

Record of Recommendation

Re: Funding Azacitidine (Vidaza[®]) for the treatment of Myelodysplastic Syndrome (MDS)

November 10, 2010

Discussion facilitated using the Decision Making Framework.

- All present will vote electronically when the vote is called by the Chair. The voting process will be completed by 12 pm on November 22, 2010. The decision will be made by a majority with dissenting voters given the opportunity to record their opinion. Dissenting opinions must be recorded within seven days of the result of the vote being announced.
- Core values and principles were reviewed and discussed along with competing obligations, constraints and relevant information.
- Options for a recommendation to the Deputy Minister were reviewed and each option was discussed. Two options were identified at this time:
 - 1) Approval of funding with restrictions
 - 2) Denial of funding
- An analysis of the projected benefits and burdens of each option was discussed.

Background

- ✓ Myelodysplastic syndrome (MDS) is a stem cell disorder characterized by dysplastic and ineffective blood cell production. MDS can convert to acute myeloid leukemia (AML) which is usually fatal.
- ✓ Incidence is approximately 1.6 cases per 1000 persons, and increases with age.
- ✓ Stem cell transplants are a good option for some, particularly younger, patients. Other treatments include supportive care (transfusions), growth factors (erythropoietin, GCSF), lenalidomide (particularly for 5-q-syndrome), and conventional chemotherapy.
- ✓ Azacitidine is a new therapy available for MDS. In study AZA-001, azacitidine was compared with conventional care in patients with intermediate-2 or high risk MDS and AML with 20-30% blasts and multilineage dysplasia. 358 patients were randomized to either azacitidine therapy or conventional care (best supportive care, low-dose cytarabine, or intensive chemotherapy)

Projected Benefits:

- ✓ Results of the study (Fenaux et al, 2009) favoured azacitidine therapy:
 - Median Overall Survival: 24.5 months versus 15 months
 - Median Time to AML transformation: 17.8 months versus 11.5 months
 - Time to disease progression: 14.1 months versus 8.8 months
 - Any remission: 29% versus 12%
 - Median duration of hematological response: 13.6 months versus 5.2 months

At 2 years, 50.8% of patients in the azacitidine group were alive compared with 26.2% in the conventional care arm. In the azacitidine group, 45% of patients who were red-blood cell transfusion dependent became transfusion independent versus 11.4% in the conventional care group.

Projected Burdens:

- ✓ The most common grade 3-4 events were blood cytopenias for all treatments. Non-hematological adverse events with the use of azacitidine included injection site reactions, nausea, vomiting, fatigue, and diarrhea.
- ✓ The cost is \$5604.90 for a 28 day cycle and \$50,445.00 for an assumed 9 cycles per patient. Projected drug costs for 2010/11 is \$252,225 (5 patients), for 2011/12 is \$302,670 (6 patients) and for 2012/13 is \$353,115 (7 patients).
- ✓ In a pharmacoeconomic analysis, the estimated cost per life year gained and quality adjusted life year were \$66,458 and \$75,351 versus best supportive care; \$69,813 and \$79,406 versus low dose chemotherapy; \$20,896 and \$25,573 versus standard dose chemotherapy.

Result of Vote:

The vote was conducted electronically. The question the Committee was asked to vote on was:

“Should the Committee support a recommendation to the Deputy Minister of Health to fund azacitidine (Vidaza[®]) as a single agent for the treatment of patients not eligible for hematopoietic stem cell transplantation with intermediate-2 and high risk MDS and AML with 20%-30% blasts and multi-lineage dysplasia”

- The result of the vote was a majority recommending funding.
- This recommendation has been accepted by the Deputy Minister of Health and funding has been approved.