BCCA Protocol Summary for Anagrelide as Second-line Treatment of Thrombocytosis Related to Myeloproliferative Disorders

Protocol Code *LKANAG*

Tumour Group *Leukemia/BMT*

Contact Physician *Dr. Donna Hogge*

ELIGIBILITY:

- myeloproliferative disorder
- platelet count of either: greater than 400 x 10^9/L with symptoms
  greater than 1000 x 10^9/L without symptoms
- inadequate response to or intolerance of hydroxyurea and/or interferon
- May be used in combination with busulfan, dexamethasone, hydroxyUREA, interferon or melphalan

EXCLUSIONS:

- Use with great care in patients with heart disease.
- Use with caution in patients with renal and /or hepatic impairment.
- Do not use during pregnancy

TESTS:

- CBC, platelets, differential
  - baseline
  - q1-2 weeks during dosage titration
  - q1-3 months during maintenance
- Urea, creatinine, electrolytes, bilirubin, AST, alkaline phosphatase
  - baseline
  - regularly for patients with renal and/or hepatic impairment

PREMEDICATIONS:

none

TREATMENT:

Drug	Dose	BCCA Administration Guideline
anagrelide	0.5 mg qid starting dose, adjust according to platelet count Usual maintenance dose 1 to 4 mg daily in divided doses (bid to qid)	PO

In patients with satisfactory response, continue therapy indefinitely.

DOSE MODIFICATIONS:
none except titration to control platelet count

PRECAUTIONS:

1. **Headache**: Occurs in about 30% of patients; generally mild but can be more severe. Treat with acetaminophen prn.
2. **Palpitations**: Occur in about 25% of patients; may require discontinuation of anagrelide.
3. **Diarrhea**: Occurs in about 25% of patients. Supportive treatment involves adequate hydration, ingestion of low fibre foods in small amounts at frequent intervals.
4. **Fluid retention**: Occurs in about 20% of patients. Supportive treatment involves elevation of the feet and avoidance of tight clothing.

Call Dr. Donna Hogge or tumour group delegate at (604) 875-4337 with any problems or questions regarding this treatment program.

Date activated: 01 May 2001

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References:

1. Cortelazzo S, Finazzi G, Ruggeri M, et al. Hydroxyurea for patients with essential thrombocythemia and a high risk of thrombosis. N Engl J Med 1995;332:1132-6.
2. Tefferi. Essential thrombocythemia and agnogenic myeloid metaplasia. American Society of Hematology Education Program Book 1999. pp. 172-177.
3. Tefferi A, Solberg LA, Silverstein MN. A clinical update in polycythemia vera and essential thrombocythemia. Am J Med 2000;109:141-9.
4. Silverstein MN, Petitt RM, Solberg LA. Anagrelide: a new drug for treating thrombocytosis. N Engl J Med 1988;318:1292-4.
5. Anagrelide Study Group. Anagrelide, a therapy for thrombocythemic states: experience in 577 patients. Am J Med 1992;92:69-76.
6. Petitt RM, Silverstein MN, Petrone ME. Anagrelide for control of thrombocythemia in polycythemia and other myeloproliferative disorders. Semin Hematol 1997;34:51-4.
7. Anagrelide Product Monograph.
8. Bennett CL, Weinberg PO, Golub RM. Cost-effectiveness model of a phase II clinical trial of a new pharmaceutical for essential thrombocythemia: Is it helpful to policy makers? Semin Hematol 1999;36(1 Suppl 2):26-9.
9. Storen EC,Tefferi A. Long-term use of anagrelide in young patients with essential thrombocythemia. Blood 2001;97:863-6.