Some variants of the glucocorticoid receptor (GR) gene have been found to alter glucocorticoid sensitivity and have been associated with worsen metabolic profiles.

**AIM OF THE STUDY**

1. To assess whether the prevalence of 363S, ER22/23EK and Bcl variants are different in patients with adrenal incidentaloma and/or subclinical Cushing syndrome than control subjects

2. To study whether the presence of these gene variants may be linked to metabolic or hormonal abnormalities in patients with adrenal incidentalomas or subclinical cushing syndrome

**METHODS**

411 subjects with adrenal incidentaloma

186 population-matched control subjects

DNA extraction

PCR

PYROSEQUENCING

**RESULTS**

We have not found any difference in the prevalence of the evaluated SNPs between patients and controls.

The GR variants are not associated with the development of adrenal incidentalomas.

The ER22/23EK and Bcl variants don’t seem to have any influence on hormonal secretion and clinical presentation.

N363S could influence blood pressure levels. However, the effect seems to be more evident in patients with normal cortisol secretion, while it is less apparent in subjects with an autonomous cortisol secretion.

Cortisol secretion outweighs the effect of GC receptor sensitivity on clinical phenotype?