Title of the study group:
EULAR Neuro Endocrine Immunology of Rheumatic Diseases (NEIRD) Study Group

Study Group Leader's name:
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Date of annual report submission:
2020

Who we are and we cover

- Aim of the NEIRD Study Group, established at EULAR in 1998, is to investigate the Neuro Endocrine Immune Network (NEI), is the most important communication-system in human body to keep the healthy status. NEIRD evaluate the relationships between NEI and Rheumatic Musculoskeletal Diseases (RMDs). The altered interaction between the nervous system, the immune/inflammatory cells and the endocrine system plays an important role in the pathophysiology of autoimmunity.

The involvement of the adrenal steroid hormones in the immune response is fundamental and follow circadian rhythms (NOBEL PRIZE for Medicine 2017). The nocturnal ability of the NEI system to mount an efficient immune and inflammatory response, with related clinical consequences, is matter of important chronotherapeutical approaches with exogenous steroids, in particular with glucocorticoids (GCs). Other important steroid hormones involved in the NEIRD are the sex hormones and the D hormone (vit D) and their role in pregnancy.

Summary of last year’s activities (2020 COVID year)

The Study Group NEIRD (founded at EULAR in 1998) managed different activities in 2020-21 and meetings were almost all online, due to the COVID-19 pandemic.

La major activities 2020-21 include:

New Edition 2020-2021:
EULAR Online course on Rheumatic Diseases - Module 41d (Neuroendocrine immunology of rheumatic diseases).
R Straub, G Pongratz, E Gotelli, Lowin T, Cutolo M
Authors of the chapter “Neuroendocrine immunology in rheumatic diseases” in the EULAR Compendium on Rheumatic Diseases – TextBook on Rheumatic diseases BMJ (2019-20 edition) (chapt 50 and 2) Straub RH, Sully A & Cutolo M

ERN ReCONNET webinar June 2020
“Sex hormones and COVID-19: How is the game?”
Cutolo M, E Aysa

25 Mosaic of Autoimmunity, Shoenfeld Fridays’ weekly e-Meeting at Sheba Medical Center
ISRAEL at OCTOBER 09, 2020
“EPIGENETICS, PREGNANCY AND AUTOIMMUNE RHEUMATIC DISEASES”
Maurizio Cutolo - Genova Italy

Contribution to the EU Horizon 2020 – the Framework Programme for Research and Innovation (2014-2020), Project title funded by EU:
“The Glucocorticoid Low-dose Outcome in Rheumatoid Arthritis Study (GLORIA) (project n°634886)”
(Leader M. Boers, members: JA Da Silva, F Buttgereit, M Cutolo).

ERN ReCONNET webinar March 2021
Challenges in COVID-19 and RMDs
Points to consider in NEIRD: rare immune-mediated CTDs vs. rare non immune-mediated CTDs in COVID RMD male and female patients
Mosca M, Talarico S, Callens S, Cutolo M

Publications:


March 31st 2021

M Cutolo
Leader NEIRD