

## SUPPLEMENTARY MATERIAL for

# Anti-cancer Activity of Phenyl and Pyrid-2-yl 1,3-Substituted Benzo[1,2,4]triazin-7-ones and Stable Free Radical Precursors

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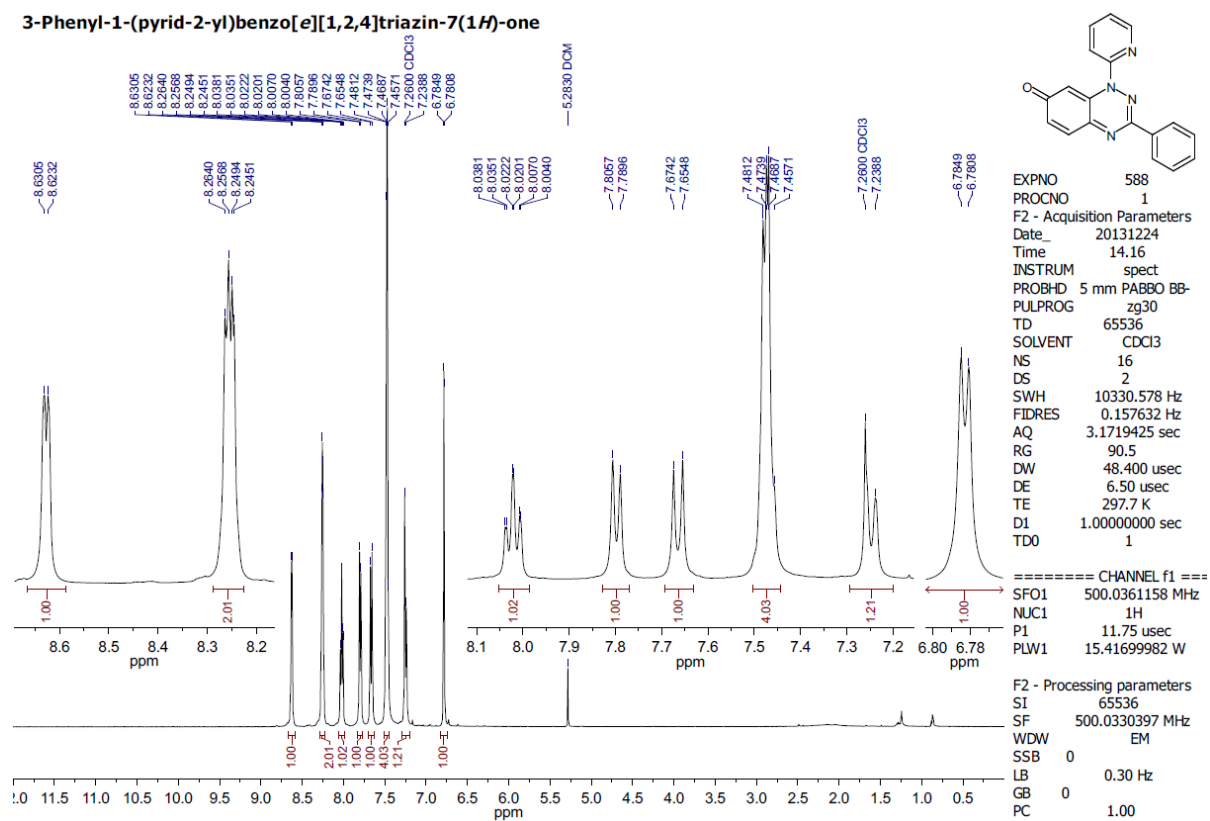
