

‘Window of opportunity’ to treat thyroid disease: Genetically modified stem cells

Scientists have found a way to efficiently engineer new thyroid cells from stem cells. The discovery, performed in mice, is the first step toward engineering new human thyroid cells in order to better study and treat thyroid diseases.

...

The thyroid is a gland in the middle of the lower neck. Although only small, it produces hormones that reach every cell, organ, and tissue to help control metabolism...It is thought that around 20 million people in the United States are living with some form of thyroid disease, the causes of which are largely unknown.

...

In their study, the researchers [found a way](#) to coax genetically modified embryonic stem cells from mice to develop into thyroid cells.

...

They discovered a small time-frame during which the Nkx2-1 gene is switched on that converts the majority of the stem cells into thyroid cells.

Researchers believe that the discovery is the first step toward an effective human stem cell protocol for creating research models and new treatments for thyroid diseases. The principle may also apply to other cell types, they add.

[The study can be found [here](#).]

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Engineering thyroid cells from stem cells may lead to new therapies](#)