

FOR IMMEDIATE RELEASE

First-in-Human Study of a Long-acting $\alpha_{\nu}\beta_3$ Integrin Targeting Molecule ⁶⁴Cu-NOTA-EB-RGD in Healthy Volunteers and GBM Patients

West Chester, PA, July 11, 2020-- Molecular Targeting Technologies, Inc. (MTTI) announced today that Dr. Jingjing Zhang of Peking Union Medical College Hospital (PUMC), Beijing, China will present a talk entitled "First-in-Human Study of a ⁶⁴Cu-Labeled Long-acting Integrin $\alpha_v\beta_3$ Targeting Molecule ⁶⁴Cu-NOTA-EB-RGD (⁶⁴Cu-EBRGD) in Healthy Volunteers and GBM Patients" at the 2020 SNMMI Virtual Annual Meeting.

Glioblastoma is the most common and most aggressive primary malignant brain tumor in adults, with 17,000 diagnoses annually in the US. It is a highly diffuse and invasive disease that is personally devastating and virtually incurable. Once diagnosed, most patients survive less than 15 months, and fewer than five percent survive five years.

"In this study, we have demonstrated a potential radiotheranostic agent that is safe, sensitive and highly selective in humans, which infers a future diagnostic tool and targeted radiotherapy for glioblastoma patients," said Jingjing Zhang, MD, PhD, of Peking Union Medical College Hospital, Beijing, China. "This innovative use of ⁶⁴Cu-EBRGD as a diagnostic, easily marks integrin targets. Further treatment with a EBRGD-radiotherapeutic promises positive outcomes."

"⁶⁴Cu-labeled EBRGD is a viable model for therapeutic application, since ¹⁷⁷Lu, ⁹⁰Y or ²²⁵Ac can be substituted for ⁶⁴Cu," said Deling Li, MD, of Beijing Tiantan Hospital, Capital Medical University, Beijing, China. "We are currently studying the ¹⁷⁷Lu homolog to treat glioblastoma and other $\alpha_v\beta_3$ integrin expressing cancers, including non-small cell lung, melanoma, renal and bone, and hope to build on the current wave of targeting radiotherapies like ¹⁷⁷Lu-DOTA-TATE."

"Incorporating Evans Blue into radiotherapeutics like EBRGD to prolong therapeutic efficacy is a substantive medical breakthrough, promising better outcomes across several indications. We're genuinely excited to be part of this and thank our colleagues for their energy, passion and commitment to the effort," said Chris Pak, President & CEO of MTTI.

MTTI is a privately held biotechnology company focused on the acquisition and development of novel technologies for treatment and diagnosis of human diseases. More information: <u>www.mtarget.com</u>. Contact: Chris Pak, Email: <u>cpak@mtarget.com</u>; and J Li, Email: <u>jli@mtarget.com</u> Tel: (610) 738-7938.

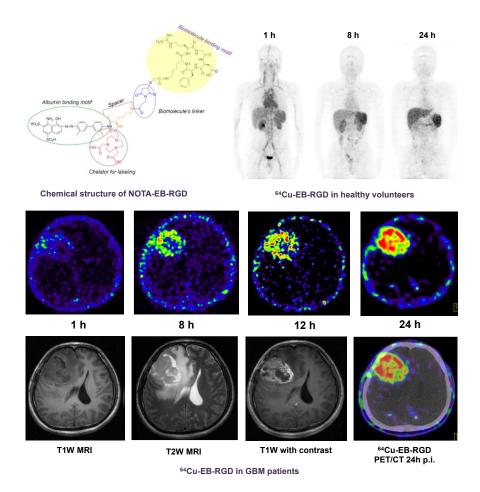


Figure 1. Representative maximum-intensity projection PET images of a healthy human volunteer injected with ⁶⁴Cu-NOTA-EB-RGD at 1, 8, and 24 hours after injection. Axial MRI and PET slices of glioblastoma patient injected with ⁶⁴Cu-NOTA-EB-RGD at different time points after injection.

Abstract 349. "First-in-Human Study of a ⁶⁴Cu-Labeled Long-acting Integrin ανβ3 Targeting Molecule ⁶⁴Cu-NOTA-EB-RGD in Healthy Volunteers and GBM Patients," Jingjing Zhang, Department of Nuclear Medicine, Peking Union Medical College Hospital, Chinese Academy of Medical Sciences, Beijing, China, and THERANOSTICS Center for Radiomolecular Precision Oncology, ENETS Center of Excellence, Zentralklinik Bad Berka, Bad Berka, Germany; Deling Li, Department of Neurosurgery Beijing, Tiantan Hospital, Beijing City, China; Gang Nu, National Institute of Biomedical Imaging and Bioengineering (NIBIB), National Institutes of Health (NIH), Bethesda, Maryland; Richard Baum, THERANOSTICS Center for Radiomolecular Precision Oncology, ENETS Center of Excellence, Zentralklinik Bad Berka, Bad Berka, Germany; Zhaohui Zhu, Department of Nuclear Medicine, Peking Union Medic, Beijing, China; and Xiaoyuan Chen, NIBIB/NIH, Bethesda, Maryland. SNMMI's 67th Annual Meeting, July 11-14, 2020.

Molecular Targeting Technologies, Inc. received an exclusive worldwide commercialization license from NIH for this technology. This patent estate includes EBRGD radiotherapeutic. Glioblastoma treatment is among its potential uses.