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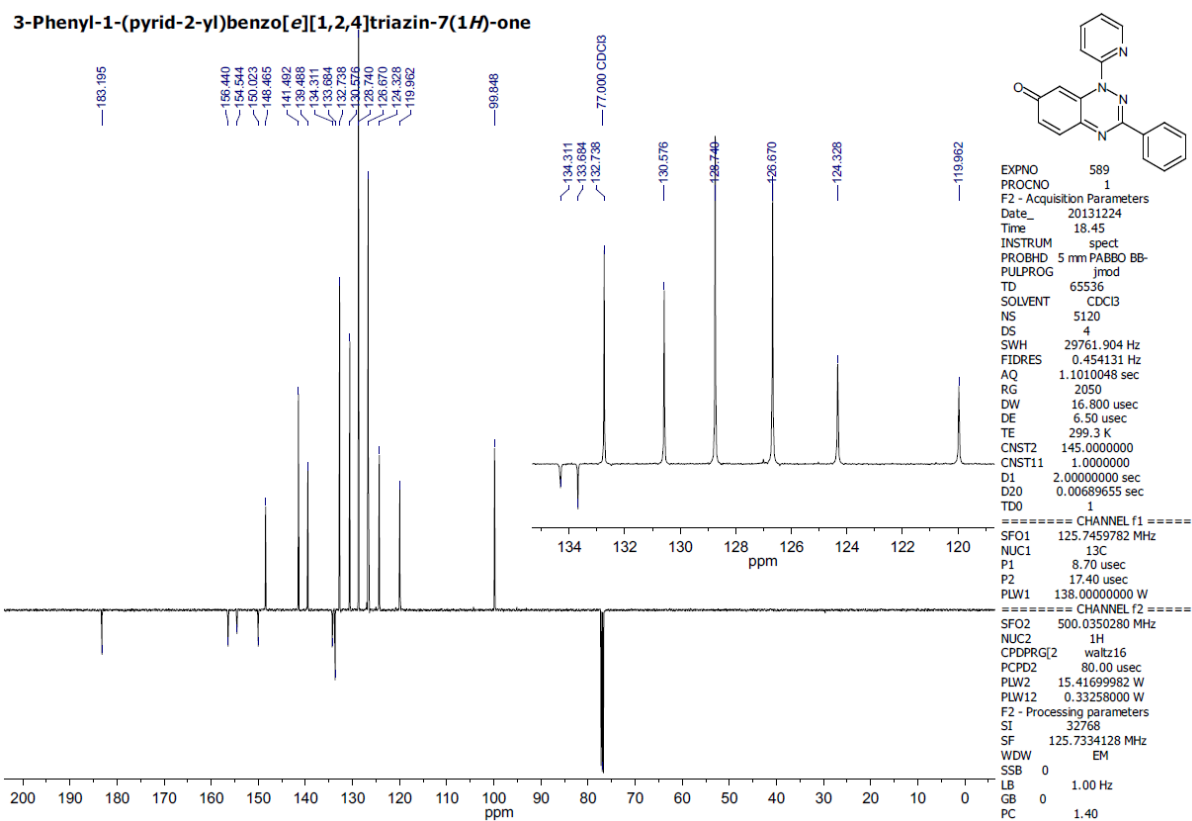
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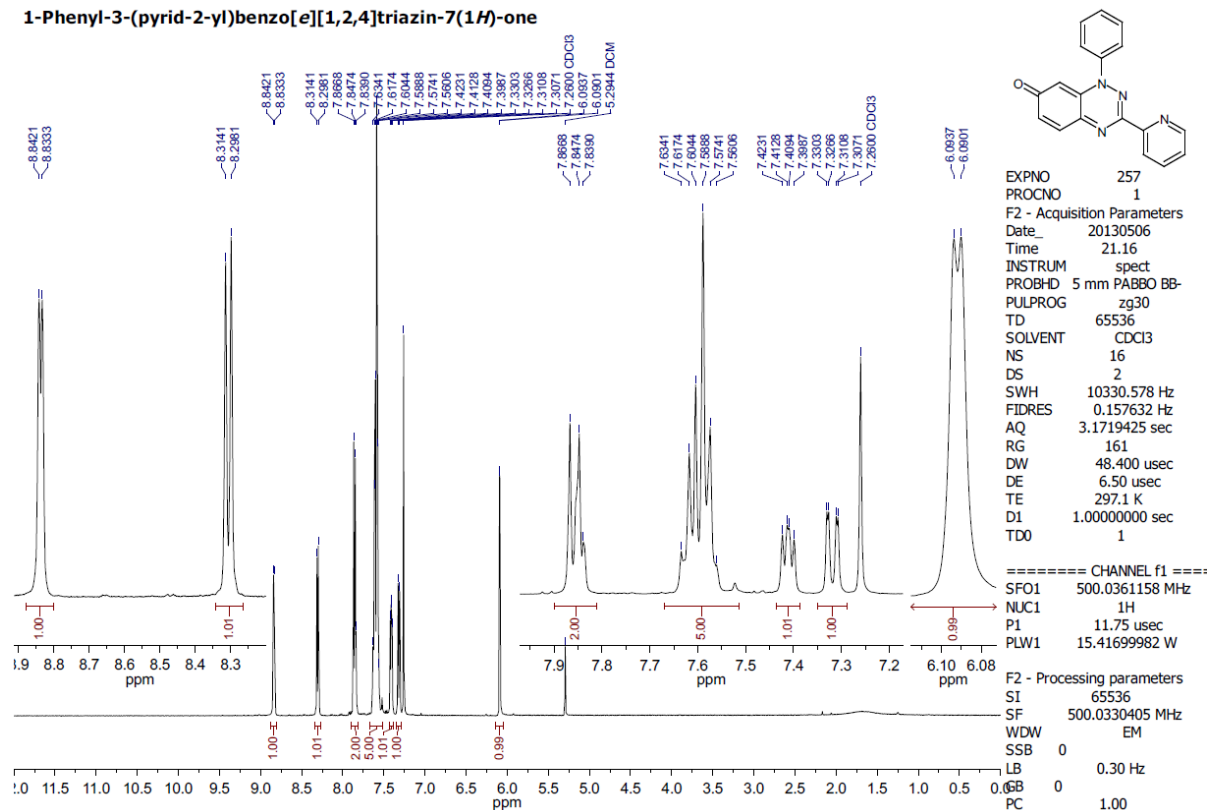


**Figure S1.**  $^1\text{H}$  NMR (500 MHz) spectrum in  $\text{CDCl}_3$  of 3-phenyl-1-(pyrid-2-yl)-benzo[e][1,2,4]triazin-7(1H)-one (**4a**).

