

Supporting Information

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HPTLC- densitometric method for assay of chlorthalidone, metoprolol succinate and telmisartan in combined pharmaceutical formulation

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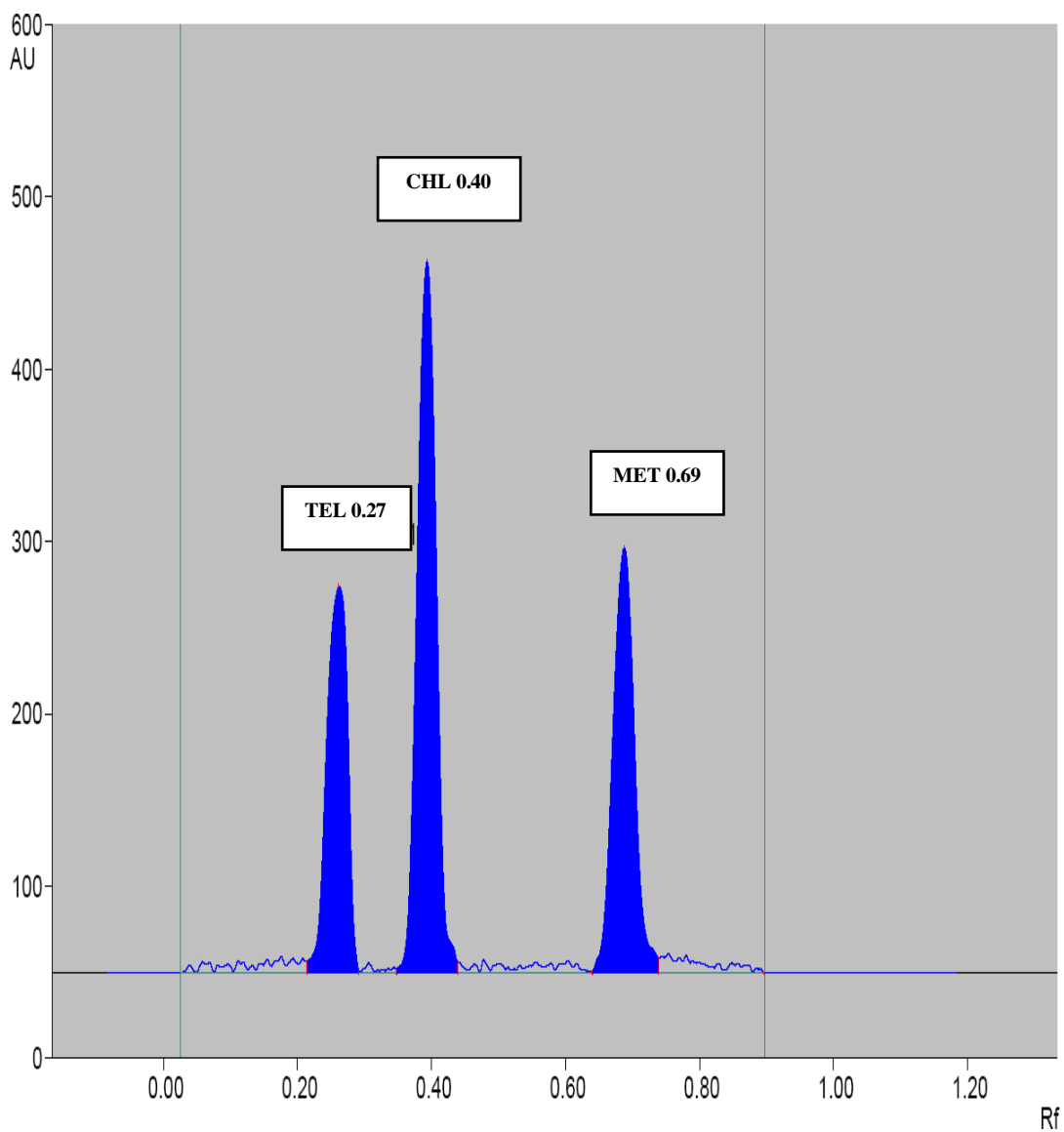


Figure S1: Representative densitogram of chlorthalidone, metoprolol succinate, and telmisartan standard solution at 225 nm

