**COST EFFECTIVENESS ANALYSIS OF DROTRECOGIN ALFA (ACTIVATED) AS A TREATMENT FOR SEVERE SEPSIS**

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**INTRODUCTION**

Drotrecogin alfa (activated) significantly reduced severe sepsis (SevSep) mortality at 28 days.¹ According to the French budget environment, it is mandatory to evaluate its cost-effectiveness ratio on a pragmatic basis using the French Intensive Care DRG. This takes into account the maximum support during ICU stay.

**METHODS**

All SevSep patients in the Cub-Rea database (1997-99 period) defined according to PROWESS trial and with a hospital length of stay (LOS) ≥ 24 hours (n = 10459) were included. The baseline patients’ characteristics are similar to those of the PROWESS criteria study. Relative Risk of death with drotrecogin alfa (activated) estimated according to the observed classification into 11 DRG groups and reach 0.8 at 28 days (28 days survived represented by the parametric function of Webull).

**RESULTS**

The expected cost in the model of a severe sepsis patient treated by standard care is €20,162.3, whereas drotrecogin alfa (activated) cost €46,171.1. Using a decision tree, the incremental cost effectiveness ratio (ICER) of drotrecogin alfa (activated) is €34,065.90 per additional year of life saved for those of the PROWESS criteria study.

The predicted cost-effectiveness ratio of drotrecogin alfa (activated) in adult severe sepsis patients is much lower than the international range considered as acceptable (53,357.10 €). Drotrecogin alfa (activated) has a cost effectiveness profile similar to, or better, than many well-accepted and common healthcare strategies. Drotrecogin alfa (activated) is cost-effective when including patients with all degrees of co-morbidity. Achieving this profile in practice will be dependent on careful patient selection. For example, restriction to patients at higher risk of death will improve cost-effectiveness because the treatment effect is larger. However, drug administration to patients with poor long-term prognosis will worsen the cost-effectiveness.

**REFERENCES**

(2) Mossé B. Réussi Urg 1990; 7: 367-74
(3) Angus DC Crit Care Med 2001; 30: 493