

Supplementary Material

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HPTLC Screening of Specific Corticosteroid Adulterants: Prednisolone, Dexamethasone, Triamcinolone Acetonide, Betamethasone-17-Valerate, and Daucosterol in Herbal Medicines

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Retention Factors (R_f) and Visualization of Five Steroid Standards (Daucosterol, Prednisolone, Dexamethasone, Triamcinolone Acetonide, and Betamethasone-17-Valerate) Under UV 254 nm, UV 366 nm, and Visible Light

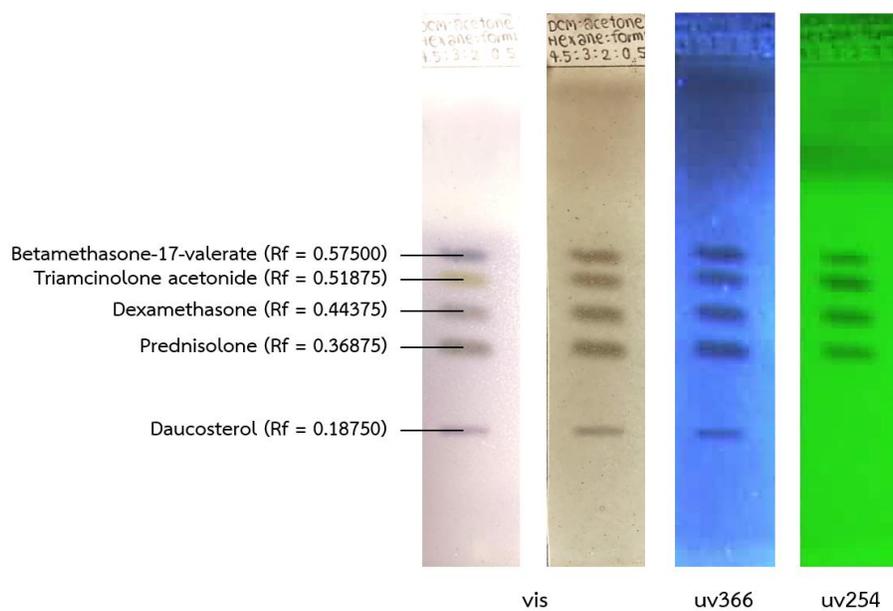


Fig. S1 DCM: Acetone: *n*-Hexane: Formic acid (4.5: 3: 2: 0.5), polarity Index = 3.225, solvent cost = 0.2514 USD, and run time = 20 min

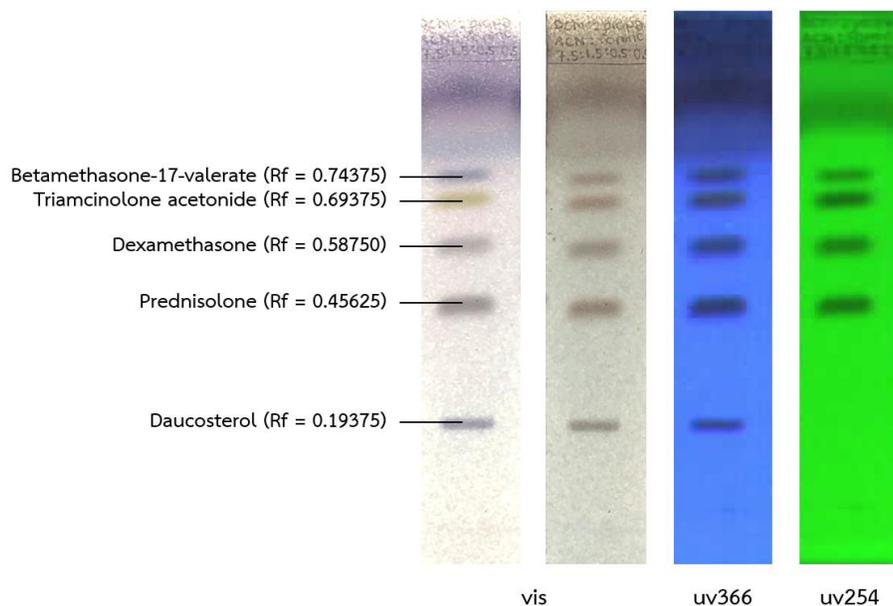


Fig. S2 DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5), polarity Index = 3.5, solvent cost = 0.2930 USD, and run time = 20 min

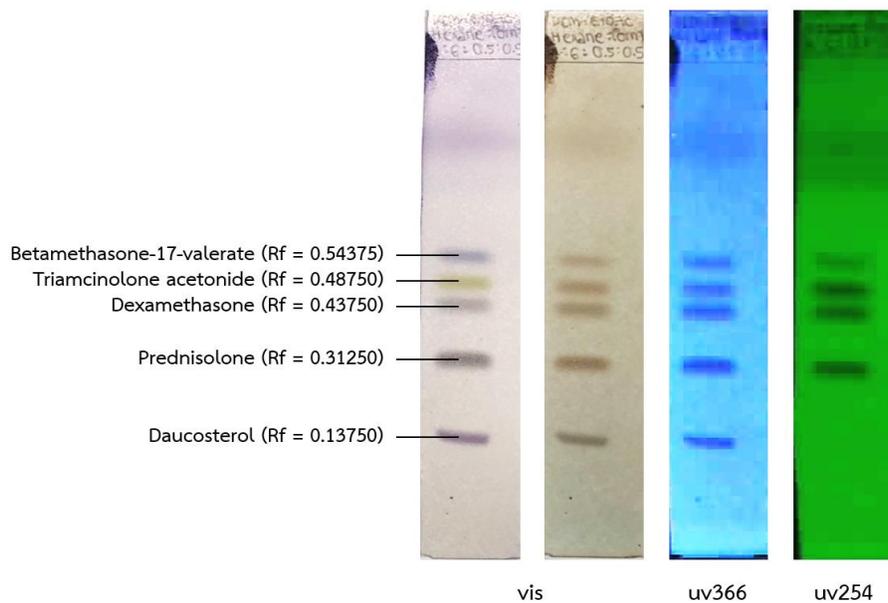


Fig. S3 EtOAc: DCM: *n*-Hexane: Formic acid (5: 4: 0.5: 0.5), polarity Index = 3.74, solvent cost = 0.3297 USD, and run time = 20 min

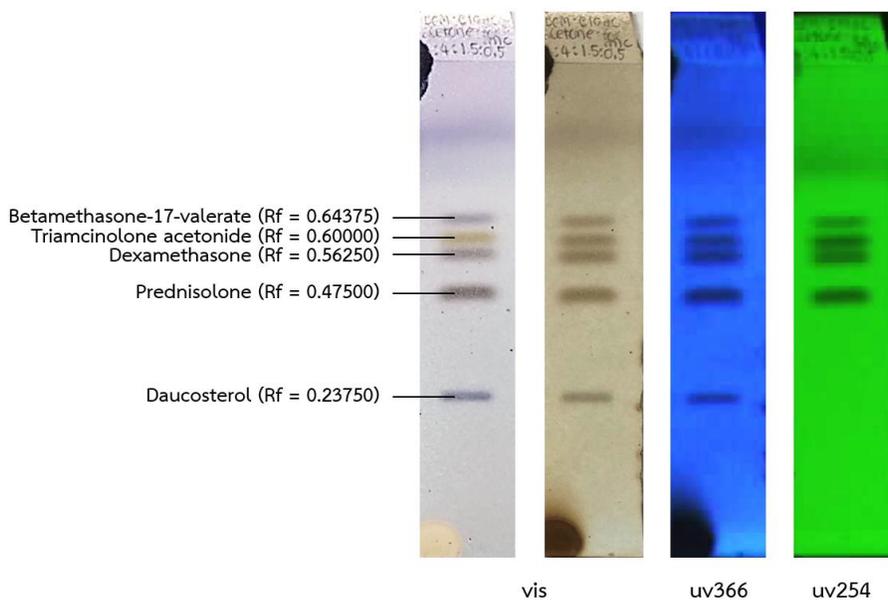


Fig. S4 DCM: EtOAc: Acetone: Formic acid (4: 4: 1.5: 0.5), polarity Index = 3.59, solvent cost = 0.3075 USD, and run time = 20 min

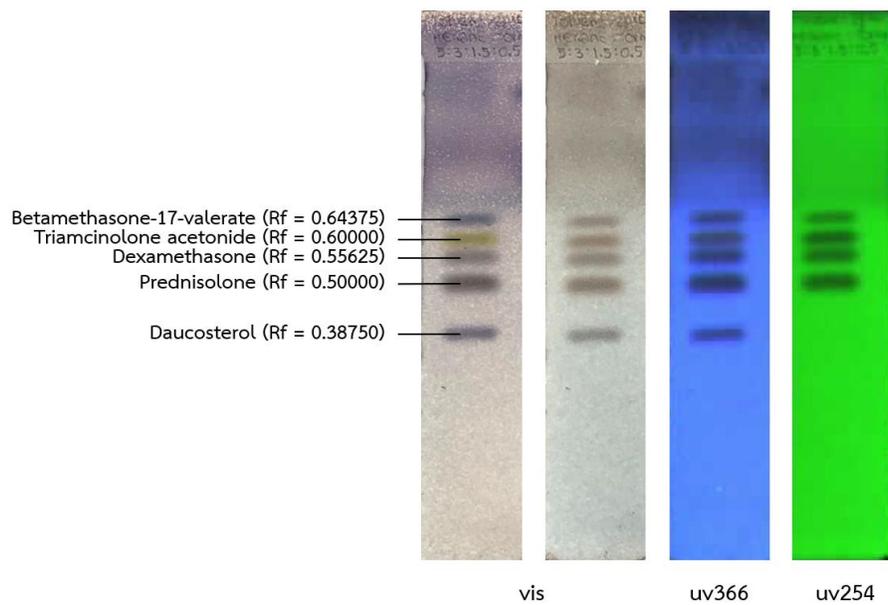


Fig. S5 Toluene: IPA: *n*-Hexane: Formic acid (5: 3: 1.5: 0.5), polarity Index = 2.67, solvent cost = 0.1903 USD, and run time = 23 min

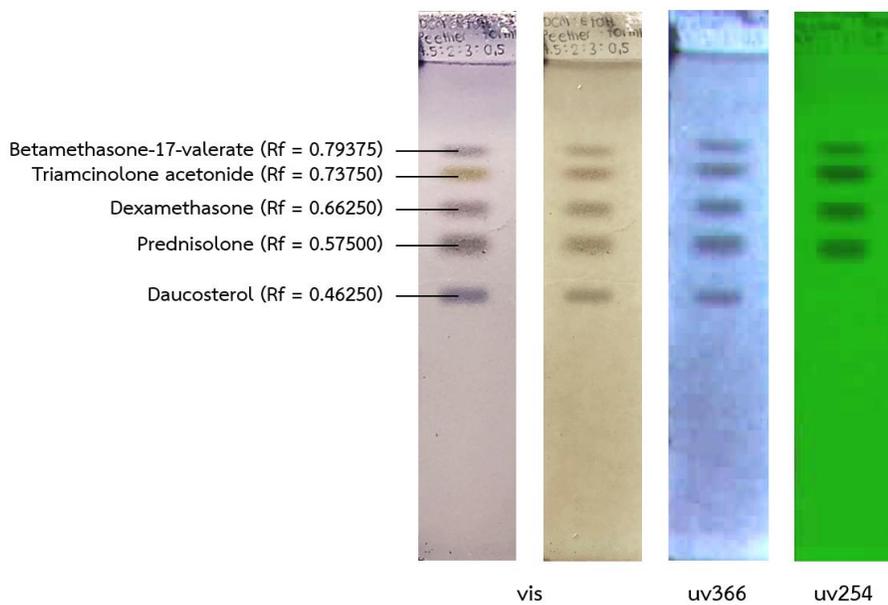


Fig. S6 DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5), polarity Index = 2.765, solvent cost = 0.2790 USD, and run time = 25 min

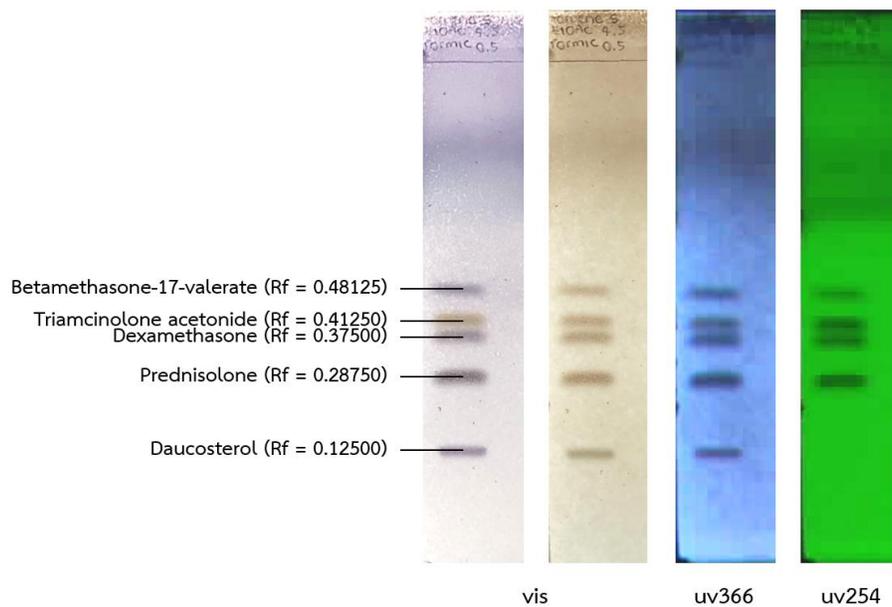


Fig. S7 Toluene: EtOAc: Formic acid (5: 4.5: 0.5), polarity Index = 3.48, solvent cost = 0.2715 USD, and run time = 20 min

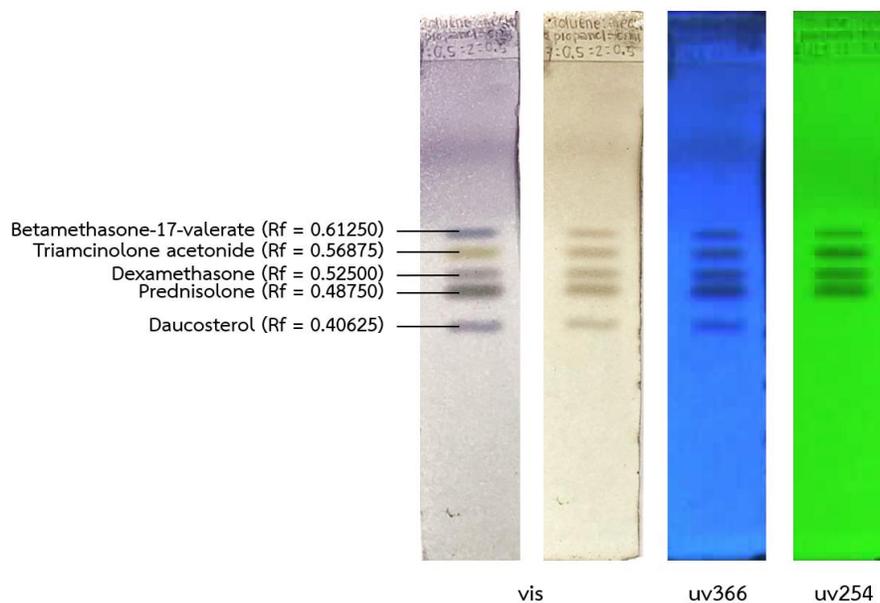


Fig. S8 Toluene: IPA: MeOH: Formic acid (7: 2: 0.5: 0.5), polarity Index = 3.015, solvent cost = 0.1893 USD, and run time = 22 min

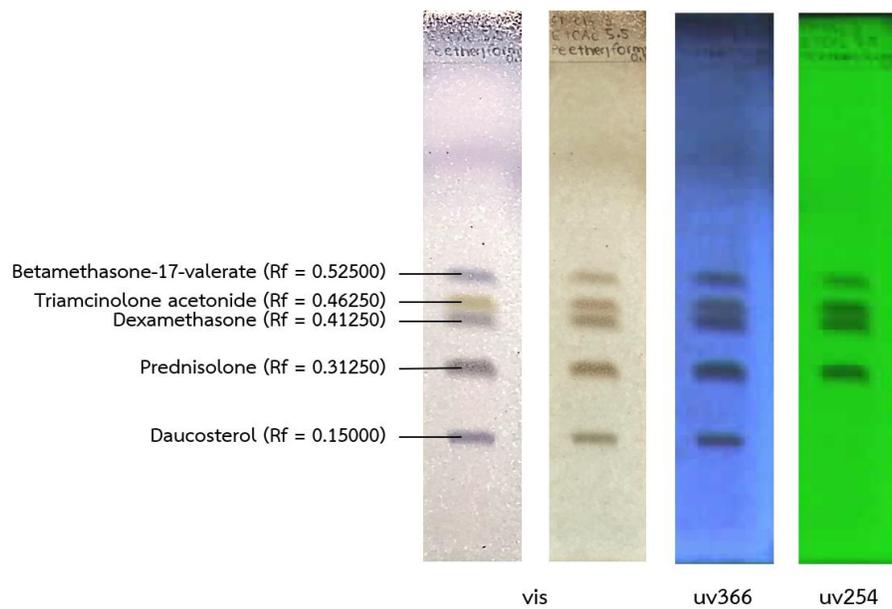


Fig. S9 EtOAc: CHCl₃: Petroleum ether: Formic acid (5.5: 3: 1: 0.5), polarity Index = 3.96, solvent cost = 0.3003 USD, run time = 23 min

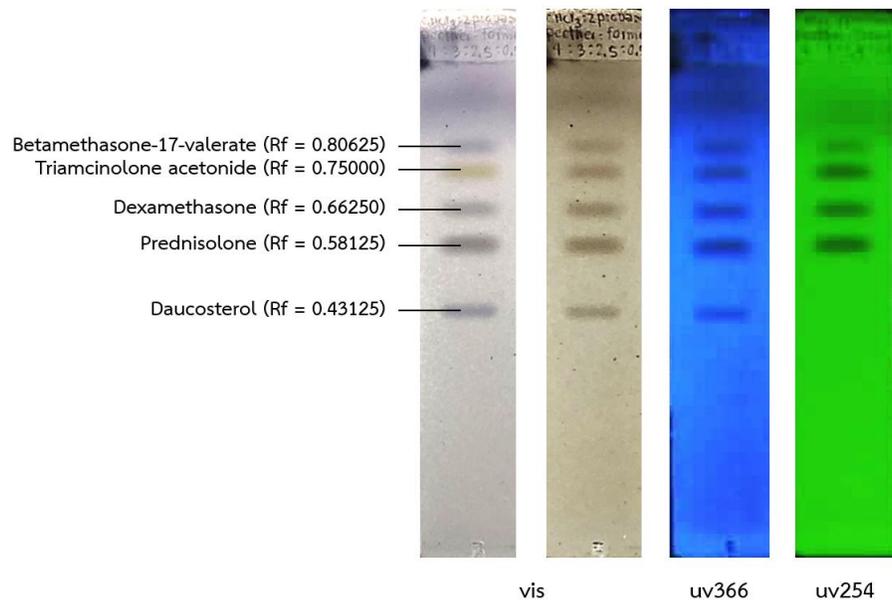


Fig. S10 CHCl₃: IPA: Petroleum ether: Formic acid (4: 3: 2.5: 0.5), polarity Index = 3.135, solvent cost = 0.2098 USD, run time = 35 min

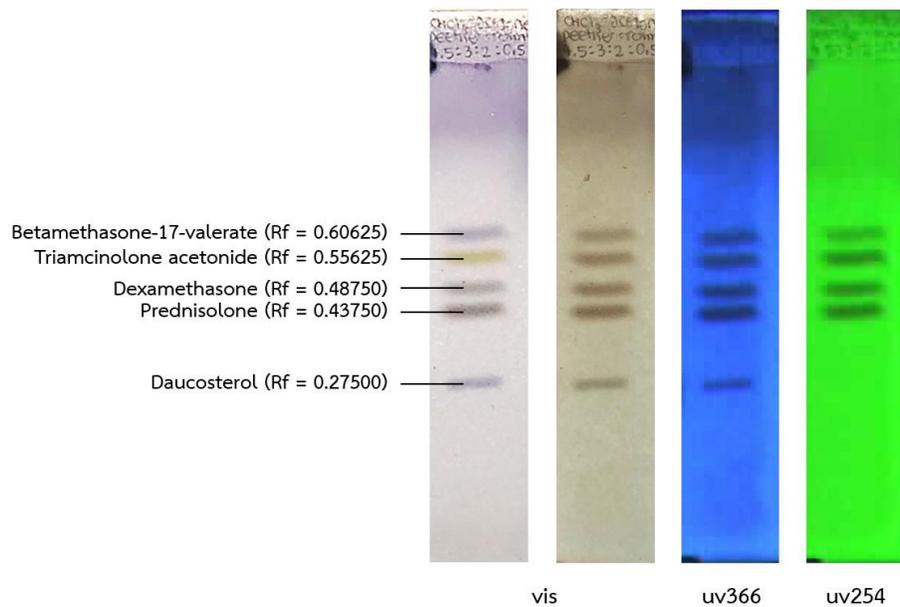


Fig. S11 CHCl₃: Acetone: Petroleum ether: Formic acid (4.5: 3: 2: 0.5), polarity Index = 3.695, solvent cost = 0.2148 USD, run time = 23 min

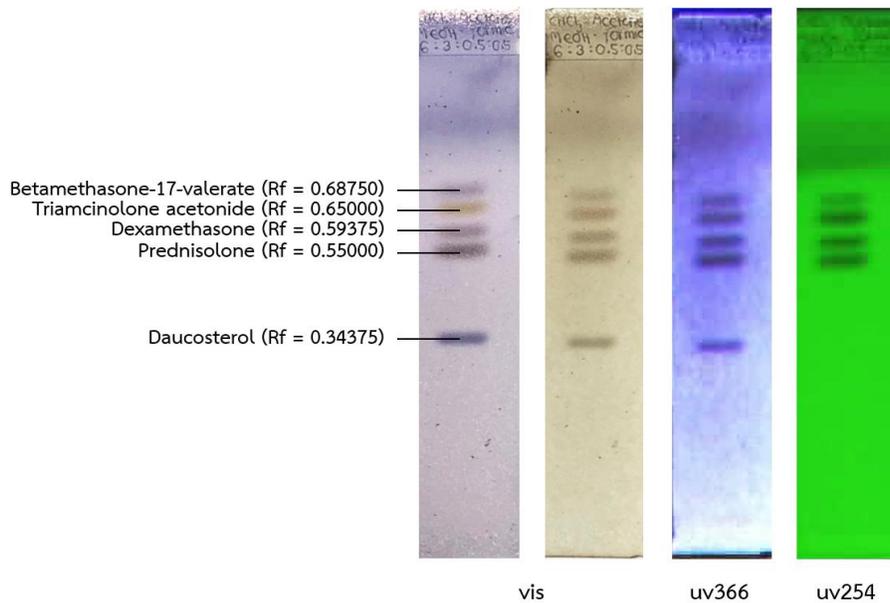


Fig. S12 CHCl₃: Acetone: MeOH: Formic acid (6: 3: 0.5: 0.5), polarity Index = 4.545, solvent cost = 0.2122 USD, run time = 23 min

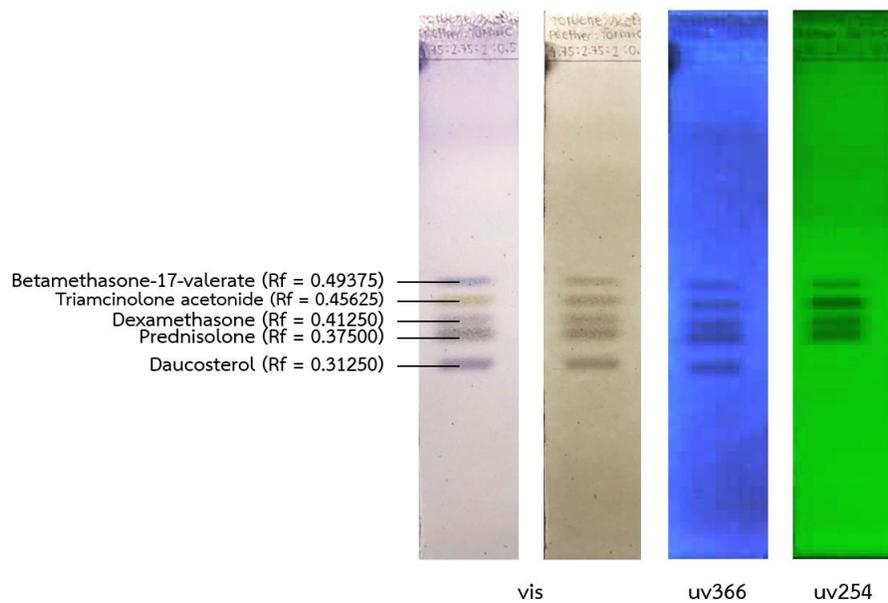


Fig. S13 Toluene: Acetone: Petroleum ether: Formic acid (4.75: 2.75: 2: 0.5), polarity Index = 2.8625, solvent cost = 0.1971 USD, and run time = 20 min

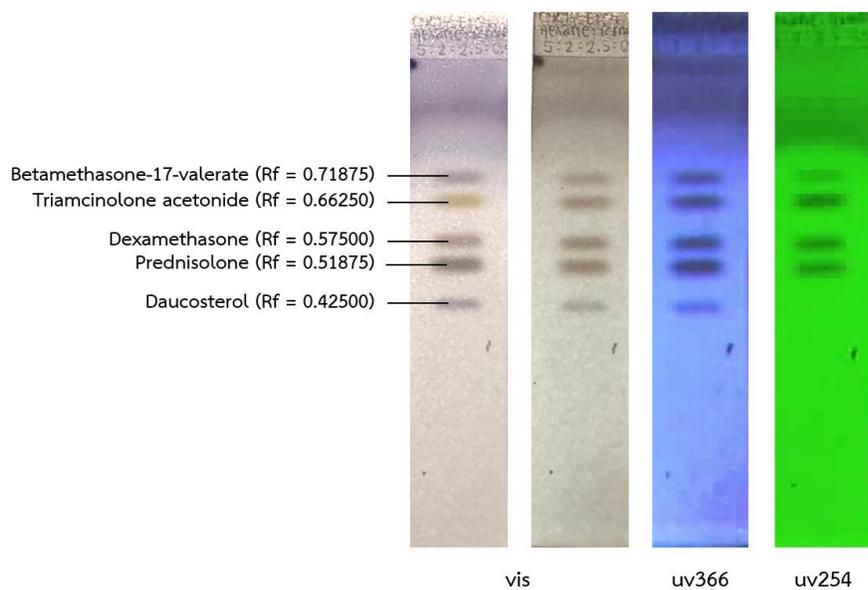


Fig. S14 CHCl₃: EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5), polarity Index = 3.39, solvent cost = 0.2409 USD, run time = 25 min

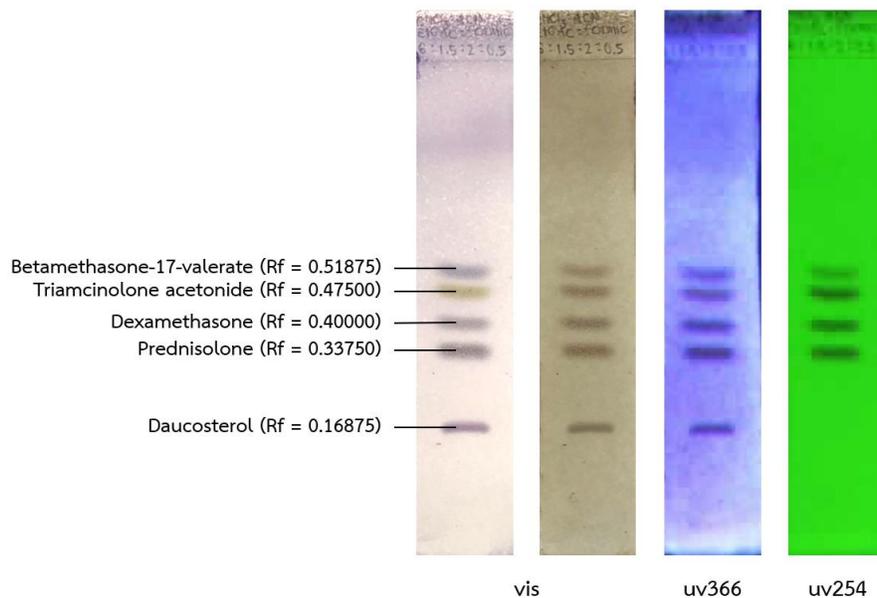


Fig. S15 CHCl₃: EtOAc: ACN: Formic acid (6: 2: 1.5: 0.5), polarity Index = 4.5, solvent cost = 0.2634 USD, and run time = 23 min

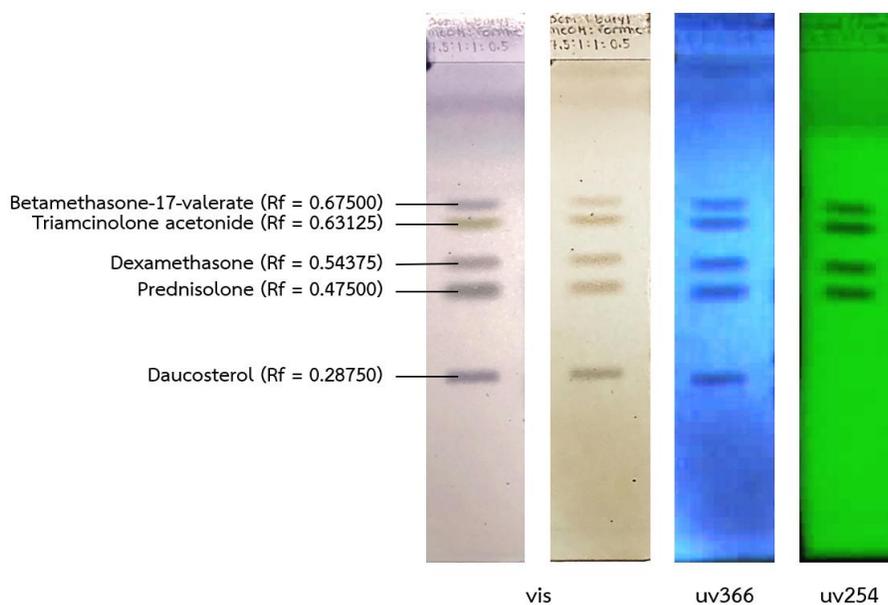


Fig. S16 DCM: *tert*-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5), polarity Index = 3.385, solvent cost = 0.3422 USD, and run time = 20 min

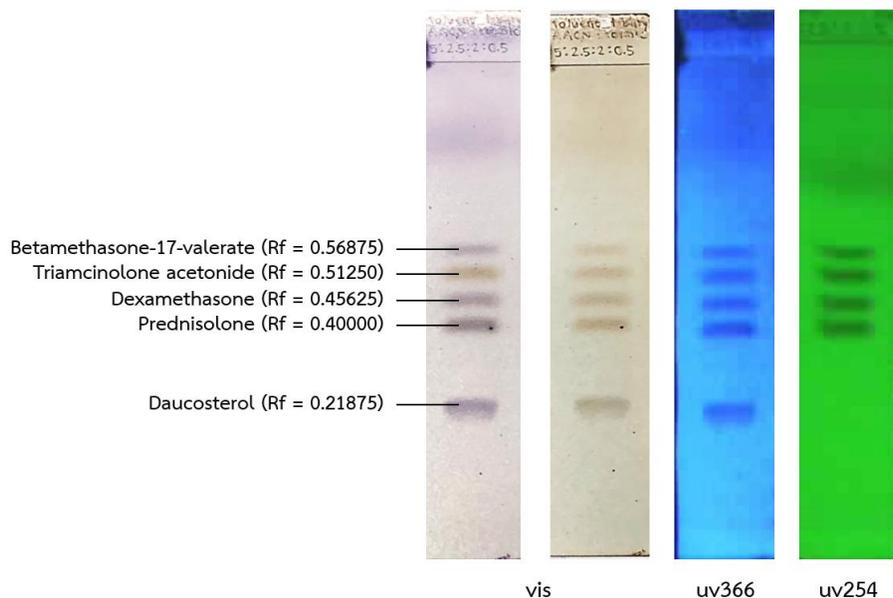


Fig. S17 Toluene: *tert*-butyl methyl ether: ACN: Formic acid (5: 2.5: 2: 0.5), polarity Index = 3.285, solvent cost = 0.3393 USD, and run time = 20 min

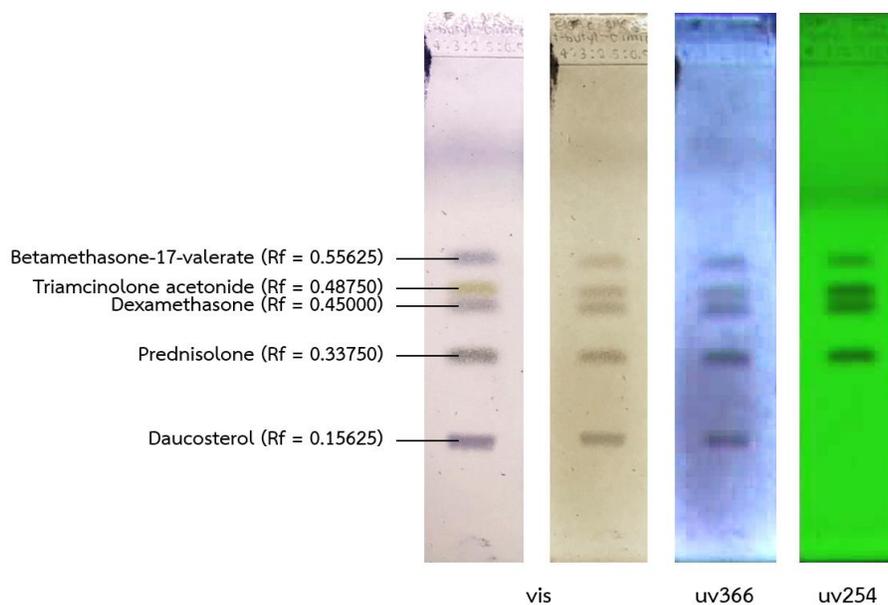


Fig. S18 EtOAc: CHCl₃: *tert*-butyl methyl ether: Formic acid (4: 3: 2.5: 0.5), polarity Index = 3.915, solvent cost = 0.4059 USD, and run time = 25 min

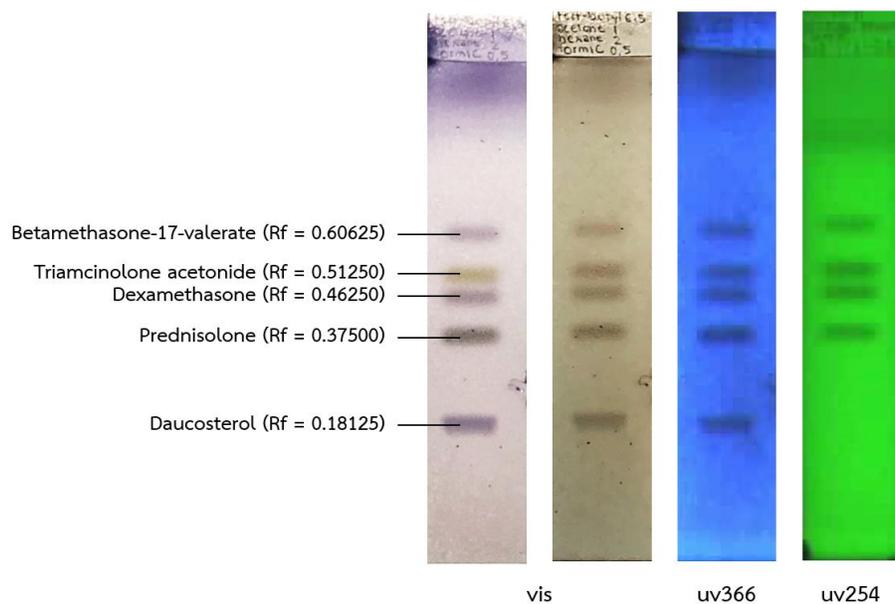


Fig. S19 *tert*-butyl methyl ether: *n*-Hexane: Acetone: Formic acid (6.5: 2: 1: 0.5), polarity Index = 2.435, solvent cost = 0.5397 USD, and run time = 25 min

