Description:
Sunitinib is an inhibitor of tyrosine kinases that is approved for use in the treatment of gastrointestinal stromal tumour (GIST) after failure of imatinib mesylate treatment due to resistance or intolerance. Sunitinib is also approved for use in renal cell carcinoma but this recommendation deals only with its use in GIST.

Dosage Forms:
12.5, 25 and 50 mg capsules. The recommended dose of sunitinib is 50 mg daily, in cycles: four weeks on, two weeks off treatment.

Recommendation:
The Canadian Expert Drug Advisory Committee (CEDAC) recommends that sunitinib be listed for patients with histologically proven unresectable or recurrent/metastatic GIST who meet the drug plan’s eligibility criteria for imatinib for the treatment of GIST but who have failed or are unable to tolerate imatinib therapy. Response to sunitinib therapy should be assessed at least every six months and therapy should be discontinued when there is objective evidence of disease progression. Sunitinib should not be funded concomitantly with imatinib.

Reasons for the Recommendation:
1. The Committee considered the results of one randomized controlled trial (RCT) comparing sunitinib with placebo in 312 adult patients with GIST who had experienced disease progression or intolerable toxicity with imatinib therapy. At a planned interim analysis the primary endpoint of the trial, a statistically significant difference in the median time to tumour progression, was achieved (27.3 vs 6.4 weeks for sunitinib and placebo, respectively). At this interim analysis, sunitinib therapy resulted in statistically significant improvement in the median progression free survival (24.6 vs 6.4 weeks) but the data were not mature enough to calculate median overall survival.

2. Sunitinib costs $6,950 for a six week cycle of therapy, compared to $4,298 - $8,596 for imatinib therapy at doses of 400 mg to 800 mg daily. Imatinib is currently covered by many drug plans or cancer agencies for the treatment of GIST. The Committee felt that the costs of sunitinib are similar to those of continued imatinib therapy in patients who have failed or are unable to tolerate imatinib therapy.
Summary of Committee Considerations:
When the primary endpoint of the RCT was reached at the planned interim analysis, the trial was unblinded and a large number of patients receiving placebo crossed over to sunitinib therapy. Therefore, the true effect of sunitinib on median survival is uncertain. There were no statistically significant differences in quality of life in patients receiving sunitinib versus those receiving placebo.

In the RCT, serious treatment-related adverse events were reported in 20% of sunitinib-treated vs 5% of placebo-treated patients. Fatigue, hypertension, myelosuppression, diarrhea and cutaneous toxicities were more common with sunitinib than with placebo.

The manufacturer submitted an economic evaluation in patients who had failed or were intolerant of imatinib, comparing sunitinib with best supportive care alone. It was assumed that sunitinib therapy is discontinued when there is tumour progression and that imatinib is not included in the best supportive care strategy. The evaluation reported an incremental cost per quality adjusted life year (QALY) gained of $80,000.

Of Note:
1. Both published and unpublished data were reviewed and taken into consideration in making this recommendation.

Background:
CEDAC provides formulary listing recommendations to publicly funded drug plans. Recommendations are based on an evidence-based review of the medication’s effectiveness and safety and an assessment of its cost-effectiveness in comparison to other available treatment options. For example, if a new medication is more expensive than other treatments, the Committee considers whether any advantages of the new medication justify the higher price. If the recommendation is not to list a drug, the Committee has concerns regarding the balance between benefit and harm for the medication, and/or concerns about whether the medication provides good value for public drug plans.