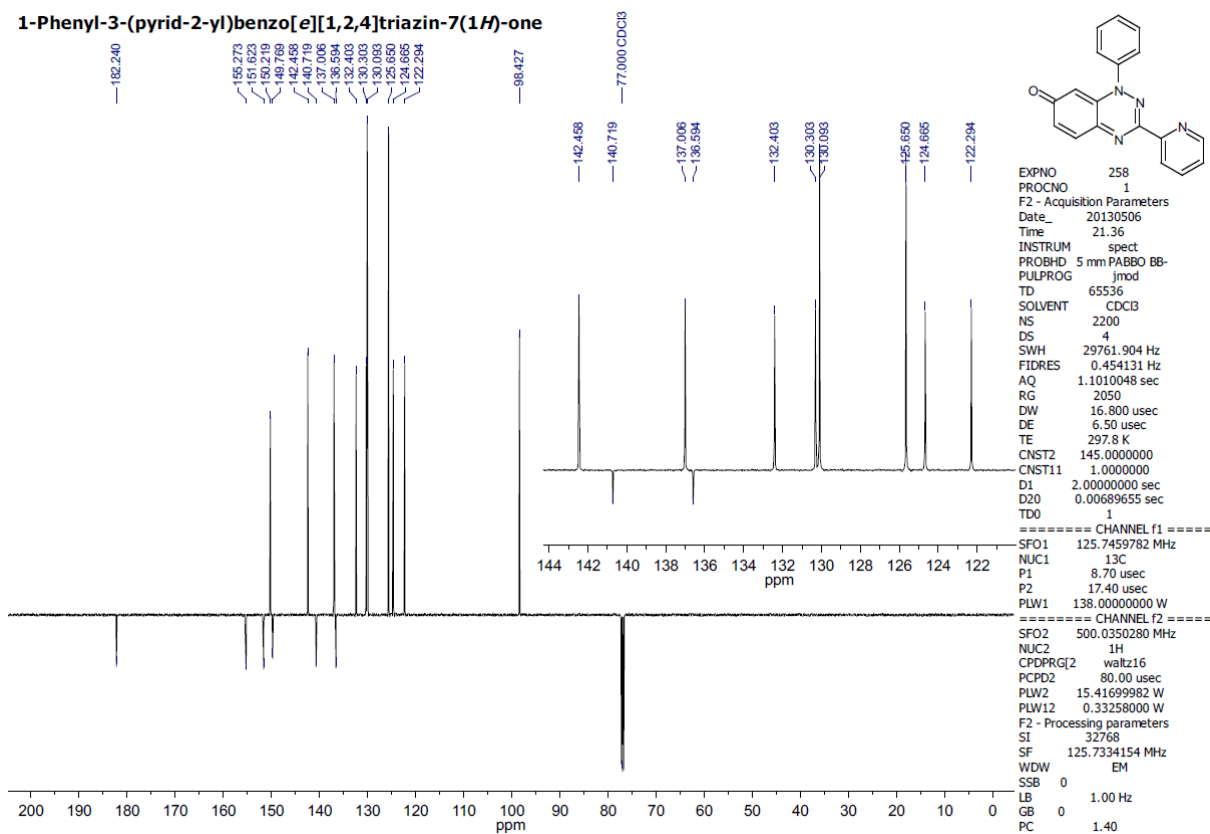


**Figure S2.** <sup>13</sup>C NMR (125 MHz) spectrum in CDCl<sub>3</sub> of 3-phenyl-1-(pyrid-2-yl)-benzo[e][1,2,4]triazin-7(1H)-one (**4a**).

