**Supplementary Table I.** Occurrence [n(%)] and grading of patient reported adverse events according to different GC doses.

		Average glucocorticoid dose within the last 12 months (in mg prednisone equivalent /d)			
		0 mg/d	< 5 mg/d	5 - 7.5 mg/d	> 7.5 mg/d
Cushingoid appearance					
	absent	77 (85.6%)	36 (37.5 %)	54 (39.4%)	24 (41.4 %)
	mild	4 (4.4%)	31 (32.3%)	29 (21.2%)	12 (20.7%)
	moderate/severe	9 (10%)	29 (30.2%)	54 (39.4 %)	22 (37.9%)
Easy bruising	absent	65 (72.2%)	35 (36.5%)	46 (33.6%)	17 (29.3%)
	mild	19 (21.1%)	36 (37.5%)	53 (38.7%)	20 (34.5%)
	moderate/severe	6 (6.7%)	25 (26%)	38 (27.7%)	21 (36.2%)
Skin atrophy	absent	62 (68.9%)	33 (34.4%)	39 (28.5%)	13 (22.4%)
1 3	mild	23 (25.6%)	41 (42.7%)	52 (38%)	21 (36.2%)
	moderate/severe	5 (5.6%)	22 (22.9%)	46 (33.6%)	24 (41.4%)
Striae cutis distensae	absent	78 (86.7%)	78 (81.3%)	118 (86.1%)	46 (79.3%)
	mild	9 (10%)	15 (15.6%)	14 (10.2%)	11 (19.0%)
	moderate/severe	3 (3.3%)	3 (3.1%)	5 (3.6%)	1 (1.7%)
Disturbed wound healing	absent	68 (75.6%)	50 (52.1%)	79 (57.7%)	20 (34.5%)
	mild	17 (18.9%)	34 (35.4%)	28 (20.4%)	21 (36.2%)
	moderate/severe	5 (5.6%)	12 (12.5%)	30 (21.9%)	17 (29.3%)
Acne	absent	83 (92.2%)	86 (89.6%)	124 (90.5%)	50 (86.2%)
	mild	7 (7.8%)	10 (10.4%)	6 (4.4%)	6 (10.3%)
	moderate/severe	0 (0%)	0 (0%)	7 (5.1%)	2 (3.4%)
Perioral dermatitis	absent	87 (96.7%)	88 (91.7%)	126 (92%)	49 (84.5%)
	mild	2 (2.2%)	6 (6.3%)	8 (5.8%)	6 (10.3%)
	moderate/severe	1 (1.1%)	2 (2.1%)	3 (2.2%)	3 (5.2%)
Hirsutism	absent	58 (78.4%)	51 (67.1%)	69 (68.3%)	30 (73.2%)
	mild	15 (20.3%)	24 (31.6%)	28 (27.7%)	10 (24.4%)
	moderate/severe	1 (1.4%)	1 (1.3%)	4 (4.0%)	1 (2.4%)
Thinning scalp hair	absent	55 (61.1%)	54 (56.3%)	61 (44.5%)	31 (53.4%)
	mild	24 (26.7%)	27 (28.1%)	43 (31.4%)	17 (29.3%)
	moderate/severe	11 (12.2%)	15 (15.6%)	33 (24.1%)	10 (17.2%)

**Supplementary Table II.** Occurrence [n (%)] and grading of physician reported adverse events according to different GC doses.

		Average glucocorticoid dose within the last 12 months (in mg prednisone equivalent /d)			
		0 mg/d	< 5 mg/d	5 - 7.5 mg/d	> 7.5 mg/d
Cushing	absent	81 (91%)	56 (58.9%)	69 (51.9%)	25 (43.1%)
	mild	7 (7.9%)	25 (26.3%)	26 (19.5%)	11 (19%)
	moderate/severe	1 (1.1%)	14 (14.7%)	38 (28.6%)	22 (37.9%)
Ecchymosis	absent	85 (94.4%)	75 (78.1%)	101 (73.3%)	34 (58.6%)
	mild	2 (2.2%)	14 (14.6%)	26 (19.0%)	18 (31.0%)
	moderate/severe	3 (3.3%)	7 (7.3%)	10 (7.3%)	6 (10.3%)
Striae cutis distensae	absent	62 (68.9%)	64 (66.7%)	85 (62.0%)	43 (74.1%)
	mild	25 (27.8%)	28 (29.2%)	41 (29.9%)	13 (22.4%)
	moderate/severe	3 (3.3%)	4 (4.2%)	11 (8.0%)	2 (3.4%)
Acne	absent	84 (93.3%)	90 (93.8%)	127 (92.7%)	54 (93.1%)
	mild	6 (6.7%)	6 (6.3%)	7 (5.1%)	4 (6.9%)
	moderate/severe	0 (0%)	0 (0%)	3 (2.2%)	0 (0%)
Perioral dermatitis	absent	90 (100%)	89 (92.7%)	127 (92.7%)	49 (84.5%)
	mild	0 (0%)	6 (6.3%)	9 (6.6%)	7 (12.1%)
	moderate/severe	0 (0%)	1 (1.0%)	1 (0.7%)	2 (3.4%)
Hirsutism	absent	57 (77%)	50 (65.8%)	62 (61.4%)	28 (68.3%)
	mild	16 (21.6%)	24 (31.6%)	34 (33.7%)	12 (29.3%)
	moderate/severe	1 (1.4%)	2 (2.6%)	5 (4.9%)	1 (2.4%)
Thinning scalp hair	absent	54 (60.0%)	48 (50.0%)	60 (43.8%)	29 (50.0%)
	mild	28 (31.1%)	33 (34.4%)	49 (35.8%)	22 (37.9%)
	moderate/severe	8 (8.9%)	15 (15.6%)	28 (20.4%)	7 (12.1%)

