

Supplementary file

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Figure S1. Trends in prevalence of oral glucocorticoid use in France per year from 2007 to 2014 by products. A) Prevalence estimates with 95%CI (error bars) and B) relative changes in reference to year 2007

Figure S2. Trends in prevalence of oral glucocorticoid (GC) use in France per year from 2007 to 2014, in women (A) and men (B) according to age. Prevalence estimates with 95% CIs (error bars)

Table S1. List of glucocorticoids and corresponding identification codes

Glucocorticoids	Source	Code
Betamethasone	Drug reimbursement (ATC)	H02AB01
Dexamethasone	Drug reimbursement (ATC)	H02AB02
Methylprednisolone	Drug reimbursement (ATC)	H02AB04
Prednisolone	Drug reimbursement (ATC)	H02AB06
Prednisone	Drug reimbursement (ATC)	H02AB07

ATC: Anatomical Therapeutic Chemical classification system

Table S2. List of concurrent drugs reimbursed at index date and corresponding identification codes

Concurrent drugs at index date	Source	Code
Analgesics	Drug reimbursement (ATC)	N02
Antibiotics	Drug reimbursement (ATC)	J01
Anti-inflammatory	Drug reimbursement (ATC)	M01, M02
Respiratory/otological drugs	Drug reimbursement (ATC)	R01, R02, R05, R06, S01, S02

ATC: Anatomical Therapeutic Chemical classification system

Table S3. List of comorbidities at risk for glucocorticoid users and corresponding identification codes

Comorbidities	Source	Code
Diabetes	Hospital discharge summary or ALD registration (ICD-10) Drug reimbursement (ATC)	E10-E14 A10
Osteoporosis	Hospital discharge summary (ICD-10) Drug reimbursement (ATC)	M80-M81, M83-M85 M05BA, M05BB, M05BX04, M05BX03, G03XC01, H05BA, H05AA02
Psychotic disorders	Hospital discharge summary or ALD registration (ICD-10) Drug reimbursement (ATC)	F20-F29 N05A (N05AN excluded)

ALD: *Affection de Longue Durée* (chronic disease); ATC: Anatomical Therapeutic Chemical classification system; ICD-10: International Classification of Diseases 10th revision

Table S4. List of recognized indications of glucocorticoid therapy and corresponding identification codes

Indications	Sources	Codes
Cancer	Hospital discharge summary or ALD registration (ICD-10) Drug reimbursement (ATC)	C00-C97, D00-D09, D37-D48 L01, L02
Inflammatory bowel diseases	Hospital discharge summary or ALD registration (ICD-10) Drug reimbursement (ATC) Drug reimbursement (CIP)	K50, K51 A07EA04, A07EC02, A07EC03, A07EC01, A07EA02, L04AB04, L04AB06, L04AC05, L04AX01 3425409 ^a
Multiple sclerosis	Hospital discharge summary or ALD registration (ICD-10) Drug reimbursement (ATC)	G35 L03AB07, L03AB08, L03AB13, L03AX13, L04AA27, N07XX07, N07XX09, L04AA31
Obstructive pulmonary diseases	Hospital discharge summary or ALD registration (ICD-10) Drug reimbursement (ATC)	J44-J46, J96 R03
Rheumatic diseases	Hospital discharge summary or ALD registration (ICD-10) Drug reimbursement (ATC) Drug reimbursement (CIP)	M05, M06, M08, M30-M35, M45, M46 L04AA13, L04AA24, L04AB04, L04AB06, L04AB01, L04AB05, L04AC03, L04AC08, L04AC07, L04AD01, L04AX01, L04AX03, L01BA01 ^b , L01AA01, A07EC01, P01BA01, P01BA02, M01CB05, M01CC01 3293907 ^c

ALD: *Affection de Longue Durée* (chronic disease); ATC: Anatomical Therapeutic Chemical classification system; CIP: *Code d'identification de la présentation* (French nomenclature, unique identification code for each presentation of a proprietary medicinal product); ICD-10: International Classification of Diseases 10th revision

^a No ATC code for para aminosalicylic acid labeled for inflammatory bowel diseases; it was identified using CIP code

^b The pharmaceutical forms of methotrexate labeled for oncology, identified using CIP codes (3150125, 3150148, 3160218), were excluded

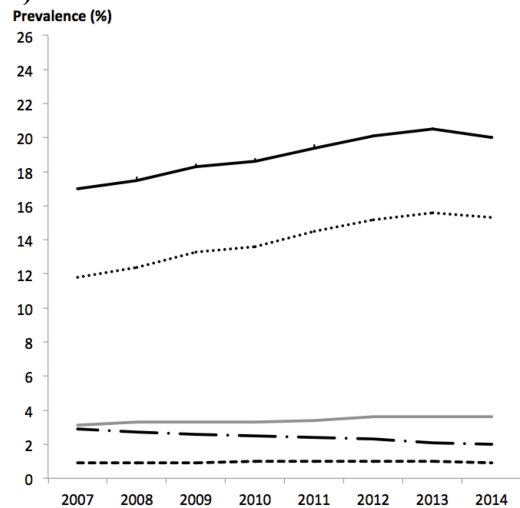
^c No ATC code for tiopronine labeled for rheumatoid arthritis; it was identified using CIP code (3293907)

