**Supp Table 1:** The release constants ofTTO from topical gel TG1 loaded with a combination of TTO and AgNPs; Lavender oil from topical gel TG5 loaded with a combination of lavender oil and AgNPs; AgNPs from TG1 loaded with a combination of TTO and AgNPs; AgNPs from TG3 loaded with AgNPs; and AgNPs release from TG5 loaded with a combination of lavender oil and AgNPs for the Zero-order, Higuchi, and Korsmeyer-Peppas

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Topical Gel** | **Loaded Drug** | **Zero-Order model** | | **Higuchi model** | | **Korsmeyer Peppas model** | | |
| **K** | **r2** | **K** | **r2** | **K** | **n** | **r2** |
| TG1 | TTO | 0.1515 | 0.9999 | 4.5272 | 0.9801 | 0.9694 | 0.7408 | 0.9998 |
| Ag Nanoparticles | 0.1363 | 0.9986 | 4.0742 | 0.9796 | 0.94390 | 0.7159 | 0.9978 |
| TG3 | Ag Nanoparticles | 0.12151 | 0.9961 | 3.6636 | 0.9928 | 0.8709 | 0.5320 | 0.9978 |
| TG5 | Lavender Oil | 0.1825 | 0.9885 | 5.4635 | 0.9721 | 1.1027 | 0.9979 | 0.9795 |
| Ag Nanoparticles | 0.1489 | 0.9982 | 4.4342 | 0.9710 | 0.9172 | 0.6263 | 0.9992 |