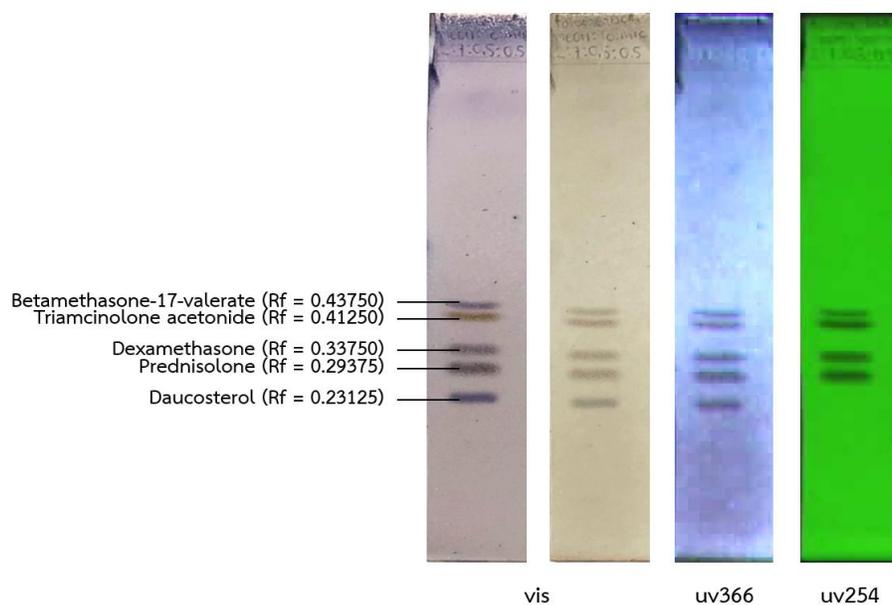


Fig. S20 DCM: Toluene: MeOH: Formic acid (7: 2: 0.5: 0.5), polarity Index = 3.205, solvent cost = 0.2896 USD, and run time = 20 min

Calibration Curves, Correlation Coefficients (R^2), LOD, and LOQ of Five Steroid Standards Under Five Selected Mobile Phase Systems

Table S1 The correlation coefficient, LOD and LOQ of five steroid standards under **DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5)** mobile phase system

	Daucosterol	Prednisolone	Dexamethasone	Triamcinolone acetonide	Betamethasone-17-valerate
Correlation coefficient	0.9906	0.9920	0.9930	0.9918	0.9954
Regression equation	$y = 16389x + 2172.6$	$y = 15524x + 732.85$	$y = 15075x + 1424.1$	$y = 10781x + 161.16$	$y = 13370x - 1166.4$
LOD	0.0371	0.0392	0.0403	0.0564	0.0455
LOQ	0.1124	0.1187	0.1222	0.1709	0.1378

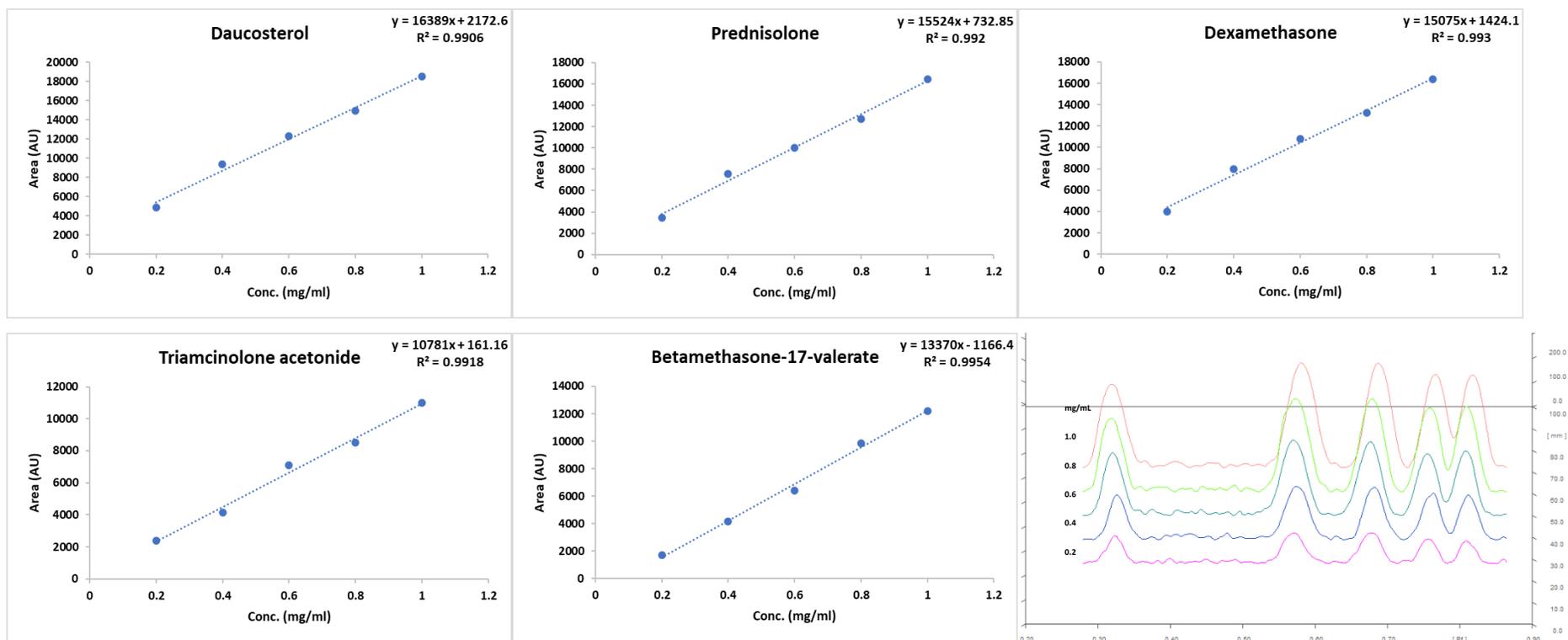


Fig. S21 The calibration curve of five steroid standards under DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5) mobile phase system

Table S2 The correlation coefficient, LOD and LOQ of five steroid standards under **DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5)** mobile phase system

	Daucosterol	Prednisolone	Dexamethasone	Triamcinolone acetonide	Betamethasone-17-valerate
Correlation coefficient	0.9921	0.9918	0.9922	0.9905	0.9942
Regression equation	$y = 14216x + 884.36$	$y = 14684x + 125.95$	$y = 13513x - 360.69$	$y = 9209.4x - 112.81$	$y = 8097.9x + 289.05$
LOD	0.0344	0.0333	0.0372	0.0531	0.0603
LOQ	0.1042	0.1009	0.1126	0.1608	0.1829

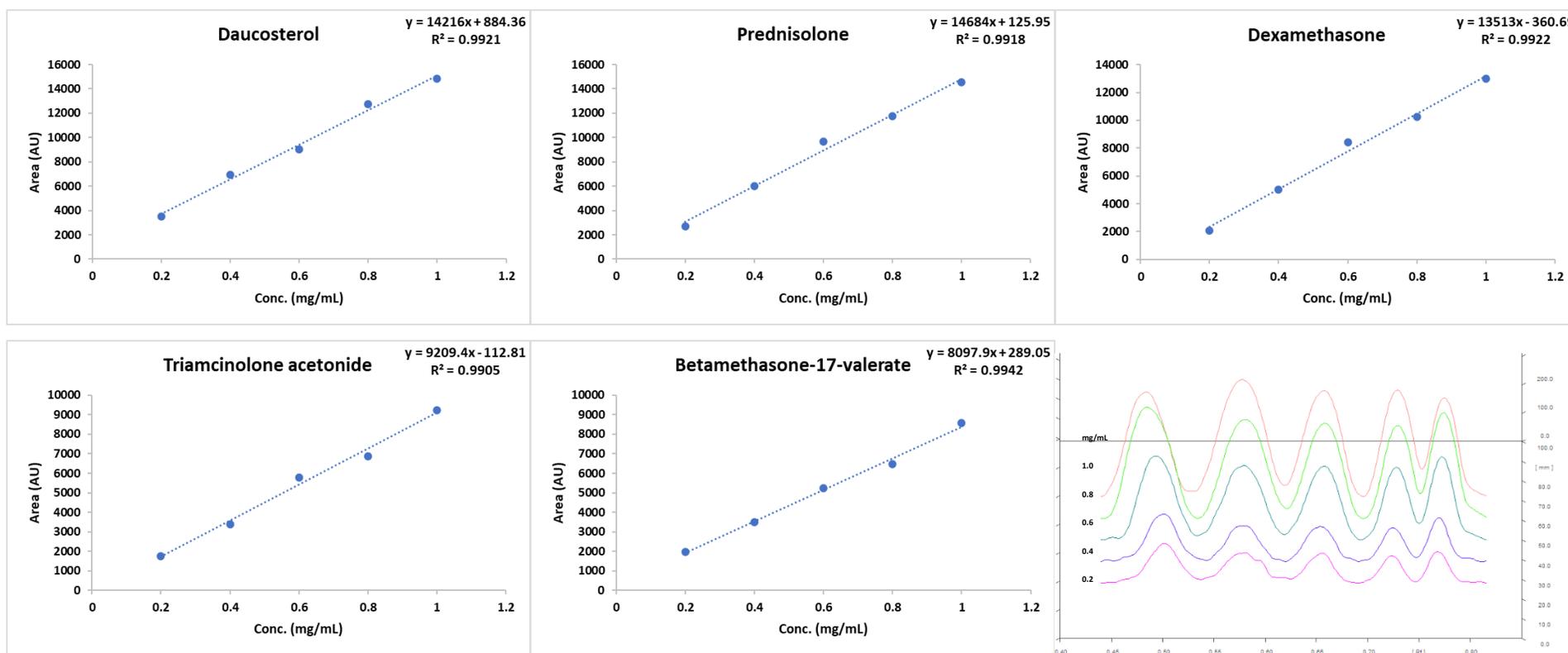


Fig. S22 The calibration curve of five steroid standards under DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5) mobile phase system

Table S3 The correlation coefficient, LOD and LOQ of five steroid standards under **CHCl₃: IPA: Petroleum ether: Formic acid (4: 3: 2.5: 0.5)** mobile phase system

	Daucosterol	Prednisolone	Dexamethasone	Triamcinolone acetonide	Betamethasone-17-valerate
Correlation coefficient	0.9904	0.9913	0.9913	0.9912	0.9921
Regression equation	$y = 12290x + 662.81$	$y = 14021x - 86.37$	$y = 11113x + 1150.1$	$y = 8888.6x + 636.47$	$y = 10004x + 138.49$
LOD	0.0402	0.0353	0.0445	0.0556	0.0494
LOQ	0.1220	0.1069	0.1349	0.1686	0.1498

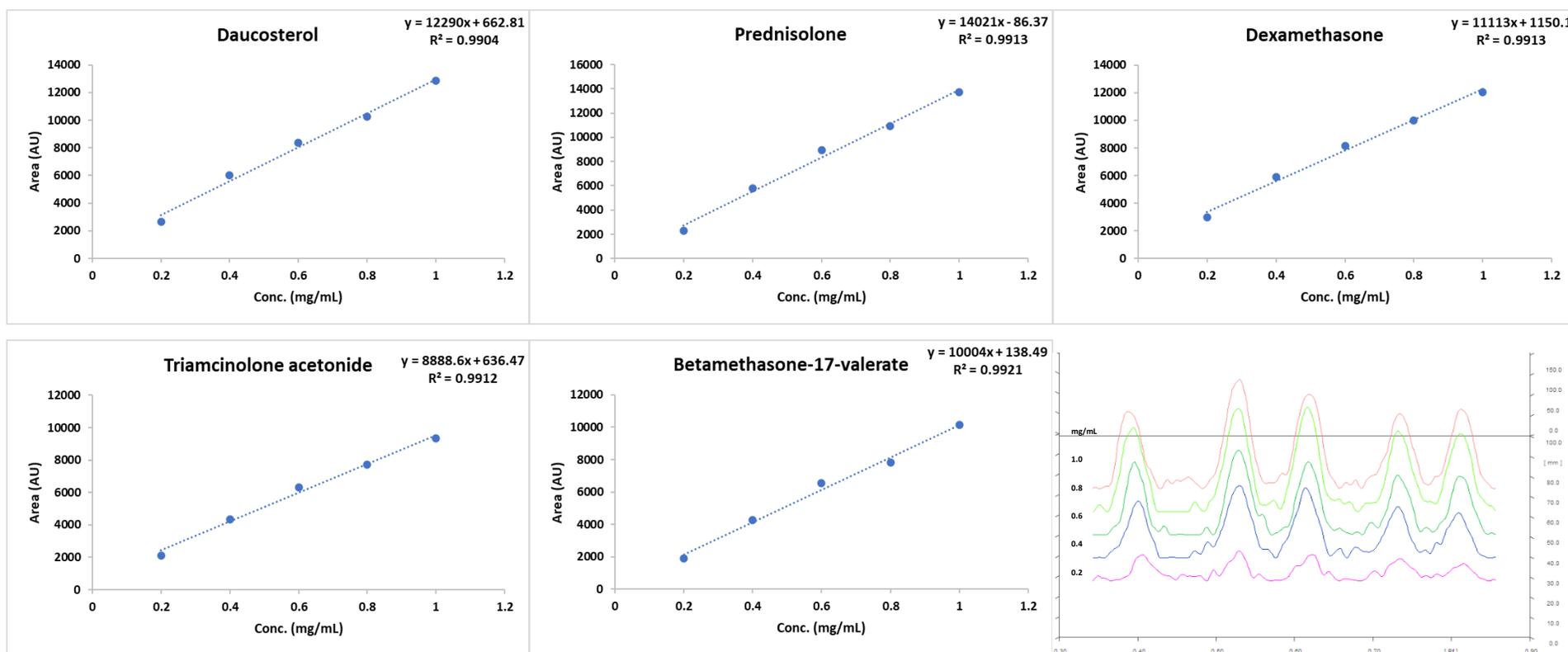


Fig. S23 The calibration curve of five steroid standards under **CHCl₃: IPA: Petroleum ether: Formic acid (4: 3: 2.5: 0.5)** mobile phase system

Table S4 The correlation coefficient, LOD and LOQ of five steroid standards under **CHCl₃: EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5)** mobile phase system

	Daucosterol	Prednisolone	Dexamethasone	Triamcinolone acetonide	Betamethasone-17-valerate
Correlation coefficient	0.9920	0.9906	0.9906	0.9912	0.9935
Regression equation	$y = 13745x + 628.6$	$y = 15012x + 377.1$	$y = 15401x - 149.3$	$y = 12047x + 53.04$	$y = 12676x + 40.05$
LOD	0.0379	0.0347	0.0339	0.0433	0.0411
LOQ	0.1150	0.1053	0.1026	0.1312	0.1247

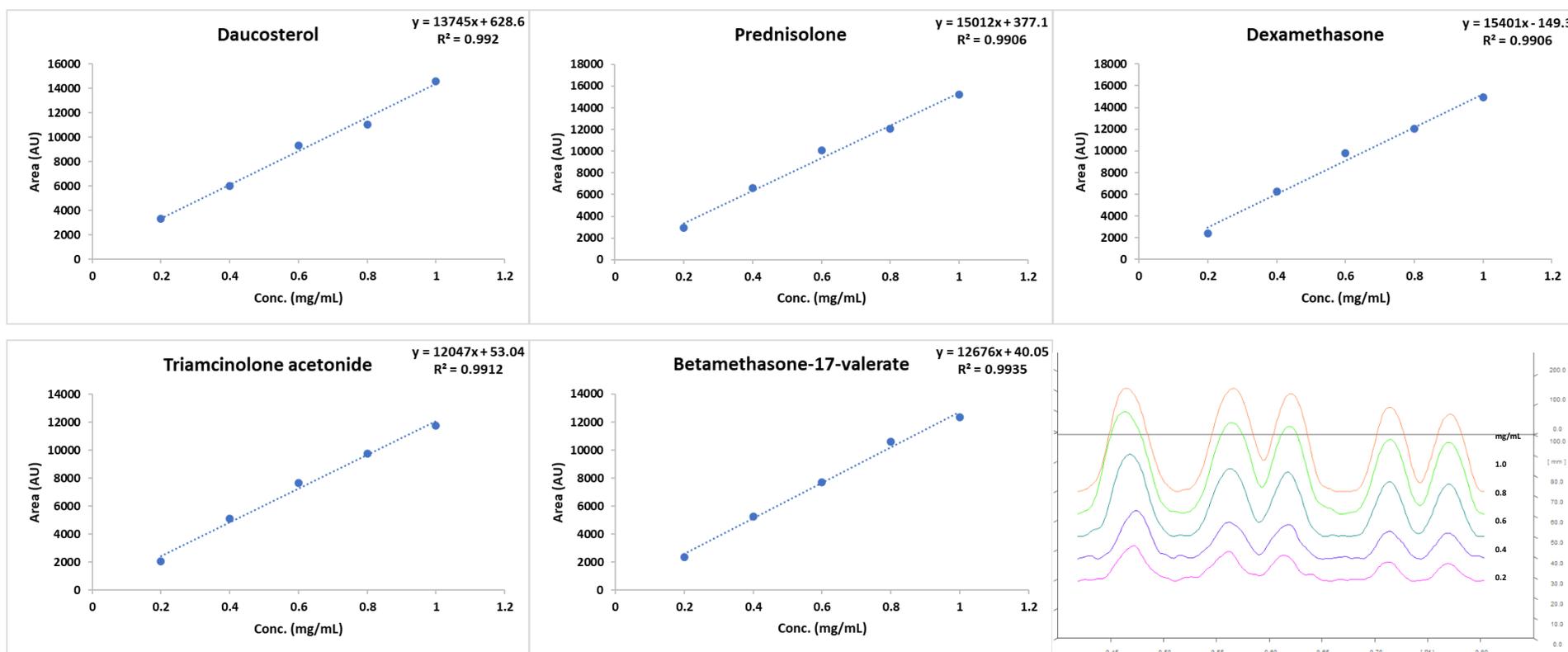


Fig. S24 The calibration curve of five steroid standards under **CHCl₃: EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5)** mobile phase system

Table S5 The correlation coefficient, LOD and LOQ of five steroid standards under **DCM: *tert*-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)** mobile phase system

	Daucosterol	Prednisolone	Dexamethasone	Triamcinolone acetonide	Betamethasone-17-valerate
Correlation coefficient	0.9910	0.9920	0.9964	0.9911	0.9967
Regression equation	$y = 16518x + 14.08$	$y = 15149x + 1124$	$y = 12281x - 136.72$	$y = 11206x - 480.47$	$y = 13176x - 126.22$
LOD	0.0345	0.0376	0.0464	0.0509	0.0433
LOQ	0.1045	0.1140	0.1406	0.1541	0.1311

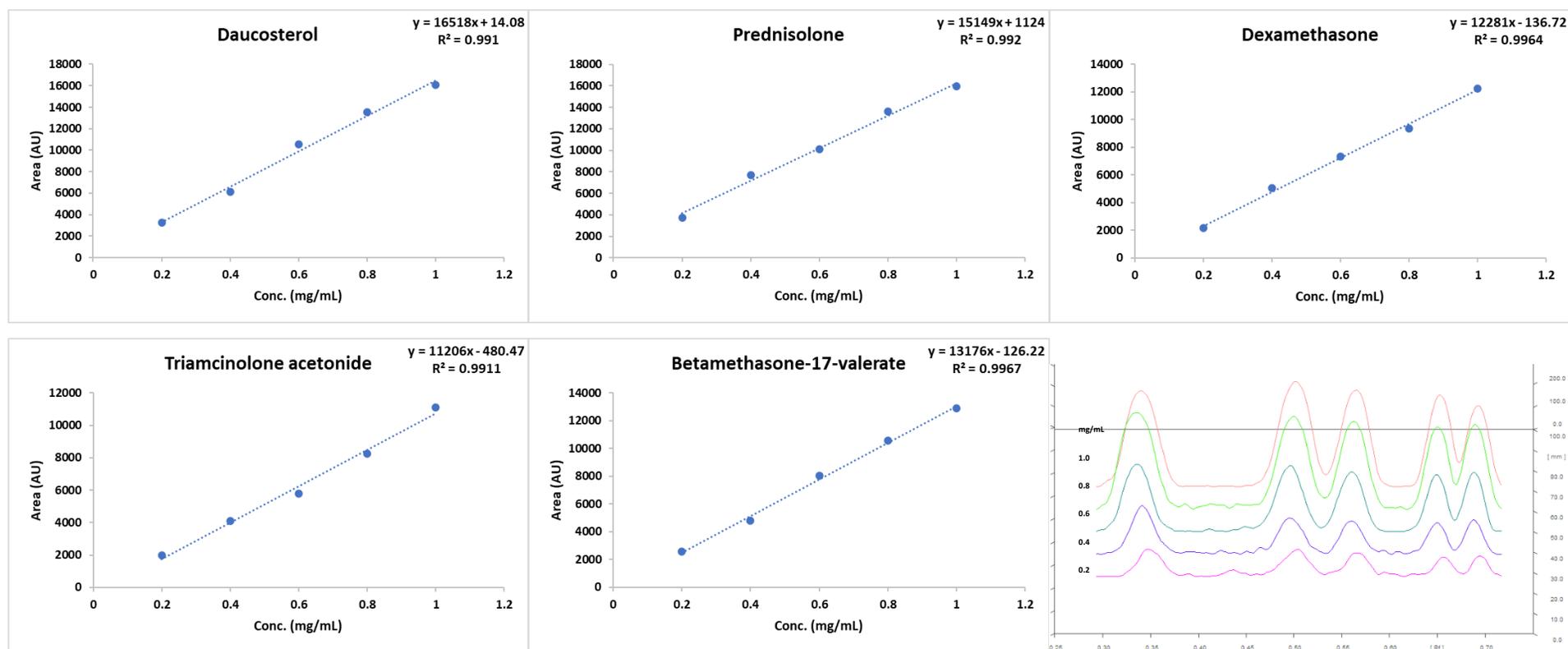


Fig. S25 The calibration curve of five steroid standards under DCM: *tert*-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5) mobile phase system

The Investigation of Spiked Steroid Standards in Herbal Medicines under Different Mobile Phase Systems

Five steroid standards (daucosterol, prednisolone, dexamethasone, triamcinolone acetonide, and betamethasone-17-valerate) were spiked into five herbal medicines—Derris scandens (A), Thai green herbal (Keaw-hom, B), Prasachangdaeng (C), Sahas Thara (D), and Andrographis paniculata (E)—and investigated under five different mobile phase systems.

Table S6 The investigation of spiked steroid standard in herbal medicine under DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5) mobile phase system

	Derris scandens (A)	Thai green herbal (Keaw-hom, B)	Prasachangdaeng (C)	Sahas Thara (D)	Andrographis paniculata (E)
Betamethasone-17-valerate	/	/	/	/	/
Triamcinolone acetonide	/	/	/	/	X
Dexamethasone	/	/	/	/	/
Prednisolone	/	/	/	/	/
Daucosterol	/	/	/	/	/

Triamcinolone acetonide overlapped with components of Andrographis paniculata (E) under the DCM: IPA: ACN: formic acid (7.5: 1.5: 0.5: 0.5) mobile phase, although occasional resolution was observed by TLC scanning.

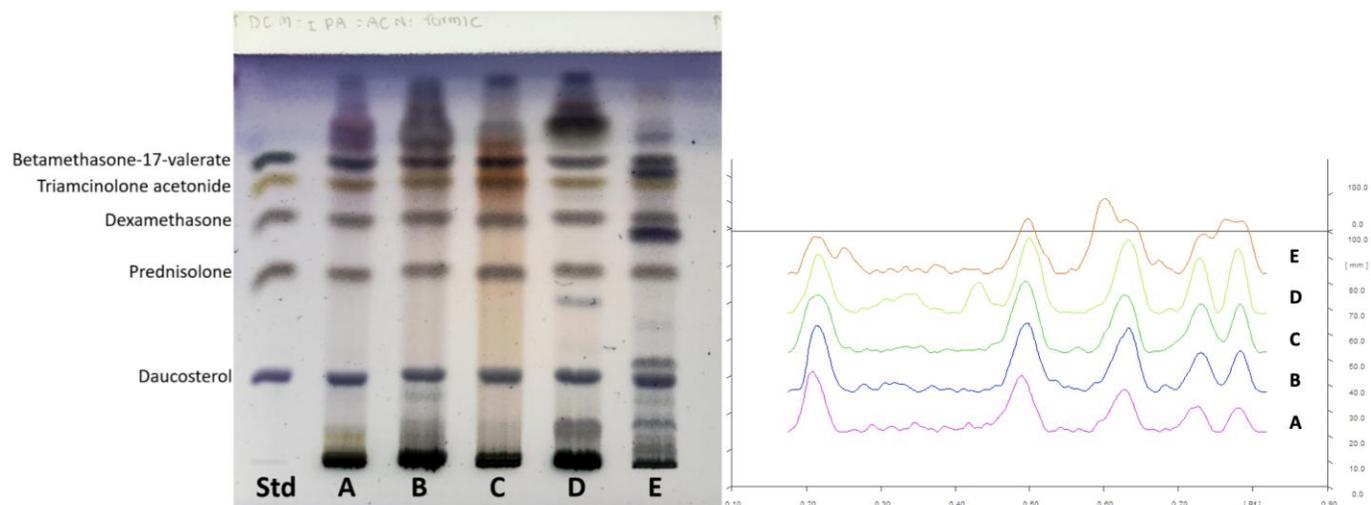


Fig. S26 The visualization of spiked steroid standard in herbal medicine under DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5) mobile phase system

Table S7 The investigation of spiked steroid standard in herbal medicine under **DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5)** mobile phase system

	Derris scandens (A)	Thai green herbal (Keaw-hom, B)	Prasachangdaeng (C)	Sahas Thara (D)	Andrographis paniculata (E)
Betamethasone-17-valerate	/	/	/	/	/
Triamcinolone acetonide	/	/	/	/	X
Dexamethasone	/	/	/	/	X
Prednisolone	/	/	/	X	/
Daucosterol	/	/	/	/	/

Prednisolone overlapped with components of Sahas Thara (D), while triamcinolone acetonide and dexamethasone overlapped with components of Andrographis paniculata (E) under the DCM: petroleum ether: EtOH: formic acid (4.5: 3: 2: 0.5) mobile phase, although dexamethasone was occasionally resolved by TLC scanning.

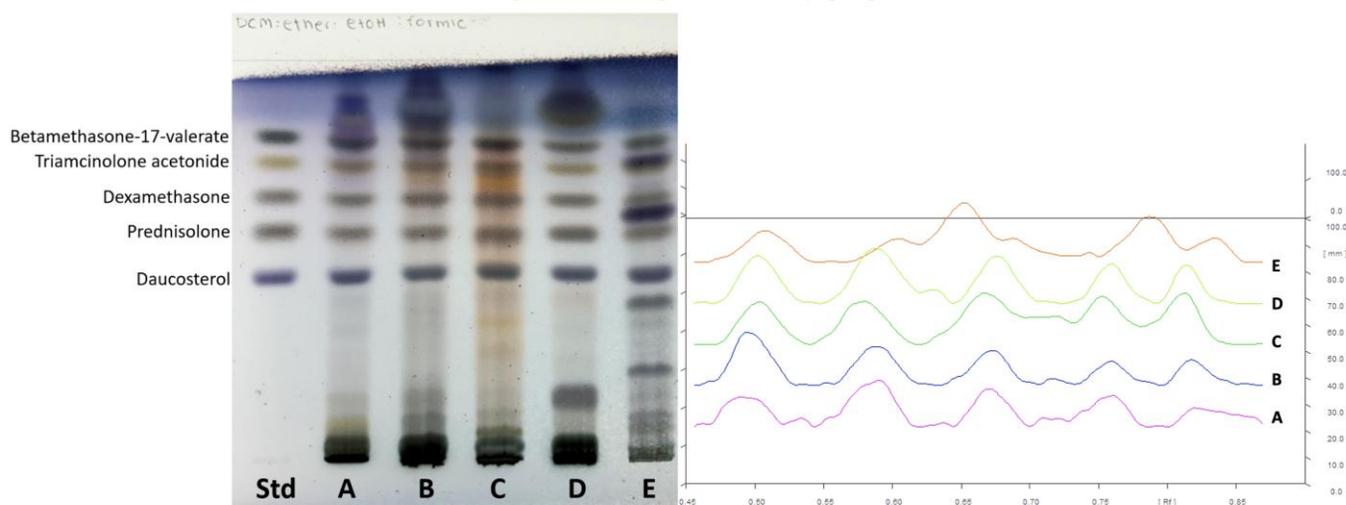


Fig. S27 The visualization of spiked steroid standard in herbal medicine under DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5) mobile phase system

Table S8 The investigation of spiked steroid standard in herbal medicine under **CHCl₃: IPA: Petroleum ether: Formic acid (4: 3: 2.5: 0.5)** mobile phase system

	Derris scandens (A)	Thai green herbal (Keaw-hom, B)	Prasachangdaeng (C)	Sahas Thara (D)	Andrographis paniculata (E)
Betamethasone-17-valerate	/	/	/	/	/
Triamcinolone acetonide	/	/	/	/	X
Dexamethasone	/	/	/	/	/
Prednisolone	/	/	/	/	/
Daucosterol	/	/	/	/	/

Triamcinolone acetonide overlapped with components of *Andrographis paniculata* (E) under the CHCl₃: IPA: petroleum ether: formic acid (4: 3: 2.5: 0.5) mobile phase.

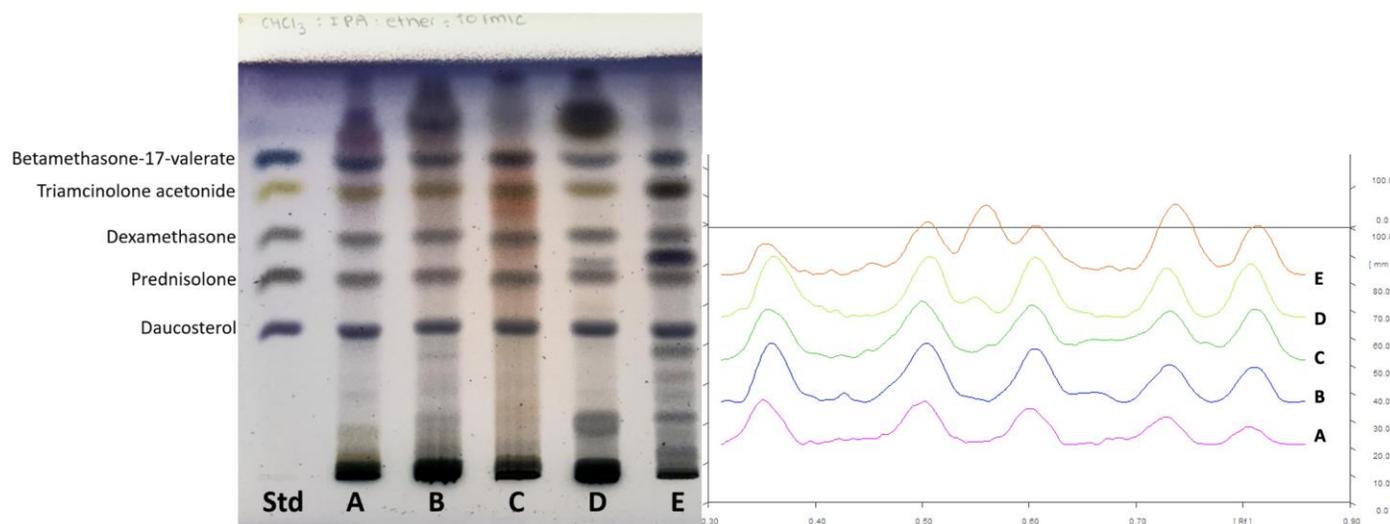


Fig. S28 The visualization of spiked steroid standard in herbal medicine under **CHCl₃: IPA: Petroleum ether: Formic acid (4: 3: 2.5: 0.5)** mobile phase system

Table S9 The investigation of spiked steroid standard in herbal medicine under CHCl_3 : EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5) mobile phase system

	Derris scandens (A)	Thai green herbal (Keaw-hom, B)	Prasachangdaeng (C)	Sahas Thara (D)	Andrographis paniculata (E)
Betamethasone-17-valerate	/	/	/	/	/
Triamcinolone acetonide	/	/	/	/	X
Dexamethasone	/	/	/	/	X
Prednisolone	/	/	/	X	/
Daucosterol	/	/	/	/	/

Prednisolone overlapped with components of Sahas Thara (D), while triamcinolone acetonide and dexamethasone overlapped with components of Andrographis paniculata (E) under the CHCl_3 : EtOH: *n*-hexane: formic acid (5: 2: 2.5: 0.5) mobile phase.

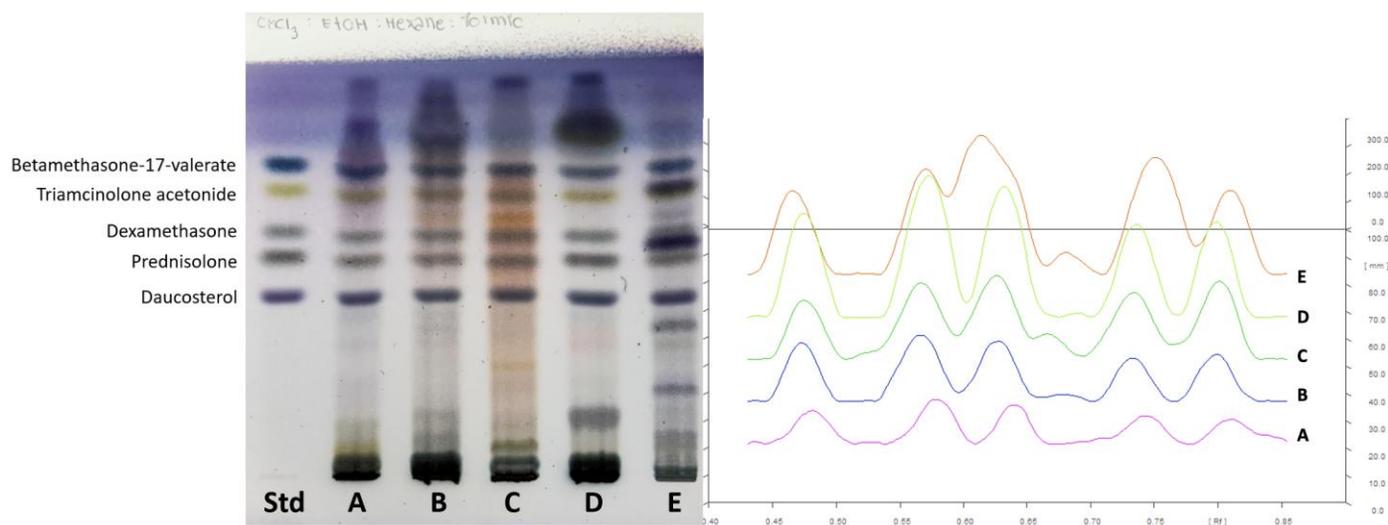


Fig. S29 The visualization of spiked steroid standard in herbal medicine under CHCl_3 : EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5) mobile phase system

Table S10 The investigation of spiked steroid standard in herbal medicine under **DCM: *tert*-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)** mobile phase system

	Derris scandens (A)	Thai green herbal (Keaw-hom, B)	Prasachangdaeng (C)	Sahas Thara (D)	Andrographis paniculata (E)
Betamethasone-17-valerate	/	/	/	/	X
Triamcinolone acetonide	/	/	/	/	/
Dexamethasone	/	/	/	/	X
Prednisolone	/	/	/	/	/
Daucosterol	/	/	/	/	/

Betamethasone-17-valerate and dexamethasone overlapped with components of *Andrographis paniculata* (E) under the **DCM: *tert*-butyl methyl ether: MeOH: formic acid (7.5: 1: 1: 0.5)** mobile phase.