## Glucocorticoid adverse effects on skin in RA/J. Amann et al.

## **Supplementary Table III.** Key features of assessed adverse effects.

Category	Key symptoms	
Cushingoid appearance	Central obesity with development of a fat pad on the back of the neck (buffalo hump) Facial weight gain (moon face) Proximal muscle weakness	
Easy bruising	Multiple haematoma, especially without trauma or in uncommon, not exposed locations Hematoma of different age simultaneously	
Ecchymosis	Subdermal purpura larger than 1 cm	
Striae cutis distensae	Circumscribed, lamellar areas of atrophied skin that appear after a dermal tearing	
Steroid acne	Small papules (mad Location: forehead	culopapular rash) without comedones or cysts., cheeks, and chest
Perioral dermatitis	Multiple small pap	ules and pustules localised around the mouth
Hirsutism	Increased hair grov	vth with male pattern
Hair loss	Hair thinning and a	alopecia
Skin atrophy	Reduction of dermal thickness and subcutaneous fat Cigarette paper like aspect	
Disturbed wound healing	Prolonged healing process after cutaneous trauma	
Scoring systems of cutan Cushingoid phenotype:	eous AEs at physica	d examination
Cushingoid phenotype	Stigmata in clinical examination	
Absent	None, OR Moonface only, OR Proximal muscle weakness only	
Mild	Central obesity with buffalo hump, OR Moon face + proximal muscle weakness	
Moderate	Central obesity with buffalo hump + moon face, OR Central obesity with buffalo hump + proximal muscle weakness	
Severe	Central obesity with buffalo hump + proximal muscle weakness + moon face	
Ecchymosis:		
Ecchymosis		Points
Absent		0
Mild	1-4	
Moderate	5-8	
Severe Points per ecchymosis dep 10 mm = 1 point; 11-20 m		>8 m = 3 points
Striae cutis distensae:	<u> </u>	-
Striae cutis distensae		Localisation, number, size
Absent		None
Mild		Old (white) striae in 1-2 typical regions (thighs, lumbosacral, hips, breasts)
Moderate		Old striae in > 2 regions or/and fresh (purple) striae in one region
Severe		Striae in unusual regions (lower back) or/and striae > 1 cm or/and multiple fresh striae

Steroid acne: A modified grading system was used for physical examination.

Localisation	Factor x acne-value $(0-4)$ * = $\underline{\text{individual score}}$		
Forehead	2		
Right cheek	2		
Left cheek	2		
Nose	1		
Chin	1		
Chest and upper back	3		

<sup>\*</sup> Acne-value:

0: no lesion; 1:  $\geq$  comedones; 2:  $\geq$  papules; 3:  $\geq$  pustules; 4:  $\geq$  nodules (each region's score is defined by the most severe lesion in that region)

<u>Total score</u> = addition of the individual scores:

0 (absent), 1-18 (mild), 19-30 points (moderate), >30 points (severe)

Perioral dermatitis: A modified version of the Perioral Dermatitis Severity Index (PODSI) was used. (1, 2).

Stigmata in clinical examination	
No lesions	absent
Discrete, pale, perioral erythema with few papaules and mild scaling	mild
Moderate, reddish perioral erythema with more disseminates papules and marked scaling	moderate
Dark red erythema with numerous erythematous papules and severe scaling. Likely to reach beyond the nasolabial fold	severe

*Hirsutism:* Only female patients were examined. A modified version of the Hirsutism-Score developed by Ferriman and Gallwey was used for the ranking (3, 4).

Thinning of scalp hair: The degree of baldness was graded using the Hamilton-Norwood-Scale for male (5, 6) and the Ludwig-Scale for female patients (7).

## References

- WOLLENBERG A, OPPEL T: Scoring of skin lesions with the perioral dermatitis severity index (PODSI). Acta Derm Venereol 2006; 86: 251-2.
- 2. WOLLENBERG A, BIEBER T, DIRSCHKA T et al.: Perioral dermatitis. J Dtsch Dermatol Ges 2011; 9: 422-7.
- 3. FERRIMAN D, GALLWEY JD: Clinical assessment of body hair growth in women. *J Clin Endocrinol Metab* 1961; 21: 1440-7.
- 4. YILDIZ BO, BOLOUR S, WOODS K, MOORE A, AZZIZ R: Visually scoring hirsutism. *Hum Reprod Update* 2010; 16: 51-64.
- NORWOOD OT: Male pattern baldness: classification and incidence. South Med J 1975; 68: 1359-65.
- 6. HAMILTON JB: Patterned loss of hair in man; types and incidence. *Ann N Y Acad Sci* 1951; 53: 708-28
- 7. LUDWIG E: Classification of the types of androgenetic alopecia (common baldness) occurring in the female sex. *Br J Dermatol* 1977; 97: 247-54.