CEDAC FINAL RECOMMENDATION and REASONS for RECOMMENDATION

TIPRANAVIR (Aptivus® - Boehringer Ingelheim (Canada) Inc.)

Description:

Tipranavir is a nonpeptidic HIV-1 protease inhibitor (PI) which, in combination with low dose ritonavir, is approved for the treatment of adult patients with HIV-1 infection with evidence of viral replication, who are treatment experienced and have HIV-1 strains resistant to multiple PIs.

Dosage Forms:

250 mg capsule

Recommendation:

The Canadian Expert Drug Advisory Committee (CEDAC) recommends that tipranavir be listed as an alternate PI as part of a HIV treatment regimen in the treatment of adult patients with HIV-1 infection who are treatment experienced, have demonstrated failure to multiple PIs and in whom no other PI is a treatment option.

Reasons for the Recommendation:

- 1. The Committee considered the results of two open-label, randomized controlled trials (RCTs) of 48 weeks duration comparing tipranavir with other PIs, each boosted with ritonavir, in treatment experienced patients with at least one primary PI mutation. Compared to other PIs boosted with ritonavir, treatment with tipranavir boosted with ritonavir was associated with statistically significant improvements in virologic response and CD4 cell counts. There were no significant differences in treatment emergent AIDS-defining illnesses or mortality in tipranavir versus the comparator PI treatment arms.
- 2. Randomization in the RCTs was stratified by pre-selection use of enfuvirtide and the superiority in virologic response in the tipranavir arm was maintained when administered with or without enfuvirtide. However, the proportion of patients achieving a virologic response was significantly greater when enfuvirtide was administered with tipranavir boosted with ritonavir.
- 3. Although the incidence of total adverse events, withdrawals due to adverse events, hepatic enzyme elevations and hyperlipidemia were significantly higher in tipranavir treated patients, interpretation of this information is complicated by the high number of patients who were converted from comparator PIs to tipranavir during the RCTs.

4. Tipranavir costs \$33.00 per day, which is significantly higher than other PIs (approximately \$15-20 per day). The estimated cost per quality-adjusted life year (QALY) gained with tipranavir use in HIV-1 infected patients who are treatment experienced and have resistance to multiple PIs is approximately \$52,000 when compared to treatment with other PIs.

Of Note:

- 1. Consideration should be given to the use of genotypic analysis to aid in the selection of patients for treatment with tipranavir boosted with ritonavir.
- 2. Both published and unpublished data were reviewed and taken into consideration in making this recommendation.