hepatic or renal impairment
Dose reductions for toxicity	400 mg BID ◯ 320 mg BID ◯ 200 mg BID ◯ permanently discontinue if unable to tolerate the final dose reduction

1. ASCO. Capivasertib. NCCN. NCCN.org. Accessed February 26, 2020.

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Hyperglycemia

"I have patients monitor their blood glucose early, particularly in the first cycle, and focus on a low carbohydrate, low sugar diet because hyperglycemia can emerge quickly."
 — Joyce O'Shaughnessy, MD

HYPERGLYCEMIA MANAGEMENT WITH CAPIVASERTIB¹

- 01 **Baseline Risk Assessment**
 - ▶ Evaluate fasting blood glucose and HbA1c prior to initiation
 - ▶ Identify high-risk patients (prediabetes, elevated A1C, higher BMI)
 - ▶ Optimize glycemic control before starting therapy
 - ▶ Consider early involvement of endocrinology for higher risk patients
- 02 **Early Monitoring (First Cycle = Highest Risk)**
 - ▶ Monitor FBC prior to treatment and frequently during weeks 1-8
 - ▶ Encourage home glucose monitoring, especially early in therapy
 - ▶ Focus on early onset, often within the first cycle
 - ▶ Increase monitoring frequency if elevations occur

1. Joyce O'Shaughnessy, MD, Moore RB, et al. Obtaining clinical monitoring and management guidelines for capivasertib in HR-positive/HER2-negative advanced breast cancer: expert opinion. *Int Breast Cancer*. 2020;19(1):1-10. doi:10.1007/s12282-020-00260-0.

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Hyperglycemia

03 Prevention and Patient Education

- ▶ Set expectations that hyperglycemia is an early and common toxicity
- ▶ Counsel on low carbohydrate, low sugar diet
- ▶ Reinforce when and how to check blood glucose at home
- ▶ Encourage early reporting of symptoms

04 Intervention and Management

- ▶ Initiate or escalate anti-diabetic therapy (for example, metformin)
- ▶ Coordinate care with endocrinology when appropriate
- ▶ Adjust monitoring based on response
- ▶ Use a patient specific approach based on baseline risk and trends

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Diarrhea: Key Management Points

- Patient Education**
Educate patients on typical onset (around 1 week), the importance of a stool log, and early symptom reporting.
- Supportive Care Readiness**
Ensure proactive availability of antidiarrheal medications like loperamide.
- Initial Management**
Upon the first sign of diarrhea, promptly initiate loperamide and adjust dosage as needed.
- Escalation for Persistence**
Consider diphenoxylate/atropine for persistent symptoms, and octreotide for refractory cases.
- Therapy Interruption**
Temporarily hold capivasertib for moderate to severe diarrhea, resuming with potential dose adjustment once symptoms improve.
- Reinforcement and Monitoring**
Emphasize hydration, dietary changes, and maintain close communication for ongoing monitoring.

Immer NM, O'Donoghuey JA, Moore IR, et al. Optimizing clinical monitoring and management guidelines for capivasertib in HR-positive/HER2-negative advanced breast cancer: expert opinion. *npj Breast Cancer*. 2023;9:18. doi:10.1038/s41525-023-00864-z

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Rash: Key Management Points

- Patient Education**
Educate patients on expected onset and the importance of early reporting.
- Prophylactic Treatment**
Start prophylactic non-sedating antihistamine for at least the first 6 weeks.
- Initial Management**
Assess rash severity and impact, initiate or escalate antihistamines.
- Supportive Care**
Add topical corticosteroids as needed, consider oral steroids for severe symptoms.
- Therapy Modification**
Hold therapy for moderate to severe rash; resume with dose modification if needed.
- Ongoing Monitoring**
Reinforce monitoring and encourage early reporting with photos.

Immer NM, O'Donoghuey JA, Moore IR, et al. Optimizing clinical monitoring and management guidelines for capivasertib in HR-positive/HER2-negative advanced breast cancer: expert opinion. *npj Breast Cancer*. 2023;9:18. doi:10.1038/s41525-023-00864-z

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Patient Education

What are Patient Education Sheets?

Patient Education Sheets (PES) are:

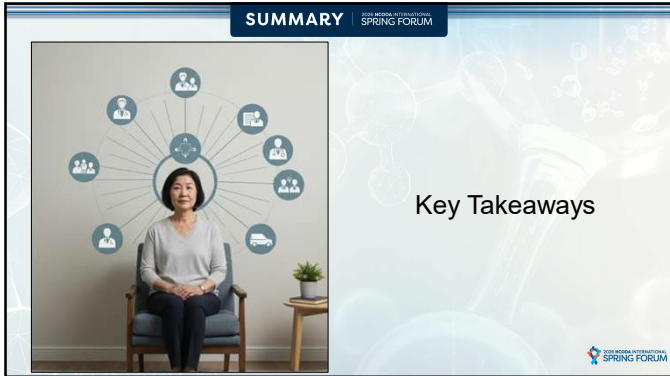
- Straightforward and easy to understand, created specifically for patients and caregivers
- Inclusive of information on both common and rare side effects, with practical tips for prevention and management
- Written at the average American reading level to ensure accessibility for wide audience
- Customizable, with space for clinicians to add supportive care details, contact information, and other personalized notes

PES evolved from our prior Oral Chemotherapy Education (OCE) and Intravenous Cancer Treatment Education (IVE) resources

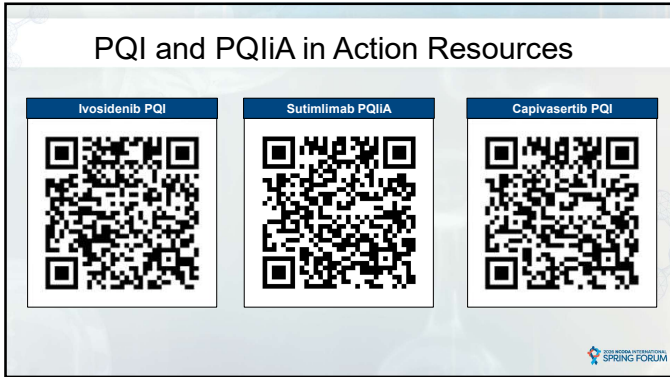
Patient Education Sheets
 Cancer care, explained. [LEARN MORE](#)

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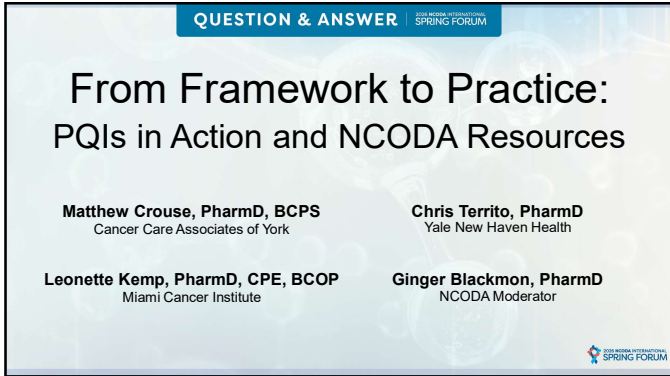
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