SUPPLEMENTARY MATERIAL

SEVEN-YEAR TOLERABILITY PROFILE OF GLUCOCORTICOIDS USE IN EARLY RHEUMATOID ARTHRITIS: DATA FROM THE ESPOIR COHORT

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Supplementary Methods 1: Design of the ESPOIR cohort:

The ESPOIR cohort is a French prospective observational cohort including patients with early arthritis who were enrolled between 2002 and 2005, within 6 months of symptoms onset, were naïve to DMARDs and GC therapy, and had RA or undifferentiated arthritis with the potential for progression to RA.

All included patients were evaluated every 6 months for the first 2 years, then once a year. Some clinical, biological, functional and radiographic data were recorded. In particular, at baseline and at each visit, medical history, physical examination data (including weight, height, blood pressure, and rheumatologic assessment), and data on comorbidities (including CVD, smoking status, infection, fracture) were collected as well as data on biological variables (including C reactive protein [CRP], lipids and blood glucose levels) measured using standard methods in local laboratories. Rheumatologist treatment followed the standard of care.

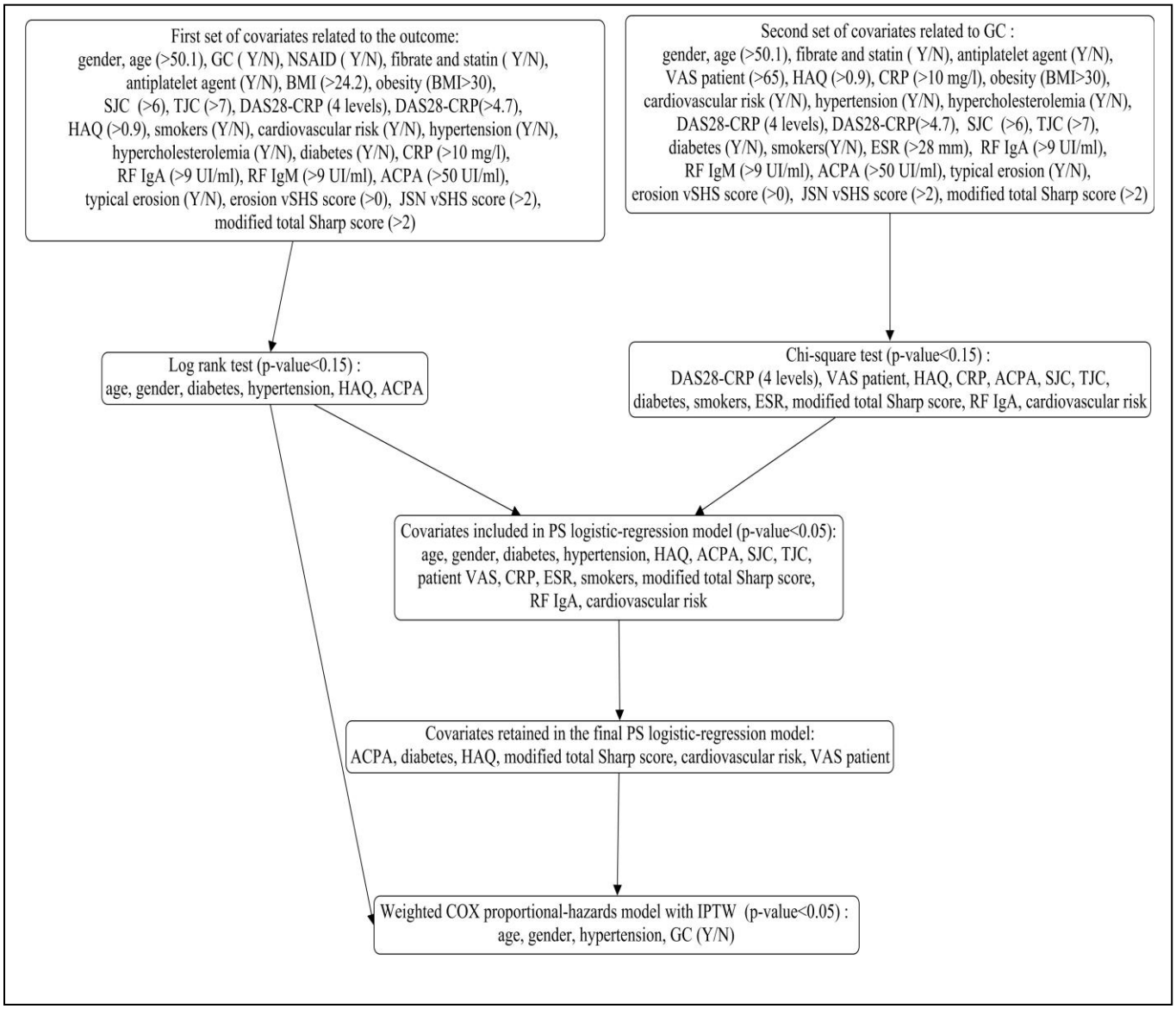
Supplementary Methods 2: Excluded patients who dropped out within the first year:

Among the 48 patients who dropped out within the first year, 20 patients underwent only the inclusion visit before they dropped out, and had no GC treatment, given that patients had to be naïve to GC to be included. Among the 28 remaining patients, 4 patients were excluded by the physician (other diagnosis than RA or UA) and 24 patients were lost of follow-up, with no data about their outcomes or their treatment (GC or not).

