Selenoprotein S Attenuates Tumor Necrosis Factor-α Induced Dysfunction in Endothelial Cells

Siyuan Cui¹, Lili Men¹, Yu Li¹, Yingshuo Zhong¹, Shanshan Yu¹, Fang Li², Jianling Du¹

¹ Department of Endocrinology, The First Affiliated Hospital of Dalian Medical University, Dalian 116000, Liaoning, China

² Department of Immunology, Dalian Medical University, Dalian 116000, Liaoning, China

The Corresponding authors’ email: Fang Li, lifang16@hotmail.com. Jianling Du, dujianlingcn@163.com. Jianling Du is the first corresponding author.

Disclosure statement: The authors have nothing to disclose.
Table S1: the sequences of SelS siRNAs and Negative siRNA were shown.

| Designation     | Sequence                  |
|-----------------|---------------------------|
| SelS siRNA 1    | sense strand 5'-CCACCUAUGGCUGGUACAUTT-3'  |
|                 | antisense strand 5'-AUGUACCAGCCAUAAGGUGGTT-3'  |
| SelS siRNA 2    | sense strand 5'-CCUUCUCUACGUGUGUCUUUTT-3'  |
|                 | antisense strand 5'-AAAGACCACGUAGAGAAGGTT-3'  |
| SelS siRNA 3    | sense strand 5'-GGAACCUGAUGUUGUGUUGUUTT-3'  |
|                 | antisense strand 5'-AACAACAACAUCCAGGUUCCTT-3'  |
| Negative siRNA  | sense strand 5'-UUCUCCGAACGUGUCAGCUTT-3'  |
|                 | antisense strand 5'-ACGUGACACGUUCGAGAATT-3'  |

Table S2: the specific primers for RT-qPCR were shown.

| Gene         | Sequences                              |
|--------------|----------------------------------------|
| Human SelS   | 5'-GTTGCGTTGGAATGATGTCTTCCCT-3'         |
|              | 5'-AGAAACAAACCCCCATCAACTGT-3'           |
| Human GAPDH  | 5'-TGACCACAGTCCATGCCATCAC-3'            |
|              | 5'-CGCCTGCTTCACCACCTTCTT-3'             |
| Human eNOS   | 5'-CTGAAGGCTGGCATCTGGAA-3'              |
|              | 5'-CATGTACTGTGCGTCCACTCTG-3'            |
| Human ET-1   | 5'-TCCTCTGCTGTTCTGACT-3'                |
|              | 5'-CAGAAACTCACCCTGTTGT-3'               |
| Human ICAM-1 | 5'-CAAGGTCATCGTAAATGTC-3'               |
|              | 5'-CGTGCTGTCATGTTCTGTT-3'               |
| Human VCAM-1 | 5'-CCACATCTACGCTGCAAAT-3'               |
|              | 5'-GAACACTTCGACTGATCGG-3'               |
| Human IL-6   | 5'-TACATCCTCAGCGCATCTCA-3'              |
|              | 5'-GCCATCTTGGAAAGGTTCAGG-3'             |
| Human IL-1β  | 5'-CCTGTCCTGCGTGTGAAAG-3'               |
|              | 5'-GAGAGGTGCTGATGTACCAG-3'              |
| Human MCP-1  | 5'-GAAGATCACCAGCAGAAG-3'                |
|              | 5'-GAATCCTGAAACCACTTCTG-3'              |
| Human IL-8   | 5'-AGTTTTGCAAGGAGGTGCTA-3'              |
|              | 5'-AAAACCTTCTCACCAAC-3'                 |
Figure S1: the dissolve and amplification curves were shown in RT-qPCR experiments.
Figure S2: The transfection with pcDNA3.1-SelS recombinant plasmid or SelS siRNA was identified in Figure 3 listed experiments. (a) pcDNA3.1-SelS plasmid transfection and (b) SelS siRNA transfection using in cell viability experiment were determined by western blot. (c) The transfection with pc-SelS plasmid and (d) transfection with SelS siRNA using in NO measurement were tested by western blot. (e) The pc-SelS plasmid transfection or (f) SelS siRNA transfection in eNOS mRNA testing was determined by RT-qPCR.