Identifying Individuals at Risk of Glucocorticoid-Induced Bone Disease

Glucocorticoid treatment can cause bone loss in some individuals, while the bone mass remains stable in others. The aim of this study is to find a biomarker that can identify individuals at risk of Glucocorticoid-Induced Bone loss.

We will include 36 healthy study participants, who will be randomized to receive either glucocorticoid treatment or placebo for 7 days. The study participants will have blood samples, bone marrow samples, bone tissue samples, and adipose tissue samples taken, and a mixed meal test performed during the study.

The analysis of the samples will be done in collaboration with Uni. Of Ulm, Germany and Uni. Of Birmingham, UK.

With these samples, we will try to find a biomarker that can be used to distinguish those who experience bone loss from those who do not.

Afterward, we will perform two confirmation studies to validate the biomarker.

A biomarker like this could be used to determine, which individuals would benefit from prophylactic treatment for bone loss in the future.