

New gene therapy method provides specific, safe control of therapeutic transgenes

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Korean researchers have described a novel control system to regulate the expression of a therapeutic transgene by targeting the passenger strand of a microRNA (miR-122) linked to the transgene. The researchers report that a control system based on targeting the passenger strand of miR-122 rather than the guide strand can regulate expression of an exogenous, therapeutic gene, while not affecting the expression of endogenous genes.

Sung Jin Kim, Chang Ho Lee, and Seong-Wook Lee, Dankook University, Yongin, Republic of Korea, describe the novel gene therapy control system they developed in the article <u>"Targeting the MicroRNA</u> <u>Passenger Strand for Regulating Therapeutic Transgenes"</u>. They compare the results of studies to regulate the <u>expression</u> of a transgene by targeting either the guide or passenger strand of miR-122, and discuss the underlying mechanisms to explain the observed miRNA activity and up- and down-regulation of <u>gene expression</u>.

"This clear and convincing paper proposes a new, safe, and effective approach to regulate therapeutic transgenes," says Executive Editor Graham C. Parker, PhD, The Carman and Ann Adams Department of Pediatrics, Wayne State University School of Medicine, Children's Hospital of Michigan, Detroit, MI.

More information: The article is available free on the <u>Nucleic Acid</u> <u>Therapeutics</u> website until August 13, 2015.

Provided by Mary Ann Liebert, Inc

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