Supplementary Table 1. Pre-/post-PMX-HP change in clinical outcomes (IL = interleukin, APACHE = Acute Physiology and Chronic Health Evaluation score; MAP = mean arterial pressure, SBP = systolic blood pressure)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Author,year(reference) | Tani,1998(20) | Nakamura, 2000(21) | Nemoto, 2001(5) | Suzuki, 2002(12) | Nakamura, 2005(23) | Vincent, 2005(22) | Cruz, 2009(6) | Takahashi, 2014(15) | Payen, 2015(9) |
| **Timing of evaluation** | immediate after PMX-HP | after 2nd PMX-HP | 3 hours after PMX-HP | after 24 hours |  | after 24 hours | after 72 hours | after 12-24hours | on day 3 |
| **Plasma endotoxin level****(pg/ml)** | perchloric acid(PCA) method | Sep-Pak C18 column  | Endospecy method |  | Endospecy method | modified limulus amebocyte lysate (LAL) assay |  |  |  |
| 83.7±26.7 to 56.4±27.9 (*p*<0.05) | 36.4±8.2 to 10.6 ±38  (*p*<0.001) | 38.6±5.7 to 21.4±2.0 (*p*<0.006) | significant reduction (*p*<0.01) | 49± 23 to 10.4±5.5 after 2ndPMX-HP(*p*<0.01) | 25%percentile: 3.8 to 9.050%percentile: 28 to 38.575%percentile: 96.8 to 69\* |  |  |  |
| 49± 23  to 4.8±2.2 on the following day (*p*<0.001) |  |  |  |
|  |  |  |  |  | **IL-18**enzyme-linked immunosorbent assay | **IL-6**commercial kit (Quantikine, R&DSystems, Minneapolis, MN) |  |  |  |
| **Plasma cytokine****level****(pg/ml)** |  |  |  | **IL-6** ↓ **IL-1β**↓(*p*< 0.05) | 1410±380  to 640±240 after 2ndPMX-HP (*p*<0.01) | 25%percentile:   350 to 18750%percentile: 1632 to 51275%percentile: 4316 to1746\* |  |  |  |
|  |  |  |  | 1410±380  to 360±180 on the following day(*p*<0.001) |  |  |  |
|  | **In MAP<90:**SBP↑78.2± 2.3to 93.2±4.0(*p*<0.01) **in MAP>90:**SBP↑127.8to135.8 (*p*<0.05) | SBP↑82±10 to 102±14 (p<0.01) | **In APACHE II <10 :**MAP ↑81±6 to104±4(*p*<0.005) |  |  | MAP ↑ 4.2±13.74 on day1MAP ↑ 10.8 ±13.65 on day2 (*p*=0.006) | MAP ↑ 76 (72-80)  to 84 (80-88)  (*p*=0.001) |  |  |
| **Blood Pressure****(mmHg)** | **In APACHE II 20-29 :** MAP ↑78±2 to 94±4 (*p*<0.001) |  |  |  |  |
|  | **In APACHE II >30 :** MAP ↑75±3 to 75±4\* |  |  |  |  |
| **PaO2/FIO2 Ratio** |  |  |  |  |  | increased  29.54 ±83.38 on day2\* | Increased from235(206-265) to 264(236-292) (*p*=0.049) | increased from162±88.8  to 306±83.5 (*p*=0.0087) |  |
|  |  |  |  |  |  |
| **SOFA score change** |  |  |  |  |  |  | −3.4(−4.4 ~ −2.4)  (*p*<0.001) | -3.3 ± 2.1 (*p*=0.019) | decreased from10(3-15) to 8 (0-16) (*p*<0.01) |

 \* insignificant difference.