



Positive Quality Intervention: Managing Treatment of Polycythemia Vera

Description of PQI: Treatment of Polycythemia Vera can be challenging, and identifying patients that are having a proper response to treatment is essential to preventing cardiovascular events. Establishing follow ups and lab reviews are recommended to ensure positive outcomes.

Background: PCV is a primary polycythemia in which the bone marrow produces too many red blood cells, white blood cells, and platelets. An acquired mutation in the janus activating kinase 2 (JAK2), found in most PCV patients, allows these cells to proliferate leading to the abnormally high red blood cell count. Common treatments for PCV are aspirin, phlebotomy, hydroxyurea, interferon (not commonly used), or a JAK2 inhibitor, ruxolitinib. Hydroxyurea (HU) is considered the gold standard treatment to start with for high risk patients (see below). Patients that are taking hydroxyurea and still have high blood counts or cannot tolerate it may benefit with treatment with ruxolitinib.

Low Risk PCV patient characteristics:	Age < 60 and no previous history of blood clots
High Risk PCV patient characteristics:	Age > 60 or previous history of a blood clot

One of the treatment goals for PCV is to reduce the cardiovascular risk of patients. Typically, clinicians try to maintain a HCT < 45% and often a target < 42% for women¹. A study published in the NEJM showed that **patients with a HCT in the 45-50% range had a 4 times greater risk of cardiovascular events than patients with a HCT less than 45%**².

Proper follow up and review of CBCs are required when patients are started on Hydroxyurea. Dose adjustments and possibly additional phlebotomies should be considered for these patients. Identifying the proper time to switch to another therapy is important to help manage the disease. **Anywhere between 20-60% of patients remain on hydroxyurea even though they are not having a proper response**³.

Important notice: National Community Oncology Dispensing Association, Inc. (NCODA), has developed this Positive Quality Intervention platform. This platform represents a brief summary of medication uses and therapy options derived from information provided by the drug manufacturer and other resources. This platform is intended as an educational aid and does not provide individual medical advice and does not substitute for the advice of a qualified healthcare professional. This platform does not cover all existing information related to the possible uses, directions, doses, precautions, warning, interactions, adverse effects, or risks associated with the medication discussed in the platform and is not intended as a substitute for the advice of a qualified healthcare professional. The materials contained in this platform are for informational purposes only and do not constitute or imply endorsement, recommendation, or favoring of this medication by NCODA, which assumes no liability for and does not ensure the accuracy of the information presented. NCODA does not make any representations with respect to the medications whatsoever, and any and all decisions, with respect to such medications, are at the sole risk of the individual consuming the medication. All decisions related to taking this medication should be made with the guidance and under the direction of a qualified healthcare professional.



PQI Process:

- Review CBC with refill every to ensure HCT is $\leq 45\%$
- Assess patients for adverse events and document in EMR
 - Use the MPN-SAF total symptom score scale⁴
- If HCT > 45 or symptoms are worse:
 - Low risk patients not taking HU:
 - Consider recommending HU for low risk patients (1-2g/ day in 1-3 divided doses)
 - High Risk patients
 - If patient has been on HU for longer than 12 weeks and is still requires phlebotomies then recommend possibly switching to second line therapy.
 - Ask prescriber if they want to consider ruxolitinib 10mg BID.
- **Document intervention in EMR**

Patient Centered Activities:

- Stress importance of adherence
 - Schedule follow up calls
 - Maintain adherence to treatments of secondary health conditions
 - (high blood pressure, diabetes, high cholesterol, history of blood clots)
- Provide education:
 - Laboratory monitoring will be required with refills
 - Possibility of dose adjustments
 - Importance of staying hydrated
- Infection prevention- Call clinic for any fever > 100.4F
- Monitoring Skin for patients on ruxolitinib:
 - Important to notice all skin lesions
 - Examine skin at baseline
 - Make note of any new lesions that arise while on therapy

References:

1. www.nccn.org/patients/guidelines/mpn/38/
2. Marchioli et al, N Engl J Med 2013; 368:22-33, January 3, 2013
3. Griesshammer M, Gisslinger H, Mesa R. Current and future treatment options for polycythemia vera. *Ann Hematol.* 2015;94(6):901-910.
4. Scherber et al Blood, 14 July 2011 v118, n2

Important notice: National Community Oncology Dispensing Association, Inc. (NCODA), has developed this Positive Quality Intervention platform. This platform represents a brief summary of medication uses and therapy options derived from information provided by the drug manufacturer and other resources. This platform is intended as an educational aid and does not provide individual medical advice and does not substitute for the advice of a qualified healthcare professional. This platform does not cover all existing information related to the possible uses, directions, doses, precautions, warning, interactions, adverse effects, or risks associated with the medication discussed in the platform and is not intended as a substitute for the advice of a qualified healthcare professional. The materials contained in this platform are for informational purposes only and do not constitute or imply endorsement, recommendation, or favoring of this medication by NCODA, which assumes no liability for and does not ensure the accuracy of the information presented. NCODA does not make any representations with respect to the medications whatsoever, and any and all decisions, with respect to such medications, are at the sole risk of the individual consuming the medication. All decisions related to taking this medication should be made with the guidance and under the direction of a qualified healthcare professional.