**Table S1.** Variables and experimental excipients domains used in BBD to formulate cationic TPP-TPGS1000-PTX-NE.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variables**  **(Independent)** | **Levels** | | **Variables (Dependent)** | **Levels** |
| **Low (-1)** | **High (+1)** | **Desirability** |
| A: Vit-E (% v/v) | 6 | 16 | Y1: PDI | Minimum |
| B: TPP-TPGS1000 (% w/v) | 1 | 5 | Y2: Size (nm) | Minimum |
| C: Tween 80 (% v/v) | 1 | 4 | Y3: Zeta (mV) | Maximum |