



The EULAR Study Group on Neuro Endocrine Immunology of the Rheumatic Diseases (NEIRD) was founded in 1998 during the First International Conference on Neuroendocrine Immune Basis of the Rheumatic Diseases held in Genova.

The members of the NEIRD organized the NEIRD Conferences (2nd, 3rd) held in 2001, 2005 and the next in 2009 (4th).

The results of the NEIRD Study Group are regularly presented during the EULAR annual meeting at the ESCIR session by the **coordinator M Cutolo**.

The EULAR members involved from the beginning in the NEIRD Study Group include RH Straub (D), JWW Bijlsma (NL), F Buttgereit (D), JAP DaSilva (P), A Doria (I), G Maestroni (S), M Cutolo (I), K Otsa (E), G Chrousos (G), JM Dayer (S), J Rovensky (SK), P Sarzi Puttini (I), Y Shoenfeld (IS), F Atzeni (I), D Jessop (UK), C Pitzalis (UK) and others including A Masi (US) and R Lahita (US).

A module number (42) has been prepared for the EULAR on line-Course that will be delivered on the web site on March 2009.

Major topics of the investigations in the last 2 years (2007-2008) included:

[Sex hormones and rheumatic diseases](#)
[Circadian rhythms and rheumatic diseases](#)
[Glucocorticoids and rheumatic diseases](#)
[Vitamin D and rheumatic diseases](#)

The most important publications on these topics during the last 2 years (2007-2008) are reported below:

Sex hormones and rheumatic diseases

Cutolo M.

Sex and rheumatoid arthritis: mouse model versus human disease.

Arthritis Rheum. 2007;56:1-3

Montagna P, Capellino S, Villaggio B, Remorgida V, Ragni N, Cutolo M, Ferrero S.

Peritoneal fluid macrophages in endometriosis: correlation between the expression of estrogen receptors and inflammation.

Fertil Steril. 2008;90(1):156-64

Shoenfeld Y, Zandman-God, Berkun Y, Blank M, de Carvalho JF, Doria A, Gilburd B, Katz U, Krause I, Langevitz P, Orbach H, Pordeus V, Ram M, Toubi E, Sherer Y.

The mosaic of autoimmunity: hormonal and environmental factors involved in autoimmune diseases.

2008. Isr Med Assoc J. 2008 Jan;10(1):8-12

Cutolo M, Capellino S, Straub RH.
Estrogens in rheumatic diseases: friend or foe?
Rheumatology (Oxford) 2008 ;47 Suppl 3:iii2-5

*Capellino S, Montagna P, Villaggio B, Sulli A, *Straub RH, Cutolo M.* **Hydroxylated estrogen metabolites influence proliferation of cultured human monocytes: possible role in synovial tissue hyperplasia.**
Clin Exp Rheumatol 2008;26:903-9

Cutolo M, Matucci Cerinic M, Lockshin M, Ostensen M.
Introduction: new trends in pregnancy and rheumatic diseases
Rheumatology 2008;47 Suppl 3:iii1

Circadian rhythms and rheumatic diseases

Cutolo M, Straub RH, Bijlsma JW.
Neuroendocrine-immune interactions in synovitis.
Nature Clin Pract Rheumatol. 2007 Nov;3(11):627-34

Cutolo M, Straub RH.
Circadian rhythms in arthritis: hormonal effects on the immune/inflammatory reaction.
Autoimmun Rev. 2008 Jan;7(3):223-8

Maestroni GJ, Otsa K, Cutolo M.
Melatonin treatment does not improve rheumatoid arthritis.
Br J Clin Pharmacol. 2008 May;65(5):797-8

Buttgereit F, Doering G, Schaeffler A, Witte S, Sierakowski S, Gromnica-Ihle E, Jeka S, Krueger K, Szechinski J, Alten R.
Efficacy of modified-release versus standard prednisone to reduce duration of morning stiffness of the joints in rheumatoid arthritis (CAPRA-1): a double-blind, randomised controlled trial.
Lancet. 2008 Jan 19;371(9608):205-14

Cutolo M, Straub RH, Buttgereit F.
Circadian rhythms of nocturnal hormones in RA: from bench to bedside.
Ann Rheum Dis 2008;67:905-8

Glucocorticoids and rheumatic diseases

Hoes JN, Jacobs JW, Boers M, Boumpas D, Buttgereit F, Caeyers N, Choy EH, Cutolo M, Da Silva JA, Esselens G, Guillevin L, Hafstrom I, Kirwan JR, Rovensky J, Russell A, Saag KG, Svensson B, Westhovens R, Zeidler H, Bijlsma JW.
EULAR evidence-based recommendations on the management of systemic glucocorticoid therapy in rheumatic diseases.
Ann Rheum Dis. 2007 Dec;66(12):1560-7

Capellino S, Riepl B, Rauch L, Angele P, Cutolo M, Straub RH.

Quantitative determination of steroid hormone receptor positive cells in the synovium of patients with rheumatoid arthritis and osteoarthritis: is there a link to inflammation?

Ann Rheum Dis. 2007 Jan;66(1):53-8

Straub RH, Pongratz G, Cutolo M, Wijbrandts CA, Baeten D, Fleck M, Atzeni F, Grunke M, Kalden JR, Schölmerich J, Lorenz HM, Tak PP, Sarzi-Puttini P.

Increased cortisol relative to adrenocorticotrophic hormone predicts improvement during anti-tumor necrosis factor therapy in rheumatoid arthritis.

Arthritis Rheum. 2008 Apr;58(4):976-84

Straub RH, Tankó LB, Christiansen C, Larsen PJ, Jessop DS

Higher physical activity is associated with increased androgens, low interleukin 6 (low cortisol) and less aortic calcification in peripheral obese elderly women.

J Endocrinol. 2008 Oct;199(1):61-8.

Cutolo M, Serio B, Pizzorni C, Secchi ME, Soldano S, Paolino S, Montagna P, Sulli A.

Use of glucocorticoids and risk of infections

Autoimmun Rev. 2008;8:153-5

Vitamin D and rheumatic diseases

Cutolo M, Otsa K, Yprus M, Serio B.

Vitamin D and rheumatoid arthritis: comment on the letter by Nielen et al.

Arthritis Rheum. 2007 May;56(5):1719-20

Cutolo M, Otsa K, Uprus M, Paolino S, Serio B.

Vitamin D in rheumatoid arthritis.

Autoimmun Rev. 2007 Nov;7(1):59-64. Epub 2007

Cutolo M, Otsa K.

Review: vitamin D, immunity and lupus.

Lupus. 2008;17(1):6-1

Cutolo M, Otsa K, Paolino S, Yprus M, Veldi T, Serio B.

Vitamin D involvement in rheumatoid arthritis and systemic lupus erythematosus.

Ann Rheum Dis letter 2008 (in press)

Cutolo M.

Vitamin D or hormone D deficiency in autoimmune rheumatic diseases, including undifferentiated connective tissue disease.

Arthritis Res Ther. 2008 Dec 2;10(6):123

4th International Conference

NeuroEndocrine Immunology and Rheumatic Diseases:

Translation from Basics to Clinics

Genova – Italy – 8th – 10th May 2009

www.4thNEIRD.com