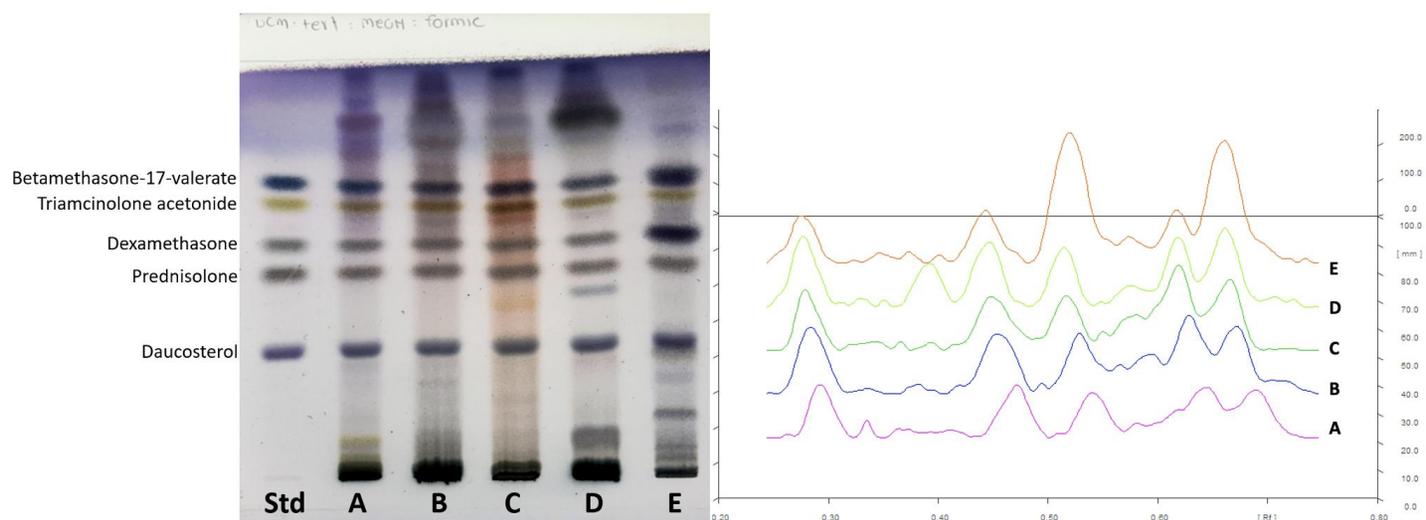


Fig. S30 The visualization of spiked steroid standard in herbal medicine under **DCM: *tert*-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)** mobile phase system

Qualitative Analysis of Five Steroid Standards in Spiked Samples under Different Mobile Phase Systems

This section presents the retention factor (R_f) values of five steroid standards in five spiked samples obtained using five selected mobile phase systems. Measurements were performed in triplicate within a single day and over three consecutive days. The relative standard deviation (%RSD) and ΔR_f were subsequently calculated according to the following acceptance criteria: intra-day precision (repeatability), %RSD \leq 2% and $\Delta R_f \leq$ 0.01; and inter-day precision (intermediate precision over three consecutive days), %RSD \leq 15% and $\Delta R_f \leq$ 0.05.

Table S11 The repeatability (intra-day precision) and intermediate precision (inter-day precision) of five spiked sample at 0.4 and 0.8 mg/mL under DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5) mobile phase system

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 1

Day 1	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7188	0.7188	0.7188	0.7250	0.7250	0.7313	0.7250	0.7250	0.7313	0.7250	0.7375	0.7375	0.7438	0.7438	0.7438	0.7300	0.00921	1.2616	0.0250
Triamcinolone acetonide	0.6688	0.6688	0.6688	0.6750	0.6688	0.6875	0.6813	0.6750	0.6750	0.6813	0.6938	0.6875	0.6875	0.6938	0.6938	0.6804	0.00970	1.4258	0.0250
Dexamethasone	0.5813	0.5813	0.5813	0.5875	0.5813	0.6000	0.6000	0.5938	0.5875	0.5938	0.6063	0.6063	0.6063	0.6000	0.6000	0.5938	0.00974	1.6404	0.0250
Prednisolone	0.4625	0.4625	0.4625	0.4625	0.4625	0.4688	0.4750	0.4688	0.4688	0.4688	0.4875	0.4813	0.4813	0.4750	0.4813	0.4713	0.00845	1.7934	0.0250
Daucosterol	0.2063	0.2063	0.2000	0.2063	0.2063	0.2125	0.2063	0.2063	0.2125	0.2063	0.2125	0.2063	0.2063	0.2125	0.2125	0.2079	0.00371	1.7844	0.0125

Day 2

Day 2	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7313	0.7250	0.7188	0.7250	0.7250	0.7250	0.7250	0.7250	0.7250	0.7375	0.7438	0.7375	0.7313	0.7250	0.7250	0.7283	0.00663	0.9097	0.0250
Triamcinolone acetonide	0.6750	0.6750	0.6688	0.6688	0.6688	0.6813	0.6750	0.6750	0.6750	0.6875	0.6938	0.6875	0.6875	0.6813	0.6875	0.6792	0.00807	1.1880	0.0250
Dexamethasone	0.6000	0.5938	0.5875	0.5938	0.5938	0.6063	0.6063	0.6000	0.6000	0.6125	0.6125	0.6125	0.6125	0.6063	0.6125	0.6033	0.00847	1.4045	0.0250
Prednisolone	0.4688	0.4688	0.4688	0.4625	0.4688	0.4875	0.4875	0.4813	0.4813	0.4813	0.4813	0.4875	0.4875	0.4813	0.4875	0.4788	0.00878	1.8330	0.0250
Daucosterol	0.2125	0.2188	0.2188	0.2188	0.2250	0.2188	0.2125	0.2188	0.2188	0.2188	0.2250	0.2188	0.2188	0.2250	0.2250	0.2196	0.00400	1.8215	0.0125

Table S11 The repeatability (intra-day precision) and intermediate precision (inter-day precision) of five spiked sample at 0.4 and 0.8 mg/mL under DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5) mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Day 3

Day 3	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7188	0.7188	0.7125	0.7188	0.7250	0.7250	0.7188	0.7125	0.7188	0.7188	0.7375	0.7313	0.7313	0.7375	0.7375	0.7242	0.00880	1.2147	0.0250
Triamcinolone acetonide	0.6750	0.6688	0.6688	0.6750	0.6813	0.6688	0.6625	0.6625	0.6625	0.6688	0.6750	0.6750	0.6688	0.6688	0.6750	0.6704	0.00552	0.8238	0.0188
Dexamethasone	0.5813	0.5750	0.5750	0.5750	0.5750	0.5813	0.5813	0.5875	0.5813	0.5875	0.6000	0.5938	0.5938	0.6000	0.6000	0.5858	0.00959	1.6363	0.0250
Prednisolone	0.4625	0.4625	0.4563	0.4500	0.4563	0.4500	0.4563	0.4563	0.4563	0.4625	0.4625	0.4563	0.4625	0.4625	0.4688	0.4588	0.00518	1.1282	0.0188
Daucosterol	0.2063	0.2125	0.2063	0.2125	0.2125	0.2063	0.2125	0.2063	0.2125	0.2125	0.2125	0.2188	0.2125	0.2125	0.2188	0.2117	0.00400	1.8896	0.0125

Intermediate precision (inter-day precision)

Day 1-3

Day 1-3	Retention factor (R_f)					Average	SD	%RSD	ΔR_f
Sample	A	B	C	D	E				
Betamethasone-17-valerate	0.7299	0.7264	0.7243	0.7278	0.7292	0.7275	0.00847	1.1642	0.0313
Triamcinolone acetonide	0.6799	0.6757	0.6736	0.6750	0.6792	0.6767	0.00898	1.3268	0.0313
Dexamethasone	0.5965	0.5944	0.5931	0.5924	0.5951	0.5943	0.01160	1.9523	0.0375
Prednisolone	0.4701	0.4708	0.4694	0.4667	0.4708	0.4696	0.01120	2.3843	0.0375
Daucosterol	0.2125	0.2125	0.2104	0.2146	0.2153	0.2131	0.00622	2.9216	0.0250

Table S11 The repeatability (intra-day precision) and intermediate precision (inter-day precision) of five spiked sample at 0.4 and 0.8 mg/mL under DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5) mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 1

Day 1	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7250	0.7250	0.7250	0.7250	0.7375	0.7313	0.7313	0.7375	0.7438	0.7438	0.7500	0.7438	0.7375	0.7438	0.7375	0.7358	0.00834	1.1335	0.0250
Triamcinolone acetonide	0.6750	0.6750	0.6750	0.6750	0.6813	0.6750	0.6750	0.6750	0.6813	0.6875	0.6875	0.6938	0.6875	0.6938	0.6938	0.6821	0.00779	1.1417	0.0187
Dexamethasone	0.5875	0.5875	0.5875	0.5875	0.6000	0.5813	0.5875	0.5875	0.5875	0.5938	0.5938	0.5938	0.5875	0.5938	0.5875	0.5896	0.00452	0.7672	0.0187
Prednisolone	0.4563	0.4625	0.4625	0.4625	0.4625	0.4500	0.4563	0.4563	0.4625	0.4625	0.4688	0.4750	0.4750	0.4625	0.4688	0.4629	0.00687	1.4849	0.0250
Daucosterol	0.2000	0.2063	0.2063	0.2063	0.2000	0.2063	0.2063	0.2063	0.2063	0.2125	0.2063	0.2063	0.2125	0.2063	0.2063	0.2063	0.00334	1.6198	0.0125

Day 2

Day 2	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7313	0.7313	0.7313	0.7375	0.7438	0.7500	0.7563	0.7500	0.7500	0.7438	0.7500	0.7563	0.7563	0.7563	0.7563	0.7467	0.00970	1.2993	0.0250
Triamcinolone acetonide	0.6875	0.6875	0.6938	0.6938	0.7000	0.7063	0.7063	0.7000	0.7000	0.7000	0.7000	0.7063	0.7125	0.7125	0.7125	0.7013	0.00825	1.1766	0.0250
Dexamethasone	0.5813	0.5875	0.5813	0.5875	0.5938	0.6000	0.6000	0.6000	0.5938	0.5938	0.6000	0.6063	0.6000	0.6063	0.6063	0.5958	0.00841	1.4110	0.0250
Prednisolone	0.4688	0.4688	0.4688	0.4750	0.4750	0.4875	0.4813	0.4813	0.4875	0.4813	0.4875	0.4938	0.4875	0.4875	0.4938	0.4817	0.00867	1.7998	0.0250
Daucosterol	0.2188	0.2125	0.2188	0.2188	0.2188	0.2188	0.2250	0.2250	0.2250	0.2188	0.2250	0.2250	0.2188	0.2188	0.2250	0.2208	0.00386	1.7468	0.0125

Day 3

Day 3	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7500	0.7438	0.7500	0.7500	0.7438	0.7500	0.7500	0.7500	0.7563	0.7625	0.7563	0.7500	0.7438	0.7500	0.7625	0.7513	0.00588	0.7830	0.0187
Triamcinolone acetonide	0.7000	0.7000	0.6938	0.6938	0.6875	0.7063	0.7125	0.7125	0.7063	0.7125	0.7000	0.7063	0.7000	0.7063	0.7125	0.7033	0.00779	1.1072	0.0250
Dexamethasone	0.6000	0.5938	0.6000	0.6000	0.5938	0.6125	0.6063	0.6125	0.6125	0.6125	0.6188	0.6125	0.6063	0.6125	0.6125	0.6071	0.00779	1.2827	0.0250
Prednisolone	0.4625	0.4688	0.4625	0.4688	0.4625	0.4688	0.4688	0.4750	0.4813	0.4875	0.4875	0.4813	0.4813	0.4875	0.4813	0.4738	0.00890	1.8790	0.0250
Daucosterol	0.2063	0.2125	0.2125	0.2063	0.2125	0.2188	0.2125	0.2125	0.2063	0.2125	0.2125	0.2063	0.2125	0.2125	0.2188	0.2117	0.00400	1.8896	0.0125

Table S11 The repeatability (intra-day precision) and intermediate precision (inter-day precision) of five spiked sample at 0.4 and 0.8 mg/mL under DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5) mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Intermediate precision (inter-day precision)

Day 1-3

Day 1-3	Retention factor (R _f)					Average	SD	%RSD	ΔR _f
Sample	A	B	C	D	E				
Betamethasone-17-valerate	0.7438	0.7431	0.7424	0.7458	0.7479	0.7446	0.01029	1.3816	0.0375
Triamcinolone acetonide	0.6931	0.6958	0.6944	0.6958	0.6986	0.6956	0.01240	1.7830	0.0375
Dexamethasone	0.5972	0.5972	0.5958	0.5979	0.5993	0.5975	0.01010	1.6896	0.0375
Prednisolone	0.4708	0.4729	0.4715	0.4743	0.4743	0.4728	0.01116	2.3607	0.0438
Daucosterol	0.2125	0.2125	0.2139	0.2118	0.2139	0.2129	0.00710	3.3352	0.0250

Table S12 The repeatability (intra-day precision) and intermediate precision of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5)** mobile phase system

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 1

Day 1	Retention factor (R_t)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7750	0.7750	0.7750	0.7813	0.7813	0.7750	0.7750	0.7750	0.7813	0.7875	0.7938	0.7938	0.7938	0.8000	0.8000	0.7842	0.00970	1.2372	0.0250
Triamcinolone acetonide	0.7125	0.7125	0.7188	0.7125	0.7188	0.7188	0.7125	0.7125	0.7188	0.7250	0.7313	0.7375	0.7375	0.7375	0.7375	0.7229	0.01048	1.4491	0.0250
Dexamethasone	0.6438	0.6438	0.6438	0.6500	0.6500	0.6500	0.6438	0.6500	0.6438	0.6500	0.6625	0.6688	0.6625	0.6688	0.6688	0.6533	0.00999	1.5283	0.0250
Prednisolone	0.5563	0.5500	0.5500	0.5500	0.5563	0.5500	0.5500	0.5500	0.5563	0.5563	0.5625	0.5688	0.5688	0.5750	0.5750	0.5583	0.00935	1.6747	0.0250
Daucosterol	0.4375	0.4313	0.4375	0.4375	0.4313	0.4375	0.4438	0.4500	0.4500	0.4500	0.4375	0.4375	0.4250	0.4313	0.4313	0.4379	0.00764	1.7452	0.0250

Day 2

Day 2	Retention factor (R_t)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7750	0.7688	0.7688	0.7688	0.7688	0.7938	0.7875	0.7938	0.7938	0.7938	0.7813	0.7813	0.7875	0.7813	0.7938	0.7825	0.01035	1.3228	0.0250
Triamcinolone acetonide	0.7188	0.7188	0.7125	0.7125	0.7125	0.7313	0.7313	0.7313	0.7375	0.7375	0.7313	0.7250	0.7250	0.7250	0.7375	0.7258	0.00911	1.2549	0.0250
Dexamethasone	0.6500	0.6438	0.6500	0.6438	0.6500	0.6563	0.6625	0.6563	0.6625	0.6625	0.6563	0.6500	0.6500	0.6500	0.6625	0.6538	0.00660	1.0092	0.0187
Prednisolone	0.5688	0.5688	0.5688	0.5625	0.5688	0.5750	0.5750	0.5813	0.5813	0.5875	0.5750	0.5750	0.5813	0.5750	0.5813	0.5750	0.00668	1.1620	0.0250
Daucosterol	0.4500	0.4500	0.4438	0.4438	0.4438	0.4563	0.4625	0.4625	0.4688	0.4688	0.4500	0.4563	0.4563	0.4563	0.4625	0.4554	0.00847	1.8606	0.0250

Day 3

Day 3	Retention factor (R_t)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7688	0.7688	0.7750	0.7688	0.7813	0.7813	0.7750	0.7813	0.7813	0.7750	0.7813	0.7875	0.7875	0.7938	0.7938	0.7800	0.00825	1.0578	0.0250
Triamcinolone acetonide	0.7063	0.7063	0.7063	0.7063	0.7188	0.7250	0.7250	0.7188	0.7188	0.7125	0.7125	0.7188	0.7188	0.7188	0.7250	0.7158	0.00703	0.9827	0.0187
Dexamethasone	0.6250	0.6250	0.6250	0.6313	0.6313	0.6438	0.6438	0.6438	0.6375	0.6375	0.6438	0.6438	0.6500	0.6500	0.6500	0.6388	0.00921	1.4419	0.0250
Prednisolone	0.5500	0.5500	0.5500	0.5563	0.5563	0.5625	0.5563	0.5625	0.5563	0.5500	0.5750	0.5563	0.5750	0.5750	0.5750	0.5604	0.00993	1.7717	0.0250
Daucosterol	0.4438	0.4438	0.4438	0.4500	0.4500	0.4500	0.4500	0.4500	0.4500	0.4563	0.4563	0.4563	0.4688	0.4625	0.4688	0.4533	0.00814	1.7951	0.0250

Table S12 The repeatability (intra-day precision) and intermediate precision of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Intermediate precision (inter-day precision)

Day 1-3

Day 1-3 Sample	Retention factor (R_f)					Average	SD	%RSD	ΔR_f
	A	B	C	D	E				
Betamethasone-17-valerate	0.7806	0.7792	0.7819	0.7833	0.7861	0.7822	0.00942	1.2040	0.0313
Triamcinolone acetonide	0.7208	0.7208	0.7201	0.7208	0.7250	0.7215	0.00975	1.3515	0.0313
Dexamethasone	0.6479	0.6472	0.6479	0.6486	0.6514	0.6486	0.01106	1.7051	0.0438
Prednisolone	0.5639	0.5611	0.5653	0.5653	0.5674	0.5646	0.01138	2.0165	0.0375
Daucosterol	0.4465	0.4479	0.4486	0.4500	0.4514	0.4489	0.01117	2.4887	0.0438

Table S12 The repeatability (intra-day precision) and intermediate precision of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 1

Day 1	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7688	0.7688	0.7625	0.7688	0.7750	0.7813	0.7813	0.7875	0.7875	0.7875	0.7625	0.7625	0.7688	0.7688	0.7688	0.7729	0.00964	1.2477	0.0250
Triamcinolone acetonide	0.7125	0.7125	0.7063	0.7125	0.7188	0.7313	0.7313	0.7250	0.7250	0.7313	0.7063	0.7125	0.7063	0.7063	0.7125	0.7167	0.00964	1.3457	0.0250
Dexamethasone	0.6313	0.6313	0.6250	0.6313	0.6375	0.6375	0.6438	0.6438	0.6375	0.6500	0.6250	0.6375	0.6313	0.6313	0.6375	0.6354	0.00695	1.0945	0.0250
Prednisolone	0.5563	0.5563	0.5500	0.5563	0.5625	0.5563	0.5625	0.5563	0.5563	0.5625	0.5438	0.5438	0.5500	0.5563	0.5500	0.5546	0.00601	1.0832	0.0188
Daucosterol	0.4563	0.4625	0.4625	0.4563	0.4625	0.4500	0.4563	0.4563	0.4500	0.4625	0.4438	0.4438	0.4438	0.4500	0.4500	0.4538	0.00701	1.5444	0.0188

Day 2

Day 2	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7688	0.7563	0.7563	0.7625	0.7625	0.7625	0.7688	0.7625	0.7750	0.7750	0.7750	0.7688	0.7688	0.7688	0.7625	0.7663	0.00616	0.8039	0.0188
Triamcinolone acetonide	0.7125	0.7063	0.7000	0.7125	0.7000	0.7125	0.7125	0.7063	0.7063	0.7125	0.7188	0.7125	0.7188	0.7188	0.7063	0.7104	0.00610	0.8586	0.0188
Dexamethasone	0.6500	0.6438	0.6438	0.6500	0.6438	0.6375	0.6438	0.6375	0.6438	0.6500	0.6500	0.6500	0.6438	0.6375	0.6375	0.6442	0.00499	0.7750	0.0125
Prednisolone	0.5375	0.5375	0.5438	0.5438	0.5438	0.5438	0.5438	0.5500	0.5500	0.5500	0.5500	0.5500	0.5500	0.5438	0.5438	0.5454	0.00440	0.8064	0.0125
Daucosterol	0.4500	0.4438	0.4438	0.4438	0.4375	0.4313	0.4250	0.4313	0.4375	0.4375	0.4500	0.4500	0.4500	0.4438	0.4438	0.4413	0.00776	1.7594	0.0250

Day3

Day 3	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7938	0.7938	0.7875	0.7813	0.7813	0.7875	0.7938	0.7875	0.7938	0.7938	0.7750	0.7688	0.7688	0.7688	0.7750	0.7833	0.00993	1.2675	0.0250
Triamcinolone acetonide	0.7313	0.7250	0.7313	0.7250	0.7188	0.7250	0.7188	0.7188	0.7250	0.7250	0.7188	0.7125	0.7125	0.7188	0.7250	0.7221	0.00572	0.7924	0.0187
Dexamethasone	0.6500	0.6500	0.6438	0.6500	0.6438	0.6500	0.6500	0.6438	0.6438	0.6500	0.6250	0.6250	0.6313	0.6375	0.6375	0.6421	0.00898	1.3993	0.0250
Prednisolone	0.5438	0.5438	0.5500	0.5438	0.5438	0.5688	0.5625	0.5563	0.5625	0.5688	0.5500	0.5563	0.5563	0.5563	0.5625	0.5550	0.00890	1.6039	0.0250
Daucosterol	0.4438	0.4500	0.4375	0.4438	0.4438	0.4375	0.4375	0.4438	0.4438	0.4500	0.4500	0.4563	0.4563	0.4625	0.4625	0.4479	0.00841	1.8770	0.0250

Table S12 The repeatability (intra-day precision) and intermediate precision of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Intermediate precision (inter-day precision)

Day 1-3

Day 1-3 Sample	Retention factor (R_f)					Average	SD	%RSD	ΔR_f
	A	B	C	D	E				
Betamethasone-17-valerate	0.7750	0.7736	0.7715	0.7750	0.7757	0.7742	0.01112	1.4359	0.0375
Triamcinolone acetonide	0.7188	0.7160	0.7139	0.7167	0.7167	0.7164	0.00867	1.2096	0.0313
Dexamethasone	0.6396	0.6417	0.6382	0.6403	0.6431	0.6406	0.00795	1.2416	0.0250
Prednisolone	0.5500	0.5507	0.5514	0.5521	0.5542	0.5517	0.00793	1.4371	0.0313
Daucosterol	0.4458	0.4472	0.4472	0.4479	0.4500	0.4476	0.00916	2.0470	0.0375

Table S13 The repeatability (intra-day precision) and intermediate precision of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: IPA: Petroleum ether: Formic acid (4.5: 3: 2: 0.5)** mobile phase system

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 1

Day 1	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7750	0.7813	0.7750	0.7750	0.7875	0.7813	0.7813	0.7750	0.7750	0.7750	0.7750	0.7813	0.7813	0.7813	0.7875	0.7792	0.00452	0.5805	0.0125
Triamcinolone acetonide	0.7188	0.7250	0.7250	0.7188	0.7250	0.7313	0.7313	0.7313	0.7250	0.7250	0.7313	0.7438	0.7313	0.7375	0.7375	0.7292	0.00695	0.9537	0.0250
Dexamethasone	0.6250	0.6313	0.6313	0.6250	0.6375	0.6375	0.6375	0.6375	0.6375	0.6375	0.6188	0.6250	0.6250	0.6313	0.6375	0.6317	0.00645	1.0219	0.0187
Prednisolone	0.5625	0.5625	0.5688	0.5625	0.5750	0.5813	0.5813	0.5813	0.5750	0.5750	0.5563	0.5688	0.5563	0.5625	0.5750	0.5696	0.00880	1.5444	0.0250
Daucosterol	0.4000	0.4000	0.4000	0.4000	0.4125	0.4125	0.4063	0.4000	0.4063	0.4063	0.4000	0.4125	0.4063	0.4063	0.4125	0.4054	0.00521	1.2854	0.0125

Day 2

Day 2	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7875	0.7875	0.7875	0.7813	0.7813	0.7938	0.7875	0.7875	0.8000	0.8000	0.8063	0.8063	0.8063	0.8000	0.8063	0.7946	0.00941	1.1842	0.0250
Triamcinolone acetonide	0.7313	0.7313	0.7313	0.7250	0.7250	0.7250	0.7250	0.7250	0.7375	0.7313	0.7500	0.7438	0.7438	0.7438	0.7438	0.7342	0.00880	1.1982	0.0250
Dexamethasone	0.6250	0.6250	0.6250	0.6250	0.6250	0.6250	0.6375	0.6375	0.6313	0.6375	0.6500	0.6438	0.6438	0.6375	0.6438	0.6342	0.00880	1.3871	0.0250
Prednisolone	0.5563	0.5625	0.5563	0.5563	0.5625	0.5813	0.5813	0.5813	0.5750	0.5750	0.5750	0.5750	0.5688	0.5688	0.5688	0.5696	0.00911	1.5991	0.0250
Daucosterol	0.4125	0.4063	0.4000	0.4063	0.4063	0.4000	0.4063	0.4000	0.4063	0.4125	0.4188	0.4188	0.4125	0.4188	0.4250	0.4100	0.00776	1.8935	0.0250

Day 3

Day 3	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7875	0.7875	0.7875	0.7875	0.7875	0.7938	0.7938	0.7938	0.8000	0.8063	0.8000	0.8000	0.8000	0.8063	0.8125	0.7963	0.00811	1.0191	0.0250
Triamcinolone acetonide	0.7125	0.7125	0.7125	0.7125	0.7125	0.7188	0.7188	0.7188	0.7250	0.7313	0.7313	0.7375	0.7313	0.7375	0.7375	0.7233	0.01015	1.4034	0.0250
Dexamethasone	0.6313	0.6250	0.6250	0.6250	0.6250	0.6313	0.6313	0.6313	0.6375	0.6375	0.6438	0.6375	0.6438	0.6438	0.6500	0.6346	0.00814	1.2824	0.0250
Prednisolone	0.5625	0.5563	0.5563	0.5563	0.5563	0.5625	0.5625	0.5688	0.5750	0.5750	0.5750	0.5750	0.5813	0.5750	0.5813	0.5679	0.00941	1.6569	0.0250
Daucosterol	0.4000	0.4000	0.4000	0.4063	0.4000	0.4063	0.4063	0.4063	0.4125	0.4188	0.4125	0.4188	0.4125	0.4125	0.4188	0.4088	0.00701	1.7144	0.0188

Table S13 The repeatability (intra-day precision) and intermediate precision of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: IPA: Petroleum ether: Formic acid (4.5: 3: 2: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Intermediate precision (Inter-day precision)

Day 1-3

Day 1-3 Sample	Retention factor (R_f)					Average	SD	%RSD	ΔR_f
	A	B	C	D	E				
Betamethasone-17-valerate	0.7889	0.7896	0.7882	0.7896	0.7938	0.7900	0.01078	1.3641	0.0375
Triamcinolone acetonide	0.7278	0.7299	0.7278	0.7292	0.7299	0.7289	0.00964	1.3219	0.0375
Dexamethasone	0.6319	0.6326	0.6333	0.6326	0.6368	0.6335	0.00779	1.2293	0.0313
Prednisolone	0.5681	0.5694	0.5688	0.5674	0.5715	0.5690	0.00893	1.5701	0.0250
Daucosterol	0.4069	0.4083	0.4042	0.4083	0.4125	0.4081	0.00688	1.6849	0.0250

Table S13 The repeatability (intra-day precision) and intermediate precision of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: IPA: Petroleum ether: Formic acid (4.5: 3: 2: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 1

Day 1	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.8000	0.8000	0.8125	0.8188	0.8188	0.8188	0.8188	0.8188	0.8250	0.8250	0.8125	0.8188	0.8250	0.8250	0.8250	0.8175	0.00825	1.0093	0.0250
Triamcinolone acetonide	0.7500	0.7500	0.7500	0.7625	0.7625	0.7563	0.7563	0.7563	0.7625	0.7625	0.7500	0.7563	0.7625	0.7563	0.7625	0.7571	0.00521	0.6883	0.0125
Dexamethasone	0.6438	0.6563	0.6438	0.6625	0.6625	0.6500	0.6563	0.6500	0.6625	0.6625	0.6625	0.6625	0.6688	0.6688	0.6625	0.6583	0.00807	1.2256	0.0250
Prednisolone	0.5500	0.5625	0.5500	0.5625	0.5563	0.5563	0.5625	0.5500	0.5625	0.5563	0.5625	0.5688	0.5688	0.5625	0.5600	0.00660	1.1781	0.0187	
Daucosterol	0.3875	0.4000	0.3938	0.4000	0.4000	0.3875	0.4000	0.3938	0.4000	0.4000	0.3938	0.4000	0.3938	0.4000	0.4000	0.3967	0.00465	1.1710	0.0125

Day 2

Day 2	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.8000	0.8000	0.8000	0.8063	0.8000	0.8063	0.8063	0.8125	0.8125	0.8063	0.8000	0.8000	0.8063	0.8063	0.8125	0.8050	0.00484	0.6014	0.0125
Triamcinolone acetonide	0.7313	0.7375	0.7375	0.7250	0.7375	0.7250	0.7313	0.7313	0.7250	0.7313	0.7375	0.7375	0.7375	0.7438	0.7438	0.7342	0.00619	0.8432	0.0188
Dexamethasone	0.6250	0.6250	0.6250	0.6250	0.6375	0.6250	0.6250	0.6313	0.6313	0.6375	0.6313	0.6375	0.6313	0.6313	0.6375	0.6304	0.00521	0.8266	0.0125
Prednisolone	0.5500	0.5500	0.5500	0.5500	0.5563	0.5625	0.5625	0.5688	0.5688	0.5688	0.5625	0.5688	0.5688	0.5750	0.5750	0.5625	0.00915	1.6265	0.0250
Daucosterol	0.4000	0.4000	0.4000	0.3938	0.4000	0.4063	0.4000	0.4000	0.4063	0.4063	0.4125	0.4125	0.4188	0.4188	0.4125	0.4058	0.00764	1.8832	0.0250

Day 3

Day 3	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.8250	0.8250	0.8188	0.8188	0.8250	0.8125	0.8188	0.8125	0.8188	0.8188	0.8000	0.8063	0.8125	0.8000	0.8063	0.8146	0.00841	1.0321	0.0250
Triamcinolone acetonide	0.7500	0.7500	0.7500	0.7438	0.7438	0.7375	0.7375	0.7500	0.7563	0.7563	0.7500	0.7563	0.7625	0.7563	0.7563	0.7504	0.00727	0.9686	0.0250
Dexamethasone	0.6250	0.6313	0.6313	0.6250	0.6375	0.6313	0.6313	0.6250	0.6313	0.6375	0.6250	0.6250	0.6375	0.6313	0.6313	0.6304	0.00465	0.7368	0.0125
Prednisolone	0.5625	0.5625	0.5688	0.5625	0.5625	0.5625	0.5688	0.5688	0.5750	0.5750	0.5500	0.5500	0.5563	0.5625	0.5563	0.5629	0.00764	1.3577	0.0250
Daucosterol	0.4063	0.4063	0.4063	0.4125	0.4125	0.4125	0.4188	0.4188	0.4125	0.4125	0.4000	0.4000	0.4000	0.4000	0.4000	0.4079	0.00687	1.6851	0.0188

Table S13 The repeatability (intra-day precision) and intermediate precision of five spiked sample at 0.4 and 0.8 mg/mL under CHCl₃: IPA: Petroleum ether: Formic acid (4.5: 3: 2: 0.5) mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Intermediate precision (Inter-day precision)

Day 1-3

Day 1-3 Sample	Retention factor (R _f)					Average	SD	%RSD	ΔR _f
	A	B	C	D	E				
Betamethasone-17-valerate	0.8083	0.8104	0.8132	0.8146	0.8153	0.8124	0.00899	1.1063	0.0250
Triamcinolone acetonide	0.7431	0.7458	0.7486	0.7479	0.7507	0.7472	0.01151	1.5398	0.0375
Dexamethasone	0.6354	0.6389	0.6382	0.6410	0.6451	0.6397	0.01461	2.2832	0.0438
Prednisolone	0.5576	0.5618	0.5611	0.5653	0.5632	0.5618	0.00780	1.3875	0.0250
Daucosterol	0.4007	0.4042	0.4028	0.4049	0.4049	0.4035	0.00806	1.9968	0.0313

Table S14 The repeatability (intra-day precision) and intermediate precision of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5)** mobile phase system

Spiked sample (0.4 mg/mL)

Repeatability precision (Intra-day precision)

Day 1

Day 1	Retention factor (R _t)															Average	SD	%RSD	ΔR _f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7125	0.7063	0.7063	0.7125	0.7125	0.7125	0.7188	0.7188	0.7188	0.7250	0.7250	0.7313	0.7250	0.7313	0.7313	0.7192	0.00867	1.2054	0.0250
Triamcinolone acetonide	0.6500	0.6438	0.6438	0.6438	0.6500	0.6563	0.6625	0.6625	0.6625	0.6688	0.6688	0.6625	0.6625	0.6563	0.6625	0.6571	0.00880	1.3387	0.0250
Dexamethasone	0.5563	0.5438	0.5438	0.5438	0.5438	0.5563	0.5625	0.5625	0.5688	0.5688	0.5688	0.5625	0.5688	0.5688	0.5688	0.5592	0.01053	1.8830	0.0250
Prednisolone	0.5000	0.4938	0.4875	0.4938	0.4875	0.5000	0.5063	0.5063	0.5125	0.5063	0.5125	0.5063	0.5063	0.5000	0.5000	0.5013	0.00791	1.5772	0.0250
Daucosterol	0.4250	0.4188	0.4188	0.4125	0.4125	0.4125	0.4188	0.4250	0.4188	0.4125	0.4188	0.4188	0.4250	0.4313	0.4313	0.4200	0.00634	1.5092	0.0188

Day 2

Day 2	Retention factor (R _t)															Average	SD	%RSD	ΔR _f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7188	0.7188	0.7188	0.7188	0.7250	0.7250	0.7250	0.7188	0.7188	0.7250	0.7313	0.7250	0.7250	0.7250	0.7313	0.7233	0.00440	0.6081	0.0125
Triamcinolone acetonide	0.6500	0.6500	0.6438	0.6500	0.6688	0.6625	0.6625	0.6563	0.6563	0.6625	0.6625	0.6563	0.6563	0.6625	0.6625	0.6575	0.00676	1.0288	0.0250
Dexamethasone	0.5625	0.5625	0.5625	0.5688	0.5688	0.5750	0.5688	0.5625	0.5625	0.5688	0.5750	0.5750	0.5688	0.5688	0.5750	0.5683	0.00499	0.8785	0.0125
Prednisolone	0.5000	0.5000	0.5000	0.5063	0.5063	0.5125	0.5063	0.5063	0.5125	0.5188	0.5063	0.5125	0.5063	0.5125	0.5125	0.5079	0.00552	1.0874	0.0188
Daucosterol	0.4313	0.4250	0.4250	0.4313	0.4313	0.4375	0.4313	0.4313	0.4313	0.4375	0.4375	0.4313	0.4250	0.4250	0.4313	0.4308	0.00440	1.0209	0.0125

Day 3

Day 3	Retention factor (R _t)															Average	SD	%RSD	ΔR _f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7188	0.7063	0.7063	0.7063	0.7125	0.7250	0.7250	0.7188	0.7188	0.7250	0.7188	0.7188	0.7188	0.7250	0.7313	0.7183	0.00764	1.0639	0.0250
Triamcinolone acetonide	0.6500	0.6375	0.6438	0.6375	0.6500	0.6563	0.6625	0.6563	0.6563	0.6625	0.6625	0.6563	0.6563	0.6625	0.6625	0.6542	0.00873	1.3350	0.0250
Dexamethasone	0.5625	0.5563	0.5563	0.5438	0.5625	0.5625	0.5688	0.5625	0.5563	0.5625	0.5625	0.5625	0.5625	0.5688	0.5688	0.5613	0.00634	1.1294	0.0250
Prednisolone	0.5000	0.4938	0.5000	0.4875	0.5000	0.5063	0.5000	0.5000	0.5063	0.5125	0.5063	0.5125	0.5125	0.5125	0.5125	0.5042	0.00772	1.5303	0.0250
Daucosterol	0.4063	0.4063	0.4125	0.4063	0.4125	0.4125	0.4188	0.4125	0.4063	0.4125	0.4188	0.4250	0.4188	0.4188	0.4188	0.4138	0.00588	1.4216	0.0188

Table S14 The repeatability (intra-day precision) and intermediate precision of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Intermediate precision (inter-day precision)

Day 1-3

Day 1-3 Sample	Retention factor (<i>R_f</i>)					Average	SD	%RSD	ΔR_f
	A	B	C	D	E				
Betamethasone-17-valerate	0.7208	0.7194	0.7174	0.7194	0.7243	0.7203	0.00732	1.0159	0.0250
Triamcinolone acetonide	0.6576	0.6549	0.6535	0.6542	0.6611	0.6563	0.00811	1.2351	0.0313
Dexamethasone	0.5646	0.5625	0.5611	0.5611	0.5653	0.5629	0.00847	1.5046	0.0313
Prednisolone	0.5049	0.5035	0.5028	0.5049	0.5063	0.5044	0.00749	1.4854	0.0313
Daucosterol	0.4222	0.4215	0.4215	0.4201	0.4222	0.4215	0.00899	2.1336	0.0313