Supplementary Table S1: distribution of patients according to glucocorticoid (GC) treatment duration

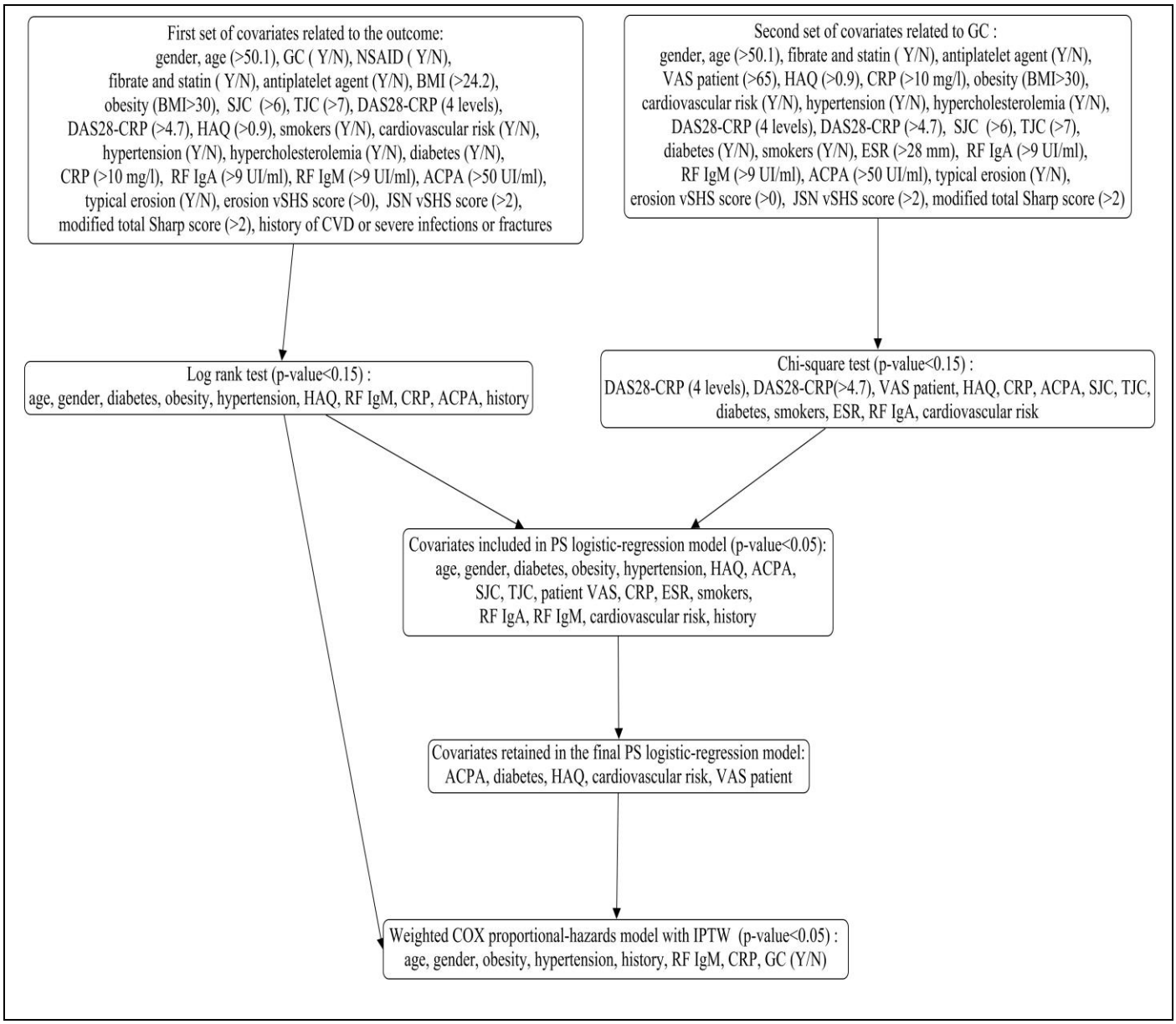
Total cumulative GC duration				
duration	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0-06 m	73	18.96	73	18.96
06-12 m	40	10.39	113	29.35
12-18 m	39	10.13	152	39.48
18-24 m	33	8.57	185	48.05
24-36 m	40	10.39	225	58.44
36-48 m	30	7.79	255	66.23
48-60 m	32	8.31	287	74.55
60-72 m	29	7.53	316	82.08
72-84 m	69	17.92	385	100.00

