**Supplemental Table. Comparison across the US, China and Spain studies**

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| **Paper title** | Health Economic Evaluation of Patients Treated for Nosocomial Pneumonia Caused by Methicillin-resistant *Staphylococcus aureus*: Secondary Analysis of a Multicenter Randomized Clinical Trial of Vancomycin and Linezolid *(Niederman et al, Clinical therapeutics, 2014)14* | Economic evaluation among Chinese patients withnosocomial pneumonia caused by methicillin resistant*staphylococcus aureus* and treated with linezolid or vancomycin: a secondary, post-hoc analysis based on a Phase 4 clinical trial study*(Wan et al, JME, 2015)25* | Nosocomial Pneumonia Caused by Methicillin-resistant *Staphylococcus aureus* Treated with Linezolid or Vancomycin: a Secondary Economic Analysis of Resource Use from a Spanish Perspective *(Rello et al, 2015)*  |
| **Perspective**  | United States | China | Spain |
| **Healthcare system**  | Multiple payers (commercial and government payers coexist) | Decentralization from central government to provincial and local authorities  | Government as the single payer (universal coverage) |
| **Objectives**  | To compare the HCRU, costs of treatment, and cost-effectiveness of linezolid compared with vancomycin in the treatment of MRSA NP using ZEPHyR clinical trial data. | To assess cost-effectiveness of linezolid vs vancomycin in treating MRSANP in China and the impact of renal failure on HCRU and costs. | By adapting a unique Spanish perspective, this study aims to assess the HCRU and costs for treating MRSA NP in hospitalized adults using linezolid or vancomycin. This study also evaluated renal failure rate and the related economic outcomes between study groups. |
| **Methodsa**  | Costs were calculated by multiplying observed HCRU by unit costs for each type of use. Unit costs were from a US payer’s perspective and obtained from literature and First Data Bank (for drugs). | The cost analyses were performed for 4 selected large cities in China, which are economically and geographically diverse, representing the North, South, East, and West of China. The unit costs were obtained from physician interviews (expert opinions). | Healthcare costs were calculated by multiplying observed HCRU (MV, bed-day by type, drug and dialysis) by their own unit costs, respectively. The drug unit costs were obtained from Botplus-Portalfarma and other medical service unit costs were obtained from Oblikue database, respectively. |
| **Resultsd** |  |  |  |
| Comparing costs between treatments | No significant difference in the costs between patients treated with linezolid and vancomycin ($45,004 vs. $44,897, P = 0.96)  | No significant difference in the costs between patients treated with linezolid and vancomycin (Nanjingb: ¥82,383 vs. ¥80,799, P = 0.70) | No significant difference in the costs between patients treated with linezolid and vancomycin (€17,782 vs.€17,423, P = 0.51) |
| Comparing costs between those who developed renal failure vs. those who did not | Patients who developed renal failure had higher cost than those who did not ($52,257 vs. $44,176, P = 0.046) | Patients who developed renal failure had higher cost than those who did not (Nanjing: ¥100,449 vs. ¥74,944, P = 0.002) | Patients who developed renal failure had higher cost than those who did not (€19,626 vs. €17,388, P = 0.14), however, the difference was not significant.  |
| Cost-effectiveness ratio  | $16,516c (95% CI: -$68,620 to $164,478) | Nanjing: ¥15,904 (95% CI: -¥161,935 to ¥314,987) | The cost-effectiveness ratio maybe higher in Spain than the US or China studies since the incremental cost between treatments was the highest in Spain and the incremental success rate remains the same across the three studies.  |
| **Major Findings** | Patients treated with linezolid and vancomycin had similar overall costs. Fewer patients developed renal failure during the study while taking linezolid compared with vancomycin, and patients with a renal failure had increased HCRU and costs. Linezolid may be a cost-effective treatment strategy in MRSA-NP.  | Linezolid was more cost-effective than vancomycin in treating MRSA-NP from a Chinese payer’s perspective. Linezolid was associated with a significantly lower rate of renal failure than vancomycin.  | From a Spanish perspective, there were no statistically significant differences in total costs between linezolid and vancomycin cohorts. Linezolid’s drug cost was partially offset by fewer renal failure events. |

a The China study reported the cost data for 4 major cities in China and the city of Nanjing was selected in this table because the unit cost for Nanjing was in the middle among the 4 cities.

bMore details about the methods (including outcomes, statistical analyses and cost-effectiveness technique) and unit cost values can be found in the published US and China studies.14,25

cThe median estimate of cost-effectiveness ratio was provided.

dThe cost data in the US ($) and China (¥) studies were converted to equivalent cost in euros (€). The cost data in US study were inflated to the same year (year 2012) as the Chinese and the Spanish studies (Consumer Price Index for Medical care items: <http://data.bls.gov/cgi-bin/surveymost>, accessed on Dec 8, 2015) and then converted to equivalent euros. The currency conversion rates ($1 = €0.92, ¥1 = €0.14) were obtained from Google – Finance (<https://www.google.com/finance/converter?a=1&from=EUR&to=USD>, accessed on Dec 8, 2015):

* Costs for linezolid vs. vancomycin converted to euro: US €42,921 vs. €42,819, P = 0.96; China €11,534 vs. €11,312, P = 0.70; Spain €17,782 vs. €17,423, P = 0.51.
* Costs for patients who developed renal failure vs. those who did not converted to euro: US €49,838 vs. €42,131, P = 0.046; China €14,063 vs. €10,492, P = 0.002; Spain: €19,626 vs. €17,388, P = 0.14.
* Cost-effectiveness ratio converted to euro: US €15,751 (95% CI: -€65,444 to €156,864); China €2,227 (95% CI: -€22,671 to €44,098)