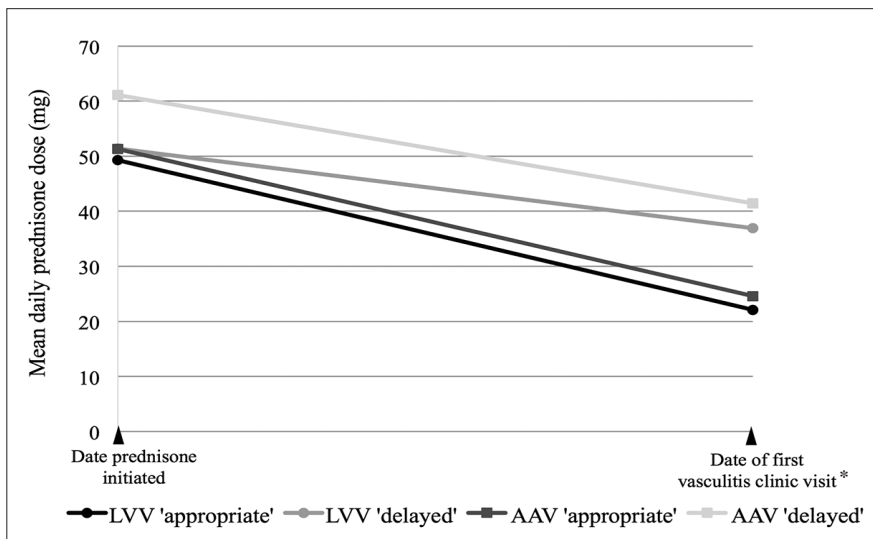




Supplementary Fig. S1. 'Appropriate' and 'delayed' trajectories of mean daily prednisone dose among patients referred for LVV and AAV.

*Occurred a mean of 118.2 days (SD 116) after GC initiation

LVV: large-vessel vasculitis; AAV: ANCA-associated vasculitis.

Supplementary Table S1. Glucocorticoid tapering protocol used to determine target GC dose in GCA and TAK.

Week of treatment	Prednisolone dose, mg/day (minimum)	Prednisolone dose, mg/day (maximum)
1	40	60
2	40	60
3	40	60
4	40	60
5-6	30	50
7-8	20	40
9-10	17.5	30
11-12	15	20
13-14	12.5	17.5
15-16	10	15
17-18	9	12.5
19-20	9	10
End of month 6	8	9
Beyond month 6	Taper by 1 mg/month	

Target GC dose taken from: Dasgupta *et al.* (8). Recommended prednisolone target doses were approximated to prednisone (mg/mg) for adjudicating target dose.

Supplementary Table S2. Glucocorticoid tapering protocol used to determine target GC dose for ANCA-associated vasculitis.

Week of treatment	Prednisone dose, mg/d
1	1 mg/kg, max 80 mg/d
2	-
3-4	-
5-6	40
7-8	30
9-10	20
11-12	15
13-14	10
15-16	7.5
17 and beyond	5

From McGeoch *et al.* (3), based on tapering protocol from: Stone *et al.* (4).

Supplementary Table S3. GC tapering trajectories, overall and according to vasculitis subtype: sensitivity analysis with ‘delayed’ tapering defined as prednisone ≥ 20 mg/day with target GC dose $\geq 33\%$ reduction of current dose.

Referral diagnosis	Overall n=160		LVV n=65		AAV n=95	
	Appropriate n=103 (64%)	Delayed n= 57 (36%)*	Appropriate n= 37 (57%)	Delayed n= 28 (43%)	Appropriate n= 66 (69%)*	Delayed n= 29 (31%)
GC tapering trajectory						
Oral prednisone start dose, mean mg $\pm$ SD	50.7 $\pm$ 17.1	54.6 $\pm$ 13.7	48.6 $\pm$ 17.6	51.8 $\pm$ 12.1	51.8 $\pm$ 16.9	57.5 $\pm$ 14.9
Prednisone dose at first visit, mean mg $\pm$ SD	22.4 $\pm$ 16.8*	37.4 $\pm$ 14.1*	19.7 $\pm$ 12.1*	36.4 $\pm$ 12.2*	23.9 $\pm$ 18.8*	38.3 $\pm$ 15.9*
Target prednisone dose at first visit, mean mg/day $\pm$ SD	20.8 $\pm$ 17.1*	16.4 $\pm$ 9.8*	18.0 $\pm$ 14.4	17.7 $\pm$ 9.1	22.3 $\pm$ 18.4*	15.1 $\pm$ 10.5*
GC duration, mean days $\pm$ SD	125.9 $\pm$ 140.4	104.4 $\pm$ 51.5	144.4 $\pm$ 135.2	109.8 $\pm$ 57.7	115.9 $\pm$ 143.2	99.2 $\pm$ 45.1
GC duration >60 days n (%)	61/102 (60)*	45 (79)*	26/36 (72)	22 (79)	35 (53)*	23 (79)*

* $p < 0.05$ between paired comparisons (appropriate vs. delayed).