Table S14 The repeatability (intra-day precision) and intermediate precision of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability precision (intra-day precision)

Day 1

Day 1	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7438	0.7438	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7250	0.7250	0.7313	0.7313	0.7375	0.7425	0.00980	1.3195	0.0250
Triamcinolone acetonide	0.6750	0.6750	0.6750	0.6750	0.6688	0.6688	0.6688	0.6688	0.6750	0.6750	0.6500	0.6563	0.6625	0.6688	0.6625	0.6683	0.00764	1.1435	0.0250
Dexamethasone	0.5875	0.5813	0.5813	0.5875	0.5875	0.5750	0.5750	0.5813	0.5813	0.5813	0.5750	0.5750	0.5750	0.5688	0.5750	0.5792	0.00562	0.9709	0.0188
Prednisolone	0.5188	0.5125	0.5125	0.5188	0.5188	0.5125	0.5188	0.5250	0.5188	0.5250	0.5188	0.5188	0.5125	0.5188	0.5125	0.5175	0.00423	0.8166	0.0125
Daucosterol	0.4438	0.4375	0.4375	0.4375	0.4313	0.4375	0.4375	0.4438	0.4375	0.4375	0.4250	0.4313	0.4313	0.4250	0.4188	0.4342	0.00703	1.6201	0.0250

Day 2

Day 2	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7063	0.7063	0.7063	0.7125	0.7125	0.7188	0.7125	0.7188	0.7250	0.7250	0.7250	0.7250	0.7313	0.7313	0.7313	0.7192	0.00929	1.2918	0.0250
Triamcinolone acetonide	0.6438	0.6438	0.6438	0.6500	0.6563	0.6563	0.6563	0.6688	0.6688	0.6688	0.6625	0.6688	0.6625	0.6688	0.6688	0.6592	0.00999	1.5148	0.0250
Dexamethasone	0.5500	0.5500	0.5563	0.5625	0.5625	0.5563	0.5563	0.5563	0.5625	0.5688	0.5563	0.5625	0.5688	0.5688	0.5750	0.5608	0.00727	1.2960	0.0250
Prednisolone	0.4938	0.4938	0.5000	0.5063	0.5063	0.5000	0.5000	0.5000	0.5125	0.5188	0.5125	0.5125	0.5125	0.5188	0.5188	0.5071	0.00880	1.7348	0.0250
Daucosterol	0.4063	0.4063	0.4125	0.4125	0.4125	0.4188	0.4188	0.4188	0.4188	0.4250	0.4063	0.4125	0.4125	0.4188	0.4250	0.4150	0.00616	1.4844	0.0188

Day 3

Day 3	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.7375	0.7375	0.7313	0.7313	0.7375	0.7188	0.7188	0.7125	0.7125	0.7125	0.7250	0.7250	0.7313	0.7313	0.7313	0.7263	0.00921	1.2681	0.0250
Triamcinolone acetonide	0.6750	0.6688	0.6750	0.6625	0.6625	0.6750	0.6750	0.6688	0.6625	0.6625	0.6688	0.6688	0.6688	0.6750	0.6750	0.6696	0.00521	0.7783	0.0125
Dexamethasone	0.5875	0.5875	0.5813	0.5813	0.5750	0.5750	0.5688	0.5688	0.5625	0.5625	0.5750	0.5750	0.5813	0.5813	0.5875	0.5767	0.00834	1.4464	0.0250
Prednisolone	0.5250	0.5250	0.5188	0.5125	0.5063	0.5125	0.5125	0.5125	0.5063	0.5063	0.5188	0.5188	0.5250	0.5188	0.5250	0.5163	0.00701	1.3574	0.0188
Daucosterol	0.4250	0.4250	0.4188	0.4250	0.4188	0.4375	0.4313	0.4313	0.4313	0.4250	0.4375	0.4438	0.4375	0.4375	0.4438	0.4313	0.00818	1.8975	0.0250

Table S14 The repeatability (intra-day precision) and intermediate precision of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Intermediate precision (inter-day precision)

Day 1-3

Day 1-3 Sample	Retention factor (<i>R_f</i>)					Average	SD	%RSD	ΔR_f
	A	B	C	D	E				
Betamethasone-17-valerate	0.7278	0.7271	0.7292	0.7306	0.7319	0.7293	0.01351	1.8527	0.0438
Triamcinolone acetonide	0.6639	0.6646	0.6660	0.6674	0.6667	0.6657	0.00900	1.3520	0.0313
Dexamethasone	0.5708	0.5701	0.5722	0.5729	0.5750	0.5722	0.01079	1.8854	0.0375
Prednisolone	0.5125	0.5125	0.5132	0.5146	0.5153	0.5136	0.00825	1.6054	0.0313
Daucosterol	0.4264	0.4271	0.4271	0.4271	0.4264	0.4268	0.01104	2.5863	0.0375

Table S15 The repeatability (intra-day precision) and intermediate precision of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: tert-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)** mobile phase system

Spiked sample (0.4 mg/mL)

Repeatability precision (intra-day precision)

Day 1

Day 1	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.6750	0.6750	0.6750	0.6813	0.6875	0.6875	0.6813	0.6750	0.6813	0.6813	0.6875	0.6813	0.6875	0.6813	0.6813	0.6817	0.00499	0.7324	0.0125
Triamcinolone acetonide	0.6250	0.6250	0.6250	0.6250	0.6313	0.6375	0.6313	0.6313	0.6313	0.6313	0.6313	0.6375	0.6375	0.6375	0.6375	0.6317	0.00499	0.7904	0.0125
Dexamethasone	0.5375	0.5438	0.5438	0.5438	0.5500	0.5375	0.5438	0.5438	0.5375	0.5313	0.5438	0.5375	0.5375	0.5375	0.5438	0.5408	0.00465	0.8589	0.0188
Prednisolone	0.4750	0.4813	0.4813	0.4813	0.4813	0.4875	0.4875	0.4813	0.4813	0.4750	0.4875	0.4813	0.4813	0.4750	0.4750	0.4808	0.00440	0.9147	0.0125
Daucosterol	0.3063	0.3125	0.3063	0.3000	0.3000	0.3000	0.3063	0.3000	0.3000	0.3000	0.3125	0.3063	0.3125	0.3125	0.3063	0.3054	0.00521	1.7063	0.0125

Day 2

Day 2	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.6750	0.6750	0.6750	0.6750	0.6813	0.6625	0.6625	0.6688	0.6688	0.6750	0.6750	0.6750	0.6688	0.6625	0.6750	0.6717	0.00572	0.8519	0.0188
Triamcinolone acetonide	0.6125	0.6313	0.6250	0.6188	0.6125	0.6188	0.6188	0.6250	0.6250	0.6250	0.6250	0.6188	0.6125	0.6125	0.6188	0.6200	0.00588	0.9487	0.0187
Dexamethasone	0.5313	0.5313	0.5250	0.5250	0.5250	0.5375	0.5313	0.5375	0.5313	0.5313	0.5375	0.5375	0.5375	0.5313	0.5375	0.5325	0.00484	0.9092	0.0125
Prednisolone	0.4750	0.4688	0.4688	0.4688	0.4688	0.4875	0.4813	0.4875	0.4875	0.4875	0.4813	0.4750	0.4750	0.4813	0.4813	0.4783	0.00742	1.5513	0.0188
Daucosterol	0.2875	0.2938	0.2938	0.2875	0.2875	0.2938	0.3000	0.3000	0.3000	0.2938	0.3000	0.3000	0.2938	0.3000	0.3000	0.2954	0.00499	1.6900	0.0125

Day 3

Day 3	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.6563	0.6563	0.6438	0.6438	0.6438	0.6500	0.6563	0.6625	0.6625	0.6625	0.6625	0.6563	0.6500	0.6500	0.6563	0.6542	0.00695	1.0631	0.0187
Triamcinolone acetonide	0.6125	0.6125	0.6063	0.6000	0.6000	0.6125	0.6125	0.6063	0.6188	0.6250	0.6250	0.6250	0.6125	0.6188	0.6188	0.6138	0.00825	1.3444	0.0250
Dexamethasone	0.5250	0.5250	0.5188	0.5188	0.5188	0.5375	0.5438	0.5438	0.5438	0.5438	0.5438	0.5375	0.5313	0.5313	0.5375	0.5333	0.00993	1.8617	0.0250
Prednisolone	0.4625	0.4625	0.4500	0.4500	0.4500	0.4625	0.4750	0.4625	0.4625	0.4750	0.4750	0.4688	0.4688	0.4688	0.4688	0.4642	0.00867	1.8676	0.0250
Daucosterol	0.2875	0.2938	0.2875	0.2875	0.2813	0.2938	0.2875	0.2875	0.2813	0.2813	0.3000	0.2938	0.2875	0.2875	0.2938	0.2888	0.00539	1.8656	0.0188

Table S15 The repeatability (intra-day precision) and intermediate precision of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: *tert*-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Intermediate precision (inter-day precision)

Day 1-3

Day 1-3 Sample	Retention factor (R_f)					Average	SD	%RSD	ΔR_f
	A	B	C	D	E				
Betamethasone-17-valerate	0.6701	0.6688	0.6674	0.6681	0.6715	0.6692	0.01288	1.9245	0.0438
Triamcinolone acetonide	0.6222	0.6236	0.6201	0.6208	0.6222	0.6218	0.00985	1.5838	0.0375
Dexamethasone	0.5368	0.5368	0.5354	0.5333	0.5354	0.5356	0.00775	1.4470	0.0313
Prednisolone	0.4771	0.4757	0.4729	0.4729	0.4736	0.4744	0.01013	2.1357	0.0375
Daucosterol	0.2979	0.2993	0.2965	0.2951	0.2938	0.2965	0.00859	2.8968	0.0313

Table S15 The repeatability (intra-day precision) and intermediate precision of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: *tert*-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability precision (intra-day precision)

Day 1

Day 1	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.6875	0.6813	0.6750	0.6750	0.6875	0.6875	0.6813	0.6813	0.6813	0.6875	0.6875	0.6875	0.6813	0.6750	0.6688	0.6796	0.00484	0.7093	0.0125
Triamcinolone acetonide	0.6313	0.6188	0.6188	0.6250	0.6250	0.6188	0.6250	0.6250	0.6188	0.6188	0.6375	0.6375	0.6313	0.6375	0.6375	0.6271	0.00772	1.2303	0.0187
Dexamethasone	0.5500	0.5438	0.5375	0.5438	0.5500	0.5375	0.5313	0.5313	0.5375	0.5375	0.5438	0.5375	0.5438	0.5375	0.5375	0.5400	0.00569	1.0535	0.0188
Prednisolone	0.4875	0.4813	0.4813	0.4875	0.4875	0.4750	0.4750	0.4750	0.4813	0.4750	0.4813	0.4813	0.4688	0.4750	0.4750	0.4792	0.00562	1.1736	0.0188
Daucosterol	0.3063	0.3000	0.2938	0.2938	0.3000	0.3125	0.3063	0.3063	0.3063	0.3125	0.3063	0.3000	0.3063	0.3000	0.3000	0.3033	0.00572	1.8863	0.0188

Day 2

Day 2	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.6875	0.6813	0.6750	0.6750	0.6813	0.6813	0.6813	0.6875	0.6875	0.6875	0.6813	0.6750	0.6688	0.6750	0.6688	0.6796	0.00645	0.9498	0.0188
Triamcinolone acetonide	0.6375	0.6313	0.6250	0.6250	0.6375	0.6313	0.6250	0.6250	0.6250	0.6313	0.6250	0.6188	0.6188	0.6250	0.6313	0.6275	0.00569	0.9066	0.0187
Dexamethasone	0.5438	0.5438	0.5438	0.5438	0.5500	0.5375	0.5375	0.5313	0.5438	0.5438	0.5438	0.5438	0.5438	0.5375	0.5375	0.5417	0.00452	0.8351	0.0188
Prednisolone	0.4750	0.4875	0.4875	0.4875	0.4750	0.4875	0.4813	0.4813	0.4875	0.4813	0.4813	0.4750	0.4688	0.4688	0.4750	0.4800	0.00676	1.4093	0.0188
Daucosterol	0.3000	0.3000	0.2938	0.3000	0.3063	0.3063	0.3000	0.3000	0.3063	0.3125	0.3000	0.3000	0.2938	0.2938	0.3000	0.3008	0.00521	1.7323	0.0188

Day 3

Day 3	Retention factor (R_f)															Average	SD	%RSD	ΔR_f
No.	1					2					3								
Sample	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E				
Betamethasone-17-valerate	0.6875	0.6750	0.6688	0.6688	0.6750	0.6813	0.6750	0.6688	0.6688	0.6750	0.6875	0.6813	0.6813	0.6875	0.6875	0.6779	0.00742	1.0946	0.0188
Triamcinolone acetonide	0.6375	0.6375	0.6250	0.6313	0.6313	0.6250	0.6188	0.6188	0.6250	0.6250	0.6313	0.6250	0.6188	0.6250	0.6313	0.6271	0.00610	0.9727	0.0187
Dexamethasone	0.5438	0.5375	0.5313	0.5375	0.5375	0.5438	0.5438	0.5313	0.5375	0.5438	0.5375	0.5375	0.5438	0.5375	0.5438	0.5392	0.00440	0.8158	0.0125
Prednisolone	0.4813	0.4750	0.4688	0.4750	0.4750	0.4875	0.4813	0.4813	0.4813	0.4875	0.4750	0.4750	0.4750	0.4813	0.4813	0.4788	0.00518	1.0810	0.0188
Daucosterol	0.3063	0.3063	0.2938	0.3000	0.3063	0.3000	0.3000	0.2938	0.2938	0.3000	0.3063	0.3063	0.3000	0.3000	0.3063	0.3013	0.00484	1.6070	0.0125

Table S15 The repeatability (intra-day precision) and intermediate precision of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: *tert*-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Intermediate precision (inter-day precision)

Day 1-3

Day 1-3 Sample	Retention factor (R_f)					Average	SD	%RSD	ΔR_f
	A	B	C	D	E				
Betamethasone-17-valerate	0.6854	0.6799	0.6764	0.6778	0.6806	0.6800	0.00647	0.9520	0.0188
Triamcinolone acetonide	0.6306	0.6264	0.6229	0.6264	0.6299	0.6272	0.00641	1.0223	0.0187
Dexamethasone	0.5424	0.5396	0.5375	0.5396	0.5424	0.5403	0.00491	0.9081	0.0188
Prednisolone	0.4813	0.4792	0.4764	0.4806	0.4792	0.4793	0.00578	1.2061	0.0188
Daucosterol	0.3049	0.3021	0.2979	0.2993	0.3049	0.3018	0.00527	1.7451	0.0188

The Quantitative Analysis of Five Steroid Standards in Spiked Sample Under Different Mobile Phase System

This section reports the recovery concentration, percent recovery, standard deviation, relative standard deviation (%RSD), and percent error for five steroid standards in five spiked samples, evaluated using five selected mobile-phase systems. Method performance was assessed through repeatability (three replicate analyses within a single day) and intermediate precision (analyses performed over three consecutive days). Acceptability criteria were defined as follows: percent recovery within 90–107%, intra-day precision (%RSD) ≤ 5.3%, and inter-day precision (%RSD) ≤ 8%.

Table S16 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5)** mobile phase system

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 1

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.3791	0.4062	0.3949	0.3876	0.3626	Betamethasone-17-valerate	0.3775	0.3753	0.3693	0.3828	0.3642	Betamethasone-17-valerate	0.3654	0.3737	0.3826	0.3772	0.3709
Triamcinolone acetonide	0.3683	0.3778	0.3724	0.3705	N/A	Triamcinolone acetonide	0.3724	0.3822	0.3943	0.4085	N/A	Triamcinolone acetonide	0.3857	0.4109	0.4201	0.4099	N/A
Dexamethasone	0.4163	0.4107	0.4050	0.3706	0.3691	Dexamethasone	0.4114	0.4138	0.4047	0.3926	0.3846	Dexamethasone	0.3955	0.3977	0.3872	0.3896	0.3723
Prednisolone	0.4002	0.4101	0.4146	0.4270	0.3914	Prednisolone	0.4001	0.3870	0.4233	0.4198	0.4011	Prednisolone	0.4089	0.4128	0.4143	0.4014	0.4024
Daucosterol	0.4082	0.4255	0.3927	0.4055	0.4078	Daucosterol	0.4137	0.3933	0.4137	0.4271	0.4235	Daucosterol	0.4019	0.4155	0.3955	0.4094	0.3927

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	94.7625	101.5426	98.7135	96.9110	90.6582	Betamethasone-17-valerate	94.3811	93.8145	92.3186	95.7049	91.0565	Betamethasone-17-valerate	91.3463	93.4349	95.6395	94.3063	92.7150
Triamcinolone acetonide	92.0819	94.4565	93.1022	92.6176	N/A	Triamcinolone acetonide	93.0906	95.5533	98.5679	102.1181	N/A	Triamcinolone acetonide	96.4206	102.7326	105.0167	102.4752	N/A
Dexamethasone	104.0813	102.6633	101.2438	92.6600	92.2703	Dexamethasone	102.8474	103.4594	101.1857	98.1559	96.1410	Dexamethasone	98.8706	99.4146	96.7977	97.4080	93.0813
Prednisolone	100.0572	102.5147	103.6403	106.7565	97.8445	Prednisolone	100.0185	96.7413	105.8192	104.9593	100.2842	Prednisolone	102.2312	103.1991	103.5775	100.3567	100.5983
Daucosterol	102.0624	106.3732	98.1649	101.3805	101.9419	Daucosterol	103.4200	98.3312	103.4368	106.7713	105.8652	Daucosterol	100.4820	103.8700	98.8636	102.3476	98.1680

Table S16 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 1

Day 1	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.3740	0.0075	2.0022	6.5034	93.4966	0.3851	0.0183	4.7529	3.7360	96.2640	0.3822	0.0128	3.3469	4.4428	95.5572
Triamcinolone acetonide	0.3755	0.0091	2.4189	6.1356	93.8644	0.3903	0.0180	4.6066	2.4192	97.5808	0.3956	0.0239	6.0306	1.1044	98.8956
Dexamethasone	0.4077	0.0109	2.6713	1.9331	101.9331	0.4074	0.0086	2.1039	1.8458	101.8458	0.3990	0.0102	2.5570	0.2576	99.7424
Prednisolone	0.4031	0.0051	1.2568	0.7690	100.7690	0.4033	0.0142	3.5186	0.8184	100.8184	0.4174	0.0051	1.2233	4.3457	104.3457
Daucosterol	0.4080	0.0059	1.4417	1.9881	101.9881	0.4114	0.0165	4.0010	2.8581	102.8581	0.4006	0.0115	2.8590	0.1551	100.1551

Day 1	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.3826	0.0052	1.3630	4.3593	95.6407	0.3659	0.0044	1.1925	8.5234	91.4766
Triamcinolone acetonide	0.3963	0.0224	5.6435	0.9297	99.0703	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.3843	0.0119	3.1025	3.9254	96.0746	0.3753	0.0082	2.1755	6.1692	93.8308
Prednisolone	0.4161	0.0132	3.1731	4.0241	104.0241	0.3983	0.0060	1.5139	0.4243	99.5757
Daucosterol	0.4140	0.0115	2.7770	3.4998	103.4998	0.4080	0.0154	3.7737	1.9917	101.9917

Table S16 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 2

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.3763	0.3641	0.4083	0.3741	0.3788	Betamethasone-17-valerate	0.3719	0.3703	0.3921	0.4199	0.3654	Betamethasone-17-valerate	0.4012	0.3750	0.3764	0.3838	0.3824
Triamcinolone acetonide	0.3768	0.4133	0.4111	0.4113	N/A	Triamcinolone acetonide	0.3674	0.3645	0.3760	0.3870	N/A	Triamcinolone acetonide	0.3785	0.3899	0.3952	0.4061	N/A
Dexamethasone	0.4114	0.3785	0.4215	0.4242	0.4197	Dexamethasone	0.3793	0.4236	0.3934	0.4066	0.3872	Dexamethasone	0.4112	0.3891	0.4077	0.4053	0.3742
Prednisolone	0.3972	0.4105	0.4202	0.4240	0.3826	Prednisolone	0.4092	0.3989	0.3966	0.4008	0.3819	Prednisolone	0.4054	0.4155	0.4235	0.4144	0.3992
Daucosterol	0.3995	0.4210	0.4130	0.4131	0.4167	Daucosterol	0.4146	0.4137	0.4276	0.4037	0.4086	Daucosterol	0.4080	0.4124	0.4198	0.4119	0.4247

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	94.0726	91.0266	102.0755	93.5153	94.6933	Betamethasone-17-valerate	92.9712	92.5785	98.0273	104.9663	91.3482	Betamethasone-17-valerate	100.2880	93.7397	94.0931	95.9461	95.6058
Triamcinolone acetonide	94.1898	103.3169	102.7627	102.8346	N/A	Triamcinolone acetonide	91.8616	91.1358	93.9996	96.7429	N/A	Triamcinolone acetonide	94.6257	97.4826	98.7905	101.5152	N/A
Dexamethasone	102.8474	94.6335	105.3731	106.0415	104.9221	Dexamethasone	94.8209	105.8939	98.3383	101.6468	96.7977	Dexamethasone	102.8109	97.2836	101.9187	101.3267	93.5506
Prednisolone	99.3003	102.6209	105.0446	106.0060	95.6624	Prednisolone	102.3085	99.7335	99.1473	100.2037	95.4852	Prednisolone	101.3519	103.8755	105.8788	103.5952	99.8027
Daucosterol	99.8749	105.2596	103.2613	103.2705	104.1873	Daucosterol	103.6427	103.4246	106.8979	100.9244	102.1432	Daucosterol	101.9876	103.0996	104.9500	102.9669	106.1779

Day 2	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.3831	0.0158	4.1190	4.2228	95.7772	0.3698	0.0054	1.4725	7.5517	92.4483	0.3923	0.0160	4.0701	1.9347	98.0653
Triamcinolone acetonide	0.3742	0.0059	1.5884	6.4410	93.5590	0.3892	0.0244	6.2607	2.6882	97.3118	0.3941	0.0176	4.4539	1.4824	98.5176
Dexamethasone	0.4006	0.0185	4.6163	0.1598	100.1598	0.3971	0.0235	5.9305	0.7297	99.2703	0.4075	0.0141	3.4528	1.8767	101.8767
Prednisolone	0.4039	0.0061	1.5220	0.9869	100.9869	0.4083	0.0085	2.0807	2.0766	102.0766	0.4134	0.0147	3.5502	3.3569	103.3569
Daucosterol	0.4073	0.0076	1.8545	1.8351	101.8351	0.4157	0.0047	1.1206	3.9279	103.9279	0.4201	0.0073	1.7326	5.0364	105.0364

Day 2	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.3926	0.0241	6.1474	1.8574	98.1426	0.3755	0.0090	2.3877	6.1176	93.8824
Triamcinolone acetonide	0.4015	0.0128	3.1932	0.3642	100.3642	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.4120	0.0105	2.5577	3.0050	103.0050	0.3937	0.0234	5.9513	1.5766	98.4234
Prednisolone	0.4131	0.0117	2.8227	3.2683	103.2683	0.3879	0.0098	2.5192	3.0166	96.9834
Daucosterol	0.4095	0.0051	1.2462	2.3873	102.3873	0.4167	0.0081	1.9367	4.1695	104.1695

Table S16 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 3

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.3865	0.3842	0.3697	0.3857	0.3752	Betamethasone-17-valerate	0.3902	0.3937	0.3775	0.3655	0.3638	Betamethasone-17-valerate	0.4050	0.3792	0.3832	0.3756	0.3714
Triamcinolone acetonide	0.3623	0.4104	0.4054	0.3997	N/A	Triamcinolone acetonide	0.3792	0.3931	0.3767	0.4010	N/A	Triamcinolone acetonide	0.3905	0.4048	0.3847	0.3771	N/A
Dexamethasone	0.3813	0.3776	0.3744	0.4084	0.3626	Dexamethasone	0.3962	0.3729	0.3852	0.3834	0.3927	Dexamethasone	0.3725	0.3910	0.3843	0.3983	0.4079
Prednisolone	0.4162	0.3933	0.3958	0.4042	0.4103	Prednisolone	0.3956	0.3884	0.4187	0.4133	0.4042	Prednisolone	0.4075	0.4071	0.4215	0.4012	0.4272
Daucosterol	0.4100	0.4171	0.4216	0.4000	0.4072	Daucosterol	0.4034	0.3934	0.3997	0.3943	0.4235	Daucosterol	0.4167	0.3992	0.4134	0.4068	0.4074

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	96.6286	96.0583	92.4308	96.4342	93.7977	Betamethasone-17-valerate	97.5542	98.4237	94.3792	91.3800	90.9592	Betamethasone-17-valerate	101.2453	94.8018	95.8022	93.8968	92.8571
Triamcinolone acetonide	90.5630	102.6027	101.3482	99.9244	N/A	Triamcinolone acetonide	94.8020	98.2780	94.1828	100.2398	N/A	Triamcinolone acetonide	97.6310	101.2114	96.1701	94.2779	N/A
Dexamethasone	95.3167	94.4030	93.5920	102.1012	90.6468	Dexamethasone	99.0498	93.2371	96.3118	95.8590	98.1791	Dexamethasone	93.1343	97.7496	96.0746	99.5638	101.9818
Prednisolone	104.0462	98.3340	98.9492	101.0492	102.5823	Prednisolone	98.8880	97.1101	104.6629	103.3215	101.0492	Prednisolone	101.8721	101.7755	105.3812	100.3068	106.8096
Daucosterol	102.4941	104.2849	105.4030	99.9878	101.8015	Daucosterol	100.8603	98.3495	99.9329	98.5661	105.8667	Daucosterol	104.1751	99.8017	103.3559	101.7039	101.8549

Day 3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.3939	0.0098	2.4803	1.5239	98.4761	0.3857	0.0074	1.9072	3.5721	96.4279	0.3768	0.0068	1.7966	5.7959	94.2041
Triamcinolone acetonide	0.3773	0.0142	3.7711	5.6680	94.3320	0.4028	0.0088	2.1924	0.6974	100.6974	0.3889	0.0148	3.8044	2.7663	97.2337
Dexamethasone	0.3833	0.0120	3.1214	4.1664	95.8336	0.3805	0.0094	2.4623	4.8701	95.1299	0.3813	0.0060	1.5803	4.6739	95.3261
Prednisolone	0.4064	0.0104	2.5488	1.6021	101.6021	0.3963	0.0097	2.4415	0.9268	99.0732	0.4120	0.0141	3.4219	2.9978	102.9978
Daucosterol	0.4100	0.0066	1.6168	2.5098	102.5098	0.4032	0.0124	3.0691	0.8120	100.8120	0.4116	0.0111	2.6859	2.8973	102.8973

Day 3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.3756	0.0101	2.6912	6.0964	93.9036	0.3702	0.0058	1.5625	7.4620	92.5380
Triamcinolone acetonide	0.3926	0.0134	3.4181	1.8526	98.1474	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.3967	0.0126	3.1653	0.8253	99.1747	0.3877	0.0231	5.9512	3.0641	96.9359
Prednisolone	0.4062	0.0063	1.5466	1.5591	101.5591	0.4139	0.0119	2.8830	3.4804	103.4804
Daucosterol	0.4003	0.0063	1.5698	0.0859	100.0859	0.4127	0.0093	2.2601	3.1744	103.1744

Table S16 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5) mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Intermediate precision (inter-day precision)

All average (average from day 1 – 3)

Day 1-3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.3837	0.0132	3.4450	4.0834	95.9166	0.3802	0.0129	3.3840	4.9533	95.0467	0.3838	0.0127	3.3182	4.0578	95.9422
Triamcinolone acetonide	0.3757	0.0090	2.4088	6.0815	93.9185	0.3941	0.0171	4.3304	1.4700	98.5300	0.3929	0.0168	4.2831	1.7844	98.2156
Dexamethasone	0.3972	0.0164	4.1296	0.6912	99.3088	0.3950	0.0178	4.5054	1.2513	98.7487	0.3959	0.0148	3.7337	1.0182	98.9818
Prednisolone	0.4045	0.0067	1.6572	1.1193	101.1193	0.4026	0.0109	2.7103	0.6561	100.6561	0.4143	0.0108	2.5989	3.5668	103.5668
Daucosterol	0.4084	0.0060	1.4568	2.1110	102.1110	0.4101	0.0119	2.9008	2.5327	102.5327	0.4108	0.0122	2.9660	2.6963	102.6963

Day 1-3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.3836	0.0152	3.9746	4.1043	95.8957	0.3705	0.0071	1.9211	7.3677	92.6323
Triamcinolone acetonide	0.3968	0.0150	3.7890	0.8060	99.1940	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.3977	0.0157	3.9548	0.5819	99.4181	0.3856	0.0188	4.8721	3.6033	96.3967
Prednisolone	0.4118	0.0103	2.5069	2.9505	102.9505	0.4001	0.0140	3.5078	0.0132	100.0132
Daucosterol	0.4080	0.0093	2.2706	1.9910	101.9910	0.4124	0.0106	2.5607	3.1118	103.1118

Table S16 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 1

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.7791	0.7780	0.8010	0.7849	0.7895	Betamethasone-17-valerate	0.7665	0.7323	0.7749	0.7876	0.7836	Betamethasone-17-valerate	0.8224	0.7826	0.7517	0.7623	0.7205
Triamcinolone acetonide	0.7866	0.7938	0.8150	0.7353	N/A	Triamcinolone acetonide	0.8045	0.7613	0.7507	0.8047	N/A	Triamcinolone acetonide	0.7682	0.7828	0.7302	0.7802	N/A
Dexamethasone	0.7805	0.8278	0.8013	0.8211	0.7794	Dexamethasone	0.7862	0.7861	0.7910	0.7811	0.7832	Dexamethasone	0.8238	0.7848	0.7834	0.8213	0.8087
Prednisolone	0.7586	0.7870	0.7961	0.7776	0.7488	Prednisolone	0.7756	0.7988	0.7966	0.8008	0.8089	Prednisolone	0.8066	0.7597	0.7758	0.7918	0.7649
Daucosterol	0.7694	0.7975	0.7759	0.7911	0.8191	Daucosterol	0.7873	0.7835	0.8076	0.8288	0.8252	Daucosterol	0.7799	0.7766	0.8107	0.8061	0.7904

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	97.3925	97.2560	100.1225	98.1114	98.6846	Betamethasone-17-valerate	95.8087	91.5361	96.8624	98.4480	97.9544	Betamethasone-17-valerate	102.7954	97.8310	93.9632	95.2814	90.0636
Triamcinolone acetonide	98.3204	99.2236	101.8730	91.9110	N/A	Triamcinolone acetonide	100.5651	95.1656	93.8380	100.5848	N/A	Triamcinolone acetonide	96.0247	97.8485	91.2756	97.5204	N/A
Dexamethasone	97.5580	103.4760	100.1600	102.6418	97.4262	Dexamethasone	98.2778	98.2670	98.8765	97.6335	97.9030	Dexamethasone	102.9710	98.1012	97.9312	102.6667	101.0887
Prednisolone	94.8197	98.3803	99.5124	97.2047	93.6055	Prednisolone	96.9463	99.8498	99.5736	100.0954	101.1180	Prednisolone	100.8298	94.9574	96.9704	98.9730	95.6177
Daucosterol	96.1766	99.6911	96.9843	98.8872	102.3819	Daucosterol	98.4090	97.9361	100.9534	103.5985	103.1523	Daucosterol	97.4815	97.0727	101.3347	100.7627	98.8010

Day 1	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.7893	0.0293	3.7128	1.3345	98.6655	0.7643	0.0278	3.6427	4.4590	95.5410	0.7759	0.0247	3.1773	3.0173	96.9827
Triamcinolone acetonide	0.7864	0.0182	2.3094	1.6966	98.3034	0.7793	0.0165	2.1187	2.5874	97.4126	0.7653	0.0442	5.7799	4.3378	95.6622
Dexamethasone	0.7968	0.0235	2.9512	0.3977	99.6023	0.7996	0.0245	3.0580	0.0520	99.9480	0.7919	0.0089	1.1301	1.0108	98.9892
Prednisolone	0.7803	0.0244	3.1246	2.4681	97.5319	0.7818	0.0201	2.5687	2.2708	97.7292	0.7895	0.0119	1.5054	1.3145	98.6855
Daucosterol	0.7788	0.0090	1.1520	2.6443	97.3557	0.7859	0.0107	1.3582	1.7667	98.2333	0.7981	0.0193	2.4151	0.2425	99.7575

Day 1	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.7782	0.0139	1.7879	2.7197	97.2803	0.7645	0.0382	5.0022	4.4325	95.5675
Triamcinolone acetonide	0.7734	0.0352	4.5501	3.3279	96.6721	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.8078	0.0232	2.8706	0.9807	100.9807	0.7904	0.0159	2.0153	1.1940	98.8060
Prednisolone	0.7901	0.0117	1.4756	1.2423	98.7577	0.7742	0.0311	4.0183	3.2196	96.7804
Daucosterol	0.8087	0.0190	2.3465	1.0828	101.0828	0.8116	0.0186	2.2889	1.4451	101.4451

Table S16 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 2

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.7771	0.7973	0.7878	0.7427	0.7241	Betamethasone-17-valerate	0.8201	0.7998	0.8157	0.8261	0.7672	Betamethasone-17-valerate	0.8074	0.8295	0.7951	0.8002	0.7483
Triamcinolone acetonide	0.7746	0.8024	0.7722	0.7530	N/A	Triamcinolone acetonide	0.7613	0.7648	0.7382	0.7709	N/A	Triamcinolone acetonide	0.8136	0.8133	0.7852	0.8183	N/A
Dexamethasone	0.8100	0.7834	0.8202	0.8259	0.7954	Dexamethasone	0.8017	0.8139	0.7945	0.7826	0.7685	Dexamethasone	0.7439	0.8009	0.8325	0.7915	0.8016
Prednisolone	0.8525	0.8390	0.7939	0.8307	0.7676	Prednisolone	0.7870	0.8545	0.8286	0.8402	0.8267	Prednisolone	0.8468	0.8544	0.8531	0.7748	0.8523
Daucosterol	0.7741	0.7520	0.7620	0.7810	0.7693	Daucosterol	0.7650	0.7936	0.7839	0.7408	0.8033	Daucosterol	0.7812	0.7715	0.7996	0.7679	0.7992

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	97.1316	99.6606	98.4705	92.8431	90.5067	Betamethasone-17-valerate	102.5093	99.9729	101.9662	103.2666	95.8938	Betamethasone-17-valerate	100.9209	103.6874	99.3932	100.0234	93.5415
Triamcinolone acetonide	96.8247	100.3042	96.5279	94.1197	N/A	Triamcinolone acetonide	95.1621	95.6062	92.2704	96.3644	N/A	Triamcinolone acetonide	101.6967	101.6654	98.1477	102.2857	N/A
Dexamethasone	101.2438	97.9270	102.5240	103.2380	99.4237	Dexamethasone	100.2139	101.7430	99.3134	97.8234	96.0663	Dexamethasone	92.9892	100.1144	104.0605	98.9378	100.1940
Prednisolone	106.5628	104.8751	99.2427	103.8404	95.9559	Prednisolone	98.3763	106.8132	103.5723	105.0192	103.3356	Prednisolone	105.8559	106.7955	106.6401	96.8440	106.5427
Daucosterol	96.7615	93.9975	95.2468	97.6219	96.1659	Daucosterol	95.6221	99.1953	97.9926	92.6010	100.4172	Daucosterol	97.6463	96.4404	99.9443	95.9821	99.8993

Day 2	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8015	0.0221	2.7577	0.1873	100.1873	0.8089	0.0179	2.2156	1.1070	101.1070	0.7995	0.0145	1.8126	0.0567	99.9433
Triamcinolone acetonide	0.7832	0.0272	3.4692	2.1055	97.8945	0.7935	0.0254	3.2050	0.8081	99.1919	0.7652	0.0243	3.1738	4.3513	95.6487
Dexamethasone	0.7852	0.0360	4.5829	1.8510	98.1490	0.7994	0.0153	1.9161	0.0719	99.9281	0.8157	0.0194	2.3755	1.9660	101.9660
Prednisolone	0.8288	0.0363	4.3786	3.5983	103.5983	0.8493	0.0089	1.0493	6.1613	106.1613	0.8252	0.0297	3.6030	3.1517	103.1517
Daucosterol	0.7734	0.0081	1.0497	3.3234	96.6766	0.7724	0.0208	2.6936	3.4556	96.5444	0.7818	0.0189	2.4148	2.2721	97.7279

