

**Supplement pages**

**Table 1: The analysis of variance for the response surfaces obtained for particle size, polydispersity, encapsulation efficiency and drug loading.**

| <b>Measure</b>                        | <b>Particle size</b> | <b>Polydispersity</b> | <b>Encapsulation efficiency</b> | <b>Drug loading</b> |
|---------------------------------------|----------------------|-----------------------|---------------------------------|---------------------|
| <b>F value</b>                        | 30.87                | 9.25                  | 14.15                           | 9.37                |
| <b>P&gt;F<sup>a</sup></b>             | <0.0001              | 0.0009                | 0.0001                          | 0.0008              |
| <b>Degree of freedom of model</b>     | 9                    | 9                     | 9                               | 9                   |
| <b>RMSE</b>                           | 7.36                 | 0.012                 | 4.79                            | 1.05                |
| <b>R<sup>2</sup></b>                  | 0.9653               | 0.8927                | 0.9273                          | 0.8940              |
| <b>Coefficient of variance</b>        | 4.85                 | 8.93                  | 6.10                            | 7.73                |
| <b>Adequate precision<sup>b</sup></b> | 24.433               | 12.691                | 10.920                          | 13.445              |

<sup>a</sup> Values indicate that confidence level for particle size polydispersibility, encapsulation efficiency and drug loading are >99.9 %.

<sup>b</sup> Value >4 indicates adequate precision in the model