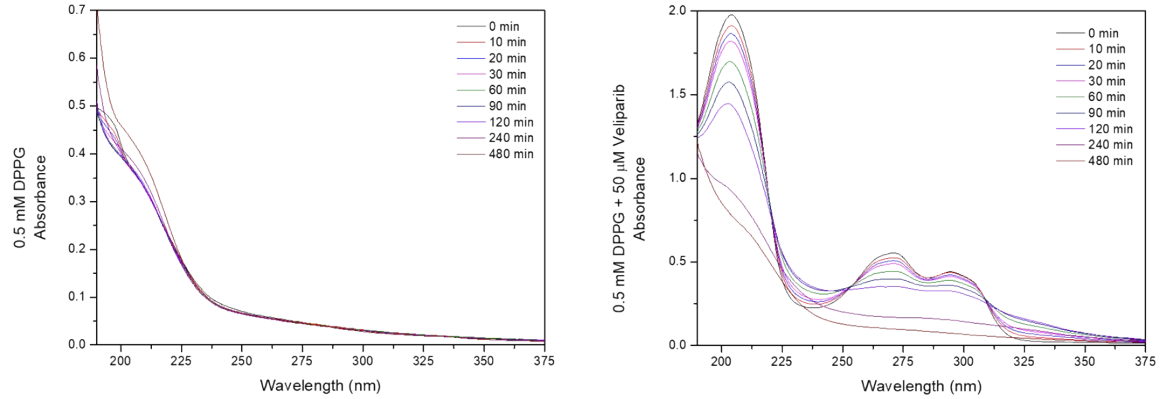
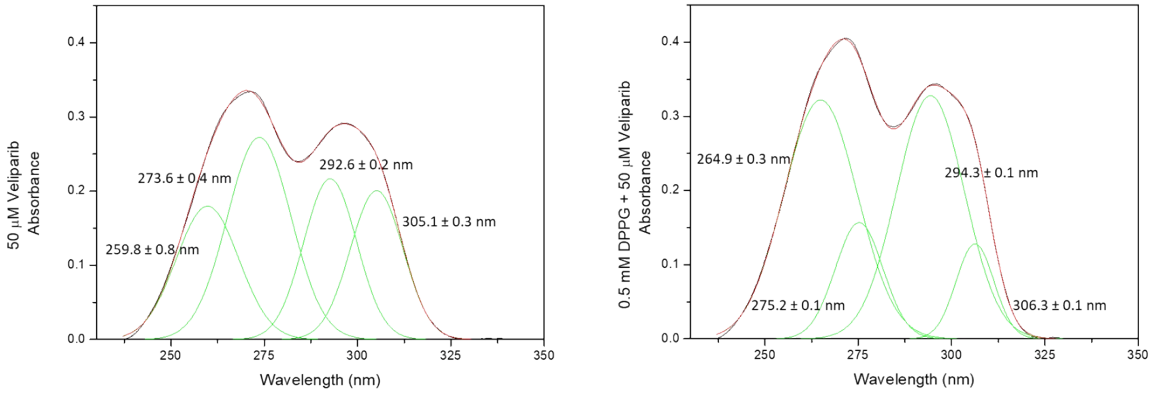
## Appendix A




(**a**) (**b**)

**Figure A1.** DPPG and DPPG encapsulating Veliparib irradiation assay with UVC lamp. Absorbance spectra of (a) 0.5 mM DPPG formulation; and (b) 0.5 mM DPPG + 50 µM Veliparib for different irradiation times.




(**a**) (**b**)

**Figure A2.** Gaussian analysis of Veliparib and DPPG+Veliparib samples. Data reveals that Veliparib spectra comprise four Gaussians and that after drug encapsulation in DPPG liposomes, these Gaussians present a red shift on wavelength number. (a) UV-vis spectra of 50 µM Veliparib; (b) UV-vis spectra of 0.5 mM DPPG + 50 µM Veliparib.

**Table A1.** Analysis of Veliparib and DPPG + Veliparib wavelength shift of Gaussian 2 and 5 upon UVC irradiation.

| Irradiation Time (min) | Veliparib Peak Position[1](nm) | DPPG+Veliparib Peak Position[1] (nm) | Veliparib Peak Position[2](nm) | DPPG+Veliparib Peak Position[2] (nm) |
|---|---|---|---|---|
| 0 | 273.7 ± 0.4 | 275.3 ± 0.1 | n.d. | n.d. |
| 10 | 273.9 ± 0.3 | 274.9 ± 0.2 | 325.2 ± 0.8 | 325.2 ± 0.8 |
| 20 | 273.5 ± 0.2 | 274.5 ± 0.1 | 325.4 ± 0.7 | 325.4 ± 0.7 |
| 30 | 273.4 ± 0.2 | 274.1 ± 0.2 | 327.1 ± 0.4 | 327.1 ± 0.4 |
| 60 | 273.04 ± 0.32 | 273.8 ± 0.3 | 327.8 ± 0.5 | 327.8 ± 0.5 |
| 90 | 273.4 ± 0.2 | 273.7 ± 0.2 | 328.5 ± 0.5 | 328.5 ± 0.5 |
| 120 | 274.1 ± 0.3 | 273.9 ± 0.2 | 328.1 ± 0.7 | 328.1 ± 0.7 |
| 240 | 275.2 ± 0.5 | 278.7 ± 0.6 | 330.3 ± 0.9 | 330.3 ± 0.9 |
| 480 | n.d. | n.d. | n.d. | n.d. |

1Peak position of Guassian 2. 2Peak position of Guassian 5.n.d. means not detected.