Day 2	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.7897	0.0427	5.4039	1.2890	98.7110	0.7465	0.0216	2.8942	6.6860	93.3140
Triamcinolone acetonide	0.7807	0.0337	4.3229	2.4100	97.5900	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.8000	0.0229	2.8592	0.0003	99.9997	0.7885	0.0176	2.2269	1.4386	98.5614
Prednisolone	0.8152	0.0354	4.3367	1.9012	101.9012	0.8156	0.0434	5.3252	1.9447	101.9447
Daucosterol	0.7632	0.0205	2.6837	4.5984	95.4016	0.7906	0.0186	2.3470	1.1725	98.8275

Table S16 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 3

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.7379	0.7537	0.7451	0.7428	0.7255	Betamethasone-17-valerate	0.7929	0.8163	0.7999	0.7977	0.7472	Betamethasone-17-valerate	0.8069	0.8278	0.7732	0.8064	0.7603
Triamcinolone acetonide	0.7908	0.7738	0.7544	0.8489	N/A	Triamcinolone acetonide	0.7761	0.8064	0.7843	0.8015	N/A	Triamcinolone acetonide	0.8163	0.7622	0.7599	0.8181	N/A
Dexamethasone	0.8261	0.8039	0.7943	0.7780	0.7853	Dexamethasone	0.8519	0.8463	0.8235	0.8176	0.8369	Dexamethasone	0.8213	0.7992	0.8037	0.8350	0.7913
Prednisolone	0.8275	0.8181	0.8150	0.7576	0.7869	Prednisolone	0.8088	0.7626	0.7637	0.8009	0.8208	Prednisolone	0.8488	0.8157	0.8155	0.7865	0.7954
Daucosterol	0.8067	0.8165	0.8343	0.8420	0.8030	Daucosterol	0.7760	0.8262	0.7963	0.8185	0.7753	Daucosterol	0.8120	0.7713	0.7792	0.7818	0.8161

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	92.2345	94.2147	93.1404	92.8534	90.6937	Betamethasone-17-valerate	99.1156	102.0335	99.9907	99.7111	93.4022	Betamethasone-17-valerate	100.8601	103.4789	96.6511	100.7984	95.0411
Triamcinolone acetonide	98.8561	96.7297	94.2995	106.1096	N/A	Triamcinolone acetonide	97.0172	100.7993	98.0364	100.1825	N/A	Triamcinolone acetonide	102.0388	95.2792	94.9917	102.2683	N/A
Dexamethasone	103.2620	100.4925	99.2869	97.2446	98.1600	Dexamethasone	106.4884	105.7844	102.9345	102.2007	104.6169	Dexamethasone	102.6675	99.8988	100.4619	104.3740	98.9113
Prednisolone	103.4418	102.2679	101.8765	94.6997	98.3578	Prednisolone	101.0995	95.3246	95.4590	100.1083	102.5996	Prednisolone	106.0982	101.9587	101.9345	98.3079	99.4271
Daucosterol	100.8413	102.0662	104.2895	105.2444	100.3692	Daucosterol	97.0003	103.2766	99.5416	102.3102	96.9149	Daucosterol	101.5025	96.4138	97.4007	97.7271	102.0135

Day 3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.7792	0.0365	4.6822	2.5966	97.4034	0.7993	0.0399	4.9887	0.0910	99.9090	0.7728	0.0274	3.5463	3.4059	96.5941
Triamcinolone acetonide	0.7944	0.0203	2.5584	0.6960	99.3040	0.7808	0.0229	2.9320	2.3973	97.6027	0.7662	0.0159	2.0757	4.2242	95.7758
Dexamethasone	0.8331	0.0164	1.9743	4.1393	104.1393	0.8165	0.0259	3.1749	2.0586	102.0586	0.8072	0.0149	1.8454	0.8944	100.8944
Prednisolone	0.8284	0.0200	2.4153	3.5465	103.5465	0.7988	0.0314	3.9284	0.1496	99.8504	0.7981	0.0298	3.7311	0.2433	99.7567
Daucosterol	0.7983	0.0194	2.4364	0.2186	99.7814	0.8047	0.0293	3.6419	0.5855	100.5855	0.8033	0.0282	3.5112	0.4106	100.4106

Day 3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.7823	0.0345	4.4051	2.2124	97.7876	0.7444	0.0176	2.3596	6.9543	93.0457
Triamcinolone acetonide	0.8228	0.0241	2.9231	2.8535	102.8535	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.8102	0.0292	3.6081	1.2731	101.2731	0.8045	0.0282	3.5113	0.5627	100.5627
Prednisolone	0.7816	0.0220	2.8189	2.2947	97.7053	0.8010	0.0176	2.2033	0.1282	100.1282
Daucosterol	0.8141	0.0303	3.7231	1.7606	101.7606	0.7981	0.0208	2.6084	0.2342	99.7658

Table S16 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Intermediate precision (inter-day precision)

All average (average from day 1 – 3)

Day 1-3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.7900	0.0276	3.4962	1.2479	98.7521	0.7908	0.0329	4.1623	1.1477	98.8523	0.7827	0.0235	3.0050	2.1600	97.8400
Triamcinolone acetonide	0.7880	0.0199	2.5238	1.4993	98.5007	0.7846	0.0202	2.5705	1.9309	98.0691	0.7656	0.0265	3.4561	4.3044	95.6956
Dexamethasone	0.8050	0.0316	3.9247	0.6302	100.6302	0.8052	0.0212	2.6290	0.6449	100.6449	0.8049	0.0167	2.0732	0.6165	100.6165
Prednisolone	0.8125	0.0341	4.1952	1.5589	101.5589	0.8100	0.0359	4.4348	1.2469	101.2469	0.8043	0.0272	3.3800	0.5313	100.5313
Daucosterol	0.7835	0.0161	2.0542	2.0621	97.9379	0.7876	0.0234	2.9751	1.5456	98.4544	0.7944	0.0218	2.7430	0.7014	99.2986

Day 1-3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.7834	0.0287	3.6682	2.0737	97.9263	0.7518	0.0255	3.3952	6.0243	93.9757
Triamcinolone acetonide	0.7923	0.0357	4.5032	0.9615	99.0385	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.8060	0.0224	2.7749	0.7512	100.7512	0.7945	0.0199	2.5086	0.6900	99.3100
Prednisolone	0.7956	0.0264	3.3172	0.5453	99.4547	0.7969	0.0335	4.2009	0.3822	99.6178
Daucosterol	0.7953	0.0318	3.9958	0.5850	99.4150	0.8001	0.0191	2.3882	0.0128	100.0128

Table S17 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5)** mobile phase system

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 1

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.3901	0.4040	0.3941	0.4018	0.3606	Betamethasone-17-valerate	0.4107	0.4192	0.4097	0.4167	0.3786	Betamethasone-17-valerate	0.4097	0.4193	0.3972	0.4060	0.4167
Triamcinolone acetonide	0.3882	0.3751	0.3845	0.3741	N/A	Triamcinolone acetonide	0.3965	0.4023	0.3876	0.3811	N/A	Triamcinolone acetonide	0.3980	0.3818	0.3643	0.3838	N/A
Dexamethasone	0.4050	0.4175	0.4265	0.4139	N/A	Dexamethasone	0.4257	0.4273	0.4091	0.3933	N/A	Dexamethasone	0.4113	0.4156	0.3881	0.4035	N/A
Prednisolone	0.4015	0.4088	0.4073	N/A	0.4173	Prednisolone	0.4192	0.4276	0.4197	N/A	0.4098	Prednisolone	0.3995	0.4119	0.3937	N/A	0.4249
Daucosterol	0.4171	0.4161	0.3939	0.3969	0.4021	Daucosterol	0.4043	0.4119	0.4070	0.4080	0.3980	Daucosterol	0.4104	0.4055	0.4160	0.4112	0.3922

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	97.5237	100.9969	98.5240	100.4412	90.1484	Betamethasone-17-valerate	102.6701	104.8065	102.4170	104.1705	94.6465	Betamethasone-17-valerate	102.4262	104.8219	99.3082	101.5001	104.1644
Triamcinolone acetonide	97.0424	93.7740	96.1357	93.5351	N/A	Triamcinolone acetonide	99.1218	100.5660	96.8904	95.2834	N/A	Triamcinolone acetonide	99.5100	95.4435	91.0866	95.9457	N/A
Dexamethasone	101.2410	104.3847	106.6276	103.4648	N/A	Dexamethasone	106.4166	106.8310	102.2864	98.3367	N/A	Dexamethasone	102.8148	103.8925	97.0347	100.8627	N/A
Prednisolone	100.3820	102.1987	101.8343	N/A	104.3183	Prednisolone	104.8018	106.8942	104.9244	N/A	102.4489	Prednisolone	99.8781	102.9733	98.4258	N/A	106.2234
Daucosterol	104.2811	104.0191	98.4690	99.2164	100.5248	Daucosterol	101.0752	102.9762	101.7505	102.0072	99.5013	Daucosterol	102.5999	101.3759	104.0032	102.8109	98.0540

Day 1	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4035	0.0116	2.8783	0.8734	100.8734	0.4142	0.0088	2.1286	3.5418	103.5418	0.4003	0.0082	2.0572	0.0830	100.0830
Triamcinolone acetonide	0.3942	0.0053	1.3463	1.4419	98.5581	0.3864	0.0142	3.6640	3.4055	96.5945	0.3788	0.0126	3.3321	5.2958	94.7042
Dexamethasone	0.4140	0.0106	2.5637	3.4908	103.4908	0.4201	0.0063	1.4983	5.0361	105.0361	0.4079	0.0192	4.7102	1.9829	101.9829
Prednisolone	0.4067	0.0108	2.6640	1.6873	101.6873	0.4161	0.0101	2.4200	4.0221	104.0221	0.4069	0.0130	3.1954	1.7282	101.7282
Daucosterol	0.4106	0.0064	1.5622	2.6521	102.6521	0.4112	0.0053	1.2952	2.7904	102.7904	0.4056	0.0111	2.7444	1.4076	101.4076

Day 1	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4081	0.0077	1.8835	2.0373	102.0373	0.3853	0.0286	7.4297	3.6803	96.3197
Triamcinolone acetonide	0.3797	0.0050	1.3120	5.0786	94.9214	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.4036	0.0103	2.5416	0.8881	100.8881	N/A	N/A	N/A	N/A	N/A
Prednisolone	N/A	N/A	N/A	N/A	N/A	0.4173	0.0075	1.8090	4.3302	104.3302
Daucosterol	0.4054	0.0075	1.8616	1.3448	101.3448	0.3974	0.0050	1.2494	0.6400	99.3600

Table S17 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 2

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.3939	0.4107	0.4213	0.4056	0.4164	Betamethasone-17-valerate	0.4069	0.4118	0.3890	0.3988	0.3974	Betamethasone-17-valerate	0.3985	0.4027	0.4030	0.4089	0.4092
Triamcinolone acetonide	0.3740	0.3889	0.3831	0.3854	N/A	Triamcinolone acetonide	0.3892	0.3670	0.3638	0.3797	N/A	Triamcinolone acetonide	0.3605	0.3687	0.3742	0.3646	N/A
Dexamethasone	0.4117	0.4204	0.3938	0.4114	N/A	Dexamethasone	0.3973	0.4016	0.3935	0.4082	N/A	Dexamethasone	0.4193	0.4187	0.4226	0.4020	N/A
Prednisolone	0.4176	0.4158	0.4105	N/A	0.3977	Prednisolone	0.4200	0.4213	0.4223	N/A	0.4114	Prednisolone	0.4091	0.4247	0.4112	N/A	0.4142
Daucosterol	0.3980	0.4028	0.4007	0.4095	0.4063	Daucosterol	0.4169	0.4143	0.4263	0.4159	0.4160	Daucosterol	0.4065	0.3955	0.3951	0.4207	0.4038

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	98.4808	102.6825	105.3251	101.3920	104.0903	Betamethasone-17-valerate	101.7193	102.9572	97.2490	99.7033	99.3575	Betamethasone-17-valerate	99.6354	100.6696	100.7622	102.2132	102.3028
Triamcinolone acetonide	93.5080	97.2216	95.7856	96.3583	N/A	Triamcinolone acetonide	97.2895	91.7435	90.9590	94.9223	N/A	Triamcinolone acetonide	90.1337	92.1778	93.5379	91.1381	N/A
Dexamethasone	102.9326	105.1013	98.4450	102.8471	N/A	Dexamethasone	99.3346	100.4009	98.3652	102.0488	N/A	Dexamethasone	104.8238	104.6813	105.6468	100.5016	N/A
Prednisolone	104.4034	103.9489	102.6158	N/A	99.4184	Prednisolone	105.0078	105.3194	105.5799	N/A	102.8439	Prednisolone	102.2872	106.1724	102.7962	N/A	103.5488
Daucosterol	99.5065	100.6901	100.1871	102.3853	101.5764	Daucosterol	104.2283	103.5829	106.5778	103.9716	104.0050	Daucosterol	101.6309	98.8735	98.7820	105.1692	100.9521

Day 2	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.3998	0.0066	1.6422	0.0548	99.9452	0.4084	0.0050	1.2233	2.1031	102.1031	0.4044	0.0162	4.0049	1.1121	101.1121
Triamcinolone acetonide	0.3746	0.0143	3.8228	6.3563	93.6437	0.3749	0.0122	3.2494	6.2857	93.7143	0.3737	0.0097	2.5851	6.5725	93.4275
Dexamethasone	0.4095	0.0112	2.7241	2.3637	102.3637	0.4136	0.0104	2.5156	3.3945	103.3945	0.4033	0.0167	4.1472	0.8190	100.8190
Prednisolone	0.4156	0.0057	1.3750	3.8995	103.8995	0.4206	0.0045	1.0668	5.1469	105.1469	0.4147	0.0066	1.6030	3.6640	103.6640
Daucosterol	0.4072	0.0095	2.3233	1.7886	101.7886	0.4042	0.0095	2.3505	1.0488	101.0488	0.4074	0.0166	4.0797	1.8490	101.8490

Day 2	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4044	0.0051	1.2657	1.1029	101.1029	0.4077	0.0096	2.3449	1.9169	101.9169
Triamcinolone acetonide	0.3766	0.0108	2.8646	5.8604	94.1396	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.4072	0.0048	1.1714	1.7991	101.7991	N/A	N/A	N/A	N/A	N/A
Prednisolone	N/A	N/A	N/A	N/A	N/A	0.4077	0.0088	2.1675	1.9370	101.9370
Daucosterol	0.4154	0.0056	1.3448	3.8420	103.8420	0.4087	0.0065	1.5785	2.1778	102.1778

Table S17 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 3

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.4081	0.4091	0.3915	0.3859	0.4034	Betamethasone-17-valerate	0.4127	0.3873	0.4019	0.4037	0.4074	Betamethasone-17-valerate	0.4164	0.4176	0.4182	0.4080	0.4230
Triamcinolone acetonide	0.3748	0.3713	0.3654	0.3692	0.0000	Triamcinolone acetonide	0.3646	0.3810	0.3783	0.3652	N/A	Triamcinolone acetonide	0.3647	0.3811	0.3698	0.3778	N/A
Dexamethasone	0.4218	0.4080	0.4148	0.4033	0.0000	Dexamethasone	0.4087	0.3960	0.3926	0.4137	N/A	Dexamethasone	0.4111	0.4097	0.4148	0.4217	N/A
Prednisolone	0.4246	0.4166	0.4118	0.0000	0.4198	Prednisolone	0.4065	0.4062	0.4211	N/A	0.4022	Prednisolone	0.4139	0.4283	0.3995	N/A	0.4239
Daucosterol	0.4195	0.4131	0.4077	0.4193	0.4065	Daucosterol	0.4055	0.4178	0.4178	0.4011	0.4167	Daucosterol	0.4176	0.4246	0.4026	0.4221	0.3978

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	102.0373	102.2657	97.8633	96.4833	100.8394	Betamethasone-17-valerate	103.1795	96.8322	100.4720	100.9166	101.8520	Betamethasone-17-valerate	104.1119	104.3897	104.5410	101.9971	105.7481
Triamcinolone acetonide	93.7116	92.8375	91.3472	92.2946	N/A	Triamcinolone acetonide	91.1463	95.2426	94.5830	91.3092	N/A	Triamcinolone acetonide	91.1870	95.2698	92.4439	94.4472	N/A
Dexamethasone	105.4453	102.0070	103.6967	100.8361	N/A	Dexamethasone	102.1723	98.9924	98.1466	103.4363	N/A	Dexamethasone	102.7862	102.4156	103.6986	105.4358	N/A
Prednisolone	106.1536	104.1395	102.9376	N/A	104.9414	Prednisolone	101.6181	101.5585	105.2683	N/A	100.5540	Prednisolone	103.4636	107.0866	99.8747	N/A	105.9732
Daucosterol	104.8773	103.2681	101.9246	104.8333	101.6133	Daucosterol	101.3794	104.4446	104.4376	100.2645	104.1826	Daucosterol	104.3919	106.1469	100.6496	105.5174	99.4608

Day 3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4124	0.0042	1.0077	3.1096	103.1096	0.4047	0.0156	3.8529	1.1625	101.1625	0.4038	0.0135	3.3334	0.9588	100.9588
Triamcinolone acetonide	0.3681	0.0059	1.5970	7.9850	92.0150	0.3778	0.0056	1.4786	5.5500	94.4500	0.3712	0.0066	1.7735	7.2087	92.7913
Dexamethasone	0.4139	0.0070	1.6814	3.4680	103.4680	0.4046	0.0075	1.8486	1.1383	101.1383	0.4074	0.0128	3.1468	1.8473	101.8473
Prednisolone	0.4150	0.0091	2.1985	3.7451	103.7451	0.4170	0.0111	2.6530	4.2616	104.2616	0.4108	0.0108	2.6341	2.6935	102.6935
Daucosterol	0.4142	0.0076	1.8300	3.5495	103.5495	0.4185	0.0058	1.3835	4.6199	104.6199	0.4093	0.0077	1.8834	2.3373	102.3373

Day 3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.3992	0.0117	2.9277	0.2010	99.7990	0.4113	0.0104	2.5207	2.8132	102.8132
Triamcinolone acetonide	0.3707	0.0064	1.7315	7.3163	92.6837	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.4129	0.0092	2.2341	3.2361	103.2361	N/A	N/A	N/A	N/A	N/A
Prednisolone	N/A	N/A	N/A	N/A	N/A	0.4153	0.0115	2.7716	3.8229	103.8229
Daucosterol	0.4142	0.0114	2.7582	3.5384	103.5384	0.4070	0.0095	2.3233	1.7523	101.7523

Table S17 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Intermediate precision (inter-day precision)

All average (average from day 1 – 3)

Day 1-3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4052	0.0090	2.2149	1.3094	101.3094	0.4091	0.0102	2.4889	2.2691	102.2691	0.4029	0.0115	2.8469	0.7180	100.7180
Triamcinolone acetonide	0.3790	0.0144	3.7890	5.2611	94.7389	0.3797	0.0110	2.9076	5.0804	94.9196	0.3746	0.0092	2.4670	6.3590	93.6410
Dexamethasone	0.4124	0.0087	2.1186	3.1075	103.1075	0.4128	0.0098	2.3849	3.1896	103.1896	0.4062	0.0144	3.5520	1.5497	101.5497
Prednisolone	0.4124	0.0088	2.1225	3.1106	103.1106	0.4179	0.0081	1.9321	4.4768	104.4768	0.4108	0.0097	2.3580	2.6952	102.6952
Daucosterol	0.4107	0.0075	1.8275	2.6634	102.6634	0.4113	0.0087	2.1239	2.8197	102.8197	0.4075	0.0108	2.6603	1.8646	101.8646

Day 1-3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4039	0.0084	2.0808	0.9797	100.9797	0.4014	0.0201	5.0022	0.3499	100.3499
Triamcinolone acetonide	0.3757	0.0078	2.0803	6.0851	93.9149	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.4079	0.0084	2.0523	1.9744	101.9744	N/A	N/A	N/A	N/A	N/A
Prednisolone	N/A	N/A	N/A	N/A	N/A	0.4135	0.0093	2.2427	3.3634	103.3634
Daucosterol	0.4116	0.0088	2.1309	2.9084	102.9084	0.4044	0.0082	2.0183	1.0967	101.0967

Table S17 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 1

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.8173	0.8171	0.8503	0.8330	0.8310	Betamethasone-17-valerate	0.8018	0.7869	0.7738	0.8072	0.8176	Betamethasone-17-valerate	0.7895	0.7702	0.7892	0.8068	0.7924
Triamcinolone acetonide	0.7978	0.7979	0.8090	0.7649	N/A	Triamcinolone acetonide	0.7327	0.7762	0.8118	0.7561	N/A	Triamcinolone acetonide	0.7465	0.7646	0.7446	0.8269	N/A
Dexamethasone	0.7413	0.7797	0.7771	0.7923	N/A	Dexamethasone	0.7948	0.7951	0.8123	0.8441	N/A	Dexamethasone	0.7870	0.7938	0.8524	0.8520	N/A
Prednisolone	0.7753	0.7810	0.7551	N/A	0.8126	Prednisolone	0.7901	0.7421	0.7795	N/A	0.7776	Prednisolone	0.8024	0.7961	0.7893	N/A	0.7455
Daucosterol	0.8247	0.8132	0.7934	0.7900	0.8032	Daucosterol	0.7396	0.7991	0.8376	0.8330	0.8190	Daucosterol	0.7367	0.7945	0.7648	0.7404	0.7898
No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	102.1646	102.1384	106.2876	104.1204	103.8796	Betamethasone-17-valerate	100.2258	98.3658	96.7311	100.9035	102.2047	Betamethasone-17-valerate	98.6930	96.2711	98.6498	100.8494	99.0481
Triamcinolone acetonide	99.7189	99.7352	101.1210	95.6130	N/A	Triamcinolone acetonide	91.5845	97.0301	101.4807	94.5082	N/A	Triamcinolone acetonide	93.3138	95.5791	93.0776	103.3578	N/A
Dexamethasone	92.6603	97.4682	97.1403	99.0362	N/A	Dexamethasone	99.3508	99.3926	101.5347	105.5063	N/A	Dexamethasone	98.3719	99.2263	106.5450	106.4975	N/A
Prednisolone	96.9145	97.6270	94.3888	N/A	101.5718	Prednisolone	98.7600	92.7603	97.4380	N/A	97.1997	Prednisolone	100.2940	99.5160	98.6647	N/A	93.1885
Daucosterol	103.0849	101.6464	99.1703	98.7465	100.3943	Daucosterol	92.4455	99.8878	104.7028	104.1198	102.3806	Daucosterol	92.0823	99.3101	95.5969	92.5501	98.7219
Day 1	A					B					C						
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery		
Betamethasone-17-valerate	0.8029	0.0139	1.7335	0.3612	100.3612	0.7914	0.0238	3.0057	1.0749	98.9251	0.8044	0.0404	5.0275	0.5562	100.5562		
Triamcinolone acetonide	0.7590	0.0343	4.5169	5.1276	94.8724	0.7796	0.0169	2.1646	2.5519	97.4481	0.7885	0.0380	4.8205	1.4402	98.5598		
Dexamethasone	0.7744	0.0289	3.7332	3.2056	96.7944	0.7896	0.0085	1.0804	1.3043	98.6957	0.8139	0.0376	4.6252	1.7400	101.7400		
Prednisolone	0.7892	0.0135	1.7152	1.3438	98.6562	0.7731	0.0279	3.6069	3.3656	96.6344	0.7746	0.0176	2.2738	3.1695	96.8305		
Daucosterol	0.7670	0.0500	6.5193	4.1291	95.8709	0.8023	0.0097	1.2134	0.2814	100.2814	0.7986	0.0367	4.5961	0.1767	99.8233		
Day 1	D					E											
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery							
Betamethasone-17-valerate	0.8157	0.0150	1.8371	1.9578	101.9578	0.8137	0.0196	2.4121	1.7108	101.7108							
Triamcinolone acetonide	0.7826	0.0386	4.9293	2.1736	97.8264	N/A	N/A	N/A	N/A	N/A							
Dexamethasone	0.8294	0.0324	3.9082	3.6800	103.6800	N/A	N/A	N/A	N/A	N/A							
Prednisolone	N/A	N/A	N/A	N/A	N/A	0.7786	0.0335	4.3084	2.6800	97.3200							
Daucosterol	0.7878	0.0463	5.8796	1.5279	98.4721	0.8040	0.0147	1.8225	0.4989	100.4989							

Table S17 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 2

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.8374	0.8267	0.8155	0.8060	0.7931	Betamethasone-17-valerate	0.8170	0.8055	0.8322	0.8028	0.7723	Betamethasone-17-valerate	0.8153	0.7844	0.7921	0.8224	0.7620
Triamcinolone acetonide	0.7586	0.8162	0.7614	0.7428	N/A	Triamcinolone acetonide	0.7506	0.8049	0.7488	0.7420	N/A	Triamcinolone acetonide	0.7339	0.7524	0.7792	0.7634	N/A
Dexamethasone	0.8111	0.8244	0.7932	0.7838	N/A	Dexamethasone	0.8082	0.8328	0.8096	0.7950	N/A	Dexamethasone	0.8312	0.8430	0.7731	0.7791	N/A
Prednisolone	0.7441	0.7639	0.8014	N/A	0.7606	Prednisolone	0.7621	0.7616	0.7436	N/A	0.7670	Prednisolone	0.7366	0.7854	0.7533	N/A	0.8069
Daucosterol	0.7747	0.7563	0.7738	0.7514	0.7344	Daucosterol	0.7803	0.7597	0.7468	0.7545	0.8115	Daucosterol	0.8198	0.8092	0.7842	0.7855	0.8302

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	104.6761	103.3408	101.9346	100.7476	99.1330	Betamethasone-17-valerate	102.1214	100.6935	104.0293	100.3447	96.5335	Betamethasone-17-valerate	101.9176	98.0493	99.0079	102.8037	95.2508
Triamcinolone acetonide	94.8299	102.0263	95.1787	92.8468	N/A	Triamcinolone acetonide	93.8214	100.6174	93.5988	92.7505	N/A	Triamcinolone acetonide	91.7366	94.0521	97.4060	95.4203	N/A
Dexamethasone	101.3827	103.0505	99.1455	97.9699	N/A	Dexamethasone	101.0215	104.1035	101.1983	99.3755	N/A	Dexamethasone	103.9059	105.3704	96.6423	97.3855	N/A
Prednisolone	93.0157	95.4895	100.1714	N/A	95.0766	Prednisolone	95.2664	95.2060	92.9493	N/A	95.8700	Prednisolone	92.0691	98.1710	94.1572	N/A	100.8567
Daucosterol	96.8331	94.5417	96.7285	93.9280	91.7948	Daucosterol	97.5322	94.9620	93.3450	94.3175	101.4398	Daucosterol	102.4720	101.1557	98.0202	98.1855	103.7699

Day 2	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8232	0.0123	1.4937	2.9050	102.9050	0.8056	0.0212	2.6275	0.6946	100.6946	0.8133	0.0202	2.4810	1.6573	101.6573
Triamcinolone acetonide	0.7477	0.0126	1.6879	6.5374	93.4626	0.7912	0.0340	4.3033	1.1014	98.8986	0.7632	0.0153	2.0051	4.6055	95.3945
Dexamethasone	0.8168	0.0126	1.5391	2.1034	102.1034	0.8334	0.0093	1.1150	4.1748	104.1748	0.7920	0.0183	2.3049	1.0046	98.9954
Prednisolone	0.7476	0.0131	1.7575	6.5496	93.4504	0.7703	0.0131	1.6992	3.7112	96.2888	0.7661	0.0309	4.0398	4.2407	95.7593
Daucosterol	0.7916	0.0246	3.1065	1.0542	98.9458	0.7751	0.0296	3.8223	3.1135	96.8865	0.7682	0.0193	2.5141	3.9688	96.0312

Day 2	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8104	0.0106	1.3020	1.2986	101.2986	0.7758	0.0158	2.0397	3.0276	96.9724
Triamcinolone acetonide	0.7494	0.0121	1.6167	6.3275	93.6725	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.7859	0.0082	1.0411	1.7563	98.2437	N/A	N/A	N/A	N/A	N/A
Prednisolone	N/A	N/A	N/A	N/A	N/A	0.7781	0.0251	3.2213	2.7322	97.2678
Daucosterol	0.7638	0.0188	2.4652	4.5230	95.4770	0.7920	0.0508	6.4130	0.9985	99.0015

Table S17 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 3

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.7761	0.7763	0.8125	0.8443	0.7555	Betamethasone-17-valerate	0.7860	0.8039	0.7838	0.8311	0.7990	Betamethasone-17-valerate	0.7672	0.7940	0.8346	0.8172	0.7895
Triamcinolone acetonide	0.7348	0.7482	0.7553	0.7848	N/A	Triamcinolone acetonide	0.7641	0.7362	0.7565	0.7666	N/A	Triamcinolone acetonide	0.7566	0.7346	0.7369	0.7768	N/A
Dexamethasone	0.8041	0.8182	0.8470	0.8315	N/A	Dexamethasone	0.8358	0.8276	0.7745	0.7918	N/A	Dexamethasone	0.8287	0.8384	0.8326	0.8033	N/A
Prednisolone	0.8215	0.7801	0.8271	N/A	0.8081	Prednisolone	0.7776	0.7529	0.7436	N/A	0.7580	Prednisolone	0.7481	0.8081	0.8031	N/A	0.7504
Daucosterol	0.8094	0.8219	0.7956	0.7803	0.7944	Daucosterol	0.7925	0.8078	0.7827	0.8317	0.7722	Daucosterol	0.7895	0.7682	0.7788	0.8260	0.7712

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	97.0182	97.0352	101.5564	105.5405	94.4327	Betamethasone-17-valerate	98.2562	100.4913	97.9752	103.8842	99.8785	Betamethasone-17-valerate	95.9037	99.2549	104.3241	102.1538	98.6838
Triamcinolone acetonide	91.8560	93.5269	94.4064	98.0983	N/A	Triamcinolone acetonide	95.5153	92.0243	94.5571	95.8194	N/A	Triamcinolone acetonide	94.5720	91.8275	92.1153	97.1034	N/A
Dexamethasone	100.5083	102.2693	105.8759	103.9401	N/A	Dexamethasone	104.4713	103.4516	96.8067	98.9707	N/A	Dexamethasone	103.5913	104.8030	104.0750	100.4124	N/A
Prednisolone	102.6861	97.5138	103.3875	N/A	101.0082	Prednisolone	97.2014	94.1147	92.9561	N/A	94.7548	Prednisolone	93.5162	101.0074	100.3817	N/A	93.8023
Daucosterol	101.1786	102.7385	99.4543	97.5322	99.2978	Daucosterol	99.0578	100.9781	97.8338	103.9580	96.5192	Daucosterol	98.6893	96.0312	97.3502	103.2467	96.4049

Day 3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.7765	0.0094	1.2124	2.9406	97.0594	0.7914	0.0140	1.7702	1.0729	98.9271	0.8103	0.0255	3.1427	1.2853	101.2853
Triamcinolone acetonide	0.7518	0.0152	2.0215	6.0189	93.9811	0.7397	0.0074	1.0053	7.5404	92.4596	0.7495	0.0109	1.4605	6.3071	93.6929
Dexamethasone	0.8229	0.0166	2.0232	2.8570	102.8570	0.8281	0.0101	1.2248	3.5080	103.5080	0.8180	0.0384	4.6957	2.2526	102.2526
Prednisolone	0.7824	0.0369	4.7180	2.1988	97.8012	0.7804	0.0276	3.5332	2.4547	97.5453	0.7913	0.0430	5.4288	1.0916	98.9084
Daucosterol	0.7971	0.0107	1.3483	0.3581	99.6419	0.7993	0.0278	3.4804	0.0841	99.9159	0.7857	0.0088	1.1221	1.7872	98.2128

Day 3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8309	0.0135	1.6305	3.8595	103.8595	0.7813	0.0229	2.9307	2.3350	97.6650
Triamcinolone acetonide	0.7761	0.0091	1.1778	2.9930	97.0070	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.8089	0.0205	2.5286	1.1077	101.1077	N/A	N/A	N/A	N/A	N/A
Prednisolone	N/A	N/A	N/A	N/A	N/A	0.7722	0.0313	4.0555	3.4782	96.5218
Daucosterol	0.8126	0.0282	3.4679	1.5790	101.5790	0.7793	0.0131	1.6818	2.5927	97.4073

Table S17 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Intermediate precision (inter-day precision)

All average (average from day 1 – 3)

Day 1-3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8009	0.0228	2.8494	0.1085	100.1085	0.7961	0.0188	2.3585	0.4844	99.5156	0.8093	0.0262	3.2406	1.1662	101.1662
Triamcinolone acetonide	0.7528	0.0204	2.7086	5.8946	94.1054	0.7702	0.0304	3.9436	3.7312	96.2688	0.7671	0.0272	3.5523	4.1176	95.8824
Dexamethasone	0.8047	0.0290	3.6056	0.5849	100.5849	0.8170	0.0222	2.7217	2.1262	102.1262	0.8080	0.0309	3.8222	0.9960	100.9960
Prednisolone	0.7731	0.0284	3.6671	3.3641	96.6359	0.7746	0.0212	2.7310	3.1772	96.8228	0.7773	0.0300	3.8623	2.8339	97.1661
Daucosterol	0.7852	0.0316	4.0239	1.8471	98.1529	0.7922	0.0246	3.1004	0.9720	99.0280	0.7842	0.0250	3.1838	1.9776	98.0224

Day 1-3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8190	0.0147	1.7892	2.3720	102.3720	0.7903	0.0246	3.1109	1.2173	98.7827
Triamcinolone acetonide	0.7693	0.0257	3.3443	3.8314	96.1686	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.8081	0.0272	3.3641	1.0104	101.0104	N/A	N/A	N/A	N/A	N/A
Prednisolone	N/A	N/A	N/A	N/A	N/A	0.7763	0.0263	3.3914	2.9635	97.0365
Daucosterol	0.7881	0.0356	4.5227	1.4906	98.5094	0.7918	0.0293	3.6959	1.0308	98.9692

Table S18 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: IPA: Petroleum ether: Formic acid (4: 3: 2.5: 0.5)** mobile phase system

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 1

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.3922	0.4214	0.4128	0.4071	0.4192	Betamethasone-17-valerate	0.4236	0.4275	0.4300	0.4219	0.4187	Betamethasone-17-valerate	0.4221	0.4111	0.4219	0.4076	0.3781
Triamcinolone acetonide	0.3724	0.3857	0.3690	0.3648	N/A	Triamcinolone acetonide	0.3867	0.3903	0.3822	0.3940	N/A	Triamcinolone acetonide	0.3763	0.3769	0.3929	0.3662	N/A
Dexamethasone	0.3944	0.4081	0.3958	0.3877	0.3992	Dexamethasone	0.4028	0.4045	0.4142	0.3986	0.3764	Dexamethasone	0.4163	0.4204	0.3913	0.3810	0.4177
Prednisolone	0.3994	0.4080	0.3863	0.3969	0.4143	Prednisolone	0.4078	0.4131	0.3951	0.4144	0.4220	Prednisolone	0.4187	0.3924	0.4104	0.4241	0.3988
Daucosterol	0.3974	0.4159	0.3789	0.4083	0.4107	Daucosterol	0.4058	0.3955	0.3942	0.4023	0.3910	Daucosterol	0.3927	0.4067	0.4081	0.3995	0.3800