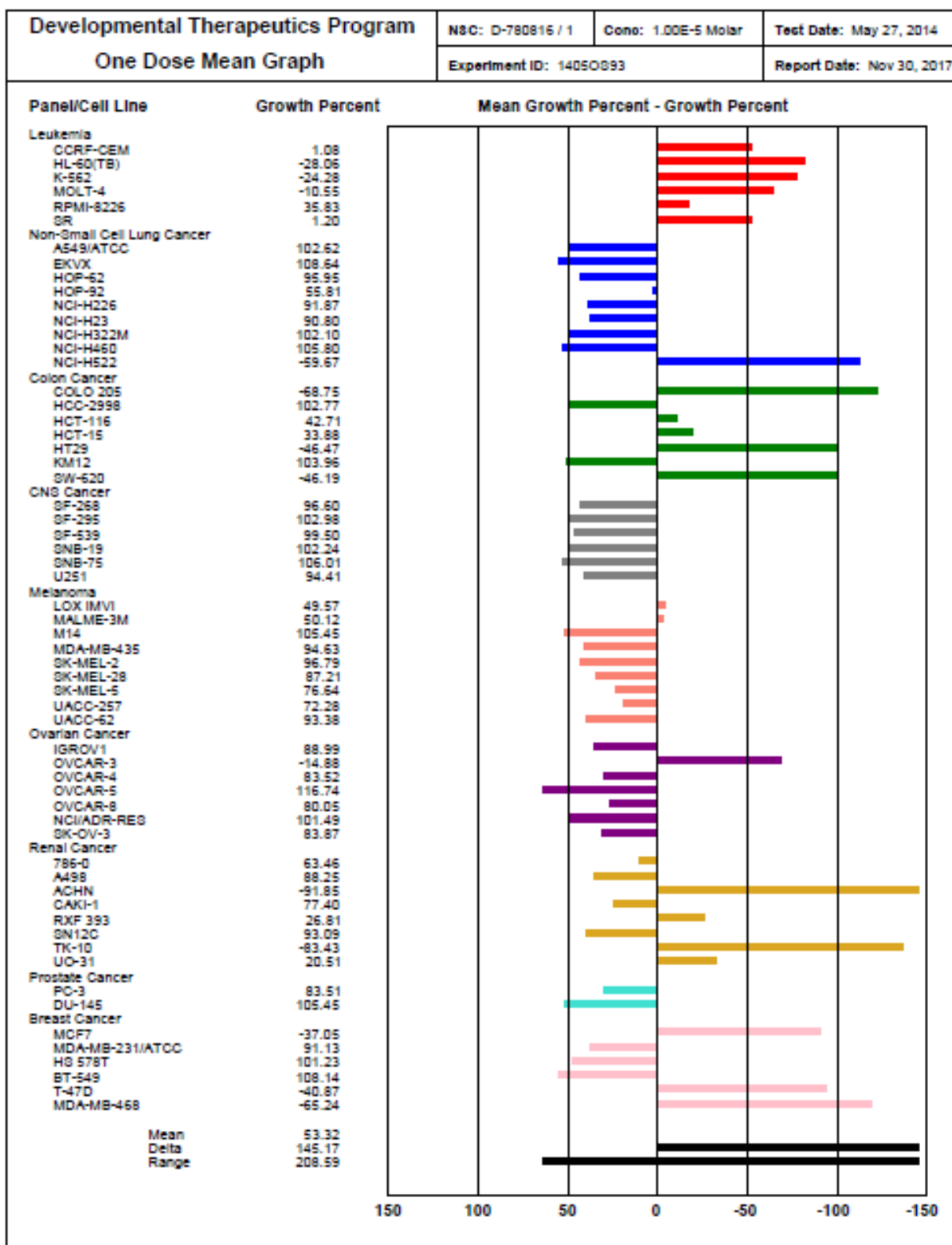
**1-Phenyl-3-(pyrid-2-yl)benzo[e][1,2,4]triazin-7(1H)-one**



**Figure S3.**  $^1\text{H}$  NMR (500 MHz) spectrum in  $\text{CDCl}_3$  of 1-phenyl-3-(pyrid-2-yl)-benzo[e][1,2,4]triazin-7(1H)-one (**4b**).



**Figure S4.** <sup>13</sup>C NMR (125 MHz) spectra in CDCl<sub>3</sub> of 1-phenyl-3-(pyrid-2-yl)-benzo[*e*][1,2,4]triazin-7(1*H*)-one (**4b**).



**Figure S5.** One dose mean graph data for 3-phenyl-1-(pyrid-2-yl)benzo[e][1,2,4]triazin-7(1H)-one (**4a**) towards the NCI-60 cell line panel.

