Supplementary Information

N-Hydroxyphthalimide Catalysts as Bioactive Pro-Oxidants

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Figure SI 1. ¹H-NMR and ¹³C-NMR spectra of compound 1-OH. Solvent: acetone-d₆.



Figure SI 2. ¹H-NMR and ¹³C-NMR spectrum of compound 2-OH. Solvent: DMSO-d₆.



Figure SI 3. ¹H-NMR and ¹³C-NMR spectrum of compound 2-Me. Solvent: CDCl₃.



Figure SI 4. ¹H-NMR and ¹³C-NMR spectrum of compound 3-OH. Solvent: DMSO-d₆.



Figure SI 5. ¹H-NMR and ¹³C-NMR spectrum of compound **3-Me**. Solvent: CDCl₃.



Figure SI 6. ¹H-NMR and ¹³C-NMR spectrum of compound 4-OH. Solvent: DMSO-d₆.



Figure SI 7. ¹H-NMR and ¹³C-NMR spectrum of compound 4-Me. Solvent: CDCl₃.



Figure SI 8. Cytotoxicity of **2-OH**, **3-OH**, and **4-OH** (each at its EC50 that were 100 μ M, 200 μ M, and 110 μ M, respectively) in MG-63 cells, each compared with the respective -Me derivative tested at the same concentration.



Figure SI 9. GSH content in MG-63 cells treated with **4-OH** and **4-Me** compounds *vs.* untreated control cells (CTRL).

Size Distribution by Intensity



Figure SI 10. Dynamic Light Scattering (DLS) analysis of the hydrodynamic diameter of 2-OH-aggregates in water.



Figure SI 11. Dynamic Light Scattering (DLS) analysis of the hydrodynamic diameter of **3-OH**-aggregates in water.

Size Distribution by Intensity



Figure SI 12. Dynamic Light Scattering (DLS) analysis of the hydrodynamic diameter of **4-OH**-aggregates in water.



Figure SI 13. Dynamic Light Scattering (DLS) analysis of the hydrodynamic diameter of **2-Me**-aggregates in water.

Size Distribution by Intensity



Figure SI 14. Dynamic Light Scattering (DLS) analysis of the hydrodynamic diameter of **3-Me**-aggregates in water.



Figure SI 15. Dynamic Light Scattering (DLS) analysis of the hydrodynamic diameter of 4-Me-aggregates in water.