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	98.0460	105.3531	103.2040	101.7795	104.8108	Betamethasone-17-valerate	105.9079	106.8650	107.4898	105.4831	104.6784	Betamethasone-17-valerate	105.5230	102.7741	105.4806	101.9120	94.5174
Triamcinolone acetonide	93.1061	96.4334	92.2510	91.1935	N/A	Triamcinolone acetonide	96.6837	97.5865	95.5558	98.5006	N/A	Triamcinolone acetonide	94.0820	94.2283	98.2278	91.5563	N/A
Dexamethasone	98.6052	102.0179	98.9449	96.9203	99.8020	Dexamethasone	100.6974	101.1293	103.5566	99.6491	94.1015	Dexamethasone	104.0763	105.1044	97.8201	95.2488	104.4362
Prednisolone	99.8390	102.0090	96.5849	99.2292	103.5673	Prednisolone	101.9555	103.2838	98.7692	103.5959	105.5001	Prednisolone	104.6657	98.0934	102.6098	106.0351	99.6999
Daucosterol	99.3407	103.9644	94.7150	102.0848	102.6646	Daucosterol	101.4441	98.8668	98.5413	100.5795	97.7459	Daucosterol	98.1629	101.6821	102.0238	99.8838	95.0079

Day 1	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone	0.4126	0.0177	4.2964	3.1590	103.1590	0.4200	0.0083	1.9700	4.9974	104.9974	0.4216	0.0086	2.0346	5.3914	105.3914
Betamethasone-17-valerate	0.3785	0.0074	1.9544	5.3761	94.6239	0.3843	0.0068	1.7759	3.9173	96.0827	0.3814	0.0120	3.1401	4.6551	95.3449
Dexamethasone	0.4045	0.0110	2.7299	1.1263	101.1263	0.4110	0.0083	2.0305	2.7505	102.7505	0.4004	0.0122	3.0365	0.1072	100.1072
Prednisolone	0.4086	0.0097	2.3684	2.1534	102.1534	0.4045	0.0108	2.6747	1.1287	101.1287	0.3973	0.0122	3.0710	0.6787	99.3213
Daucosterol	0.3986	0.0066	1.6680	0.3508	99.6492	0.4060	0.0102	2.5156	1.5044	101.5044	0.3937	0.0146	3.7142	1.5733	98.4267

Day 1	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4122	0.0084	2.0387	3.0582	103.0582	0.4053	0.0236	5.8272	1.3355	101.3355
Triamcinolone acetonide	0.3750	0.0165	4.3926	6.2499	93.7501	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.3891	0.0089	2.2835	2.7273	97.2727	0.3978	0.0207	5.2053	0.5534	99.4466
Prednisolone	0.4118	0.0138	3.3492	2.9534	102.9534	0.4117	0.0118	2.8695	2.9225	102.9225
Daucosterol	0.4034	0.0045	1.1156	0.8494	100.8494	0.3939	0.0155	3.9399	1.5272	98.4728

Table S18 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: IPA: Petroleum ether: Formic acid (4: 3: 2.5: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 2

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.4259	0.4125	0.4135	0.3889	0.4158	Betamethasone-17-valerate	0.4170	0.4238	0.4204	0.4148	0.3886	Betamethasone-17-valerate	0.4073	0.4197	0.4011	0.4121	0.4179
Triamcinolone acetonide	0.3846	0.3684	0.3662	0.3675	N/A	Triamcinolone acetonide	0.3778	0.3692	0.3839	0.3665	N/A	Triamcinolone acetonide	0.3672	0.3862	0.3719	0.3823	N/A
Dexamethasone	0.3997	0.4070	0.3990	0.3921	0.4021	Dexamethasone	0.3828	0.3954	0.3825	0.4013	0.3850	Dexamethasone	0.4006	0.3971	0.3762	0.3911	0.4153
Prednisolone	0.3950	0.3972	0.3832	0.3765	0.4270	Prednisolone	0.4246	0.4064	0.4054	0.3865	0.4070	Prednisolone	0.4065	0.3892	0.3855	0.4158	0.4238
Daucosterol	0.4093	0.4204	0.3896	0.3798	0.4149	Daucosterol	0.4189	0.4001	0.3929	0.4038	0.3974	Daucosterol	0.3960	0.4118	0.4048	0.4000	0.4022

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	106.4652	103.1165	103.3689	97.2214	103.9437	Betamethasone-17-valerate	104.2560	105.9429	105.0932	103.7113	97.1539	Betamethasone-17-valerate	101.8220	104.9308	100.2751	103.0190	104.4860
Triamcinolone acetonide	96.1521	92.0935	91.5535	91.8657	N/A	Triamcinolone acetonide	94.4477	92.2876	95.9749	91.6351	N/A	Triamcinolone acetonide	91.7982	96.5571	92.9823	95.5643	N/A
Dexamethasone	99.9235	101.7480	99.7435	98.0226	100.5332	Dexamethasone	95.7055	98.8437	95.6177	100.3284	96.2566	Dexamethasone	100.1507	99.2644	94.0453	97.7684	103.8243
Prednisolone	98.7478	99.2969	95.8058	94.1333	106.7590	Prednisolone	106.1510	101.6113	101.3457	96.6206	101.7433	Prednisolone	101.6185	97.3053	96.3638	103.9507	105.9495
Daucosterol	102.3167	105.1035	97.3900	94.9428	103.7264	Daucosterol	104.7374	100.0344	98.2341	100.9477	99.3550	Daucosterol	99.0071	102.9555	101.2061	99.9896	100.5389

Day 2	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4167	0.0093	2.2293	4.1811	104.1811	0.4187	0.0057	1.3682	4.6634	104.6634	0.4116	0.0098	2.3722	2.9124	102.9124
Triamcinolone acetonide	0.3765	0.0088	2.3307	5.8673	94.1327	0.3746	0.0101	2.6941	6.3539	93.6461	0.3740	0.0090	2.4131	6.4964	93.5036
Dexamethasone	0.3944	0.0100	2.5392	1.4068	98.5932	0.3998	0.0063	1.5702	0.0480	99.9520	0.3859	0.0118	3.0507	3.5311	96.4689
Prednisolone	0.4087	0.0149	3.6532	2.1724	102.1724	0.3976	0.0086	2.1679	0.5955	99.4045	0.3914	0.0122	3.1175	2.1616	97.8384
Daucosterol	0.4081	0.0115	2.8196	2.0204	102.0204	0.4108	0.0102	2.4775	2.6978	102.6978	0.3958	0.0080	2.0259	1.0566	98.9434

Day 2	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4053	0.0143	3.5176	1.3172	101.3172	0.4074	0.0163	4.0110	1.8612	101.8612
Triamcinolone acetonide	0.3721	0.0088	2.3704	6.9783	93.0217	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.3948	0.0056	1.4289	1.2935	98.7065	0.4008	0.0152	3.7868	0.2047	100.2047
Prednisolone	0.3929	0.0204	5.1956	1.7651	98.2349	0.4193	0.0108	2.5690	4.8172	104.8172
Daucosterol	0.3945	0.0129	3.2710	1.3733	98.6267	0.4048	0.0090	2.2340	1.2067	101.2067

Table S18 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: IPA: Petroleum ether: Formic acid (4: 3: 2.5: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 3

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.4183	0.4024	0.4256	0.3902	0.4135	Betamethasone-17-valerate	0.4125	0.4141	0.4131	0.4058	0.4093	Betamethasone-17-valerate	0.4008	0.4012	0.4022	0.4135	0.4233
Triamcinolone acetonide	0.3685	0.3692	0.3811	0.3632	N/A	Triamcinolone acetonide	0.3773	0.3762	0.3675	0.3761	N/A	Triamcinolone acetonide	0.3738	0.3776	0.3650	0.3732	N/A
Dexamethasone	0.4032	0.4020	0.3800	0.3871	0.3815	Dexamethasone	0.3911	0.4098	0.3997	0.4112	0.3963	Dexamethasone	0.3834	0.3936	0.4075	0.3968	0.4026
Prednisolone	0.3892	0.3748	0.4155	0.4186	0.3913	Prednisolone	0.4206	0.3932	0.4179	0.3991	0.3834	Prednisolone	0.3883	0.3810	0.3996	0.3860	0.3919
Daucosterol	0.4032	0.4126	0.3941	0.3900	0.3821	Daucosterol	0.3890	0.3999	0.4078	0.4042	0.3956	Daucosterol	0.4016	0.4092	0.3886	0.3891	0.4083

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	104.5659	100.6075	106.3877	97.5512	103.3789	Betamethasone-17-valerate	103.1215	103.5363	103.2689	101.4422	102.3243	Betamethasone-17-valerate	100.1877	100.2976	100.5600	103.3639	105.8354
Triamcinolone acetonide	92.1329	92.3073	95.2746	90.8110	N/A	Triamcinolone acetonide	94.3267	94.0483	91.8826	94.0342	N/A	Triamcinolone acetonide	93.4492	94.4055	91.2413	93.3029	N/A
Dexamethasone	100.7986	100.5107	95.0081	96.7740	95.3748	Dexamethasone	97.7864	102.4386	99.9370	102.7985	99.0754	Dexamethasone	95.8382	98.3893	101.8829	99.1924	100.6591
Prednisolone	97.2964	93.7036	103.8740	104.6532	97.8135	Prednisolone	105.1524	98.3038	104.4713	99.7641	95.8379	Prednisolone	97.0842	95.2566	99.9067	96.4958	97.9668
Daucosterol	100.7992	103.1467	98.5332	97.4978	95.5348	Daucosterol	97.2496	99.9795	101.9546	101.0616	98.8891	Daucosterol	100.3985	102.2964	97.1438	97.2699	102.0686

Day 3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4105	0.0089	2.1739	2.6250	102.6250	0.4059	0.0071	1.7611	1.4805	101.4805	0.4136	0.0117	2.8202	3.4056	103.4056
Triamcinolone acetonide	0.3732	0.0044	1.1835	6.6971	93.3029	0.3743	0.0045	1.1995	6.4130	93.5870	0.3712	0.0087	2.3355	7.2005	92.7995
Dexamethasone	0.3926	0.0100	2.5465	1.8589	98.1411	0.4018	0.0081	2.0164	0.4462	100.4462	0.3958	0.0142	3.5815	1.0573	98.9427
Prednisolone	0.3994	0.0184	4.6054	0.1557	99.8443	0.3830	0.0094	2.4440	4.2454	95.7546	0.4110	0.0099	2.4146	2.7507	102.7507
Daucosterol	0.3979	0.0078	1.9542	0.5176	99.4824	0.4072	0.0066	1.6101	1.8075	101.8075	0.3968	0.0099	2.4956	0.7895	99.2105

Day 3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4031	0.0118	2.9383	0.7858	100.7858	0.4154	0.0072	1.7349	3.8462	103.8462
Triamcinolone acetonide	0.3709	0.0068	1.8226	7.2840	92.7160	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.3984	0.0121	3.0442	0.4117	99.5883	0.3935	0.0108	2.7569	1.6302	98.3698
Prednisolone	0.4012	0.0164	4.0930	0.3044	100.3044	0.3888	0.0047	1.2215	2.7940	97.2060
Daucosterol	0.3944	0.0085	2.1564	1.3902	98.6098	0.3953	0.0131	3.3059	1.1692	98.8308

Table S18 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: IPA: Petroleum ether: Formic acid (4: 3: 2.5: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Intermediate precision (inter-day precision)

All average (average from day 1 – 3)

Day 1-3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4133	0.0113	2.7328	3.3217	103.3217	0.4149	0.0091	2.2002	3.7138	103.7138	0.4156	0.0098	2.3687	3.9031	103.9031
Triamcinolone acetonide	0.3761	0.0066	1.7469	5.9802	94.0198	0.3778	0.0082	2.1585	5.5614	94.4386	0.3755	0.0098	2.6055	6.1174	93.8826
Dexamethasone	0.3971	0.0106	2.6600	0.7131	99.2869	0.4042	0.0084	2.0765	1.0496	101.0496	0.3940	0.0128	3.2428	1.4937	98.5063
Prednisolone	0.4056	0.0136	3.3557	1.3900	101.3900	0.3951	0.0127	3.2029	1.2374	98.7626	0.3999	0.0132	3.3103	0.0299	99.9701
Daucosterol	0.4015	0.0091	2.2751	0.3840	100.3840	0.4080	0.0082	2.0113	2.0032	102.0032	0.3954	0.0098	2.4772	1.1398	98.8602

Day 1-3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4069	0.0110	2.6979	1.7204	101.7204	0.4094	0.0155	3.7863	2.3476	102.3476
Triamcinolone acetonide	0.3727	0.0101	2.7114	6.8374	93.1626	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.3941	0.0090	2.2816	1.4775	98.5225	0.3974	0.0143	3.5980	0.6596	99.3404
Prednisolone	0.4020	0.0169	4.2092	0.4975	100.4975	0.4066	0.0161	3.9499	1.6486	101.6486
Daucosterol	0.3974	0.0092	2.3155	0.6380	99.3620	0.3980	0.0122	3.0756	0.4965	99.5035

Table S18 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: IPA: Petroleum ether: Formic acid (4: 3: 2.5: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 1

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.8292	0.7995	0.8228	0.8100	0.8019	Betamethasone-17-valerate	0.7995	0.8501	0.8229	0.8302	0.8206	Betamethasone-17-valerate	0.8521	0.7917	0.8386	0.8137	0.8304
Triamcinolone acetonide	0.7457	0.7758	0.7392	0.7301	N/A	Triamcinolone acetonide	0.7248	0.7284	0.7493	0.7369	N/A	Triamcinolone acetonide	0.7588	0.7288	0.7293	0.7661	N/A
Dexamethasone	0.7978	0.8032	0.8322	0.8433	0.8051	Dexamethasone	0.8374	0.7819	0.8140	0.7921	0.8453	Dexamethasone	0.7722	0.7736	0.7522	0.7886	0.8149
Prednisolone	0.7740	0.7871	0.8048	0.7922	0.8173	Prednisolone	0.7521	0.8179	0.7911	0.7702	0.7871	Prednisolone	0.8132	0.7890	0.7527	0.7886	0.7670
Daucosterol	0.8302	0.8043	0.7749	0.8288	0.8410	Daucosterol	0.7907	0.8061	0.8176	0.8424	0.8178	Daucosterol	0.7917	0.7914	0.7911	0.8174	0.7942

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	103.6537	99.9376	102.8465	101.2496	100.2350	Betamethasone-17-valerate	99.9339	106.2651	102.8590	103.7799	102.5778	Betamethasone-17-valerate	106.5088	98.9580	104.8207	101.7144	103.8061
Triamcinolone acetonide	93.2083	96.9772	92.3997	91.2606	N/A	Triamcinolone acetonide	90.6038	91.0468	93.6639	92.1170	N/A	Triamcinolone acetonide	94.8466	91.1003	91.1593	95.7678	N/A
Dexamethasone	99.7210	100.4004	104.0234	105.4148	100.6355	Dexamethasone	104.6758	97.7335	101.7468	99.0102	105.6645	Dexamethasone	96.5311	96.6976	94.0284	98.5737	101.8593
Prednisolone	96.7466	98.3905	100.6060	99.0271	102.1679	Prednisolone	94.0096	102.2383	98.8925	96.2767	98.3879	Prednisolone	101.6482	98.6295	94.0836	98.5751	95.8773
Daucosterol	103.7723	100.5379	96.8612	103.6055	105.1301	Daucosterol	98.8435	100.7637	102.1958	105.2979	102.2233	Daucosterol	98.9604	98.9208	98.8821	102.1785	99.2808

Day 1	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8269	0.0264	3.1896	3.3654	103.3654	0.8138	0.0317	3.8992	1.7203	101.7203	0.8281	0.0091	1.0977	3.5087	103.5087
Triamcinolone acetonide	0.7431	0.0171	2.3035	7.1137	92.8863	0.7443	0.0273	3.6635	6.9586	93.0414	0.7393	0.0100	1.3552	7.5924	92.4076
Dexamethasone	0.8025	0.0328	4.0915	0.3093	100.3093	0.7862	0.0153	1.9439	1.7228	98.2772	0.7995	0.0419	5.2421	0.0671	99.9329
Prednisolone	0.7797	0.0310	3.9706	2.5319	97.4681	0.7980	0.0172	2.1612	0.2472	99.7528	0.7829	0.0271	3.4553	2.1393	97.8607
Daucosterol	0.8042	0.0225	2.7978	0.5254	100.5254	0.8006	0.0080	1.0045	0.0741	100.0741	0.7945	0.0215	2.7119	0.6870	99.3130

Day 1	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8180	0.0108	1.3172	2.2480	102.2480	0.8177	0.0145	1.7751	2.2063	102.2063
Triamcinolone acetonide	0.7444	0.0191	2.5724	6.9516	93.0484	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.8080	0.0306	3.7920	0.9996	100.9996	0.8218	0.0210	2.5532	2.7198	102.7198
Prednisolone	0.7837	0.0118	1.5056	2.0404	97.9596	0.7905	0.0253	3.2047	1.1890	98.8110
Daucosterol	0.8296	0.0125	1.5060	3.6940	103.6940	0.8177	0.0234	2.8614	2.2114	102.2114

Table S18 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: IPA: Petroleum ether: Formic acid (4: 3: 2.5: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 2

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.8204	0.8429	0.7960	0.7740	0.7483	Betamethasone-17-valerate	0.7919	0.8107	0.8485	0.8338	0.8238	Betamethasone-17-valerate	0.7964	0.8194	0.8001	0.8455	0.8036
Triamcinolone acetonide	0.7500	0.7614	0.7308	0.7335	N/A	Triamcinolone acetonide	0.7378	0.7346	0.7870	0.7263	N/A	Triamcinolone acetonide	0.7285	0.7407	0.7239	0.7563	N/A
Dexamethasone	0.8199	0.7911	0.8097	0.7918	0.7825	Dexamethasone	0.7684	0.7956	0.8007	0.8294	0.8441	Dexamethasone	0.7912	0.8118	0.8308	0.7826	0.8330
Prednisolone	0.7886	0.7564	0.7757	0.7678	0.7985	Prednisolone	0.7560	0.7938	0.8124	0.8323	0.7870	Prednisolone	0.7734	0.8136	0.7451	0.7779	0.8209
Daucosterol	0.7738	0.7661	0.7675	0.7752	0.8253	Daucosterol	0.7573	0.8266	0.8276	0.8176	0.7522	Daucosterol	0.7802	0.8353	0.7701	0.8374	0.8489

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	102.5504	105.3642	99.4953	96.7552	93.5377	Betamethasone-17-valerate	98.9868	101.3358	106.0565	104.2297	102.9739	Betamethasone-17-valerate	99.5491	102.4267	100.0076	105.6928	100.4499
Triamcinolone acetonide	93.7553	95.1701	91.3520	91.6909	N/A	Triamcinolone acetonide	92.2239	91.8301	98.3708	90.7881	N/A	Triamcinolone acetonide	91.0609	92.5895	90.4913	94.5415	N/A
Dexamethasone	102.4836	98.8831	101.2182	98.9708	97.8122	Dexamethasone	96.0463	99.4455	100.0900	103.6748	105.5127	Dexamethasone	98.8988	101.4791	103.8513	97.8291	104.1235
Prednisolone	98.5724	94.5561	96.9579	95.9718	99.8161	Prednisolone	94.4973	99.2188	101.5519	104.0419	98.3709	Prednisolone	96.6699	101.7016	93.1431	97.2325	102.6110
Daucosterol	96.7279	95.7607	95.9417	96.9049	103.1671	Daucosterol	94.6643	103.3298	103.4519	102.2049	94.0215	Daucosterol	97.5274	104.4120	96.2631	104.6704	106.1095

Day 2	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8029	0.0153	1.9089	0.3621	100.3621	0.8243	0.0167	2.0220	3.0422	103.0422	0.8148	0.0292	3.5828	1.8531	101.8531
Triamcinolone acetonide	0.7388	0.0108	1.4634	7.6533	92.3467	0.7456	0.0140	1.8786	6.8034	93.1966	0.7472	0.0346	4.6274	6.5953	93.4047
Dexamethasone	0.7931	0.0258	3.2535	0.8571	99.1429	0.7995	0.0109	1.3666	0.0641	99.9359	0.8138	0.0154	1.8976	1.7198	101.7198
Prednisolone	0.7726	0.0163	2.1113	3.4201	96.5799	0.7879	0.0290	3.6833	1.5078	98.4922	0.7777	0.0337	4.3309	2.7824	97.2176
Daucosterol	0.7705	0.0118	1.5340	3.6935	96.3065	0.8093	0.0377	4.6592	1.1675	101.1675	0.7884	0.0340	4.3086	1.4478	98.5522

Day 2	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8178	0.0384	4.6896	2.2259	102.2259	0.7919	0.0391	4.9352	1.0128	98.9872
Triamcinolone acetonide	0.7387	0.0157	2.1216	7.6599	92.3401	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.8013	0.0248	3.0935	0.1582	100.1582	0.8199	0.0328	4.0046	2.4828	102.4828
Prednisolone	0.7927	0.0347	4.3816	0.9179	99.0821	0.8021	0.0172	2.1498	0.2660	100.2660
Daucosterol	0.8101	0.0317	3.9186	1.2601	101.2601	0.8088	0.0504	6.2352	1.0994	101.0994

Table S18 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: IPA: Petroleum ether: Formic acid (4: 3: 2.5: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 3

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.8462	0.8511	0.8508	0.8385	0.8335	Betamethasone-17-valerate	0.8491	0.8149	0.7886	0.8214	0.8475	Betamethasone-17-valerate	0.8117	0.7880	0.7864	0.8018	0.8518
Triamcinolone acetonide	0.7511	0.7316	0.7489	0.7788	N/A	Triamcinolone acetonide	0.7671	0.7458	0.7278	0.7376	N/A	Triamcinolone acetonide	0.7793	0.7511	0.7310	0.7289	N/A
Dexamethasone	0.7994	0.8412	0.8430	0.8376	0.8368	Dexamethasone	0.8169	0.7565	0.7602	0.7918	0.7743	Dexamethasone	0.8210	0.8311	0.8119	0.7996	0.8020
Prednisolone	0.7621	0.8152	0.7746	0.7487	0.7838	Prednisolone	0.7829	0.7807	0.7584	0.7777	0.7408	Prednisolone	0.7514	0.7812	0.7491	0.7991	0.7599
Daucosterol	0.8148	0.8042	0.8066	0.8343	0.8164	Daucosterol	0.8497	0.7763	0.8384	0.8133	0.8318	Daucosterol	0.7739	0.7760	0.7614	0.7786	0.7640

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	105.7728	106.3876	106.3513	104.8144	104.1822	Betamethasone-17-valerate	106.1327	101.8594	98.5807	102.6691	105.9415	Betamethasone-17-valerate	101.4583	98.4995	98.2983	100.2213	106.4763
Triamcinolone acetonide	93.8932	91.4518	93.6077	97.3442	N/A	Triamcinolone acetonide	95.8887	93.2266	90.9709	92.2028	N/A	Triamcinolone acetonide	97.4075	93.8903	91.3787	91.1171	N/A
Dexamethasone	99.9224	105.1505	105.3755	104.6983	104.5982	Dexamethasone	102.1180	94.5683	95.0272	98.9764	96.7909	Dexamethasone	102.6264	103.8885	101.4847	99.9505	100.2520
Prednisolone	95.2622	101.8960	96.8215	93.5826	97.9689	Prednisolone	97.8601	97.5908	94.7977	97.2146	92.5983	Prednisolone	93.9258	97.6479	93.6378	99.8919	94.9921
Daucosterol	101.8520	100.5196	100.8248	104.2930	102.0554	Daucosterol	106.2072	97.0402	104.8016	101.6578	103.9757	Daucosterol	96.7391	97.0056	95.1748	97.3300	95.4973

Day 3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8356	0.0208	2.4902	4.4546	104.4546	0.8180	0.0317	3.8714	2.2488	102.2488	0.8086	0.0366	4.5214	1.0768	101.0768
Triamcinolone acetonide	0.7658	0.0141	1.8412	4.2702	95.7298	0.7429	0.0101	1.3577	7.1437	92.8563	0.7359	0.0114	1.5430	8.0142	91.9858
Dexamethasone	0.8124	0.0115	1.4151	1.5556	101.5556	0.8096	0.0462	5.7112	1.2024	101.2024	0.8050	0.0418	5.1942	0.6291	100.6291
Prednisolone	0.7655	0.0160	2.0908	4.3173	95.6827	0.7924	0.0198	2.4931	0.9551	99.0449	0.7607	0.0129	1.6945	4.9143	95.0857
Daucosterol	0.8128	0.0379	4.6645	1.5994	101.5994	0.7855	0.0162	2.0562	1.8115	98.1885	0.8021	0.0387	4.8247	0.2671	100.2671

Day 3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8205	0.0184	2.2407	2.5683	102.5683	0.8443	0.0096	1.1373	5.5333	105.5333
Triamcinolone acetonide	0.7484	0.0266	3.5556	6.4453	93.5547	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.8097	0.0245	3.0248	1.2084	101.2084	0.8044	0.0313	3.8907	0.5470	100.5470
Prednisolone	0.7752	0.0253	3.2681	3.1036	96.8964	0.7615	0.0215	2.8266	4.8136	95.1864
Daucosterol	0.8087	0.0281	3.4776	1.0936	101.0936	0.8041	0.0356	4.4231	0.5095	100.5095

Table S18 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: IPA: Petroleum ether: Formic acid (4: 3: 2.5: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Intermediate precision (inter-day precision)

All average (average from day 1 – 3)

Day 1-3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8218	0.0236	2.8706	2.7274	102.7274	0.8187	0.0244	2.9747	2.3371	102.3371	0.8172	0.0253	3.1006	2.1462	102.1462
Triamcinolone acetonide	0.7492	0.0176	2.3528	6.3458	93.6542	0.7443	0.0162	2.1739	6.9686	93.0314	0.7408	0.0195	2.6374	7.4006	92.5994
Dexamethasone	0.8027	0.0232	2.8920	0.3359	100.3359	0.7984	0.0269	3.3747	0.1948	99.8052	0.8061	0.0312	3.8732	0.7606	100.7606
Prednisolone	0.7726	0.0202	2.6158	3.4231	96.5769	0.7928	0.0200	2.5280	0.9034	99.0966	0.7738	0.0247	3.1903	3.2787	96.7213
Daucosterol	0.7958	0.0299	3.7625	0.5229	99.4771	0.7985	0.0234	2.9261	0.1900	99.8100	0.7950	0.0285	3.5896	0.6226	99.3774

Day 1-3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8188	0.0220	2.6842	2.3474	102.3474	0.8179	0.0312	3.8113	2.2423	102.2423
Triamcinolone acetonide	0.7438	0.0187	2.5078	7.0189	92.9811	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.8063	0.0235	2.9167	0.7887	100.7887	0.8153	0.0263	3.2278	1.9165	101.9165
Prednisolone	0.7838	0.0235	3.0032	2.0206	97.9794	0.7847	0.0261	3.3208	1.9122	98.0878
Daucosterol	0.8161	0.0243	2.9772	2.0159	102.0159	0.8102	0.0335	4.1394	1.2734	101.2734

Table S19 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5)** mobile phase system

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 1

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.4087	0.4241	0.4106	0.4171	0.4269	Betamethasone-17-valerate	0.4262	0.4196	0.4230	0.4113	0.4084	Betamethasone-17-valerate	0.3952	0.3889	0.3979	0.4052	0.4031
Triamcinolone acetonide	0.3752	0.3841	0.3666	0.3804	N/A	Triamcinolone acetonide	0.3811	0.3764	0.3701	0.3715	N/A	Triamcinolone acetonide	0.3641	0.3739	0.3624	0.3606	N/A
Dexamethasone	0.3962	0.3902	0.3989	0.4207	N/A	Dexamethasone	0.4009	0.4218	0.4193	0.3922	N/A	Dexamethasone	0.3895	0.3886	0.4245	0.4015	N/A
Prednisolone	0.3920	0.4073	0.4034	N/A	0.3834	Prednisolone	0.4195	0.4221	0.4126	N/A	0.4175	Prednisolone	0.3877	0.4166	0.4242	N/A	0.4179
Daucosterol	0.4218	0.4164	0.4160	0.3956	0.4192	Daucosterol	0.4243	0.4203	0.4109	0.3883	0.4033	Daucosterol	0.4120	0.4095	0.4242	0.4160	0.4063

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	102.1803	106.0262	102.6556	104.2827	106.7243	Betamethasone-17-valerate	106.5429	104.9079	105.7402	102.8193	102.0876	Betamethasone-17-valerate	98.8078	97.2280	99.4744	101.2987	100.7662
Triamcinolone acetonide	93.8068	96.0210	91.6610	95.0913	N/A	Triamcinolone acetonide	95.2822	94.0973	92.5367	92.8625	N/A	Triamcinolone acetonide	91.0239	93.4706	90.5985	90.1585	N/A
Dexamethasone	99.0423	97.5602	99.7240	105.1766	N/A	Dexamethasone	100.2354	105.4623	104.8260	98.0537	N/A	Dexamethasone	97.3703	97.1560	106.1181	100.3798	N/A
Prednisolone	98.0066	101.8202	100.8543	N/A	95.8616	Prednisolone	104.8794	105.5156	103.1541	N/A	104.3665	Prednisolone	96.9158	104.1467	106.0568	N/A	104.4731
Daucosterol	105.4456	104.0979	103.9978	98.8978	104.8108	Daucosterol	106.0713	105.0637	102.7337	97.0735	100.8312	Daucosterol	102.9956	102.3645	106.0586	104.0124	101.5824

Day 1	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4100	0.0155	3.7831	2.5103	102.5103	0.4109	0.0192	4.6627	2.7207	102.7207	0.4105	0.0125	3.0529	2.6234	102.6234
Triamcinolone acetonide	0.3735	0.0086	2.3159	6.6290	93.3710	0.3781	0.0053	1.4060	5.4704	94.5296	0.3664	0.0039	1.0596	8.4013	91.5987
Dexamethasone	0.3955	0.0058	1.4555	1.1174	98.8826	0.4002	0.0187	4.6805	0.0595	100.0595	0.4142	0.0135	3.2648	3.5560	103.5560
Prednisolone	0.3997	0.0173	4.3204	0.0661	99.9339	0.4153	0.0075	1.7994	3.8275	103.8275	0.4134	0.0104	2.5224	3.3551	103.3551
Daucosterol	0.4194	0.0065	1.5505	4.8375	104.8375	0.4154	0.0055	1.3170	3.8420	103.8420	0.4171	0.0067	1.6096	4.2634	104.2634

Day 1	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4112	0.0060	1.4514	2.8002	102.8002	0.4128	0.0125	3.0322	3.1927	103.1927
Triamcinolone acetonide	0.3708	0.0099	2.6646	7.2959	92.7041	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.4048	0.0145	3.5890	1.2034	101.2034	N/A	N/A	N/A	N/A	N/A
Prednisolone	N/A	N/A	N/A	N/A	N/A	0.4063	0.0198	4.8651	1.5671	101.5671
Daucosterol	0.4000	0.0144	3.5973	0.0055	99.9945	0.4096	0.0085	2.0647	2.4081	102.4081

Table S19 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under CHCl₃: EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5) mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 2

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.3808	0.3979	0.4116	0.3943	0.4267	Betamethasone-17-valerate	0.4112	0.4170	0.4143	0.3969	0.4127	Betamethasone-17-valerate	0.3934	0.4012	0.4223	0.4246	0.4181
Triamcinolone acetonide	0.3641	0.3624	0.3757	0.3655	N/A	Triamcinolone acetonide	0.3759	0.3656	0.3667	0.3685	N/A	Triamcinolone acetonide	0.3718	0.3731	0.3661	0.3789	N/A
Dexamethasone	0.4036	0.3980	0.4065	0.3882	N/A	Dexamethasone	0.3846	0.4156	0.3871	0.4046	N/A	Dexamethasone	0.4085	0.4197	0.4109	0.4014	N/A
Prednisolone	0.4133	0.3936	0.4118	N/A	0.4144	Prednisolone	0.3749	0.3964	0.3925	N/A	0.3863	Prednisolone	0.4078	0.4075	0.3840	N/A	0.3971
Daucosterol	0.4231	0.4038	0.4137	0.4054	0.4267	Daucosterol	0.3906	0.4064	0.4253	0.3934	0.4099	Daucosterol	0.4155	0.4167	0.4090	0.4154	0.4164

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	95.1966	99.4685	102.9081	98.5652	106.6691	Betamethasone-17-valerate	102.7976	104.2610	103.5766	99.2180	103.1684	Betamethasone-17-valerate	98.3384	100.2889	105.5765	106.1543	104.5351
Triamcinolone acetonide	91.0364	90.5923	93.9230	91.3788	N/A	Triamcinolone acetonide	93.9686	91.4099	91.6651	92.1217	N/A	Triamcinolone acetonide	92.9414	93.2714	91.5365	94.7261	N/A
Dexamethasone	100.8977	99.5049	101.6184	97.0570	N/A	Dexamethasone	96.1496	103.8975	96.7827	101.1590	N/A	Dexamethasone	102.1362	104.9185	102.7141	100.3441	N/A
Prednisolone	103.3240	98.4029	102.9576	N/A	103.6038	Prednisolone	93.7350	99.0891	98.1198	N/A	96.5627	Prednisolone	101.9534	101.8752	96.0115	N/A	99.2673
Daucosterol	105.7766	100.9458	103.4140	101.3514	106.6806	Daucosterol	97.6591	101.6060	106.3296	98.3467	102.4791	Daucosterol	103.8796	104.1742	102.2499	103.8559	104.1106

Day 2	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.3951	0.0153	3.8667	1.2225	98.7775	0.4054	0.0103	2.5293	1.3395	101.3395	0.4161	0.0056	1.3348	4.0204	104.0204
Triamcinolone acetonide	0.3706	0.0060	1.6059	7.3512	92.6488	0.3670	0.0055	1.4963	8.2422	91.7578	0.3695	0.0054	1.4530	7.6251	92.3749
Dexamethasone	0.3989	0.0126	3.1687	0.2722	99.7278	0.4111	0.0115	2.7988	2.7736	102.7736	0.4015	0.0126	3.1444	0.3717	100.3717
Prednisolone	0.3987	0.0207	5.2032	0.3292	99.6708	0.3992	0.0074	1.8428	0.2109	99.7891	0.3961	0.0142	3.5962	0.9703	99.0297
Daucosterol	0.4098	0.0170	4.1452	2.4385	102.4385	0.4090	0.0068	1.6682	2.2420	102.2420	0.4160	0.0084	2.0208	3.9978	103.9978

Day 2	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4053	0.0168	4.1513	1.3125	101.3125	0.4192	0.0071	1.6836	4.7909	104.7909
Triamcinolone acetonide	0.3710	0.0070	1.8954	7.2578	92.7422	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.3981	0.0087	2.1821	0.4799	99.5201	N/A	N/A	N/A	N/A	N/A
Prednisolone	N/A	N/A	N/A	N/A	N/A	0.3992	0.0142	3.5586	0.1887	99.8113
Daucosterol	0.4047	0.0110	2.7261	1.1847	101.1847	0.4177	0.0085	2.0284	4.4234	104.4234

Table S19 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 3

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.4007	0.4090	0.4169	0.4207	0.4207	Betamethasone-17-valerate	0.4082	0.4175	0.4109	0.4135	0.4078	Betamethasone-17-valerate	0.4228	0.4013	0.3978	0.4119	0.4147
Triamcinolone acetonide	0.3755	0.3788	0.3712	0.3875	N/A	Triamcinolone acetonide	0.3683	0.3819	0.3686	0.3745	N/A	Triamcinolone acetonide	0.3799	0.3683	0.3621	0.3750	N/A
Dexamethasone	0.3973	0.4095	0.4056	0.3844	N/A	Dexamethasone	0.4114	0.4161	0.4190	0.4034	N/A	Dexamethasone	0.4184	0.4247	0.4166	0.3971	N/A
Prednisolone	0.4176	0.4056	0.3861	N/A	0.4092	Prednisolone	0.4128	0.4211	0.3943	N/A	0.4077	Prednisolone	0.4280	0.4021	0.3966	N/A	0.3956
Daucosterol	0.4175	0.3934	0.3982	0.3857	0.4124	Daucosterol	0.4081	0.4138	0.3844	0.3919	0.4008	Daucosterol	0.4228	0.4111	0.4092	0.4048	0.3835

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	100.1647	102.2454	104.2156	105.1820	105.1722	Betamethasone-17-valerate	102.0620	104.3754	102.7187	103.3774	101.9614	Betamethasone-17-valerate	105.6988	100.3264	99.4567	102.9672	103.6871
Triamcinolone acetonide	93.8752	94.7053	92.7941	96.8739	N/A	Triamcinolone acetonide	92.0802	95.4835	92.1507	93.6345	N/A	Triamcinolone acetonide	94.9668	92.0677	90.5279	93.7487	N/A
Dexamethasone	99.3247	102.3765	101.4122	96.1041	N/A	Dexamethasone	102.8521	104.0290	104.7513	100.8457	N/A	Dexamethasone	104.6020	106.1830	104.1621	99.2825	N/A
Prednisolone	104.3882	101.3922	96.5328	N/A	102.2998	Prednisolone	103.1991	105.2641	98.5795	N/A	101.9335	Prednisolone	106.9944	100.5146	99.1623	N/A	98.8942
Daucosterol	104.3689	98.3558	99.5489	96.4260	103.0957	Daucosterol	102.0335	103.4576	96.1095	97.9702	100.2110	Daucosterol	105.7093	102.7846	102.3045	101.2023	95.8785