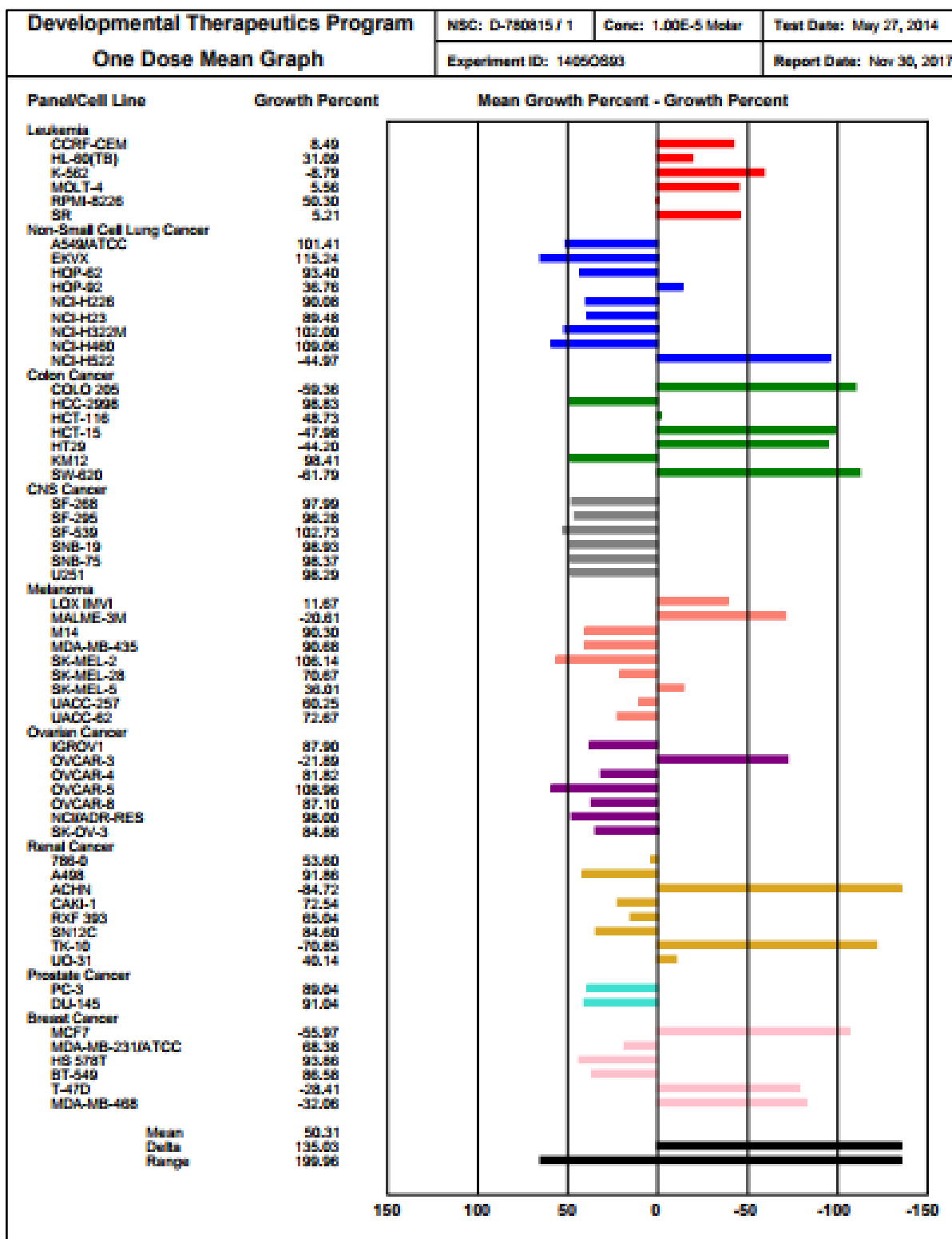
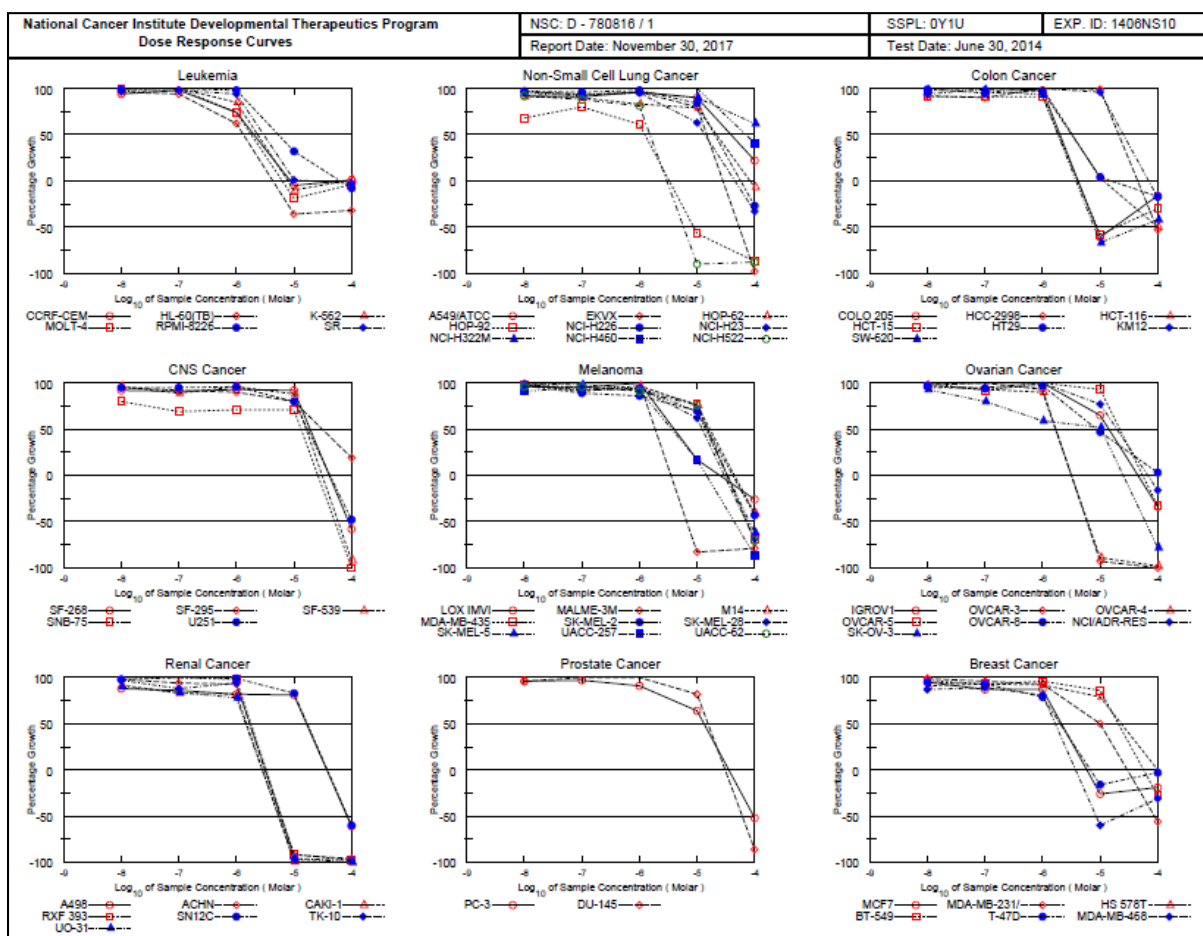