Supplementary Figure S1: Covariates selection (principal analysis, n=602)



ACPA, anti-citrullinated protein antibody; BMI, body mass index; CRP, C-reactive protein; DAS28-CRP, disease activity score 28 using CRP; ESR, erythrocyte sedimentation rate; GC, glucocorticoid; HAQ, health assessment questionnaire; IPTW, inverse-probability-of-treatment weighting technique; JSN, joint space narrowing; NSAIDs, non-steroidal anti-inflammatory drugs; PS, propensity score; RF, rheumatoid factor; SJC, swollen joint count ; TJC, tender joint count; mSHS, van der Heijde-modified total Sharp Score; VAS, patient's overall assessment using visual analogue scale; Y/N, yes or no.

Supplementary Figure S2: Covariates selection for the subsequent analysis, n=657 (comprising the 602 patients without history and the 55 patients with history and sufficient data)



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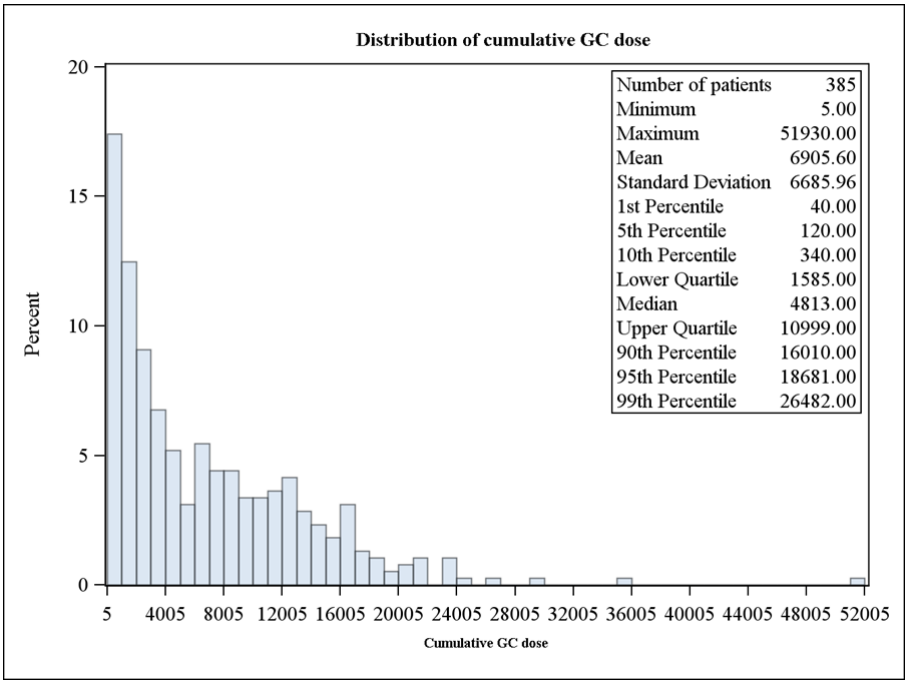
Supplementary Figure S3: Distribution of cumulative glucocorticoid (GC) dose



Supplementary Table S2: Stratified Cox model based on cumulative GC dose and on duration of GC treatment levels:

Stratified Cox model based on cumulative dose (quartiles)

Parameter		DF	Parameter Estimate	Standard Error	Chi-Square	Pr > ChiSq	Hazard Ratio	95% Hazard Ratio Confidence Limits	
age	**1**	1	0.48155	0.20958	5.2795	0.0216	1.619	1.073	2.441
gender	**M**	1	0.61218	0.20068	9.3057	0.0023	1.844	1.245	2.733
hypertension	**1**	1	0.42695	0.22364	3.6445	0.0563	1.533	0.989	2.376

Stratified Cox model based on duration of GC treatment levels (quartiles)

Parameter		DF	Parameter Estimate	Standard Error	Chi-Square	Pr > ChiSq	Hazard Ratio	95% Hazard Ratio Confidence Limits	
age	**1**	1	0.49177	0.21047	5.4595	0.0195	1.635	1.082	2.470
gender	**M**	1	0.60531	0.19960	9.1972	0.0024	1.832	1.239	2.709
hypertension	**1**	1	0.40211	0.22334	3.2415	0.0718	1.495	0.965	2.316