Day 3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4106	0.0112	2.7399	2.6418	102.6418	0.4093	0.0081	1.9796	2.3157	102.3157	0.4085	0.0097	2.3827	2.1303	102.1303
Triamcinolone acetonide	0.3746	0.0058	1.5565	6.3593	93.6407	0.3763	0.0072	1.9028	5.9145	94.0855	0.3673	0.0047	1.2718	8.1758	91.8242
Dexamethasone	0.4090	0.0108	2.6287	2.2596	102.2596	0.4168	0.0076	1.8319	4.1962	104.1962	0.4138	0.0071	1.7229	3.4419	103.4419
Prednisolone	0.4194	0.0078	1.8513	4.8606	104.8606	0.4096	0.0101	2.4682	2.3903	102.3903	0.3924	0.0055	1.4079	1.9085	98.0915
Daucosterol	0.4161	0.0074	1.7881	4.0372	104.0372	0.4061	0.0111	2.7299	1.5327	101.5327	0.3973	0.0124	3.1250	0.6790	99.3210

Day 3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4154	0.0047	1.1347	3.8422	103.8422	0.4144	0.0064	1.5510	3.6069	103.6069
Triamcinolone acetonide	0.3790	0.0074	1.9400	5.2476	94.7524	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.3950	0.0097	2.4469	1.2559	98.7441	N/A	N/A	N/A	N/A	N/A
Prednisolone	N/A	N/A	N/A	N/A	N/A	0.4042	0.0075	1.8502	1.0425	101.0425
Daucosterol	0.3941	0.0097	2.4736	1.4672	98.5328	0.3989	0.0145	3.6426	0.2716	99.7284

Table S19 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Intermediate precision (inter-day precision)

All average (average from day 1 – 3)

Day 1-3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4052	0.0144	3.5582	1.3099	101.3099	0.4085	0.0119	2.9016	2.1253	102.1253	0.4117	0.0091	2.2021	2.9247	102.9247
Triamcinolone acetonide	0.3729	0.0063	1.6793	6.7798	93.2202	0.3738	0.0073	1.9661	6.5423	93.4577	0.3677	0.0043	1.1647	8.0674	91.9326
Dexamethasone	0.4012	0.0107	2.6638	0.2900	100.2900	0.4094	0.0137	3.3530	2.3431	102.3431	0.4098	0.0117	2.8605	2.4566	102.4566
Prednisolone	0.4060	0.0173	4.2650	1.4884	101.4884	0.4080	0.0102	2.4912	2.0023	102.0023	0.4006	0.0134	3.3501	0.1588	100.1588
Daucosterol	0.4151	0.0107	2.5772	3.7711	103.7711	0.4102	0.0082	1.9903	2.5389	102.5389	0.4101	0.0127	3.0863	2.5274	102.5274

Day 1-3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4106	0.0102	2.4909	2.6517	102.6517	0.4155	0.0084	2.0167	3.8635	103.8635
Triamcinolone acetonide	0.3736	0.0082	2.1870	6.6004	93.3996	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.3993	0.0107	2.6735	0.1775	99.8225	N/A	N/A	N/A	N/A	N/A
Prednisolone	N/A	N/A	N/A	N/A	N/A	0.4032	0.0131	3.2511	0.8069	100.8069
Daucosterol	0.3996	0.0113	2.8215	0.0960	99.9040	0.4087	0.0125	3.0477	2.1867	102.1867

Table S19 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 1

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.7777	0.7483	0.8290	0.7547	0.7502	Betamethasone-17-valerate	0.7819	0.7765	0.7814	0.7805	0.7670	Betamethasone-17-valerate	0.7374	0.7624	0.7789	0.8243	0.7357
Triamcinolone acetonide	0.7327	0.7349	0.7859	0.7393	N/A	Triamcinolone acetonide	0.7730	0.7662	0.7681	0.7456	N/A	Triamcinolone acetonide	0.7625	0.7224	0.7493	0.8200	N/A
Dexamethasone	0.7922	0.8059	0.8010	0.7765	N/A	Dexamethasone	0.7586	0.7429	0.7745	0.7659	N/A	Dexamethasone	0.7513	0.8018	0.7626	0.8200	N/A
Prednisolone	0.7802	0.8001	0.8239	N/A	0.7367	Prednisolone	0.8080	0.7852	0.7543	N/A	0.8142	Prednisolone	0.8035	0.7782	0.8169	N/A	0.7566
Daucosterol	0.8430	0.8339	0.8259	0.7902	0.8228	Daucosterol	0.8282	0.8081	0.8042	0.8220	0.8007	Daucosterol	0.7819	0.8041	0.7987	0.8121	0.8320

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	97.2137	93.5395	103.6245	94.3372	93.7692	Betamethasone-17-valerate	97.7354	97.0658	97.6782	97.5589	95.8697	Betamethasone-17-valerate	92.1786	95.2938	97.3666	103.0318	91.9637
Triamcinolone acetonide	91.5867	91.8606	98.2377	92.4085	N/A	Triamcinolone acetonide	96.6284	95.7693	96.0121	93.2043	N/A	Triamcinolone acetonide	95.3107	90.3032	93.6567	102.5012	N/A
Dexamethasone	99.0268	100.7410	100.1226	97.0627	N/A	Dexamethasone	94.8291	92.8609	96.8176	95.7316	N/A	Dexamethasone	93.9176	100.2297	95.3234	102.5015	N/A
Prednisolone	97.5261	100.0158	102.9934	N/A	92.0913	Prednisolone	100.9959	98.1548	94.2887	N/A	101.7786	Prednisolone	100.4363	97.2713	102.1183	N/A	94.5760
Daucosterol	105.3810	104.2415	103.2366	98.7786	102.8465	Daucosterol	103.5304	101.0067	100.5275	102.7555	100.0846	Daucosterol	97.7337	100.5065	99.8363	101.5160	104.0015

Day 1	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.7657	0.0245	3.2063	4.2908	95.7092	0.7624	0.0141	1.8501	4.7003	95.2997	0.7965	0.0282	3.5422	0.4436	99.5564
Triamcinolone acetonide	0.7561	0.0209	2.7667	5.4914	94.5086	0.7412	0.0225	3.0397	7.3556	92.6444	0.7678	0.0183	2.3870	4.0312	95.9688
Dexamethasone	0.7674	0.0218	2.8409	4.0755	95.9245	0.7836	0.0353	4.5020	2.0561	97.9439	0.7794	0.0196	2.5209	2.5788	97.4212
Prednisolone	0.7972	0.0149	1.8693	0.3472	99.6528	0.7878	0.0112	1.4226	1.5193	98.4807	0.7984	0.0383	4.8026	0.1998	99.8002
Daucosterol	0.8177	0.0319	3.9033	2.2150	102.2150	0.8153	0.0162	1.9893	1.9183	101.9183	0.8096	0.0144	1.7759	1.2001	101.2001

Day 1	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.7865	0.0352	4.4712	1.6907	98.3093	0.7509	0.0156	2.0826	6.1325	93.8675
Triamcinolone acetonide	0.7683	0.0449	5.8429	3.9620	96.0380	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.7875	0.0287	3.6438	1.5681	98.4319	N/A	N/A	N/A	N/A	N/A
Prednisolone	N/A	N/A	N/A	N/A	N/A	0.7692	0.0403	5.2330	3.8514	96.1486
Daucosterol	0.8081	0.0163	2.0144	1.0167	101.0167	0.8185	0.0161	1.9672	2.3108	102.3108

Table S19 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 2

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.7553	0.7527	0.7423	0.7683	0.7486	Betamethasone-17-valerate	0.7868	0.7939	0.8297	0.7924	0.7779	Betamethasone-17-valerate	0.7799	0.7375	0.7373	0.7326	0.7619
Triamcinolone acetonide	0.7778	0.7547	0.7760	0.7317	N/A	Triamcinolone acetonide	0.7517	0.7372	0.7777	0.7646	N/A	Triamcinolone acetonide	0.7381	0.7459	0.7388	0.7588	N/A
Dexamethasone	0.7681	0.8296	0.7828	0.7986	N/A	Dexamethasone	0.7929	0.7794	0.7608	0.7434	N/A	Dexamethasone	0.8069	0.7777	0.7641	0.7813	N/A
Prednisolone	0.7839	0.7974	0.8235	N/A	0.8019	Prednisolone	0.7980	0.8287	0.8025	N/A	0.7599	Prednisolone	0.8381	0.8136	0.7981	N/A	0.7732
Daucosterol	0.8092	0.8306	0.8294	0.8318	0.8343	Daucosterol	0.8402	0.8335	0.7835	0.8272	0.8468	Daucosterol	0.8385	0.8161	0.8505	0.7944	0.8054

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	94.4171	94.0828	92.7900	96.0393	93.5760	Betamethasone-17-valerate	98.3468	99.2422	103.7132	99.0449	97.2335	Betamethasone-17-valerate	97.4829	92.1934	92.1589	91.5791	95.2316
Triamcinolone acetonide	97.2209	94.3332	97.0051	91.4663	N/A	Triamcinolone acetonide	93.9566	92.1501	97.2167	95.5784	N/A	Triamcinolone acetonide	92.2601	93.2386	92.3462	94.8448	N/A
Dexamethasone	96.0132	103.7011	97.8508	99.8190	N/A	Dexamethasone	99.1113	97.4312	95.0969	92.9298	N/A	Dexamethasone	100.8579	97.2088	95.5165	97.6682	N/A
Prednisolone	97.9824	99.6728	102.9418	N/A	100.2431	Prednisolone	99.7544	103.5813	100.3131	N/A	94.9823	Prednisolone	104.7570	101.6961	99.7644	N/A	96.6460
Daucosterol	101.1450	103.8241	103.6768	103.9724	104.2816	Daucosterol	105.0209	104.1897	97.9356	103.3949	105.8512	Daucosterol	104.8163	102.0071	106.3132	99.3052	100.6712

Day 2	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.7740	0.0165	2.1345	3.2511	96.7489	0.7614	0.0292	3.8337	4.8272	95.1728	0.7698	0.0520	6.7515	3.7793	96.2207
Triamcinolone acetonide	0.7558	0.0202	2.6687	5.5208	94.4792	0.7459	0.0087	1.1707	6.7594	93.2406	0.7642	0.0220	2.8820	4.4773	95.5227
Dexamethasone	0.7893	0.0196	2.4868	1.3392	98.6608	0.7956	0.0295	3.7063	0.5530	99.4470	0.7692	0.0119	1.5431	3.8453	96.1547
Prednisolone	0.8067	0.0281	3.4844	0.8313	100.8313	0.8132	0.0156	1.9229	1.6501	101.6501	0.8081	0.0136	1.6815	1.0064	101.0064
Daucosterol	0.8293	0.0174	2.1041	3.6607	103.6607	0.8267	0.0094	1.1312	3.3403	103.3403	0.8211	0.0343	4.1734	2.6419	102.6419

Day 2	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.7644	0.0301	3.9312	4.4456	95.5544	0.7628	0.0147	1.9209	4.6530	95.3470
Triamcinolone acetonide	0.7517	0.0175	2.3341	6.0368	93.9632	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.7744	0.0282	3.6409	3.1943	96.8057	N/A	N/A	N/A	N/A	N/A
Prednisolone	N/A	N/A	N/A	N/A	N/A	0.7783	0.0215	2.7638	2.7095	97.2905
Daucosterol	0.8178	0.0204	2.4890	2.2241	102.2241	0.8288	0.0212	2.5639	3.6013	103.6013

Table S19 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 3

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.7534	0.8081	0.7872	0.8078	0.7481	Betamethasone-17-valerate	0.8224	0.7835	0.8168	0.7838	0.7797	Betamethasone-17-valerate	0.7896	0.8520	0.8121	0.7938	0.8481
Triamcinolone acetonide	0.7332	0.7385	0.7519	0.7508	N/A	Triamcinolone acetonide	0.7224	0.7529	0.7446	0.7340	N/A	Triamcinolone acetonide	0.7644	0.7845	0.7300	0.7601	N/A
Dexamethasone	0.8038	0.8347	0.8131	0.7812	N/A	Dexamethasone	0.7919	0.7668	0.8114	0.8060	N/A	Dexamethasone	0.7691	0.8136	0.7724	0.7996	N/A
Prednisolone	0.7749	0.8028	0.8036	N/A	0.7993	Prednisolone	0.8208	0.8114	0.7871	N/A	0.8162	Prednisolone	0.8095	0.7855	0.8268	N/A	0.8402
Daucosterol	0.8385	0.8111	0.8457	0.8303	0.8309	Daucosterol	0.8179	0.8026	0.8220	0.8186	0.7985	Daucosterol	0.8300	0.8390	0.8206	0.8058	0.8111

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	94.1706	101.0073	98.3981	100.9718	93.5168	Betamethasone-17-valerate	102.7991	97.9336	102.0970	97.9760	97.4642	Betamethasone-17-valerate	98.6968	106.4990	101.5162	99.2284	106.0119
Triamcinolone acetonide	91.6552	92.3109	93.9836	93.8497	N/A	Triamcinolone acetonide	90.3011	94.1091	93.0798	91.7486	N/A	Triamcinolone acetonide	95.5503	98.0603	91.2484	95.0160	N/A
Dexamethasone	100.4748	104.3341	101.6411	97.6454	N/A	Dexamethasone	98.9863	95.8460	101.4212	100.7483	N/A	Dexamethasone	96.1415	101.7028	96.5522	99.9513	N/A
Prednisolone	96.8625	100.3439	100.4546	N/A	99.9092	Prednisolone	102.5971	101.4264	98.3821	N/A	102.0250	Prednisolone	101.1924	98.1823	103.3465	N/A	105.0276
Daucosterol	104.8081	101.3905	105.7148	103.7859	103.8650	Daucosterol	102.2399	100.3201	102.7455	102.3263	99.8072	Daucosterol	103.7495	104.8772	102.5791	100.7266	101.3896

Day 3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.7884	0.0345	4.3792	1.4445	98.5555	0.8145	0.0347	4.2619	1.8133	101.8133	0.8054	0.0159	1.9760	0.6704	100.6704
Triamcinolone acetonide	0.7400	0.0218	2.9461	7.4978	92.5022	0.7586	0.0235	3.1015	5.1732	94.8268	0.7422	0.0111	1.5021	7.2294	92.7706
Dexamethasone	0.7883	0.0176	2.2345	1.4658	98.5342	0.8050	0.0348	4.3179	0.6277	100.6277	0.7990	0.0230	2.8804	0.1285	99.8715
Prednisolone	0.8017	0.0239	2.9826	0.2173	100.2173	0.7999	0.0132	1.6519	0.0158	99.9842	0.8058	0.0199	2.4754	0.7278	100.7278
Daucosterol	0.8288	0.0103	1.2458	3.5992	103.5992	0.8176	0.0191	2.3317	2.1960	102.1960	0.8294	0.0141	1.7017	3.6798	103.6798

Day 3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.7951	0.0120	1.5138	0.6079	99.3921	0.7920	0.0511	6.4518	1.0024	98.9976
Triamcinolone acetonide	0.7483	0.0132	1.7702	6.4619	93.5381	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.7956	0.0129	1.6204	0.5516	99.4484	N/A	N/A	N/A	N/A	N/A
Prednisolone	N/A	N/A	N/A	N/A	N/A	0.8186	0.0206	2.5136	2.3206	102.3206
Daucosterol	0.8182	0.0122	1.4961	2.2796	102.2796	0.8135	0.0164	2.0113	1.6873	101.6873

Table S19 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **CHCl₃: EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Intermediate precision (inter-day precision)

All average (average from day 1 – 3)

Day 1-3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.7760	0.0248	3.1996	2.9954	97.0046	0.7794	0.0354	4.5475	2.5714	97.4286	0.7905	0.0346	4.3726	1.1842	98.8158
Triamcinolone acetonide	0.7506	0.0198	2.6424	6.1700	93.8300	0.7486	0.0186	2.4828	6.4294	93.5706	0.7580	0.0195	2.5726	5.2460	94.7540
Dexamethasone	0.7817	0.0202	2.5816	2.2935	97.7065	0.7947	0.0303	3.8112	0.6605	99.3395	0.7825	0.0209	2.6669	2.1842	97.8158
Prednisolone	0.8019	0.0203	2.5333	0.2338	100.2338	0.8003	0.0160	2.0025	0.0383	100.0383	0.8041	0.0231	2.8694	0.5114	100.5114
Daucosterol	0.8253	0.0197	2.3915	3.1583	103.1583	0.8199	0.0143	1.7496	2.4848	102.4848	0.8201	0.0217	2.6423	2.5073	102.5073

Day 1-3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.7820	0.0276	3.5231	2.2481	97.7519	0.7686	0.0332	4.3197	3.9293	96.0707
Triamcinolone acetonide	0.7561	0.0267	3.5254	5.4869	94.5131	N/A	N/A	N/A	N/A	N/A
Dexamethasone	0.7858	0.0231	2.9336	1.7713	98.2287	N/A	N/A	N/A	N/A	N/A
Prednisolone	N/A	N/A	N/A	N/A	N/A	0.7887	0.0338	4.2888	1.4134	98.5866
Daucosterol	0.8147	0.0152	1.8685	1.8402	101.8402	0.8203	0.0170	2.0774	2.5331	102.5331

Table S20 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: *tert*-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)** mobile phase system

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 1

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.3935	0.4274	0.4257	0.3858	N/A	Betamethasone-17-valerate	0.4264	0.4139	0.4161	0.4108	N/A	Betamethasone-17-valerate	0.4118	0.4064	0.4006	0.4028	N/A
Triamcinolone acetonide	0.3936	0.3746	0.3685	0.3735	0.3994	Triamcinolone acetonide	0.3997	0.3655	0.3868	0.3952	0.3773	Triamcinolone acetonide	0.3652	0.3718	0.3862	0.3958	0.3876
Dexamethasone	0.4067	0.3871	0.4159	0.3850	N/A	Dexamethasone	0.4213	0.3769	0.3909	0.4009	N/A	Dexamethasone	0.4143	0.4099	0.3820	0.3682	N/A
Prednisolone	0.3833	0.4069	0.3913	0.4007	0.4063	Prednisolone	0.4095	0.3957	0.4188	0.3863	0.3876	Prednisolone	0.4165	0.3835	0.4046	0.3931	0.4081
Daucosterol	0.3712	0.3835	0.3790	0.4223	0.4233	Daucosterol	0.4126	0.4006	0.4064	0.4182	0.4087	Daucosterol	0.4068	0.4083	0.4067	0.4138	0.4140

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	98.3686	106.8613	106.4230	96.4523	N/A	Betamethasone-17-valerate	106.6109	103.4840	104.0266	102.7117	N/A	Betamethasone-17-valerate	102.9470	101.5923	100.1560	100.7062	N/A
Triamcinolone acetonide	98.4087	93.6567	92.1174	93.3846	99.8610	Triamcinolone acetonide	99.9212	91.3633	96.6975	98.8125	94.3149	Triamcinolone acetonide	91.2986	92.9540	96.5436	98.9463	96.9117
Dexamethasone	101.6859	96.7820	103.9801	96.2446	N/A	Dexamethasone	105.3359	94.2334	97.7327	100.2284	N/A	Dexamethasone	103.5852	102.4778	95.4996	92.0532	N/A
Prednisolone	95.8133	101.7245	97.8348	100.1832	101.5777	Prednisolone	102.3681	98.9339	104.7115	96.5823	96.9123	Prednisolone	104.1290	95.8677	101.1601	98.2804	102.0282
Daucosterol	92.8051	95.8851	94.7424	105.5670	105.8273	Daucosterol	103.1378	100.1411	101.6016	104.5423	102.1782	Daucosterol	101.7045	102.0693	101.6757	103.4541	103.4995

Day 1	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4106	0.0165	4.0233	2.6422	102.6422	0.4159	0.0107	2.5671	3.9792	103.9792	0.4141	0.0126	3.0543	3.5352	103.5352
Triamcinolone acetonide	0.3862	0.0184	4.7690	3.4572	96.5428	0.3706	0.0047	1.2681	7.3420	92.6580	0.3805	0.0104	2.7345	4.8805	95.1195
Dexamethasone	0.4141	0.0073	1.7631	3.5357	103.5357	0.3913	0.0169	4.3147	2.1689	97.8311	0.3963	0.0176	4.4370	0.9292	99.0708
Prednisolone	0.4031	0.0175	4.3486	0.7701	100.7701	0.3954	0.0117	2.9638	1.1579	98.8421	0.4049	0.0138	3.3970	1.2355	101.2355
Daucosterol	0.3969	0.0224	5.6421	0.7842	99.2158	0.3975	0.0127	3.1845	0.6349	99.3651	0.3974	0.0159	4.0082	0.6601	99.3399

Day 1	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.3998	0.0128	3.1977	0.0433	99.9567	N/A	N/A	N/A	N/A	N/A
Triamcinolone acetonide	0.3882	0.0127	3.2697	2.9522	97.0478	0.3881	0.0111	2.8599	2.9708	97.0292
Dexamethasone	0.3847	0.0164	4.2506	3.8246	96.1754	N/A	N/A	N/A	N/A	N/A
Prednisolone	0.3934	0.0072	1.8317	1.6514	98.3486	0.4007	0.0113	2.8277	0.1727	100.1727
Daucosterol	0.4181	0.0042	1.0109	4.5211	104.5211	0.4153	0.0074	1.7793	3.8350	103.8350

Table S20 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: *tert*-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 2

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.4155	0.4194	0.4118	0.3912	N/A	Betamethasone-17-valerate	0.4035	0.4109	0.3985	0.3931	N/A	Betamethasone-17-valerate	0.3968	0.4059	0.4190	0.4075	N/A
Triamcinolone acetonide	0.3960	0.3849	0.4022	0.3660	0.4054	Triamcinolone acetonide	0.3670	0.3734	0.3673	0.3687	0.3788	Triamcinolone acetonide	0.3717	0.3672	0.3730	0.3812	0.3822
Dexamethasone	0.3927	0.3980	0.4185	0.3876	N/A	Dexamethasone	0.4163	0.4165	0.4076	0.3870	N/A	Dexamethasone	0.3947	0.4065	0.4186	0.4034	N/A
Prednisolone	0.3862	0.3910	0.3823	0.3751	0.3841	Prednisolone	0.3792	0.4041	0.3990	0.4044	0.3807	Prednisolone	0.3975	0.3941	0.4055	0.4034	0.4009
Daucosterol	0.4122	0.4236	0.4218	0.4043	0.3837	Daucosterol	0.3949	0.4178	0.4010	0.4144	0.4005	Daucosterol	0.4175	0.4037	0.4209	0.4219	0.4117

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	103.8767	104.8463	102.9546	97.8051	N/A	Betamethasone-17-valerate	100.8865	102.7288	99.6152	98.2700	N/A	Betamethasone-17-valerate	99.2092	101.4671	104.7552	101.8731	N/A
Triamcinolone acetonide	98.9999	96.2156	100.5481	91.4883	101.3557	Triamcinolone acetonide	91.7493	93.3533	91.8140	92.1821	94.6897	Triamcinolone acetonide	92.9138	91.7917	93.2463	95.2943	95.5531
Dexamethasone	98.1744	99.4895	104.6356	96.9062	N/A	Dexamethasone	104.0677	104.1226	101.8976	96.7495	N/A	Dexamethasone	98.6711	101.6330	104.6539	100.8574	N/A
Prednisolone	96.5509	97.7589	95.5674	93.7867	96.0327	Prednisolone	94.7950	101.0215	99.7459	101.0941	95.1812	Prednisolone	99.3778	98.5164	101.3697	100.8400	100.2178
Daucosterol	103.0561	105.9014	105.4580	101.0643	95.9199	Daucosterol	98.7138	104.4485	100.2470	103.5979	100.1244	Daucosterol	104.3773	100.9190	105.2340	105.4777	102.9350

Day 2	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4053	0.0095	2.3335	1.3241	101.3241	0.4121	0.0068	1.6576	3.0141	103.0141	0.4098	0.0104	2.5460	2.4417	102.4417
Triamcinolone acetonide	0.3782	0.0156	4.1180	5.4457	94.5543	0.3751	0.0090	2.3923	6.2131	93.7869	0.3808	0.0187	4.9203	4.7972	95.2028
Dexamethasone	0.4012	0.0131	3.2586	0.3044	100.3044	0.4070	0.0093	2.2789	1.7484	101.7484	0.4149	0.0063	1.5291	3.7291	103.7291
Prednisolone	0.3876	0.0092	2.3859	3.0921	96.9079	0.3964	0.0068	1.7231	0.9010	99.0990	0.3956	0.0120	3.0269	1.1057	98.8943
Daucosterol	0.4082	0.0119	2.9035	2.0491	102.0491	0.4150	0.0102	2.4696	3.7563	103.7563	0.4146	0.0118	2.8424	3.6463	103.6463

Day 2	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.3973	0.0089	2.2420	0.6839	99.3161	N/A	N/A	N/A	N/A	N/A
Triamcinolone acetonide	0.3720	0.0081	2.1799	7.0118	92.9882	0.3888	0.0145	3.7297	2.8005	97.1995
Dexamethasone	0.3927	0.0093	2.3712	1.8290	98.1710	N/A	N/A	N/A	N/A	N/A
Prednisolone	0.3943	0.0166	4.2075	1.4264	98.5736	0.3886	0.0108	2.7752	2.8561	97.1439
Daucosterol	0.4135	0.0089	2.1423	3.3799	103.3799	0.3986	0.0141	3.5426	0.3402	99.6598

Table S20 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: *tert*-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Repeatability (intra-day precision)

Day 3

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.4005	0.4043	0.3986	0.4111	N/A	Betamethasone-17-valerate	0.3982	0.3889	0.4115	0.3969	N/A	Betamethasone-17-valerate	0.4235	0.3940	0.3949	0.3981	N/A
Triamcinolone acetonide	0.3660	0.3753	0.3723	0.3728	0.3731	Triamcinolone acetonide	0.3824	0.3644	0.3905	0.3609	0.3690	Triamcinolone acetonide	0.3964	0.3699	0.3679	0.3781	0.3932
Dexamethasone	0.4153	0.4083	0.3884	0.3963	N/A	Dexamethasone	0.4030	0.4173	0.4061	0.3891	N/A	Dexamethasone	0.3816	0.3735	0.4090	0.4173	N/A
Prednisolone	0.3936	0.3927	0.3954	0.3820	0.3882	Prednisolone	0.3841	0.4120	0.4047	0.3996	0.3870	Prednisolone	0.3981	0.3945	0.3820	0.3789	0.4052
Daucosterol	0.3958	0.4196	0.4138	0.4110	0.3972	Daucosterol	0.4142	0.4083	0.4024	0.3905	0.4051	Daucosterol	0.4091	0.4023	0.4189	0.4059	0.4194

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	100.1332	101.0686	99.6437	102.7763	N/A	Betamethasone-17-valerate	99.5583	97.2169	102.8768	99.2206	N/A	Betamethasone-17-valerate	105.8861	98.4976	98.7196	99.5260	N/A
Triamcinolone acetonide	91.5106	93.8285	93.0678	93.1905	93.2641	Triamcinolone acetonide	95.6066	91.0912	97.6234	90.2345	92.2557	Triamcinolone acetonide	99.0913	92.4743	91.9679	94.5179	98.2882
Dexamethasone	103.8295	102.0870	97.1077	99.0864	N/A	Dexamethasone	100.7495	104.3181	101.5149	97.2645	N/A	Dexamethasone	95.3876	93.3702	102.2376	104.3282	N/A
Prednisolone	98.3943	98.1863	98.8415	95.5080	97.0460	Prednisolone	96.0212	103.0051	101.1849	99.8993	96.7457	Prednisolone	99.5148	98.6204	95.4931	94.7340	101.2971
Daucosterol	98.9469	104.8934	103.4571	102.7624	99.3026	Daucosterol	103.5540	102.0768	100.5966	97.6150	101.2838	Daucosterol	102.2645	100.5648	104.7315	101.4805	104.8465

Day 3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4074	0.0140	3.4353	1.8592	101.8592	0.3957	0.0078	1.9828	1.0723	98.9277	0.4017	0.0087	2.1739	0.4134	100.4134
Triamcinolone acetonide	0.3816	0.0152	3.9773	4.5972	95.4028	0.3699	0.0055	1.4803	7.5353	92.4647	0.3769	0.0120	3.1825	5.7803	94.2197
Dexamethasone	0.4000	0.0171	4.2725	0.0111	99.9889	0.3997	0.0231	5.7896	0.0749	99.9251	0.4011	0.0111	2.7688	0.2868	100.2868
Prednisolone	0.3919	0.0071	1.8207	2.0232	97.9768	0.3997	0.0107	2.6674	0.0627	99.9373	0.3940	0.0114	2.9040	1.4935	98.5065
Daucosterol	0.4064	0.0095	2.3396	1.5885	101.5885	0.4100	0.0088	2.1430	2.5117	102.5117	0.4117	0.0085	2.0573	2.9284	102.9284

Day 3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4020	0.0079	1.9607	0.5076	100.5076	N/A	N/A	N/A	N/A	N/A
Triamcinolone acetonide	0.3706	0.0088	2.3667	7.3524	92.6476	0.3784	0.0129	3.4157	5.3973	94.6027
Dexamethasone	0.4009	0.0147	3.6590	0.2264	100.2264	N/A	N/A	N/A	N/A	N/A
Prednisolone	0.3869	0.0111	2.8805	3.2862	96.7138	0.3935	0.0102	2.5879	1.6371	98.3629
Daucosterol	0.4025	0.0107	2.6631	0.6193	100.6193	0.4072	0.0112	2.7594	1.8110	101.8110

Table S20 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: *tert*-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)** mobile phase system (continued)

Spiked sample (0.4 mg/mL)

Intermediate precision (inter-day precision)

All average (average from day 1 – 3)

Day 1-3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.4078	0.0120	2.9513	1.9418	101.9418	0.4079	0.0119	2.9199	1.9737	101.9737	0.4085	0.0108	2.6407	2.1301	102.1301
Triamcinolone acetonide	0.3820	0.0147	3.8383	4.5000	95.5000	0.3719	0.0063	1.6851	7.0301	92.9699	0.3794	0.0124	3.2748	5.1527	94.8473
Dexamethasone	0.4051	0.0132	3.2684	1.2763	101.2763	0.3993	0.0165	4.1357	0.1652	99.8348	0.4041	0.0137	3.3952	1.0289	101.0289
Prednisolone	0.3942	0.0126	3.1952	1.4484	98.5516	0.3972	0.0089	2.2287	0.7072	99.2928	0.3982	0.0119	2.9931	0.4546	99.5454
Daucosterol	0.4038	0.0145	3.5955	0.9511	100.9511	0.4075	0.0121	2.9760	1.8777	101.8777	0.4079	0.0134	3.2887	1.9716	101.9716

Day 1-3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.3997	0.0090	2.2447	0.0732	99.9268	N/A	N/A	N/A	N/A	N/A
Triamcinolone acetonide	0.3769	0.0122	3.2261	5.7721	94.2279	0.3851	0.0123	3.1851	3.7229	96.2771
Dexamethasone	0.3928	0.0138	3.5238	1.8091	98.1909	N/A	N/A	N/A	N/A	N/A
Prednisolone	0.3915	0.0112	2.8579	2.1213	97.8787	0.3942	0.0107	2.7196	1.4401	98.5599
Daucosterol	0.4114	0.0101	2.4443	2.8401	102.8401	0.4071	0.0121	2.9824	1.7686	101.7686

Table S20 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: *tert*-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 1

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.8308	0.8076	0.8393	0.7959	N/A	Betamethasone-17-valerate	0.8259	0.8240	0.7914	0.8321	N/A	Betamethasone-17-valerate	0.7847	0.8379	0.8186	0.8146	N/A
Triamcinolone acetonide	0.7654	0.7424	0.7345	0.7218	0.7714	Triamcinolone acetonide	0.7515	0.7516	0.7333	0.7286	0.7496	Triamcinolone acetonide	0.7706	0.7311	0.7565	0.7506	0.7737
Dexamethasone	0.8259	0.8518	0.8006	0.7861	N/A	Dexamethasone	0.8241	0.8039	0.8346	0.8163	N/A	Dexamethasone	0.7890	0.8199	0.7632	0.8263	N/A
Prednisolone	0.8137	0.8052	0.8300	0.8088	0.8172	Prednisolone	0.7804	0.7670	0.7834	0.7480	0.7893	Prednisolone	0.7900	0.7890	0.7778	0.7711	0.7891
Daucosterol	0.8129	0.8395	0.8065	0.8061	0.7992	Daucosterol	0.8101	0.7764	0.8092	0.7703	0.8007	Daucosterol	0.7667	0.7376	0.7631	0.7735	0.7730

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	103.8547	100.9546	104.9182	99.4888	N/A	Betamethasone-17-valerate	103.2324	103.0009	98.9301	104.0094	N/A	Betamethasone-17-valerate	98.0819	104.7351	102.3302	101.8312	N/A
Triamcinolone acetonide	95.6783	92.8015	91.8099	90.2292	96.4246	Triamcinolone acetonide	93.9337	93.9527	91.6660	91.0714	93.6984	Triamcinolone acetonide	96.3231	91.3815	94.5573	93.8222	96.7112
Dexamethasone	103.2400	106.4726	100.0796	98.2607	N/A	Dexamethasone	103.0110	100.4867	104.3301	102.0399	N/A	Dexamethasone	98.6312	102.4898	95.3965	103.2898	N/A
Prednisolone	101.7146	100.6560	103.7535	101.1049	102.1503	Prednisolone	97.5485	95.8793	97.9231	93.5004	98.6592	Prednisolone	98.7549	98.6195	97.2251	96.3867	98.6344
Daucosterol	101.6128	104.9342	100.8152	100.7592	99.9048	Daucosterol	101.2579	97.0450	101.1466	96.2913	100.0834	Daucosterol	95.8350	92.1950	95.3923	96.6879	96.6235

Day 1	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8138	0.0253	3.1149	1.7230	101.7230	0.8232	0.0151	1.8391	2.8969	102.8969	0.8165	0.0240	2.9426	2.0595	102.0595
Triamcinolone acetonide	0.7625	0.0099	1.2969	4.6883	95.3117	0.7417	0.0103	1.3892	7.2881	92.7119	0.7414	0.0130	1.7581	7.3223	92.6777
Dexamethasone	0.8130	0.0208	2.5557	1.6274	101.6274	0.8252	0.0244	2.9540	3.1497	103.1497	0.7995	0.0357	4.4714	0.0646	99.9354
Prednisolone	0.7947	0.0171	2.1579	0.6607	99.3393	0.7871	0.0192	2.4363	1.6151	98.3849	0.7971	0.0287	3.5979	0.3661	99.6339
Daucosterol	0.7965	0.0259	3.2522	0.4314	99.5686	0.7845	0.0514	6.5570	1.9419	98.0581	0.7929	0.0258	3.2596	0.8820	99.1180

Day 1	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8142	0.0181	2.2213	1.7765	101.7765	N/A	N/A	N/A	N/A	N/A
Triamcinolone acetonide	0.7337	0.0150	2.0490	8.2924	91.7076	0.7649	0.0133	1.7393	4.3886	95.6114
Dexamethasone	0.8096	0.0209	2.5874	1.1968	101.1968	N/A	N/A	N/A	N/A	N/A
Prednisolone	0.7760	0.0307	3.9577	3.0027	96.9973	0.7985	0.0162	2.0266	0.1854	99.8146
Daucosterol	0.7833	0.0198	2.5257	2.0872	97.9128	0.7910	0.0156	1.9703	1.1294	98.8706

Table S20 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: *tert*-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 2

