

Table S1: Different mobile phases used for optimization of the novel TLC-densitometric the assay of flumethasone pivalate and clioquinol.

Mobile phases	Ratio in volumes
Chloroform: methyl alcohol : ammonia	8:2: 0.2
Chloroform: methyl alcohol : glacial acetic	2:8: 0.2
Ethyl acetate: methyl alcohol : ammonia	8:2: 0.2
Ethyl acetate: methyl alcohol : glacial acetic	2:8: 0.2
Hexane: acetone	6:4
Hexane: acetone	2:8
Benzene: acetone	6:4
Benzene: acetone	2:8
Ethyl acetate: benzene: formic acid	2:8:0.2
Ethyl acetate: benzene: formic acid	8:2:0.2
Ethyl acetate: benzene: formic acid	5:5:0.0
Ethyl acetate: benzene: formic acid*	5:5:0.2

*The optimal mobile phase

Table S2: Comparasions for LOD and LOQ for the novel TLC-densitometric and UHPLC methods with refernces methods for the assay of flumethasone pivalate and clioquinol.

Refence Number	Items	TLC method		RP- UHPLC method	
		flumethasone pivalate	clioquinol	flumethasone pivalate	clioquinol
New methods	Limit of detection (LOD)	0.52 µg/band	0.63 µg/band	1.52 µg/mL	1.47 µg/mL
	Limit of quantita- tion (LOQ)	1.57 µg/band	1.91 µg/band	4.63 µg/mL	4.45 µg/mL
Ref [16]	LOD	0.09 µg/band	0.41 µg/band	1.34 µg/mL	2.58 µg/mL
	LOQ	0.27 µg/band	1.23 µg/band	4.02 µg/mL	7.74 µg/mL
Ref [8]	LOD	-----	-----	Not mentioned	-----
	LOQ	-----	-----	0.15 µg/mL	-----
Ref [9]	LOD	-----	-----	-----	Not mentioned*

	LOQ	-----	-----	-----	Not mentioned *
Ref [10]	LOD	-----	-----	-----	Not mentioned*
	LOQ	-----	-----	-----	Not mentioned *
Ref [11]	LOD	-----	-----	-----	0.42 µg/mL
	LOQ	-----	-----	-----	1.72 µg/mL
Ref [12]	LOD	-----	-----	-----	2 ng/mL in plasma (electro- chemical detection)
	LOQ	-----	-----	-----	5 ng/mL in plasma (electro- chemical detection)

LOD and LOQ were Calculated from the equations [LOD =3.3 (Standard deviation / slope), LOQ = 3xLOD]

* CL determined in cream and onitement without recording of calibration curve.