

Central composite design aided optimization and validation of developed an eco-friendly HPLC method for the quantification of Lenalidomide loaded mesoporous silica nanoparticles

Ashutosh Gupta, Rachana S. P, Sudheer Moorkoth, Namdev Dhas

Manipal College of Pharmaceutical Sciences, Manipal, India.

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SUPPLEMENTARY MATERIAL

Calibration curve of lenalidomide

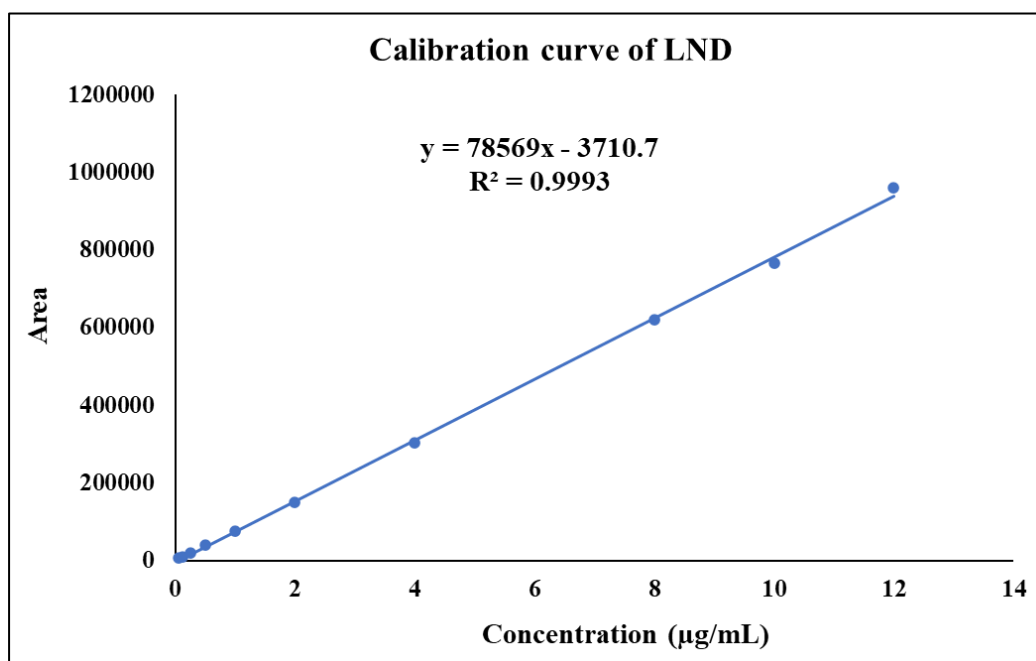


FIGURE S1: Calibration curve of the lenalidomide

Peak purity of the drugs

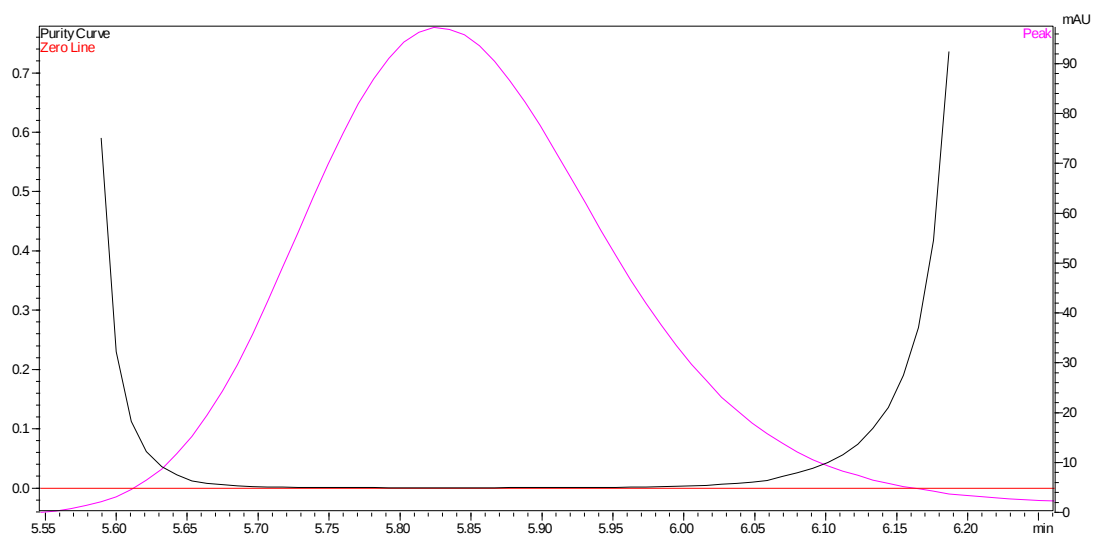


FIGURE S2: Peak purity of the lenalidomide

TABLE S1: Results of robustness study

Robustness					
Parameters		Lenalidomide			
		Rt	Area	Tailing factor	Theoretical plate
pH	5.4	6.007 ±	48434 ±	1.38 ± 0.08	3052.38 ± 64.61
	5	0.004	1029.04		
	5.5	6.01 ±	48528 ± 372.20	1.31 ± 0.03	3089.89 ± 39.74
	5	0.010			
Temperature (°C)	24	5.20 ±	17568 ± 441.42	1.41 ± 0.05	3169.89 ± 160.67
	26	5.99 ± 0.02	49560 ± 386.55	1.22 ± 0.02	3120.09 ± 169.82
Flow rate	0.7	6.79 ± 0.01	53516 ± 480.40	1.36 ± 0.04	3259.89 ± 28.45
	5				
	0.9	5.36 ±	42628.67 ±	1.42 ± 0.13	2918.15 ± 68.82
	5	0.005	985.44		
Injection volume	9	6.001 ±	44187 ± 669.56	1.42 ± 0.01	2988.575 ±

(μl)		0.002			115.57
	11	6.015 ± 0.004	51912 ± 822.44	1.34 ± 0.02	3027.31 ± 35.57
Wavelength	1	6.019 ± 0.024	48921 ± 718.15	1.273 ± 0.063	3163.079 ± 118.584
	-1	6.027 ± 0.004	50767 ± 775.001	1.259 ± 0.071	3459.545 ± 372.96