

**Table S1. Comparison of dialysate GDP concentrations and clinical parameters pre- and post-FIR therapy in DM and non-DM patients**

| Parameters                                          | DM                 |                    | P       | Non-DM             |                    | P       |
|-----------------------------------------------------|--------------------|--------------------|---------|--------------------|--------------------|---------|
|                                                     | Pre-FIR            | Post-FIR           |         | Pre-FIR            | Post-FIR           |         |
| GDPs (µg/L)                                         |                    |                    |         |                    |                    |         |
| Formaldehyde                                        | 4845.68±2034.39    | 3763.61±1516.77    | 0.16    | 3432.91±1232.04    | 3032.81±851.77     | 0.23    |
| Acetaldehyde                                        | 1889.60±438.37     | 1895.58±396.97     | 0.83    | 1747.09±342.21     | 1920.53±441.68     | 0.25    |
| Furfural                                            | 1467.19±685.11     | 933.09±440.95      | 0.08    | 1283.12±769.79     | 829.18±538.97      | 0.11    |
| HMF                                                 | 56,317.52±39711.71 | 42,494.66±32097.18 | 0.16    | 47,558.21±36923.19 | 29,859.25±17953.52 | 0.16    |
| Glyoxal                                             | 7034.68±3121.20    | 5125.68±5003.88    | 0.16    | 7017.86±3247.17    | 6197.24±4720.01    | 0.59    |
| Methylglyoxal                                       | 2222.19±1499.73    | 1523.81±1460.20    | 0.11    | 2292.04±1540.23    | 1571.78±1257.92    | 0.15    |
| KDG                                                 | 38,460.35±17028.53 | 31,916.52±19623.39 | 0.51    | 30,107.61±12956.49 | 26,655.02±12819.17 | 0.29    |
| Peritoneal function                                 |                    |                    |         |                    |                    |         |
| D/D0 glucose                                        | 0.38±0.07          | 0.42±0.06          | 0.24    | 0.35±0.08          | 0.37±0.06          | 0.03*   |
| D/P creatinine                                      | 0.67±0.11          | 0.66±0.08          | 0.88    | 0.69±0.10          | 0.66±0.09          | 0.04*   |
| Peritoneal Kt/V                                     | 1.78±0.42          | 1.74±0.35          | 0.71    | 1.62±0.33          | 1.89±0.42          | 0.007** |
| Peritoneal weekly CCr (L/week/1.73 m <sup>2</sup> ) | 42.92±7.97         | 41.29±5.21         | 0.60    | 39.56±8.40         | 42.02±9.17         | 0.21    |
| nPCR (g/kg/d)                                       | 1.02±0.22          | 1.03±0.29          | 0.83    | 1.19±0.21          | 1.20±0.29          | 0.91    |
| Serum biochemistry                                  |                    |                    |         |                    |                    |         |
| Glucose (mg/dL)                                     | 136±60.52          | 169.64±60.15       | 0.22    | 102.53±13.45       | 101.35±12.44       | 0.80    |
| HbA1c (%)                                           | 6.85±1.21          | 7.09±1.28          | 0.47    | 5.57±0.57          | 5.69±0.70          | 0.30    |
| Albumin (g/dL)                                      | 3.25±0.33          | 3.24±0.44          | 0.92    | 3.77±0.43          | 3.69±0.41          | 0.31    |
| Potassium (mmol/L)                                  | 4.24±0.86          | 3.68±0.54          | 0.004** | 4.12±0.47          | 3.92±0.75          | 0.30    |
| Hs-CRP (mg/dL)                                      | 2.07±5.22          | 0.75±1.14          | 0.55    | 0.36±0.63          | 0.26±0.31          | 0.48    |

Continuous variables were presented as mean ± standard deviation.

\*:  $P < 0.05$ ; \*\*:  $P < 0.01$  by using Wilcoxon signed-rank test (two-tailed).

Abbreviations: GDP: glucose degradation products; FIR: far-infrared; DM: diabetes mellitus; D/D0 glucose: ratio of dialysate glucose after time of dwell to initial dialysate glucose; D/P creatinine: dialysate/plasma creatinine ratio at 4 h; Kt/V: Kt/V urea; CCr: creatinine clearance; nPCR: normalized protein catabolic rate; HbA1c: glycated hemoglobin; hs-CRP: high-sensitivity C-reactive protein.