

(R)-21¹³, (R)-35¹⁴, (R)-37¹², Ginsenoside Rg1¹⁵ and Org 214007-0¹⁶. Results are shown in Table 1. (R)-16 showed better efficacy and safety compared to prednisone. Compound A, Ginsenoside Rg 1, Compounds 14, (R)-18, and (R)-21 had better safety profiles than a GC, but with similar efficacy. (R)-35 and (R)-37 showed better efficacy than a GC, but safety data was lacking. Org 214007-0, LGD-5552, Compounds 4 and 5 and PF-04171327 showed similar efficacy as a GC, but no safety data was provided.

Author, year	SGRM tested	Reference compound	Clinical trial	Pre-clinical human	Pre-clinical animal	Efficacy	Safety	Conclusion on efficacy and safety in comparison to reference compound
Dewint et al., 2008	Compound A	Dex		X	X	X	X	Similar efficacy, Better safety of Compound A.
Gossye et al., 2009	Compound A	Dex		X				Similar efficacy, No safety data.
Gossye et al., 2010	Compound A	Dex		X	X			Less efficacy of Compound A, No safety data.
Rauch et al., 2011	Compound A	Dex		X		X	X	Similar efficacy, Better safety of Compound A.
Rauner et al., 2013	Compound A	Dex			X	X	X	Less efficacy of Compound A, Better safety of Compound A.
Malaise et al., 2015	Compound A	Pred		X		X	X	Similar efficacy, Better safety of Compound A.
Yang et al., 2015	Compound 4 and 5	Pred			X	X		Similar efficacy of compound 4, better efficacy of compound 5. No safety data.
Razavi et al., 2014	Compound 14	Pred			X	X	X	Similar efficacy, Better safety of Compound 14.
Riether et al., 2010	Compound (R)-16 and (R)-37	Pred			X	X	X	Better efficacy of (R)-16, Better safety of (R)-16 and (R)-37.
Harcken et al., 2014	Compound (R)-18 and (R)-21	Pred			X	X	X	Similar efficacy, Better safety of (R)-18 and (R)-21.
Weinstein et al., 2011	Compound 35 and 37	Pred, dex			X	X		Better efficacy of compounds 35 and 37. No safety data.
Miner et al., 2007	LGD-5552	Pred			X	X		Similar efficacy, No safety data.
Lopez et al., 2008	LGD-5552	Pred			X	X		Similar efficacy, No safety data.
Du et al., 2011	Ginsenoside Rg1	Dex			X	X		Similar efficacy, Better safety of Ginsenoside Rg1.
Van Lierop et al., 2012	Org 214007-0	Pred			X	X	X	Similar efficacy of Org-214007-0. No safety data.
Conrado et al., 2015	PF-04171327	Pred	X			X		Similar efficacy, No safety data.

Table 1. Efficacy and safety results of selective glucocorticoid receptor modulators (SGRMs).

Conclusions: Studies both assessing efficacy and safety parameters of SGRMs are scarce. Currently, there is insufficient evidence for the presumed superior efficacy/toxicity balance of SGRMs compared to that of GCs.

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AB0429 SHORT-TERM EFFECTS OF LOW DOSE GLUCOCORTICOIDS ON BONE METABOLISM IN EARLY RHEUMATOID ARTHRITIS

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Background: Glucocorticoids (GCs) are frequently used in the treatment of Rheumatoid Arthritis (RA). Studies in humans about the effects on bone turnover markers and modulators are poor, and results are discordant and controversial, probably because conducted with different doses and underlying diseases.

Objectives: To evaluate changes in serum bone turnover markers and Wnt inhibitors at 7- and 30-days after initiation of low dose GCs treatment of early RA.
Methods: 27 adult patients suffering from early RA were prospectively enrolled. Blood tests including C-Reactive Protein (CRP), amino-terminal propeptide of type 1 procollagen (P1NP, marker of bone formation), carboxy-terminal telopeptide of

type 1 collagen (CTX, marker of bone resorption), Sclerostin, and Dickkopf-related protein 1 (DKK1) were detected at baseline and 7 and 30 days after starting low dose of GC (methylprednisolone 4 mg/day).

