**Supplementary Table : Characteristics of the 247 CVC insertion procedure**

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|  | **n = 247** |
| Procedure performed by a physician with training in general surgery | 149 (60,3%) |
| Procedure performed in the ICU | 88 (35,6%) |
| PN infused in a recently inserted CVC (less than 48h of use) | 192 (77,7%) |
| CVC time (days) | 14 (9 – 23) |
| Executor of procedure |  |
| First year resident | 105 (42,5%) |
| Second year resident | 23 (9,3%) |
| Third year resident | 40 (16,2%) |
| Fourth year resident | 7 (2,8%) |
| Staff | 31 (12,6%) |
| Not identified | 41 (16,6%) |
| Catheter insertion technique |  |
| Ultrasound guided puncture | 123 (49,8%) |
| Anatomical landmarks puncture | 87 (35,2%) |
| Guide wire exchange | 17 (6,9%) |
| No description | 20 (8,1%) |
| Catheter (regarding the number of lumen) |  |
| Single-lumen | 12 (4,9%) |
| Double-lumen | 232 (93,9%) |
| Triple-lumen | 3 (1,9%) |
| Puncture Site |  |
| Subclavian | 95 (38,5%) |
| Jugular | 147 (59,5%) |
| Femoral | 4 (2,1%) |
| Complications |  |
| CLABSI | 28 (11,3%) |
| Mechanical complication (pneumothorax, arterial punction…) | 6 (2,4%) |

N: number of patients; %: percentage; IQR: interquartile range; CVC: central venous cateter; ICU: intensive care unit; PN: parenteral nutrition; CLABSI: central line associated bloodstream infection