

Supplementary Materials: Co-Spray Dried Nafamostat Mesylate with Lecithin and Mannitol as Respirable Microparticles for Targeted Pulmonary Delivery: Pharmacokinetics and Lung Distribution in Rats

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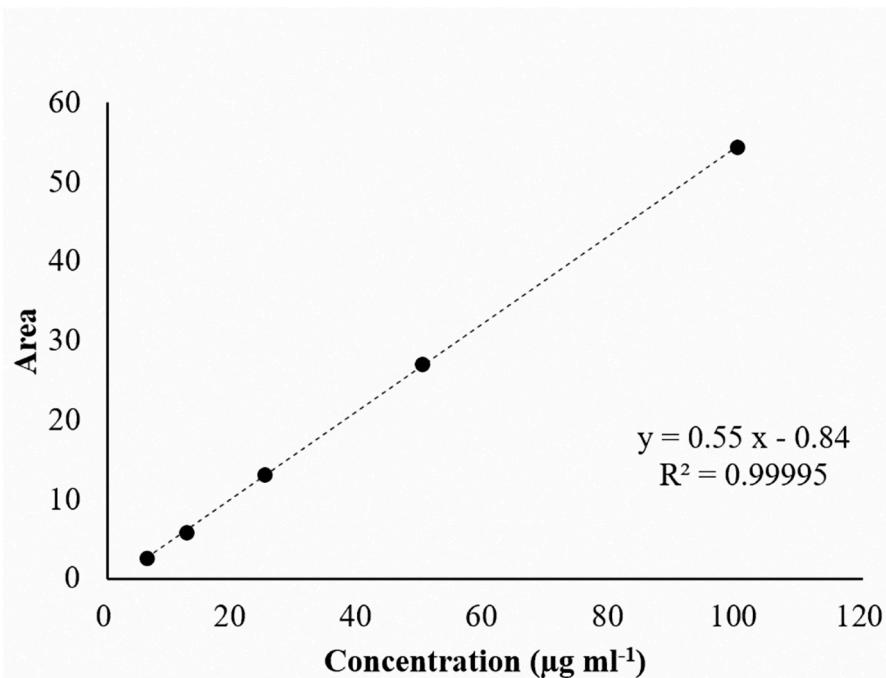


Figure S1. Linearity of nafamostat mesylate (NFM) HPLC analysis method validation.

Table S1. Linearity of nafamostat mesylate (NFM) HPLC analysis method validation.

| Concentration ($\mu\text{g mL}^{-1}$) | Area | Calculated Concentration ($\mu\text{g mL}^{-1}$) | Deviation (%) |
|---|---------|--|---------------|
| 6.25 | 2.58 | 6.18 | 1.10 |
| 12.50 | 5.897 | 12.17 | 2.64 |
| 25.00 | 13.182 | 25.32 | 1.29 |
| 50.00 | 26.975 | 50.22 | 0.45 |
| 100.00 | 54.465 | 99.85 | 0.15 |
| R² | 0.99995 | | |
| Slope | 0.55 | | |
| Intercept | -0.84 | | |

Table S2. Accuracy of nafamostat mesylate (NFM) HPLC analysis method validation.

| Sample No. | Concentration ($\mu\text{g mL}^{-1}$) | area | Founded Concentration ($\mu\text{g mL}^{-1}$) | recovery (%) |
|---------------------------|---|-------|---|--------------|
| 1 | 25.00 | 13.75 | 26.34 | 105.37 |
| 2 | 50.00 | 27.52 | 51.20 | 102.40 |
| 3 | 100.00 | 55.29 | 101.34 | 101.34 |
| 4 | 25.00 | 13.80 | 26.44 | 105.75 |
| 5 | 50.00 | 27.58 | 51.31 | 102.62 |
| 6 | 100.00 | 55.06 | 100.93 | 100.93 |
| 7 | 25.00 | 13.88 | 26.59 | 106.35 |
| 8 | 50.00 | 27.53 | 51.23 | 102.46 |
| 9 | 100.00 | 55.16 | 101.10 | 101.10 |
| Average | | | | 103.15 |
| Standard deviation | | | | 2.11 |
| %RSD | | | | 2.05 |

Table S3. Precision of nafamostat mesylate (NFM) HPLC analysis method validation.

| Sample No. | Concentration ($\mu\text{g mL}^{-1}$) | area |
|---------------------------|---|-------|
| 1 | 100 | 54.26 |
| 2 | 100 | 54.10 |
| 3 | 100 | 54.28 |
| 4 | 100 | 54.94 |
| 5 | 100 | 54.41 |
| 6 | 100 | 55.09 |
| Average | | 54.52 |
| Standard deviation | | 0.40 |
| %RSD | | 0.74 |