

## **Microwave Assisted Synthesis of Fluorescent Hetero Atoms Doped Carbon Dots for Determination of Betrixaban with Greenness Evaluation**

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**Table S1 Robustness data of Betrixaban maleate (BTM)**

<b>Parameters</b>	<b>Volume of buffer solution (mL)</b>			<b>pH of buffer solution</b>		
	<b>1.8</b>	<b>2.0</b>	<b>2.2</b>	<b>11.8</b>	<b>12.0</b>	<b>12.2</b>
<b>% Recovery</b>	100.33	101.00	101.92	100.74	101.00	101.92
<b><math>\bar{X} \pm SD</math></b>	101.08 $\pm$ 0.79			101.22 $\pm$ 0.62		
<b>% Error</b>	0.46			0.36		

**Table S2 Comparison between the performance of the evolved method and the other reported ones for determination of Betrixaban maleate (BTM)**

Methods	Conditions	Linearity range ( $\mu\text{g/ml}$ )	LOD ( $\mu\text{g/ml}$ )	Reference
RP-HPLC	Cyano column, mobile phase: acetonitrile: methanol: water (35:35:30, v/v/v, pH 3.2) with UV detection at 240 nm.	0.20 – 20.0	0.04	4
RP-HPLC	C <sub>18</sub> column, mobile phase: water: acetonitrile (88: 12 v/v) using UV detection at wavelength of 272 nm.	70.0 – 210.0	4.96	5
LC-MS/MS	C <sub>18</sub> column, mobile phase A: (95% of 5 mM ammonium formate in water with 5% acetonitrile), mobile phase B: (100% acetonitrile).	0.004 – 1.0	0.0003	6
Spectrophotometry	First derivative amplitude at 304 nm using methanol. Difference absorbance ( $\Delta A$ ) at 335 nm in 0.1 M NaOH <i>versus</i> 0.1 M HCL.	1.0 – 20.0 8.0 – 80.0	0.23 0.91	7
Quantitative proton nuclear magnetic resonance	The quantitative determination was based on the selective proton BTM signal at 3.87 ppm using DMSO- <i>d</i> <sub>6</sub> as deuterated solvent and phloroglucinol as internal standard	100 - 8000	19.0	8
Spectrofluorimetry	Using N,S-CDs probe based fluorescent sensor	0.568 - 56.8	0.187	This method