Results: At baseline we observed a significant positive correlation between CRP and DKK1 serum levels ($r=0.63$; $p<0.05$) and between DKK1 and CTX serum levels ($r=0.38$; $p<0.05$). A significant decrease in serum levels of CRP, P1NP, and Sclerostin was observed after 7 and 30 days of GC treatment ($p<0.05$). About DKK1, it has been detected a not significant tendency to decrease after starting GC. CTX serum levels showed no significant changes.

Conclusions: This study has shown that a low dose GC treatment might have complex and conflicting short-term effects on bone metabolism in early RA (a reduction of bone formation, without increase of bone resorption), different from those observed with higher dose, in other diseases or in healthy subjects. The observed decrease in P1NP and Sclerostin serum levels might mean that also low dose of GC could acutely suppress bone formation and induce loss of function and/or number of osteocytes.

Disclosure of Interest: None declared

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AB0430 LEFLUNOMIDE AS A SECOND LINE DMARD AFTER METHOTREXATE HAS LIMITED IMPACT ON RHEUMATOID ARTHRITIS IN REAL LIFE

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Background: If rheumatoid arthritis (RA) is not in remission or at least low disease under methotrexate (MTX), leflunomide is an approved conventional synthetic DMARD, which is commonly used in some countries.

Objectives: To investigate in a real life situation whether patients with RA benefit from instituting leflunomide after methotrexate.

Methods: The clinical data of all RA patients who had at least once received leflunomide, and who agreed to the pseudonymized analysis of their data (approved by the local ethics committee), were analyzed from the time of leflunomide initiation on to the time of stopping leflunomide or the last visit in 2015, which ever came first.

Results: In total, 145 RA patients treated with leflunomide were identified. Of these, 87 received leflunomide after MTX had failed as a first line DMARD, and 8 received leflunomide as a first line DMARD. 50 patients had another first line therapy. Of the first line leflunomide patients 3 (38%) were still on leflunomide at the last visit, as compared to 7 of the 44 patients (16%) who were switched from MTX to leflunomide, and 0 of the 27 patients in whom leflunomide was added to MTX ($p<0.01$ vs 1st line leflunomide). For leflunomide monotherapy, 29% and 19% were still on the drug after 24 and 48 months, respectively, as compared to 14 and 0% under the combination with MTX. Of all patients who started leflunomide, remission (at least low disease activity) as per CDAI (≤ 2.8 (≤ 10)) was reached by 23% (57%) 3 months, 20% (40%) 6 months, and 16% (34%) one year after initiating leflunomide monotherapy, with corresponding percentages of patients of 39% switched to other approaches at six months and of 60% switched at one year. Under the combination of leflunomide and MTX, remission (at least low disease activity) was seen in 18% (53%) at 3 months, 20% (37%) at 6 months, and 8% (20%) at one year, and 55% and 71% had switched to other modes of action at six months and one year, respectively. Gastrointestinal and mucocutaneous adverse events and hypertension were common, and 4 our patients experienced serious bacterial infections.

Conclusions: Leflunomide constitutes a longer term option for a subgroup of RA patients with contraindications to MTX or after MTX failure. After one year, leflunomide had led to sustained acceptable disease control in approximately one third of the patients, but only in one in five under leflunomide combined with MTX. These results are supportive of the EULAR recommendations that patients should be switched to a second conventional DMARD in the absence of predictors of bad outcome only. If leflunomide is initiated, the patients need to be followed closely for potential secondary loss of efficacy.

Disclosure of Interest: None declared

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AB0431 POST-MARKETING SURVEILLANCE OF TOFACITINIB IN JAPANESE PATIENTS WITH RHEUMATOID ARTHRITIS: AN INTERIM REPORT OF SAFETY DATA

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Background: Tofacitinib is an oral JAK inhibitor for the treatment of rheumatoid arthritis (RA). Efficacy and safety of tofacitinib have been shown in RA patients in global Phase 2, Phase 3 (one study included Japanese patients) and long-term extension (LTE) studies and in two Phase 2 and one LTE study in Japanese patients.