Reviewer’s report

Title: Cost-minimization analysis of TPE and IVIg in the treatment of Guillain-Barre syndrome

Version: 1 Date: 24 November 2010

Reviewer: ching piao tsai

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Major Compulsory Revisions

1. The author assumed that serious adverse events (AEs) attributable to TPE or IVIg occur infrequently at similar rates and that associated costs would not directly affect this analysis. The author also assumed that the length of hospitalization would be equivalent between the two therapies given the equivalent time to response between the two.

2. However, it’s debatable, a Dutch study reported a higher rate of complications with PE than IVIG; pneumonia, atelectasis, thrombosis, and hemodynamic difficulties occurred more often with PE than with IVIG. Sixteen of 73 patients (22%) had multiple complications with PE compared with 5 of 74 (7%) with IVIG. See: Van der Meché FGA, Schmitz PIM, Dutch Guillain-Barré Study Group. A randomized trial comparing intravenous immune globulin and plasma exchange in Guillain-Barré syndrome. N Engl J Med 1992;326:1123–1129.

3. Also, another largest trial, adverse events occurred in 8 of 121 patients (7%) in the PE group (hypotension, septicemia, pneumonia, malaise, abnormal clotting, and hypocalcaemia) and in 6 of 130 (5%) patients in the IVIG group (vomiting, meningism, renal failure, myocardial infarction, and infusion site erythema). The increased rate of complications with PE involve increased cost, from a pharmacoeconomic perspective. See: Plasma Exchange/Sandoglobulin Guillain-Barré Syndrome Trial Group. Randomised trial of plasma exchange, intravenous immunoglobulin, and combined treatments in Guillain-Barré syndrome. Lancet 1997;349:225–230.

4. Its means that more complication, more related and direct cost. Since the basic supposing is so debatable, therefore, analysis of the direct cost between TPE and IVIG seemed to be not so important and significant.

5. The difference between Outpatient Hospital CMS 2010 Reimbursement TPE 8171, and Provider TPE Costs 4238 showed that there should be some bias and direct cost not emphasized by the author.

6. The author should address the above questionable point to make the manuscript more perfect.

Level of interest: An article of importance in its field

Quality of written English: Acceptable
Statistical review: Yes, and I have assessed the statistics in my report.