Supplementary Tables

Table S1: Correlation matrix for serum tryptophan and metabolites *vs*. rheumatoid factor (RF) in OA and RA patients, respectively.

ln (serum level)		OA rheumatoid factor (RF)	RA rheumatoid factor (RF)
Serotonin	r	-0.092	0.110
	p-value	0.449	0.433
Tryptophan	r	-0.066	**-0.369**
	p-value	0.587	**0.006**
IDO activity	r	**-0.276**	**0.385**
	p-value	**0.044**	**0.004**
Kynurenine	r	**-0.439**	0.190
	p-value	**0.001**	0.168

Table S2. Linear regression model predicting change in RAMRIS at month six.

Model #	model chracteristics	predictor	Std beta	T	*p*-value
1	r=0.631	constant		3.111	0.007
	r2=0.399	serotonin [ng/ml]	0.42	1.96	0.069
	corr. r2=0.198	tryptophan [µmol/l]	0.223	0.968	0.348
	ANOVA *p*=0.139	kyneurenin [µmol/l]	-0.066	-0.277	0.785
		age	-0.216	-0.931	0.367
		sex	0.106	0.5	0.624
2	r=0.629	constant		3.199	0.006
	r2=0.396	serotonin [ng/ml]	0.426	2.058	0.056
	corr. r2=0.245	tryptophan [µmol/l]	0.197	0.964	0.349
	ANOVA *p*=0.074	age	-0.243	-1.189	0.252
		sex	0.112	0.548	0.591
3	r=0.62	constant		3.744	0.002
	r2=0.384	serotonin [ng/ml]	0.455	2.331	**0.032**
	corr. r2=0.276	tryptophan [µmol/l]	0.176	0.895	0.383
	ANOVA *p*=0.037	age	-0.242	-1.213	0.242
4	r=0.596	constant		6.44	0
	r2=0.355	serotonin [ng/ml]	0.469	2.418	**0.026**
	corr. r2=0.284	age	-0.282	-1.453	0.163
	ANOVA *p*=0.019				
5	r=0.529	constant		12.25	0
	r2=0.28	serotonin [ng/ml]	0.529	2.716	**0.014**
	corr. r2=0.242				
	ANOVA *p*=0.014				

Table S3. Linear regression model predicting change in erosions at month six in RA patients with increased CRP values.

Model #	model chracteristics	predictor	Std beta	T	*p*-value
1	r=0.776	constant		0.623	0.551
	r2=0.602	serotonin ng/ml	0.478	1.926	0.09
	corr. r2=0.353	tryptophan µmol/l	0.449	1.613	0.146
	ANOVA *p*=0.128	kyneurenine µmol/l	-0.807	-2.875	**0.021**
		age	0.403	1.414	0.195
		sex	-0.212	-0.769	0.464
2	r=0.757	constant		0.35	0.735
	r2=0.573	serotonin ng/ml	0.414	1.812	0.103
	corr. r2=0.383	tryptophan µmol/l	0.488	1.826	0.101
	ANOVA *p*=0.078	kyneurenine µmol/l	-0.721	-2.866	**0.019**
		age	0.374	1.353	0.209
3	r=0.697	constant		2.49	0.032
	r2=0.486	serotonin ng/ml	0.33	1.443	0.18
	corr. r2=0.331	tryptophan µmol/l	0.297	1.257	0.237
	ANOVA *p*=0.074	kyneurenine µmol/l	-0.577	-2.432	0.035
4	r=0.636	constant		3.774	0.003
	r2=0.404	serotonin ng/ml	0.345	1.472	0.169
	corr. r2=0.296	kyneurenine µmol/l	-0.496	-2.116	0.058
	ANOVA *p*=0.058				
5	r=0.536	constant		5.021	0
	r2=0.287	kyneurenine µmol/l	-0.536	-2.198	**0.048**
	corr. r2=0.228				
	ANOVA *p*=0.048				