

Case number	Comorbidity	Steroid	ARV	Presenting features	9 am Cortisol (nmol/L)	AI on SST at presentation	Endo Input	Management	Adrenal crisis advice given?	Biochemical Evidence of HPA axis recovery?
<b>Centre A, cohort size: 3,300; number of cortisol requests in 9 months: unknown</b>										
1	Disc prolapse & radiculopathy	InjTAC 40mg X4	ATV/r KIV	Cushing's Syndrome night sweat and polyuria & polydipsia	<10	Y	Y	<ul style="list-style-type: none"> <li>ART switched to KIV/RAL</li> <li>HC replacement at 10 mg BD for 11 weeks then 10 mg daily for 10 weeks</li> </ul>	Y	Y, 18 weeks
2	COPD	inhFLU + PRED	ATV/r TVD	Cushing's Syndrome inc low mood	ND – SST done directly	Y	Y	<ul style="list-style-type: none"> <li>inhFLU stopped</li> <li>ART switched to TVD/RAL/MVC</li> <li>HC replacement at 10 mg/5 mg/5 mg for 48 weeks, then 10 mg daily for 24 weeks</li> </ul>	Y	Y, 73 weeks
3	Chronic Sinusitis	nFLU	DRV/r TVD	Cushing's Syndrome	<10	Y	Y	<ul style="list-style-type: none"> <li>Switch ART to TVD/RAL</li> <li>HC replacement at 10 mg BD for 45 weeks</li> </ul>	Y	Y, 40 weeks
<b>Centre B, cohort size: 4,117; number of cortisol requests in 9 months: 18</b>										
4	Asthma	inhFLU,	LPV/r Tenofovir	Cushing's Syndrome inc new HTN, Cataracts	GP	GP	N	<ul style="list-style-type: none"> <li>inhFLU, stopped</li> <li>HC replacement, dose not given</li> </ul>	N	ND
5	Asthma	inhFLU,	DRV/r TVD	Cushing's Syndrome inc new HTN	11	ND: assessed clinically	Y	<ul style="list-style-type: none"> <li>Switched to BEC</li> <li>HC replacement 10 mg 1 week then 5 mg 1 week</li> </ul>	Y	Y On review at 12 weeks
6	Asthma OA	inhFLU plus injTAC	DRV/r mono	Fatigue	76	ND: assessed clinically	N	<ul style="list-style-type: none"> <li>inhFLU stopped</li> <li>injTAC ceased</li> <li>monitored only</li> </ul>	N	ND

7	Asthma	inhFLU	ATV/r TVD	Cushing's Syndrome	39	Y	Y	<ul style="list-style-type: none"> <li>inhFLU stopped</li> <li>ART switched to Truv/ETV</li> <li>HC replacement 10 mg 1 week then reduced 5 mg 1 week</li> </ul>	Y	ND
8	Bronchiectasis	inhFLU	ATV/r TVD	Fatigue	GP	GP	N	<ul style="list-style-type: none"> <li>inhFLU stopped</li> </ul>	NA	ND
9	Asthma	inhFLU	DRV/r TVD	Fatigue, weight loss	ND-SST done directly	Y	Y	<ul style="list-style-type: none"> <li>inhFLU switched to inhBUD post ICS</li> <li>HC replacement 10 mg 1 week then reduced 5 mg 1 week</li> <li>ART switched to TDF/MVC/RAL</li> </ul>	Y	Y On review at 26 weeks
10	Shoulder OA	InjTAC	DRV/r mono	Fatigue	4-40	Y	Y	<ul style="list-style-type: none"> <li>injTAC ceased</li> <li>HC replacement 10 mg maintained</li> </ul>	N	ND
11	Vertebral OA	InjTAC	DRV/r mono	Fatigue	30	Y	N	<ul style="list-style-type: none"> <li>injTAC ceased</li> <li>Monitored only</li> </ul>	N	Y On review at 26 weeks
12	SLE	InjTAC	ATV/r TVD	Cushing's Syndrome	ND - SST done directly	Y	Y	<ul style="list-style-type: none"> <li>injTAC ceased</li> <li>HC replacement 10 mg maintained</li> </ul>	N	Y On review at 26 weeks
<b>Centre C, cohort size: 7,700; number of cortisol requests in 9 months: 82</b>										
13	TB IRIS	PRED	DRV/r KIV	Cushing's Syndrome	<20	ND Assessed clinically	N	<ul style="list-style-type: none"> <li>PRED stopped</li> </ul>	N	ND
14	Eosinophilic Folliculitis Keratosi	topEUM + topFA	LPV/r 3TC	Addisonian crisis	30	Y	Y	<ul style="list-style-type: none"> <li>Topical steroids stopped</li> <li>HC replacement (at 10/5/5 mg for 25 weeks followed</li> </ul>	y	Y – at 3 years 9 months, after extended