GC: glucocorticoid; SD: standard deviation; AAV: ANCA-associated vasculitis; LVV: large vessel vasculitis.

Supplementary Table S4a. Characteristics of patients referred for LVV according to GC tapering trajectory (n=65): sensitivity analysis with ‘delayed’ tapering defined as prednisone ≥ 20 mg/day with target GC dose $\geq 33\%$ reduction of current dose.

GC tapering trajectory	Appropriate n=37 (57%)	Delayed n=28 (43%)
Referral Specialty n (%)		
Rheumatology	26 (70)	20 (71)
Primary care	4 (11)	2 (7)
Other medical subspecialty	5 (14)	2 (7)
Surgical subspecialty	2 (5)	4 (14)
Referral diagnosis n (%)		
Giant cell arteritis	31 (84)	21 (75)
Takayasu’s arteritis	5 (14)	4 (14)
Undifferentiated	1 (3)	3 (11)
Disease relapse n (%)	11 (30)	3 (11)
BVAS at diagnosis or relapse, mean $\pm$ SD	3.6 $\pm$ 3.7	4.6 $\pm$ 3.3
Vision loss or stroke n (%)	6 (16)	9 (32)
Received pulse GC n (%)	3 (8)	6 (21)
Induction therapy (prior to referral)		
GC alone	32 (86)	25 (89)
Cyclophosphamide + GC	0 (0)	1 (4)
Methotrexate + GC	3 (8)	2 (7)
Azathioprine + GC	2 (5)	0 (0)
Wait time to vasculitis clinic, mean days $\pm$ SD	69.4 $\pm$ 30.6	67.5 $\pm$ 26.2

GC: glucocorticoid; SD: standard deviation; BVAS: Birmingham Vasculitis Activity Score (Version 3).

Supplementary Table S4b. Characteristics of patients referred for AAV according to GC tapering trajectory (n=95): sensitivity analysis with 'delayed' tapering defined as prednisone ≥ 20 mg/day with target GC dose $\geq 33\%$ reduction of current dose.

GC tapering trajectory	Appropriate n=66 (69%)	Delayed n=29 (31%)
Referrals specialty n (%)		
Rheumatology	27 (41)	8 (28)
Primary care	6 (9)	3 (10)
Nephrology	13 (20)	12 (41)
Respirology	13 (20)	1 (3)
Other medical subspecialty	5 (8)	5 (17)
Surgical subspecialty	2 (3)	0 (0)
Referral diagnosis n (%)		
GPA	29 (44)	11 (38)
MPA	28 (42)	12 (41)
EGPA	9 (14)	6 (21)
Disease relapse, n (%)	19 (29)*	3 (10)*
BVAS at diagnosis or relapse, mean $\pm$ SD	13.1 $\pm$ 7.9	15.4 $\pm$ 7.1
Pulmonary hemorrhage n (%)	6 (9)	4 (14)
Renal involvement, n (%)	31 (47)	17 (59)
Serum creatinine >500 micromol/L, creatinine rise >30%, or fall in creatinine clearance by 25%	19 (29)	12 (41)
Received pulse GC, n (%)	21 (32)	15 (52)
Induction therapy (prior to referral)		
GC alone	21 (34)	9 (31)
Cyclophosphamide + GC	17 (26)	13 (45)
Rituximab + GC	10 (15)	3 (10)
Cyclophosphamide + rituximab + GC	1 (2)	0 (0)
Mycophenolate mofetil + GC	5 (8)	1 (3)
Methotrexate + GC	7 (11)	1 (3)
Azathioprine + GC	5 (8)	2 (7)
Wait time to vasculitis clinic, mean days $\pm$ SD	61.5 $\pm$ 32.0	54.8 $\pm$ 29.1

* $p < 0.05$ between paired comparisons (appropriate vs. delayed).

GC: glucocorticoid; SD: standard deviation; AAV: ANCA-associated vasculitis; GPA: granulomatosis with polyangiitis; MPA: microscopic polyangiitis; EGPA: eosinophilic granulomatosis with polyangiitis.

Supplementary Table S5. Referring physician reported comfort with GC tapering according to vasculitis classification (n=15).

Vasculitis type	"Not comfortable" n (%)	"Somewhat comfortable" n (%)	"Very comfortable" n (%)
Giant cell arteritis/idiopathic aortitis	1 (7)	3 (20)	11 (73)
Takayasu's arteritis	7 (47)	5 (33)	3 (20)
ANCA-associated vasculitis (limited)	1 (7)	6 (40)	8 (53)
ANCA-associated vasculitis (systemic)	3 (20)	6 (40)	6 (40)