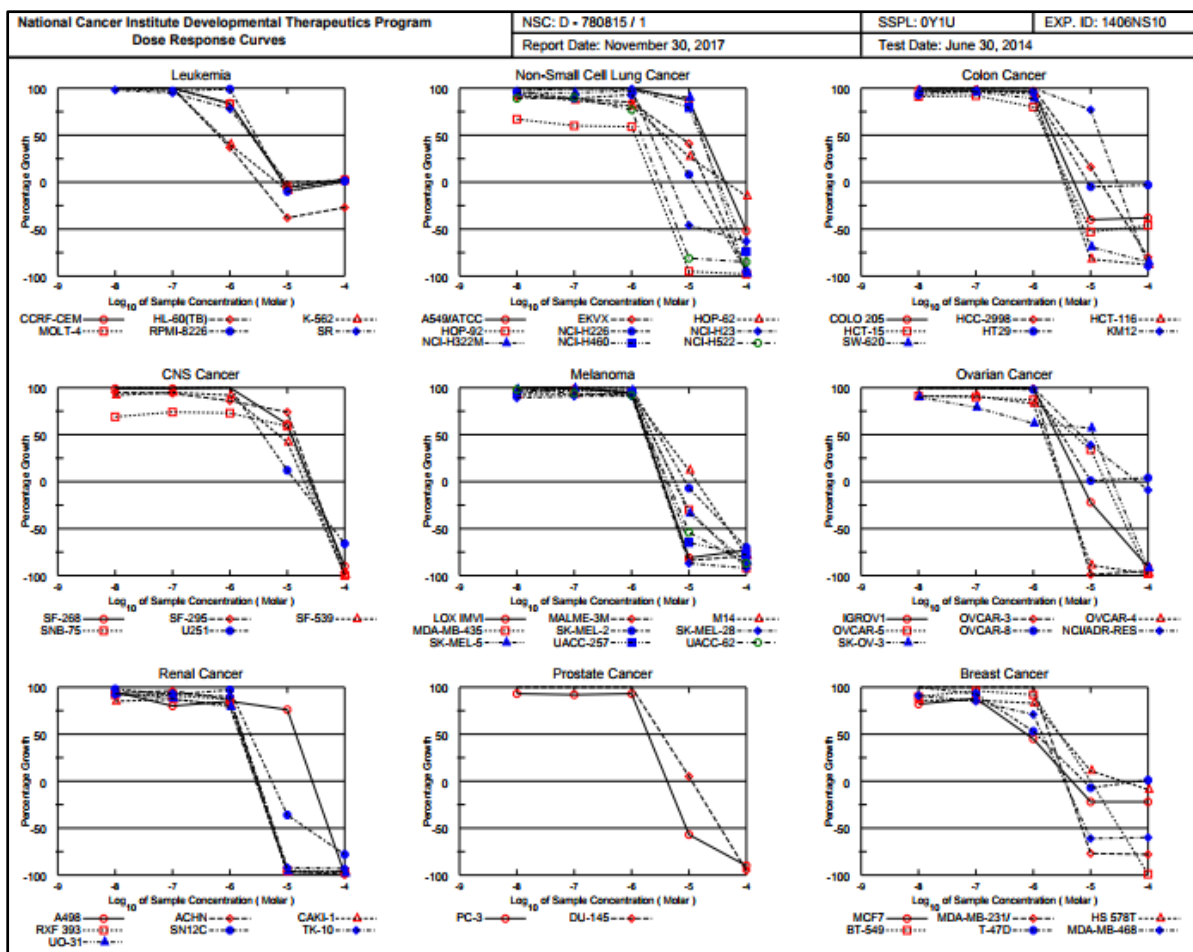