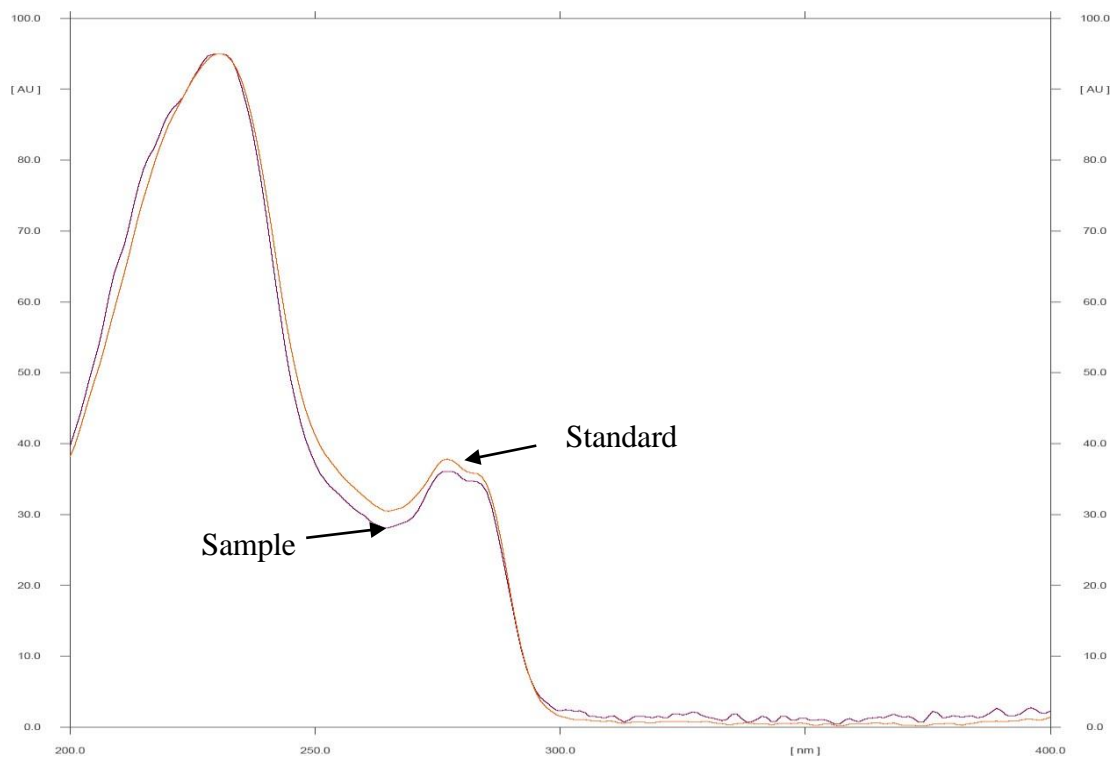


Figure S2: Peak purity of standard and sample of CHL

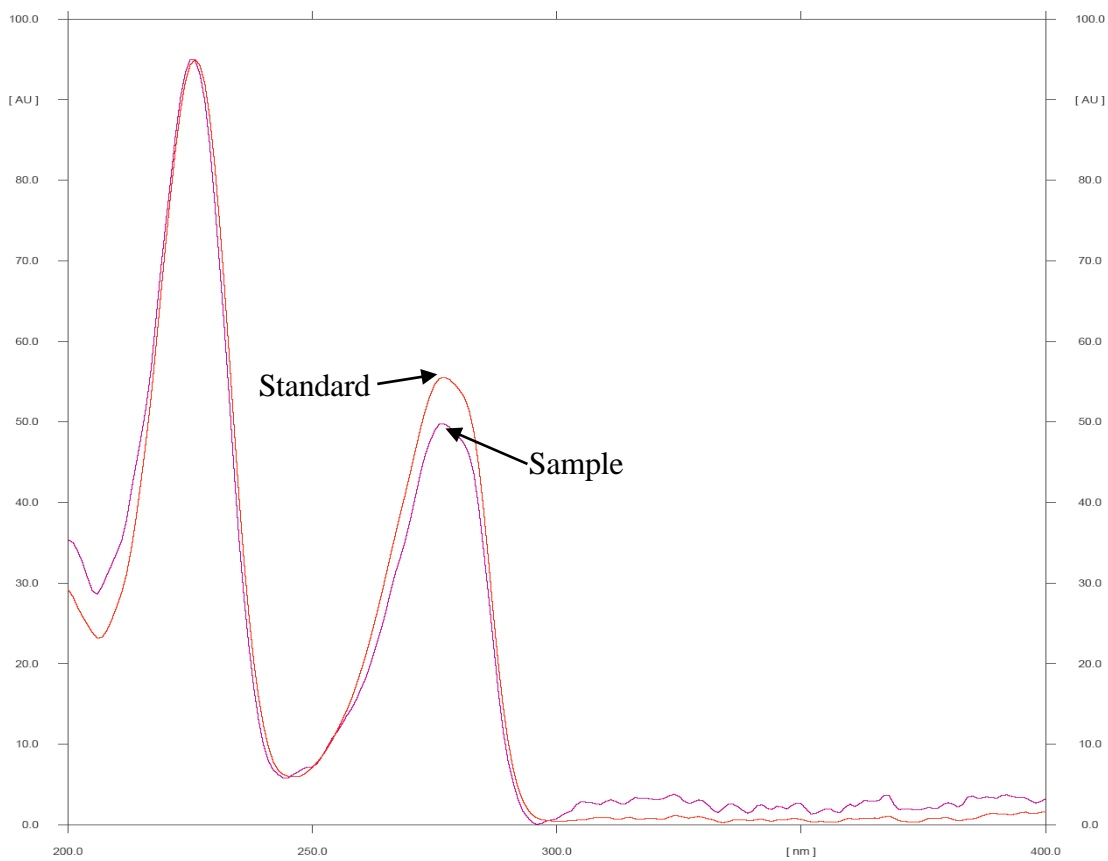


Figure S3: Peak Purity of standard and sample of MET

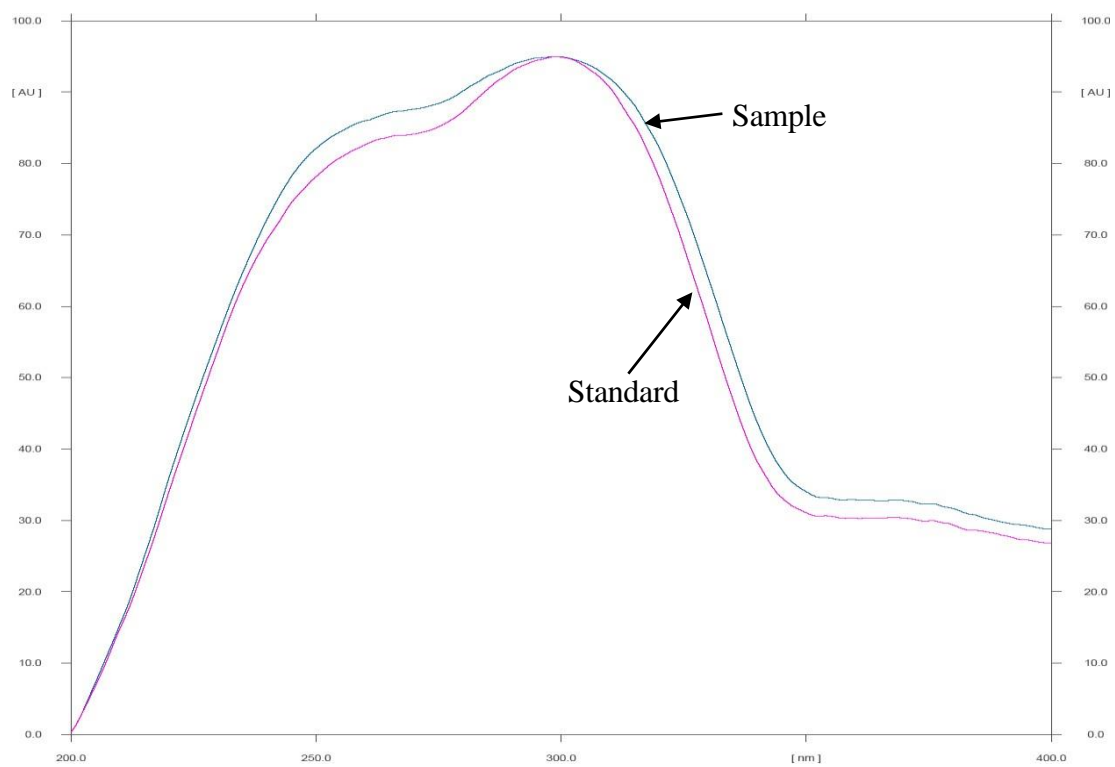


Figure S4: Peak purity of standard and sample of TEL

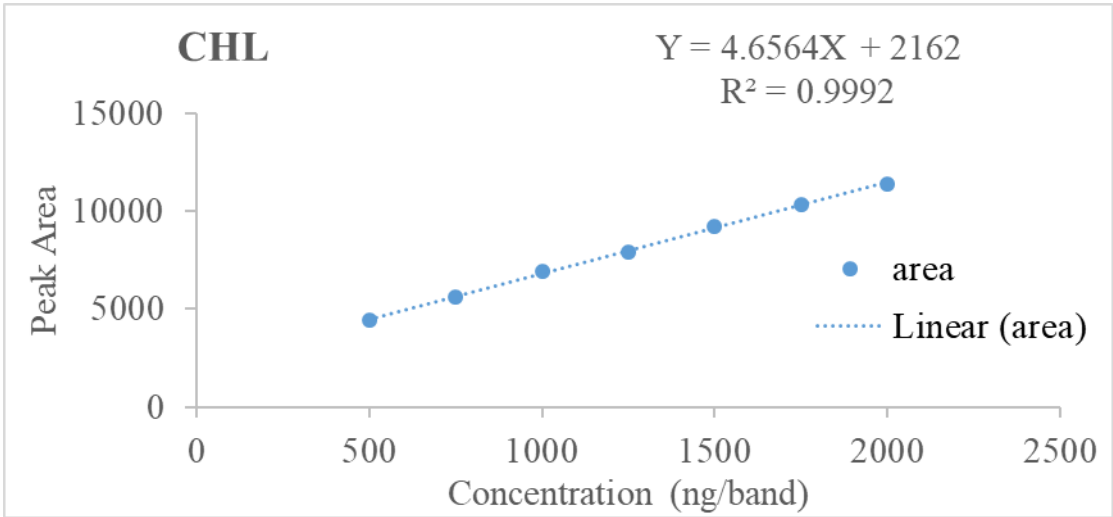


Figure S5: Calibration curve of CHL (500-2000) ng/band

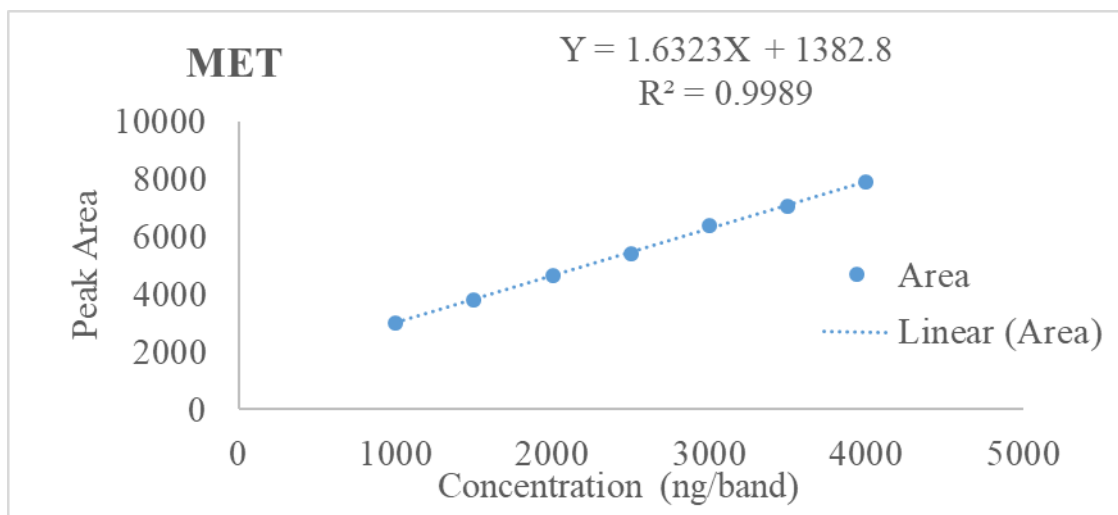


Figure S6: Calibration curve of MET (1000-4000) ng/band

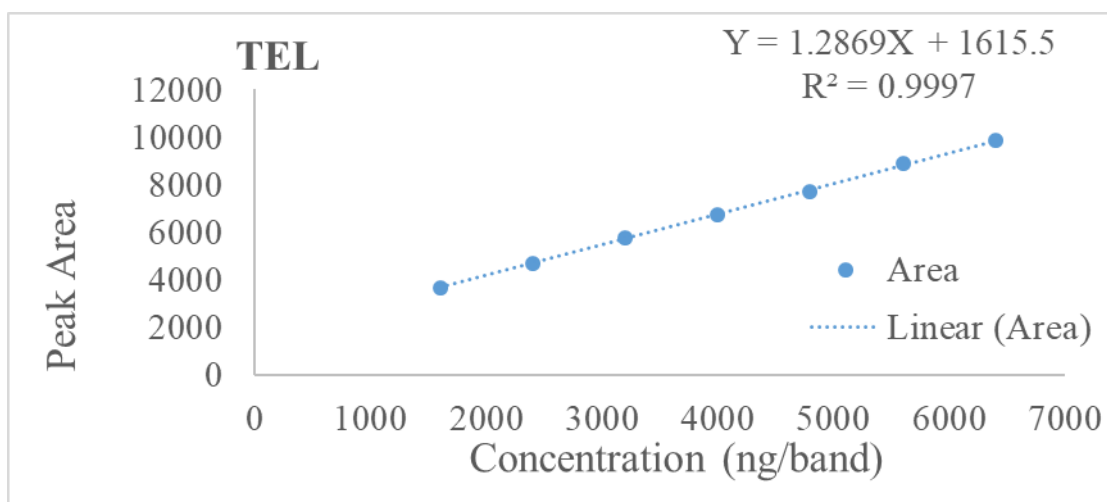


Figure S7: Calibration curve of TEL (1600-6400) ng/band

Table S1: Observation and remarks for selection of mobile phase for CHL, MET and TEL

