

NEWS RELEASE

Company TMS Co., Ltd.
Representative Takuro Wakabayashi, Chief Executive
Officer
(Securities code: 4891; Tokyo Stock Exchange Growth
Market)

**Notice of Publication of a Research Paper on the Renoprotective Effects
of an SMTP Compound in Acute Kidney Injury**

TMS Co., Ltd. (the “Company”) hereby announces that the results of a collaborative study with Showa Medical University demonstrating the renoprotective effects of SMTP-44D*, one of the SMTP compounds, in acute kidney injury have been published in the international peer-reviewed journal International Journal of Molecular Sciences.

* SMTP-44D is one of the bioactive compounds in the SMTP family, which also includes TMS-007. The SMTP compounds were discovered from the fungus *Stachybotrys microspora* by Keiji Hasumi, Chairman of the Company, during his tenure as Professor at Tokyo University of Agriculture and Technology.

Details

Title:

SMTP-44D Attenuates Renal Inflammatory/Oxidative Dysfunction in a Mouse Model of Ischemia-Reperfusion-Induced Acute Kidney Injury

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Summary of the paper:

Acute kidney injury (AKI) is a condition characterized by an abrupt decline in kidney function, and ischemia-reperfusion injury associated with cardiac surgery and other clinical settings is one of its major causes. Oxidative stress and inflammatory responses induced during reperfusion, when blood flow is restored after ischemia, play important roles in renal tissue injury. However, effective pharmacological treatments targeting these pathological processes remain limited.

In this study, the effects of SMTP-44D were investigated in a mouse model of ischemia-reperfusion-induced AKI. SMTP-44D improved renal functional parameters, including blood urea nitrogen, serum creatinine, and fractional excretion of sodium. In addition, SMTP-44D significantly reduced the tubular injury markers NGAL and KIM-1 and significantly suppressed increases in the pro-inflammatory cytokines TNF-alpha and IL-1beta, as well as NOX-1, which is associated with oxidative stress, in kidney tissue.

These findings suggest that SMTP-44D suppresses inflammation and oxidative stress and attenuates renal dysfunction.

TMS Co., Ltd.

TMS Co., Ltd. is a clinical-stage biopharmaceutical company focused on the discovery and development of transformative medicines for the treatment of serious diseases in areas of high unmet medical need. The Company's pipeline consists of a family of small molecule compounds called SMTPs (*Stachybotrys microspora* triprenyl phenols) derived from a fungus. TMS' lead program, TMS-007 (JX10), has demonstrated efficacy and safety in its Japanese Phase 2a study for the treatment of acute ischemic stroke. The Company's robust pipeline also includes programs in acute kidney injury, and spinal cord injury. TMS continues to explore new pipeline products by leveraging its established partnerships with leading academic institutions in Japan, with the intention to build a bridge between academic discoveries and the global pharmaceutical market. For more information about TMS, please visit <https://www.tms-japan.co.jp/en/>.

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