Photochemical and Photobiological Activity of Ru(II) Homoleptic and Heteroleptic Complexes Containing Methylated Bipyridyl-type Ligands

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Figure S1. 500 MHz ¹H NMR spectrum of **1** in acetone- d_6 at 25 °C; top: downfield region; bottom: upfield region.

2.3 2.2 2.1 2.0 1.9 1.8

1.7 1.6 1.5 1.4 1.3 1.2 1.1

1.797-

2.4

2.500-

2.7

2.6 2.5

3.0 2.9 2.8

3.3 3.2 3.1

X : parts per Million : 1H



Figure S2. 500 MHz ¹H NMR spectrum of **2** in acetone- d_6 at 25 °C; top: downfield region; bottom: upfield region.



Figure S3. 500 MHz ¹H NMR spectrum of **3** in acetone- d_6 at 25 °C; top: downfield region; bottom: upfield region.



Figure S4. 500 MHz ¹H NMR spectrum of **4** in acetone- d_6 at 25 °C; top: downfield region; bottom: upfield region.





Figure S5. 500 MHz ¹H NMR spectrum of **5** in acetone- d_6 at 25 °C; top: downfield region; bottom: upfield region.





Figure S6. 500 MHz ¹H NMR spectrum of **6** in acetone- d_6 at 25 °C; top: downfield region; bottom: upfield region.



Figure S7. 500 MHz ¹H NMR spectrum of **7** in acetone- d_6 at 25 °C; top: downfield region; bottom: upfield region.



Figure S8. Mass spectrum of 1.



Figure S9. Mass spectrum of 2.



Figure S10. Mass spectrum of 3.



Figure S11. Mass spectrum of 4.



Figure S12. Mass spectrum of 5.



Figure S13. Mass spectrum of 6.



Figure S14. Mass spectrum of 7.



Figure S15. Analytical HPLC chromatogram of 1.



Figure S16. Analytical HPLC chromatogram of 2.



Figure S17. Analytical HPLC chromatogram of 3.



Figure S18. Analytical HPLC chromatogram of 4.



Figure S19. Analytical HPLC chromatogram of 5.



Figure S20. Analytical HPLC chromatogram of 6.



Figure S21. Analytical HPLC chromatogram of 7.



Figure S22. Cell cytotoxicity dose responses for compound 1 with different light sources.



Figure S23. Cell cytotoxicity dose responses for compound 2 with different light sources.



Figure S24. Cell cytotoxicity dose responses for compound 3 with different light sources.



Figure S25. Cell cytotoxicity dose responses for compound 4 with different light sources.



Figure S26. Cell cytotoxicity dose responses for compound 5 with different light sources.



Figure S27. Cell cytotoxicity dose responses for compound 6 with different light sources.



Figure S28. Cell cytotoxicity dose responses for compound 7 with different light sources.



Figure S29. Dose dependent generation of ${}^{1}O_{2}$ detected by SOSG. A) Compound **3**; B) Compound **6**; C) Ru(dpp)₃; D) Compound **2**.



Figure S30. Time dependent inhibition of production of Dendra2 by compound **4** in the dark in HEK293 T-REx cells.



Figure S31. Time dependent inhibition of production of Dendra2 by compound **2** (left) and compound **4** (right) following irradiation in HEK293 T-REx cells.