Table S5. List of therapeutic measures associated with the prescription of glucocorticoids and corresponding identification codes

Therapeutic measures	Sources	Codes
<i>Prevention/management of osteoporosis</i>		
Dual-energy X-ray absorptiometry, DXA	Hospital discharge summary or ambulatory setting (CCAM)	PAQK007
Drugs for osteoporosis management	Drug reimbursement (ATC)	M80-M81, M83-M85 M05BA, M05BB, M05BX04, M05BX03, G03XC01, H05BA, H05AA02, A12AX, A12AA, A11CC
<i>Potassium supplementation</i>		
Potassium supplements	Drug reimbursement (ATC)	A12B
Serum potassium assay	Lab test, ambulatory setting (TNB)	1608, 1609, 1610
<i>Ulcer prophylaxis</i>		
Proton pump inhibitors	Drug reimbursement (ATC)	A02BC
Non-steroidal anti-inflammatory	Drug reimbursement (ATC)	M01A
Aspirin labeled for anti-inflammatory properties	Drug reimbursement (ATC)	N02BA01, N02BA51

ALD: *Affection de Longue Durée* (chronic disease); ATC: Anatomical Therapeutic Chemical classification system; CCAM: *Classification Commune des Actes Médicaux* (French medical classification for clinical procedures); TNB: *Table Nationale de Biologie* (French medical classification for lab tests)

A) Prevalence estimates



B) Relative changes

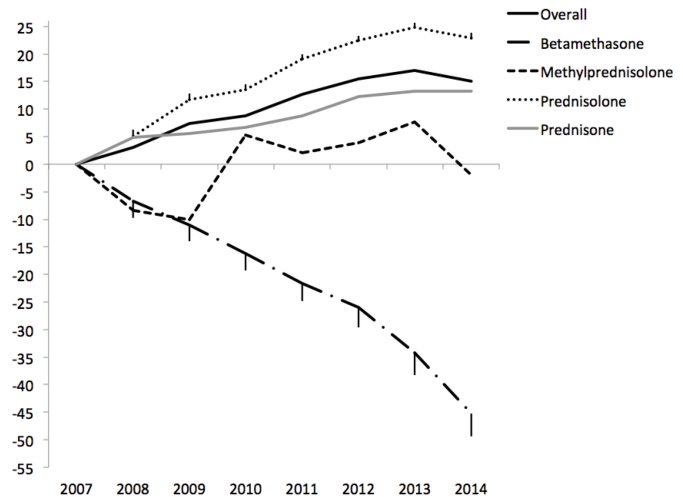
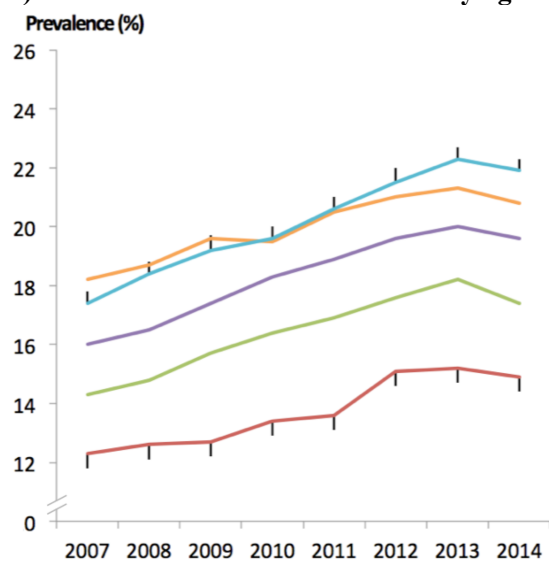


Figure S1. Trends in prevalence of oral glucocorticoid use in France per year from 2007 to 2014 by products. A) Prevalence estimates with 95%CI (error bars) and B) relative changes in reference to year 2007

A) Prevalence of GC use in women by age



B) Prevalence of GC use in men by age

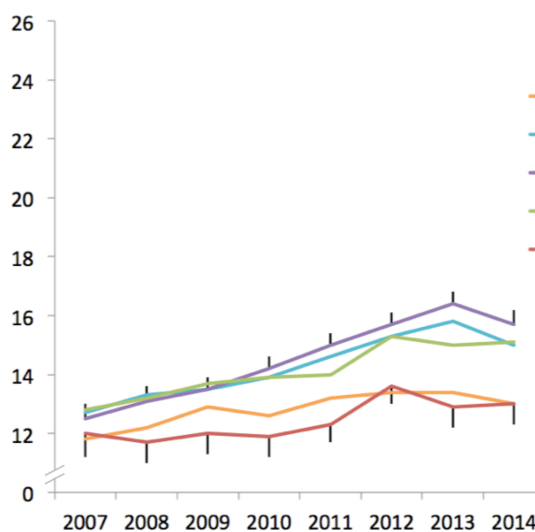


Figure S2. Trends in prevalence of oral glucocorticoid (GC) use in France per year from 2007 to 2014, in women (A) and men (B) according to age. Prevalence estimates with 95% CIs (error bars)