Figure S6. One dose mean graph data for 1-phenyl-3-(pyrid-2-yl)benzo[e][1,2,4]triazin-7(1H)-one (**4b**) towards the NCI-60 cell line panel.



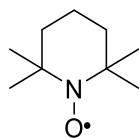
**Figure S7.** Five dose data for 3-phenyl-1-(pyrid-2-yl)benzo[e][1,2,4]triazin-7(1H)-one (4a) towards the NCI-60 cell line panel.



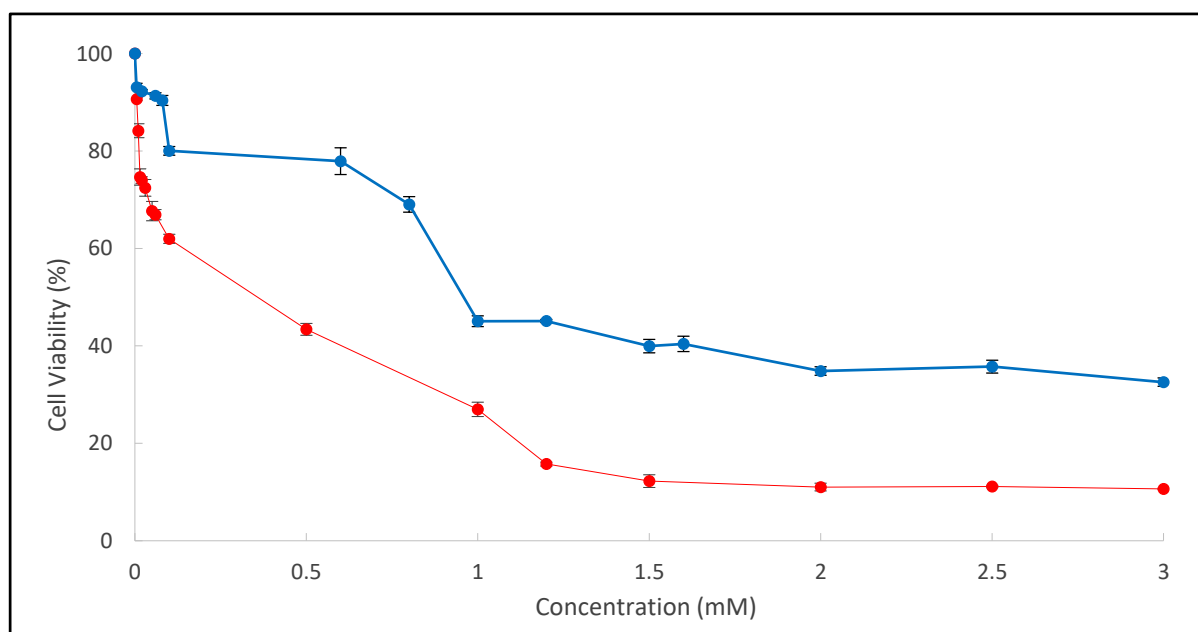


**Figure S8.** Five dose data for 1-phenyl-3-(pyridin-2-yl)benzo[e][1,2,4]triazin-7(1H)-one (4b) towards the NCI-60 cell line panel.