	Pilaris							by 10/5 mg for 25 weeks, 10/2.5 mg for 58 weeks, and 5/5 mg for 3 weeks )+ FC 50 µg		monitoring
15	Tendinosis	injTAC 40 mg x3	DRV/r mono	Adrenal insufficiency	<20	Y	N	<ul style="list-style-type: none"> <li>• injTAC ceased</li> <li>• Monitored only</li> </ul>	N	ND
16	Asthma	inhFLU	ATV/R TVD	Cushing's Syndrome	301	ND Assessed clinically	N	<ul style="list-style-type: none"> <li>• inhFLU stopped</li> </ul>	N	ND
17	OA	injTAC 40 mg x3	DRV/R 3TC	Cushing's Syndrome inc Osteoporosis, AVN	16	ND Assessed clinically	N	<ul style="list-style-type: none"> <li>• ART switched to TVD/RAL</li> </ul>	N	ND
18	Seronegative arthropathy COPD	PRED + injTAC + InjMPRED (multiple)	SAQ/R TVD	Cushing's Syndrome inc osteoporosis, high BMs, OSA	23	ND Assessed clinically	Y	<ul style="list-style-type: none"> <li>• ART switched to TVD/ETV/RAL</li> <li>• HC replacement 10 mg BD maintained</li> <li>• PRED switched to DMARDs</li> </ul>	Y	N – remains unrecovered at time of writing
19	Asthma	inhFLU	DRV/r mono	Cushing's Syndrome	228	ND Assessed clinically	N	<ul style="list-style-type: none"> <li>• ART switched to EVP</li> </ul>	N	ND

**Table S1. Summary and management of ICS and SAI resulting from ritonavir/glucocorticoid interactions in three large London HIV centres (evaluation period: 01/01/12–30/09/12)**

ND = not done; inhBUD = inhaled budesonide; inhFLU = inhaled fluticasone; nFLU = nasal fluticasone; BEC = beclamethasone; HC = hydrocortisone; PRED = prednisolone; injTAC = injected triamcinolone; InjMPRED = injected methylprednisolone (depomedrone); topEUM = topical eumovate; topFA = topical fluocinolone acetonide; FC = fludrocortisone; SAB = subacromial bursitis; COPD = chronic obstructive pulmonary disease; OA = osteoarthritis; LE = lateral epicondylitis; HTN = hypertension; OSA = obstructive sleep apnoea; AVN = avascular necrosis; HTN = hypertension; TB IRIS = tuberculosis-associated immune reconstitution inflammatory syndrome; KIV = kivexa (abacavir+lamivudine); TVD = truvada (emtricitabine+tenofovir); TDF = tenofovir; DRV = darunavir; ATV = atazanavir; r = ritonavir; SQV = saquinavir; LPV = lopinavir; NVP = nevirapine; 3TC = lamivudine; MVC = maraviroc; RAL = raltegravir; EVP = evirola; mono = boosted PI monotherapy; AI = adrenal insufficiency; N = no; Y = yes; GP = general practitioner; DMARDs = disease-modifying anti-rheumatic drugs