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.8168	0.8174	0.8102	0.8183	N/A	Betamethasone-17-valerate	0.8325	0.8484	0.8407	0.8548	N/A	Betamethasone-17-valerate	0.8186	0.8414	0.8054	0.8123	N/A
Triamcinolone acetonide	0.7897	0.7334	0.7411	0.7449	0.7664	Triamcinolone acetonide	0.7358	0.7439	0.7839	0.7687	0.7830	Triamcinolone acetonide	0.7428	0.7813	0.7565	0.7222	0.7695
Dexamethasone	0.8407	0.8529	0.8489	0.8465	N/A	Dexamethasone	0.8558	0.7959	0.7806	0.7944	N/A	Dexamethasone	0.8299	0.8238	0.7935	0.8004	N/A
Prednisolone	0.7570	0.7655	0.7925	0.7614	0.7864	Prednisolone	0.7733	0.7829	0.7937	0.7919	0.7437	Prednisolone	0.7559	0.8008	0.7484	0.7506	0.7877
Daucosterol	0.8094	0.7972	0.7793	0.7699	0.7686	Daucosterol	0.7801	0.7763	0.7453	0.7578	0.7453	Daucosterol	0.7677	0.7709	0.7768	0.7307	0.7382

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	102.0987	102.1727	101.2781	102.2932	N/A	Betamethasone-17-valerate	104.0625	106.0453	105.0823	106.8555	N/A	Betamethasone-17-valerate	102.3311	105.1772	100.6700	101.5380	N/A
Triamcinolone acetonide	98.7180	91.6727	92.6331	93.1072	95.8044	Triamcinolone acetonide	91.9794	92.9923	97.9862	96.0933	97.8769	Triamcinolone acetonide	92.8439	97.6650	94.5673	90.2761	96.1836
Dexamethasone	105.0843	106.6171	106.1174	105.8090	N/A	Dexamethasone	106.9713	99.4872	97.5798	99.2969	N/A	Dexamethasone	103.7428	102.9733	99.1920	100.0480	N/A
Prednisolone	94.6284	95.6878	99.0577	95.1738	98.2961	Prednisolone	96.6615	97.8687	99.2112	98.9859	92.9641	Prednisolone	94.4848	100.1040	93.5516	93.8197	98.4628
Daucosterol	101.1807	99.6445	97.4166	96.2315	96.0794	Daucosterol	97.5082	97.0344	93.1652	94.7309	93.1584	Daucosterol	95.9629	96.3670	97.0957	91.3323	92.2775

Day 2	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8226	0.0086	1.0435	2.8308	102.8308	0.8357	0.0163	1.9453	4.4651	104.4651	0.8187	0.0191	2.3366	2.3435	102.3435
Triamcinolone acetonide	0.7561	0.0293	3.8794	5.4862	94.5138	0.7529	0.0252	3.3457	5.8900	94.1100	0.7605	0.0217	2.8515	4.9378	95.0622
Dexamethasone	0.8421	0.0130	1.5408	5.2661	105.2661	0.8242	0.0285	3.4605	3.0259	103.0259	0.8077	0.0363	4.4927	0.9631	100.9631
Prednisolone	0.7621	0.0097	1.2780	4.7418	95.2582	0.7831	0.0177	2.2558	2.1132	97.8868	0.7782	0.0258	3.3146	2.7265	97.2735
Daucosterol	0.7857	0.0214	2.7288	1.7828	98.2172	0.7815	0.0139	1.7731	2.3180	97.6820	0.7671	0.0189	2.4688	4.1075	95.8925

Day 2	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8285	0.0230	2.7780	3.5622	103.5622	N/A	N/A	N/A	N/A	N/A
Triamcinolone acetonide	0.7453	0.0233	3.1226	6.8412	93.1588	0.7730	0.0088	1.1421	3.3784	96.6216
Dexamethasone	0.8137	0.0285	3.5026	1.7180	101.7180	N/A	N/A	N/A	N/A	N/A
Prednisolone	0.7679	0.0214	2.7906	4.0069	95.9931	0.7726	0.0250	3.2386	3.4257	96.5743
Daucosterol	0.7528	0.0201	2.6676	5.9017	94.0983	0.7507	0.0159	2.1208	6.1616	93.8384

Table S20 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: *tert*-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Repeatability (intra-day precision)

Day 3

No.1	Conc. Recovery (mg/mL)					No.2	Conc. Recovery (mg/mL)					No.3	Conc. Recovery (mg/mL)				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	0.8262	0.8308	0.8260	0.7755	N/A	Betamethasone-17-valerate	0.7964	0.8013	0.8487	0.7987	N/A	Betamethasone-17-valerate	0.8241	0.7976	0.8048	0.8414	N/A
Triamcinolone acetonide	0.7215	0.7392	0.7369	0.7204	0.7659	Triamcinolone acetonide	0.7292	0.7328	0.7781	0.7552	0.7673	Triamcinolone acetonide	0.7546	0.7531	0.7381	0.7242	0.7293
Dexamethasone	0.8366	0.8320	0.8242	0.7975	N/A	Dexamethasone	0.8147	0.8550	0.8451	0.8252	N/A	Dexamethasone	0.8432	0.7707	0.8303	0.7873	N/A
Prednisolone	0.7638	0.7766	0.7621	0.7736	0.7586	Prednisolone	0.7499	0.7948	0.7904	0.7394	0.7514	Prednisolone	0.7896	0.7441	0.7689	0.7554	0.7749
Daucosterol	0.7497	0.7721	0.7793	0.7816	0.7784	Daucosterol	0.7765	0.7577	0.7629	0.7438	0.7697	Daucosterol	0.7711	0.7970	0.7929	0.7844	0.7884

No.1	%Recovery					No.2	%Recovery					No.3	%Recovery				
	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Betamethasone-17-valerate	103.2798	103.8509	103.2514	96.9388	N/A	Betamethasone-17-valerate	99.5562	100.1672	106.0889	99.8408	N/A	Betamethasone-17-valerate	103.0123	99.7004	100.5941	105.1753	N/A
Triamcinolone acetonide	90.1880	92.3966	92.1155	90.0530	95.7341	Triamcinolone acetonide	91.1473	91.5990	97.2623	94.4033	95.9070	Triamcinolone acetonide	94.3219	94.1356	92.2627	90.5259	91.1685
Dexamethasone	104.5733	103.9952	103.0272	99.6928	N/A	Dexamethasone	101.8404	106.8808	105.6410	103.1453	N/A	Dexamethasone	105.3957	96.3421	103.7855	98.4083	N/A
Prednisolone	95.4782	97.0765	95.2629	96.7044	94.8206	Prednisolone	93.7413	99.3440	98.8052	92.4211	93.9196	Prednisolone	98.7062	93.0127	96.1153	94.4262	96.8686
Daucosterol	93.7070	96.5085	97.4143	97.6981	97.2940	Daucosterol	97.0662	94.7180	95.3582	92.9730	96.2096	Daucosterol	96.3897	99.6278	99.1132	98.0447	98.5502

Day 3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8156	0.0166	2.0372	1.9494	101.9494	0.8099	0.0182	2.2457	1.2395	101.2395	0.8265	0.0220	2.6598	3.3115	103.3115
Triamcinolone acetonide	0.7351	0.0173	2.3547	8.1143	91.8857	0.7417	0.0104	1.3991	7.2896	92.7104	0.7510	0.0234	3.1209	6.1198	93.8802
Dexamethasone	0.8315	0.0149	1.7907	3.9365	103.9365	0.8192	0.0436	5.3181	2.4060	102.4060	0.8332	0.0108	1.2911	4.1513	104.1513
Prednisolone	0.7678	0.0202	2.6251	4.0247	95.9753	0.7718	0.0257	3.3249	3.5222	96.4778	0.7738	0.0148	1.9114	3.2722	96.7278
Daucosterol	0.7658	0.0142	1.8561	4.2790	95.7210	0.7756	0.0199	2.5628	3.0485	96.9515	0.7784	0.0150	1.9326	2.7047	97.2953

Day 3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8052	0.0334	4.1507	0.6516	100.6516	N/A	N/A	N/A	N/A	N/A
Triamcinolone acetonide	0.7333	0.0191	2.6040	8.3392	91.6608	0.7542	0.0215	2.8506	5.7302	94.2698
Dexamethasone	0.8033	0.0196	2.4397	0.4155	100.4155	N/A	N/A	N/A	N/A	N/A
Prednisolone	0.7561	0.0171	2.2674	5.4828	94.5172	0.7616	0.0121	1.5874	4.7971	95.2029
Daucosterol	0.7699	0.0227	2.9442	3.7614	96.2386	0.7788	0.0094	1.2032	2.6487	97.3513

Table S20 The recovery concentration, %recovery, standard deviation, percent relative standard deviation (%RSD) and %error of five spiked sample at 0.4 and 0.8 mg/mL under **DCM: *tert*-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)** mobile phase system (continued)

Spiked sample (0.8 mg/mL)

Intermediate precision (inter-day precision)

All average (average from day 1 – 3)

Day 1-3	A					B					C				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8173	0.0163	1.9899	2.1677	102.1677	0.8229	0.0182	2.2107	2.8671	102.8671	0.8206	0.0194	2.3672	2.5715	102.5715
Triamcinolone acetonide	0.7512	0.0216	2.8818	6.0963	93.9037	0.7454	0.0156	2.0929	6.8226	93.1774	0.7510	0.0191	2.5462	6.1266	93.8734
Dexamethasone	0.8289	0.0192	2.3149	3.6100	103.6100	0.8229	0.0289	3.5097	2.8605	102.8605	0.8135	0.0302	3.7075	1.6832	101.6832
Prednisolone	0.7749	0.0207	2.6658	3.1424	96.8576	0.7807	0.0195	2.5021	2.4168	97.5832	0.7830	0.0233	2.9709	2.1216	97.8784
Daucosterol	0.7827	0.0227	2.9026	2.1644	97.8356	0.7805	0.0287	3.6765	2.4362	97.5638	0.7795	0.0209	2.6874	2.5647	97.4353

Day 1-3	D					E				
	Average	SD	%RSD	%error	%recovery	Average	SD	%RSD	%error	%recovery
Betamethasone-17-valerate	0.8160	0.0244	2.9941	1.9968	101.9968	N/A	N/A	N/A	N/A	N/A
Triamcinolone acetonide	0.7374	0.0178	2.4178	7.8243	92.1757	0.7640	0.0157	2.0533	4.4990	95.5010
Dexamethasone	0.8089	0.0207	2.5619	1.1101	101.1101	N/A	N/A	N/A	N/A	N/A
Prednisolone	0.7667	0.0223	2.9130	4.1641	95.8359	0.7776	0.0230	2.9543	2.8027	97.1973
Daucosterol	0.7687	0.0224	2.9166	3.9168	96.0832	0.7735	0.0216	2.7903	3.3132	96.6868

Slope Ratios of Five Steroids in Ethanol and Five Herbal Matrices under Different Mobile-Phase Systems

Slope ratio analysis of five steroid standards (daucosterol, prednisolone, dexamethasone, triamcinolone acetone, and betamethasone-17-valerate) in ethanol (0.2–1.0 mg mL⁻¹) and in five herbal matrices—Derris scandens (A), Thai green herbal (Keaw-hom, B), Prasachangdaeng (C), Sahas Thara (D), and Andrographis paniculata (E)—at 0.4 and 0.8 mg mL⁻¹, evaluated under five different mobile-phase systems.

Table S21 The slope ratio of five steroid standard between in EtOH and in five herbal medicines under **DCM: IPA: ACN: Formic acid (7.5: 1.5: 0.5: 0.5)** mobile phase system

		A								
Day	1			2			3			
No.	1	2	3	1	2	3	1	2	3	
Betamethasone-17-valerate	1.0002	0.9724	1.1424	1.0019	1.1205	1.0155	0.8784	1.0068	1.0047	
Triamcinolone acetone	1.0456	1.0804	0.9563	0.9946	0.9846	1.0877	1.0715	0.9923	1.0645	
Dexamethasone	0.9103	0.9371	1.0707	0.9964	1.0561	0.8317	1.1121	1.1393	1.1220	
Prednisolone	0.8958	0.9387	0.9943	1.1383	0.9444	1.1036	1.0284	1.0331	1.1032	
Daucosterol	0.9029	0.9340	0.9448	0.9365	0.8760	0.9330	0.9919	0.9314	0.9883	

		B								
Day	1			2			3			
No.	1	2	3	1	2	3	1	2	3	
Betamethasone-17-valerate	0.9297	0.8926	1.0223	1.0829	1.0737	1.1364	0.9237	1.0564	1.1216	
Triamcinolone acetone	1.0399	0.9478	0.9296	0.9729	1.0008	1.0585	0.9086	1.0332	0.8935	
Dexamethasone	1.0429	0.9307	0.9679	1.0122	0.9759	1.0295	1.0658	1.1833	1.0205	
Prednisolone	0.9425	1.0296	0.8672	1.0713	1.1389	1.0972	1.0620	0.9354	1.0214	
Daucosterol	0.9301	0.9754	0.9028	0.8274	0.9497	0.8978	0.9985	1.0820	0.9303	

		C								
Day	1			2			3			
No.	1	2	3	1	2	3	1	2	3	
Betamethasone-17-valerate	1.0153	1.0141	0.9229	0.9487	1.0591	1.0469	0.9237	1.0564	1.1216	
Triamcinolone acetone	1.1064	0.8911	0.7753	0.9029	0.9054	0.9750	0.9086	1.0332	0.8935	
Dexamethasone	0.9908	0.9657	0.9906	0.9967	1.0029	1.0620	1.0658	1.1833	1.0205	
Prednisolone	0.9538	0.9333	0.9036	0.9344	1.0800	1.0740	1.0620	0.9354	1.0214	
Daucosterol	0.9580	0.9847	1.0381	0.8723	0.8909	0.9494	0.9985	1.0820	0.9303	

		D								
Day	1			2			3			
No.	1	2	3	1	2	3	1	2	3	
Betamethasone-17-valerate	0.9931	1.0119	0.9626	0.9217	1.0157	1.0410	0.8927	1.0804	1.0770	
Triamcinolone acetonide	0.9120	0.9905	0.9257	0.8540	0.9599	1.0306	1.1229	1.0013	1.1026	
Dexamethasone	1.1262	0.9711	1.0793	1.0043	0.9400	0.9655	0.9239	1.0854	1.0918	
Prednisolone	0.8765	0.9523	0.9759	1.0167	1.0983	0.9009	0.8835	0.9690	0.9631	
Daucosterol	0.9639	1.0043	0.9918	0.9197	0.8428	0.8900	1.1050	1.0605	0.9375	

		E								
Day	1			2			3			
No.	1	2	3	1	2	3	1	2	3	
Betamethasone-17-valerate	1.0671	1.0485	0.8741	0.8632	1.0044	0.9148	0.8759	0.9585	0.9723	
Triamcinolone acetonide	N/A									
Dexamethasone	1.0258	0.9967	1.0910	0.9393	0.9533	1.0684	1.0567	1.1105	0.9584	
Prednisolone	0.8937	1.0195	0.9064	0.9625	1.1119	1.1328	0.9413	1.0415	0.9204	
Daucosterol	1.0282	1.0044	0.9943	0.8814	0.9869	0.9362	0.9894	0.8796	1.0217	

Table S22 The slope ratio of five steroid standard between in EtOH and in five herbal medicines under **DCM**:

Petroleum ether: EtOH: Formic acid (4.5: 3: 2: 0.5) mobile phase system

		A								
Day	1			2			3			
No.	1	2	3	1	2	3	1	2	3	
Betamethasone-17-valerate	1.0681	0.9778	0.9496	1.1087	1.0252	1.0420	0.9200	0.9333	0.8770	
Triamcinolone acetonide	1.0240	0.8405	0.8712	0.9615	0.9035	0.9334	0.9000	0.9988	0.9796	
Dexamethasone	0.8408	0.9229	0.9393	0.9983	1.0271	1.0299	0.9557	1.0677	1.0440	
Prednisolone	0.9345	0.9272	1.0071	0.8163	0.8553	0.8185	0.9922	0.9278	0.8357	
Daucosterol	1.0189	0.8382	0.8156	0.9416	0.9084	1.0331	0.9748	0.9674	0.9299	

		B								
Day	1			2			3			
No.	1	2	3	1	2	3	1	2	3	
Betamethasone-17-valerate	1.0328	0.9193	0.8772	1.0400	0.9843	0.9543	0.9180	1.0415	0.9412	
Triamcinolone acetonide	1.0570	0.9349	0.9571	1.0683	1.0949	0.9593	0.9422	0.8881	0.8839	
Dexamethasone	0.9055	0.9195	0.9456	1.0100	1.0781	1.0606	1.0253	1.0791	1.0719	
Prednisolone	0.9306	0.7863	0.9606	0.8703	0.8509	0.9017	0.9089	0.8667	0.9493	
Daucosterol	0.9927	0.9680	0.9724	0.8839	0.8634	1.0344	1.0221	0.9751	0.8592	

C									
Day	1			2			3		
No.	1	2	3	1	2	3	1	2	3
Betamethasone-17-valerate	1.1405	0.9105	0.9799	0.9854	1.1081	0.9725	1.0525	0.9548	1.0411
Triamcinolone acetonide	1.0611	1.0607	0.9507	0.9457	0.9624	1.0127	0.9747	0.9453	0.9179
Dexamethasone	0.8765	1.0078	1.1606	0.9985	1.0403	0.8764	1.0806	0.9547	1.0445
Prednisolone	0.8694	0.8995	0.9890	0.9773	0.8032	0.8552	1.0384	0.8064	1.0089
Daucosterol	0.9987	1.0766	0.8719	0.9327	0.8011	0.9726	0.9698	0.9123	0.9405

D									
Day	1			2			3		
No.	1	2	3	1	2	3	1	2	3
Betamethasone-17-valerate	1.0780	0.9764	1.0020	1.0010	1.0099	1.0339	1.1460	1.0685	1.0231
Triamcinolone acetonide	0.9769	0.9373	1.1077	0.8934	0.9058	0.9970	1.0390	1.0033	0.9976
Dexamethasone	0.9461	1.1268	1.1213	0.9309	0.9670	0.9427	1.0704	0.9451	0.9539
Prednisolone	N/A								
Daucosterol	0.9828	1.0623	0.8229	0.8547	0.8466	0.9120	0.9023	1.0765	1.0098

E									
Day	1			2			3		
No.	1	2	3	1	2	3	1	2	3
Betamethasone-17-valerate	1.1761	1.0976	0.9393	0.9418	0.9371	0.8820	0.8803	0.9791	0.9162
Triamcinolone acetonide	N/A								
Dexamethasone	N/A								
Prednisolone	0.9883	0.9195	0.8015	0.9073	0.8890	0.9816	0.9708	0.8896	0.8163
Daucosterol	1.0026	1.0526	0.9939	0.8201	0.9887	1.0659	0.9698	0.8886	0.9335

Table S23 The slope ratio of five steroid standard between in EtOH and in five herbal medicines under CHCl₃:**IPA: Petroleum ether: Formic acid (4: 3: 2.5: 0.5)** mobile phase system

		A								
Day	1			2			3			
No.	1	2	3	1	2	3	1	2	3	
Betamethasone-17-valerate	1.0926	0.9396	1.0749	0.9864	0.9372	0.9728	1.0698	1.0914	1.0273	
Triamcinolone acetonide	0.9331	0.8452	0.9561	0.9136	0.9000	0.9032	0.9565	0.9745	1.0137	
Dexamethasone	1.0084	1.0865	0.8899	1.0504	0.9639	0.9765	0.9905	1.0645	1.0941	
Prednisolone	0.9365	0.8606	0.9863	0.9840	0.8284	0.9172	0.9323	0.9057	0.9077	
Daucosterol	1.0820	0.9624	0.9976	0.9114	0.8459	0.9605	1.0290	1.1516	0.9308	

		B								
Day	1			2			3			
No.	1	2	3	1	2	3	1	2	3	
Betamethasone-17-valerate	0.9452	1.0567	0.9514	1.0761	0.9673	0.9992	1.1217	1.0018	0.9670	
Triamcinolone acetonide	0.9752	0.8451	0.8797	0.9825	0.9137	0.8862	0.9060	0.9240	0.9338	
Dexamethasone	0.9878	0.9434	0.8829	0.9602	1.0005	1.0369	1.0979	0.8670	1.0939	
Prednisolone	0.9477	1.0119	0.9917	0.8982	0.9683	1.0610	1.1009	0.9688	1.0004	
Daucosterol	0.9711	1.0266	0.9616	0.8642	1.0663	1.0587	0.9789	0.9410	0.9171	

		C								
Day	1			2			3			
No.	1	2	3	1	2	3	1	2	3	
Betamethasone-17-valerate	1.0249	0.9823	1.0416	0.9562	1.0702	0.9974	1.0631	0.9389	0.9604	
Triamcinolone acetonide	0.9255	0.9177	0.8409	0.9115	1.0077	0.8800	0.9194	0.9006	0.9152	
Dexamethasone	1.0910	0.9994	0.9024	1.0269	1.0456	1.1366	1.1574	0.9012	1.0109	
Prednisolone	1.0463	0.9902	0.8556	0.9811	1.0176	0.8992	0.8977	0.8512	0.8737	
Daucosterol	0.9901	1.0585	0.9574	0.9449	1.0867	0.9132	1.0312	1.0765	0.9321	

		D								
Day	1			2			3			
No.	1	2	3	1	2	3	1	2	3	
Betamethasone-17-valerate	1.0072	1.0208	1.0152	0.9629	1.0475	1.0837	1.1208	1.0390	0.9708	
Triamcinolone acetonide	0.9133	0.8573	0.9998	0.9152	0.8994	0.9352	1.0388	0.9037	0.8893	
Dexamethasone	1.1391	0.9837	1.0190	0.9992	1.0702	0.9789	1.1262	0.9515	1.0071	
Prednisolone	0.9882	0.8896	0.9112	0.9781	1.1146	0.9051	0.8251	0.9467	1.0329	
Daucosterol	1.0513	1.1002	1.0447	0.9887	1.0346	1.0935	1.1109	1.0225	0.9739	

Day	E								
	1			2			3		
No.	1	2	3	1	2	3	1	2	3
Betamethasone-17-valerate	0.956592	1.004773	1.130948	0.831317	1.08794	0.964139	1.049855	1.095587	1.071172
Triamcinolone acetonide	N/A								
Dexamethasone	1.01469	1.172276	0.992824	0.950913	1.147687	1.044227	1.138217	0.945064	0.998448
Prednisolone	1.007685	0.912756	0.920548	0.928732	0.949986	0.992725	0.981242	0.893588	0.920173
Daucosterol	1.075956	1.067006	1.035537	1.026078	0.88688	1.116802	1.085761	1.090622	0.88926

Table S24 The slope ratio of five steroid standard between in EtOH and in five herbal medicines under CHCl₃:

EtOH: *n*-Hexane: Formic acid (5: 2: 2.5: 0.5) mobile phase system

Day	A								
	1			2			3		
No.	1	2	3	1	2	3	1	2	3
Betamethasone-17-valerate	0.9225	0.8893	0.8555	0.9364	0.9390	0.9663	0.8818	1.0354	0.9169
Triamcinolone acetonide	0.8937	0.9797	0.9960	1.0341	0.9394	0.9158	0.8944	0.8852	0.9613
Dexamethasone	0.9901	0.8942	0.9046	0.9113	1.0207	0.9958	1.0162	0.9512	0.8768
Prednisolone	0.9705	0.9711	1.0396	0.9264	1.0577	1.0756	0.8934	1.0200	0.9539
Daucosterol	1.0532	1.0099	0.9247	0.9651	1.1238	1.0575	1.0525	1.0245	1.0179

Day	B								
	1			2			3		
No.	1	2	3	1	2	3	1	2	3
Betamethasone-17-valerate	0.8105	0.8922	0.9336	0.8870	0.9422	0.8410	0.9977	0.9149	1.1267
Triamcinolone acetonide	0.8770	0.9744	0.8714	0.9807	0.9289	0.9321	0.8992	0.9273	1.0405
Dexamethasone	1.0392	0.8026	1.0330	1.0790	0.9096	0.8950	1.0629	0.8766	0.9722
Prednisolone	0.9821	0.9079	0.9040	1.0094	1.0807	1.0152	0.9930	0.9759	0.9585
Daucosterol	1.0439	0.9695	0.9865	1.0670	1.0677	0.9984	1.0443	0.9718	1.0697

Day	C								
	1			2			3		
No.	1	2	3	1	2	3	1	2	3
Betamethasone-17-valerate	1.0459	0.8962	0.9526	0.8267	1.0385	0.7874	0.9258	1.0148	1.0358
Triamcinolone acetonide	1.0481	0.9949	0.9671	1.0009	1.0277	0.9316	0.9517	0.9401	0.9197
Dexamethasone	1.0052	0.8881	0.8453	0.9408	0.9341	0.8832	1.0187	0.9809	0.8894
Prednisolone	1.0513	0.8542	0.9818	1.0293	1.0251	1.0352	1.0438	0.9818	1.0753
Daucosterol	1.0248	0.9832	0.9361	1.0394	0.8954	1.1038	1.1188	1.0938	1.0285

		D								
Day	1			2			3			
No.	1	2	3	1	2	3	1	2	3	
Betamethasone-17-valerate	0.8439	0.9230	1.0476	0.9351	0.9887	0.7700	0.9676	0.9257	0.9549	
Triamcinolone acetonide	0.8973	0.9355	1.1484	0.9155	0.9904	0.9496	0.9083	0.8986	0.9628	
Dexamethasone	0.8895	0.9341	1.0462	1.0258	0.8470	0.9499	0.9919	1.0065	1.0062	
Prednisolone	N/A									
Daucosterol	0.9866	1.0844	0.9902	1.0659	1.0844	0.9475	1.1115	1.0668	1.0025	

		E								
Day	1			2			3			
No.	1	2	3	1	2	3	1	2	3	
Betamethasone-17-valerate	0.8081	0.8965	0.8316	0.8048	0.9130	0.8593	0.8186	0.9297	1.0834	
Triamcinolone acetonide	N/A									
Dexamethasone	N/A									
Prednisolone	0.8832	0.9919	0.8468	0.9688	0.9340	0.9402	0.9752	1.0212	1.1116	
Daucosterol	1.0088	0.9934	1.0642	1.0188	1.0922	0.9723	1.0463	0.9940	1.0690	

Table S25 The slope ratio of five steroid standard between in EtOH and in five herbal medicines under **DCM: tert-butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)** mobile phase system

		A								
Day	1			2			3			
No.	1	2	3	1	2	3	1	2	3	
Betamethasone-17-valerate	1.0934	0.9985	0.9322	1.0032	1.0724	1.0545	1.0643	0.9955	1.0014	
Triamcinolone acetonide	0.9295	0.8795	1.0135	0.9844	0.9221	0.9277	0.8887	0.8669	0.8955	
Dexamethasone	1.0479	1.0069	0.9368	1.1199	1.0988	1.0881	1.0532	1.0293	1.1540	
Prednisolone	1.0762	0.9273	0.9338	0.9271	0.9853	0.8959	0.9256	0.9146	0.9790	
Daucosterol	1.1042	0.9938	0.8997	0.9931	0.9630	0.8755	0.8847	0.9058	0.9051	

		B								
Day	1			2			3			
No.	1	2	3	1	2	3	1	2	3	
Betamethasone-17-valerate	0.9505	1.0252	1.0788	0.9950	1.0936	1.0889	1.0663	1.0312	1.0090	
Triamcinolone acetonide	0.9195	0.9654	0.8981	0.8713	0.9263	1.0354	0.9096	0.9211	0.9580	
Dexamethasone	1.1616	1.0674	1.0250	1.1374	0.9485	1.0431	1.0590	1.0944	0.9931	
Prednisolone	0.9959	0.9282	1.0137	0.9362	0.9472	1.0169	0.9597	0.9568	0.8741	
Daucosterol	1.1398	0.9395	0.8232	0.9339	0.8962	0.9181	0.8812	0.8736	0.9869	

C									
Day	1			2			3		
No.	1	2	3	1	2	3	1	2	3
Betamethasone-17-valerate	1.0341	0.9383	1.0450	0.9960	1.1055	0.9658	1.0686	1.0930	1.0247
Triamcinolone acetonide	0.9150	0.8663	0.9257	0.8472	1.0416	0.9589	0.9116	0.9690	0.9256
Dexamethasone	0.9618	1.1093	0.9529	1.0760	0.9326	0.9373	1.0895	1.0977	1.0533
Prednisolone	1.0967	0.9113	0.9329	1.0255	0.9868	0.8573	0.9168	0.9643	0.9674
Daucosterol	1.0689	1.0069	0.8911	0.8938	0.8608	0.8896	0.9137	0.9012	0.9349

D									
Day	1			2			3		
No.	1	2	3	1	2	3	1	2	3
Betamethasone-17-valerate	1.0253	1.0531	1.0296	1.0678	1.1544	1.0120	0.9110	1.0046	1.1082
Triamcinolone acetonide	0.8707	0.8333	0.8870	0.9473	1.0000	0.8526	0.8692	0.9857	0.8653
Dexamethasone	1.0028	1.0385	1.1453	1.1471	1.0184	0.9924	1.0030	1.0903	0.9249
Prednisolone	1.0203	0.9042	0.9449	0.9656	0.9688	0.8680	0.9790	0.8494	0.9412
Daucosterol	0.9595	0.8804	0.8992	0.9140	0.8586	0.7719	0.9263	0.8833	0.9461

E									
Day	1			2			3		
No.	1	2	3	1	2	3	1	2	3
Betamethasone-17-valerate	N/A								
Triamcinolone acetonide	0.9299	0.9308	0.9651	0.9025	1.0106	0.9681	0.9820	0.9956	0.8405
Dexamethasone	N/A								
Prednisolone	1.0272	1.0041	0.9524	1.0056	0.9075	0.9671	0.9260	0.9109	0.9244
Daucosterol	0.9398	0.9799	0.8975	0.9624	0.8619	0.8162	0.9529	0.9114	0.9225

Solvent Cost

Table 26 Cost of solvents

Solvent	Volume (mL)	Price (USD)	Price/mL (USD)
Methanol	4000	23	0.0058
Dichloromethane	2500	53	0.0212
<i>n</i> -Hexane	2500	34	0.0136
Acetone	2500	24	0.0096
Isopropanol	4000	35	0.0088
Ethyl Acetate	2500	56	0.0224
Toluene	2500	32	0.0128
Acetonitrile	4000	56	0.0140
Petroleum ether	4000	56	0.0140
Chloroform	2500	39	0.0156
Ethanol	2500	40.5	0.0162
<i>tert</i> -butyl methyl ether	2500	118	0.0472
Formic acid	2500	81	0.0324

Simple Derringer's Desirability for 20 Mobile Phase System

Table S27 The Derringer's desirability for different 20 mobile phase system to separate five steroid standards with four main criteria

Mobile phase No.	Mobile phase system	Separation (maximum, weight = 1)			0.2-0.8 (maximum, weight = 1)			Price (USD) (minimum, weight = 0.5)			Time (min) (minimum, weight = 0.5)			Overall D	Ranking
		Data	d_i	D	Data	d_i	D	Data	d_i	D	Data	d_i	D		
4	DCM: EtOAc: Acetone: formic acid (4: 4: 1.5: 0.5)	7	0.75	0.75	in	1	1	0.31	0.6	0.77	20	1	1	0.8344	1
16	DCM: <i>tert</i> -butyl methyl ether: MeOH: Formic acid (7.5: 1: 1: 0.5)	7	0.75	0.75	in	1	1	0.34	0.6	0.77	20	1	1	0.8344	1
17	Toluene: <i>tert</i> -butyl methyl ether: ACN: Formic acid (5: 2.5: 2: 0.5)	7	0.75	0.75	in	1	1	0.34	0.6	0.77	20	1	1	0.8344	1
2	DCM: IPA: ACN: formic acid (7.5: 1.5: 0.5: 0.5)	10	1	1	out	0.5	0.5	0.29	0.8	0.89	20	1	1	0.7647	2
12	CHCl ₃ : Acetone: MeOH: Formic acid (6: 3: 0.5: 0.5)	6	0.625	0.625	in	1	1	0.21	0.8	0.89	23	0.6	0.77	0.7565	3
6	DCM: EtOH: Petroleum ether: formic acid (4.5: 2: 3: 0.5)	7	0.75	0.75	in	1	1	0.28	0.8	0.89	25	0.4	0.63	0.7514	4
14	CHCl ₃ : EtOH: <i>n</i> -Hexane: Formic acid (5: 2: 2.5: 0.5)	6	0.625	0.625	in	1	1	0.24	0.8	0.89	25	0.4	0.63	0.7071	5
11	CHCl ₃ : Acetone: Petroleum ether: Formic acid (4.5: 3: 2: 0.5)	5	0.5	0.5	in	1	1	0.21	0.8	0.89	23	0.6	0.77	0.7023	6
3	DCM: EtOAc: <i>n</i> -Hexane: formic acid (4: 5: 0.5: 0.5)	8	0.875	0.875	out	0.5	0.5	0.33	0.6	0.77	20	1	1	0.6972	7
1	DCM: Acetone: <i>n</i> -Hexane: formic acid (4.5: 3: 2: 0.5)	7	0.75	0.75	out	0.5	0.5	0.25	0.8	0.89	20	1	1	0.6948	8
7	Toluene: EtOAc: formic acid (5: 4.5: 0.5)	7	0.75	0.75	out	0.5	0.5	0.27	0.8	0.89	20	1	1	0.6948	8
5	Toluene: IPA: <i>n</i> -Hexane: formic acid (5: 3: 1.5: 0.5)	4	0.375	0.375	in	1	1	0.19	1	1.00	23	0.6	0.77	0.6623	9
8	Toluene: IPA: MeOH: Formic acid (7: 2: 0.5: 0.5)	2	0.25	0.25	in	1	1	0.19	1	1.00	22	0.8	0.89	0.6070	10
20	DCM: Toluene: MeOH: Formic acid (7: 2: 0.5: 0.5)	2	0.25	0.25	in	1	1	0.29	0.8	0.89	20	1	1	0.6070	10
15	CHCl ₃ : EtOAc: ACN: Formic acid (6: 2: 1.5: 0.5)	6	0.625	0.625	out	0.5	0.5	0.26	0.8	0.89	23	0.6	0.77	0.6005	11
10	CHCl ₃ : IPA: Petroleum ether: Formic acid (4: 3: 2.5: 0.5)	8	0.875	0.875	in	0.5	0.5	0.21	0.8	0.89	35	0.2	0.45	0.5593	12
18	EtOAc: CHCl ₃ : <i>tert</i> -butyl methyl ether: Formic acid (4: 3: 2.5: 0.5)	8	0.875	0.875	out	0.5	0.5	0.41	0.4	0.63	25	0.4	0.63	0.5593	12
9	EtOAc: CHCl ₃ : Petroleum ether: Formic acid (5.5: 3: 1: 0.5)	5	0.5	0.5	out	0.5	0.5	0.30	0.6	0.77	23	0.6	0.77	0.5313	13
19	<i>tert</i> -butyl methyl ether: <i>n</i> -Hexane: Acetone: Formic acid (6.5: 2: 1: 0.5)	8	0.875	0.875	out	0.5	0.5	0.54	0.2	0.45	25	0.4	0.63	0.4983	14
13	Toluene: Acetone: Petroleum ether: Formic acid (4.75: 2.75: 2: 0.5)	1	0.125	0.125	in	1	1	0.20	0.8	0.89	20	1	1	0.4817	15

Note for d_i value

Separation: sum ΔR_f between spot = 10 ($d_i = 1$), 8 ($d_i = 0.875$), 7 ($d_i = 0.75$), 6 ($d_i = 0.625$), 5 ($d_i = 0.5$), 4 ($d_i = 0.375$), 3 ($d_i = 0.25$) and 1 ($d_i = 0.125$)

ΔR_f between spot ($>0.2000 = 5$ point, $0.1501-0.2000 = 4$ point, $0.1001-0.1500 = 3$ point, $0.0751-0.1000 = 2$ point, $0.0501-0.0750 = 1$ point, $\leq 0.0500 = 0$ point)

0.2-0.8: All R_f within range of 0.2-0.8 = in ($d_i = 1$), some R_f not in range of 0.2-0.8 = out ($d_i = 0.5$)

Price (USD): <0.20 ($d_i = 1$), $0.20-0.29$ ($d_i = 0.8$), $0.30-0.39$ ($d_i = 0.6$), $0.40-0.49$ ($d_i = 0.4$), $0.50-0.59$ ($d_i = 0.2$)

Time (min): 20 min ($d_i = 1$), 22 min ($d_i = 0.8$), 23 min ($d_i = 0.6$), 25 min ($d_i = 0.4$), 25 min ($d_i = 0.2$)