No	T (mL)	M (mL)	E (mL)	TEA (mL)	Rf value			Remarks
					Observation			
					CHL	MET	TEL	
1	4.5	2.5	-	-	0.78	0.76	-	Merging of Peaks and high Rf value
2	5.0	1.5	-	-	0.42	0.45	0.79	Partially peaks were merged
3	4.5	-	2.5		0.21	0.25	0.26	Partially peaks were merged
4	5.0	1.0	1.5	-	0.37	0.41	0.72	Partially peaks were merged
5	4.0	1.0	1.5	0.5	0.32	0.49	0.71	Separated broad peaks observed
6	4.0	0.7	1.0	0.8	0.24	0.31	0.64	Broad peak of MET and little tailing in TEL
7	4.0	0.8	1.0	1.0	0.26	0.36	0.68	Well separated peaks with little tailing in TEL
8	4.0	0.8	1.0	1.2	0.28	0.39	0.70	Well resolved sharp peak observed

(T: Toluene, M: Methanol, E: Ethyl Acetate, TEA: Tri-ethyl amine, v/v/v/v)

Table S2: Peak purity and assay data for CHL, MET and TEL

Drugs	Label Claim (% w/w)	Mean Area	%Assay ± * SD	%RSD	Purity	
					Standard	Sample
CHL	12.5	7984.7	100.03 ± 1.13	1.13	0.999933	0.999911
MET	25.0	5444.48	99.53 ± 0.85	0.85	0.999953	0.999383
TEL	40.0	6753.11	99.80 ± 0.71	0.72	0.999910	0.999501

(*Mean assay of n=6)

Table S3: Linearity and range data for CHL, MET and TEL

No	CHL			MET			TEL			
	Conc. (ng/band)	Mean Peak area ± * SD	%RSD	Conc. (ng/band)	Mean Peak area ± * SD	%RSD	Conc. (ng/band)	Mean Peak area ± * SD	%RSD	
1	500	4458.40 ± 57.81	1.29	1000	3027.85 ± 39.40	1.30	1600	3686.23 ± 50.25	1.37	
2	750	5620.96 ± 61.90	1.10	1500	3791.55 ± 40.77	1.07	2400	4786.00 ± 49.71	1.05	
3	1000	6908.80 ± 48.86	0.70	2000	4678.06 ± 44.75	0.95	3200	5786.20 ± 65.02	1.12	
4	1250	7909.46 ± 56.57	0.71	2500	5400.18 ± 45.15	0.83	4000	6775.30 ± 70.11	1.03	
5	1500	9239.15 ± 47.44	0.51	3000	6392.96 ± 53.94	0.84	4800	7789.60 ± 74.90	0.96	
6	1750	10341.48 ± 56.29	0.54	3500	7059.10 ± 50.92	0.72	5600	8865.00 ± 29.10	0.32	
7	2000	11399.65 ± 56.84	0.49	4000	7895.16 ± 49.93	0.63	6400	9754.20 ± 56.50	0.57	
Linearity Equation				Linearity Equation				Linearity Equation		
y = 4.6564x + 2162				y = 1.632x + 1382.8				y = 1.2869x + 1615.5		
R ² = 0.9992				R ² = 0.9989				R ² = 0.9997		

(*Mean area of n=5)