***Supplemental Information***

**Table S1. Specific primers and probes used for gene expression analysis**

|  |  |  |  |
| --- | --- | --- | --- |
| Gene(Protein) | Forward Primer | Reverse Primer | Probe |
| Havcr1 (KIM-1) | GGAATGGCACTGTGACATCCT | CTGCGGCTTCCTCAAAGG | AGGAGGCCTGGAATAATCACACTGTAAGA |
| Col1a1(COL1A1) | GAAGCATGTCTGGTTTGGAGAGA | ATCGGAACCTTCGCTTCCAT | TGACCGATGGATTCCAGTTCGA |
| Timp-1(TIMP-1) | CCGCAGCGAGGAGTTTCTC | GGCAGTGATGTGCAAATTTCC | TCGCGGGCCGTTTAAGGAA |
| Nppa (ANP) | GGGGGTAGGATTGACAGGAT | TCGAGCAGATTTGGCTGTTA | CCCAGAGCGGACTAGGCTGCAA |
| Spp1 (ONP) | TCACCTCCCGCATGAAGAG | CTCAGACGCTGGGCAACTG | CAGGAGTCCGATGAGGCTATCAAGGTCATC |
| Serpine 1 (PAI-1) | CCATGATGGCTCAGAACAAC | GTTCCAGGATGTCGTACTCGT | TTCAACTACACTGAGTTCACCACTCCGGAT |

**Table S2. Body weight development during the study at week 1, 3, 5 and 7 (study end).**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| week | Control | Placebo | Empagliflozin 3mg/kg | Empagliflozin 10mg/kg | Finerenone 1mg/kg | Finerenone 3mg/kg | Combination 3 + 1 |
| 1 | 189.5 ± 1.3\*\*\* | 226.9 ± 3.9 | 232.8 ± 2.8 | 224.2 ± 3.7 | 229.4 ± 3.6 | 229.2 ± 3.4 | 227.4 ± 3.4 |
| 3 | 216.7 ± 1.4\*\*\* | 248.1 ± 4.6 | 258.8 ± 2.9 | 248.1 ± 4.2 | 244.9 ± 4.3 | 251.2 ± 3.2 | 251.4 ± 3.9 |
| 5 | 231.8 ± 2.0\*\*\* | 267.9 ± 3.2 | 265.4 ± 2.7 | 261.0 ± 1.6 | 271.3 ± 4.5 | 271.5 ± 2.5 | 269.9 ± 6.1 |
| 7 | 231.8 ± 2.0\*\*\* | 267.9 ± 3.2 | 265.4 ± 2.7 | 261.0 ± 1.6 | 248.4 ± 19.5 | 271.5 ± 2.5 | 269.9 ± 6.1 |

Data are mean ± SEM; \*\*\*p<0.005, vs. placebo.

**Figure S1. Urinary volume and organ weights per body weight**



B

D



A

C

Urinary volume/body weight determined after 2 (A) and 6 weeks (B), heart weight/body weight determined at study end (C) and kidney weight/body weight at study end (D), respectively. Data are mean ± SEM.

**Figure S2. Renal and cardiac gene expression**



F

D

B

A

C

E

Shown are relative expression to mean control=1 of renal KIM-1 (A), renal TIMP-1 (B), renal COL1a1 (C), cardiac ANP (D), cardiac OPN € and cardiac PAI-1 (F). Data are mean ± SEM, \*\*\*p<0.005, \*\*p<0.01, \*p<0.05 vs. placebo.