

MicroRNAs as new therapeutic target for glucocorticoid-dependent pathologies (P-1137)

Keywords

- miRNA as target for treatment of glucocorticoid-dependent pathologies, including diabetes-related dyslipidemia, hyperglycemia and insulin resistance
- liver-specific knockdown sufficient for sustained systemic effects
- *in vivo* test method / no severe side effects detected

Abstract

Glucocorticoid signalling plays a key role in diseases associated with metabolic syndrome, which are considered to become the major burden of human health in the 21st century. So strategies for treating such diseases are urgently needed. The current invention describes an miRNA which interferes with glucocorticoid signalling and can therefore be used as a therapeutic target for e.g. diabetes-related metabolic disorders.

Development Stage

The invention has been successfully tested in an *in vivo* model of metabolic syndrome (db/db mouse)

The Technology

Liver-specific knockdown of a specific miRNA which is involved in glucocorticoid receptor signalling can be used as a method for interfering with glucocorticoid-dependent pathologies, including diabetes-related dyslipidemia, hyperglycemia and insulin resistance. For example, it has been shown that liver-specific knockdown leads to a significant reduction of circulating VLDL-associated triglycerides in an *in vivo* mouse model of metabolic syndrome.

Applications and Commercial Opportunity

DKFZ is looking for a commercial partner to further develop this technology towards clinical application.

Inventors

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Intellectual Property

A European Patent Application has been filed EP 13190740.4

Further Information

No other public information is currently available, but further information (speaking with the inventor) is available under a signed Confidential Disclosure Agreement (CDA).

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