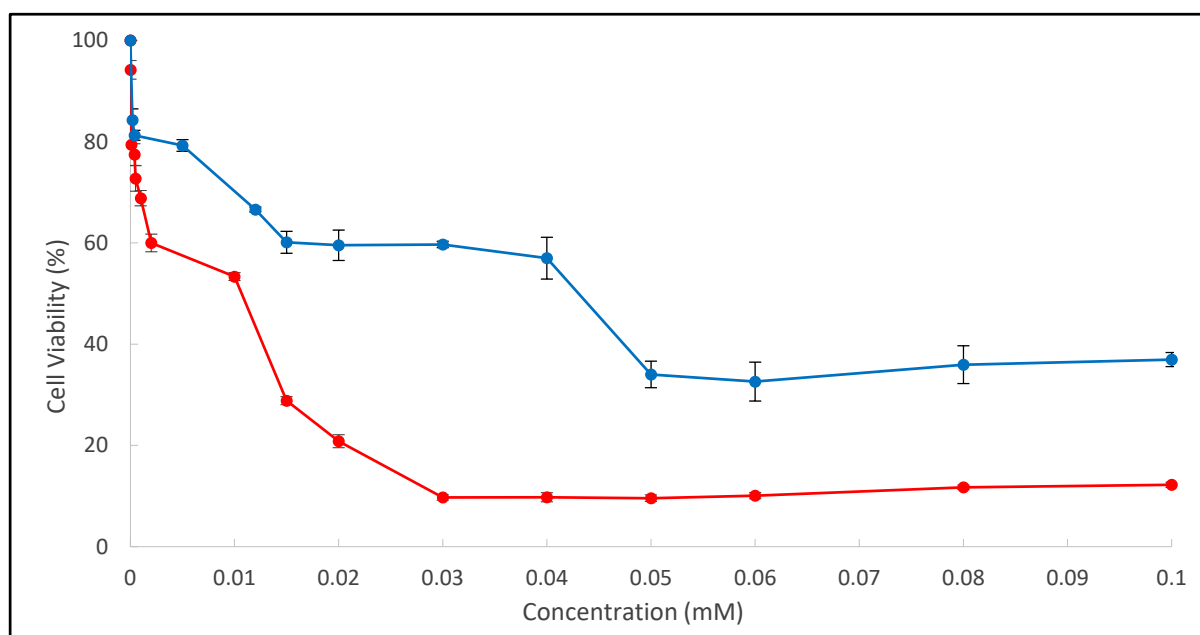
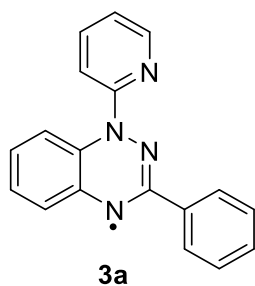
## Cell Viability Graphs



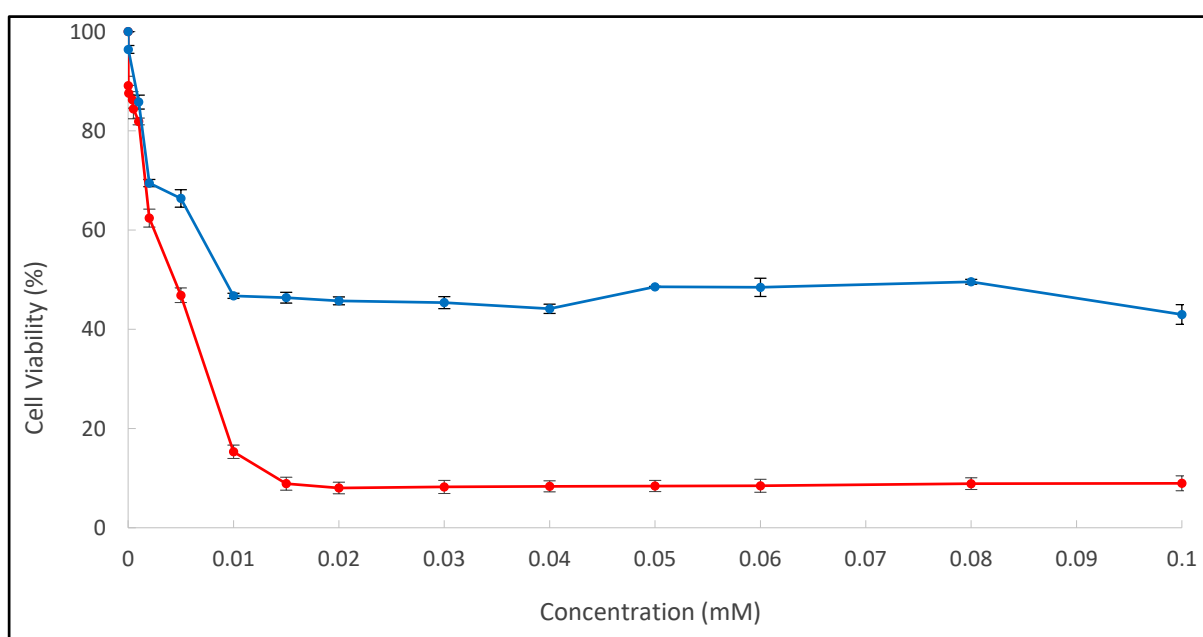
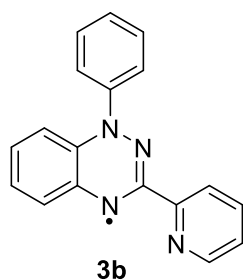
TEMPO



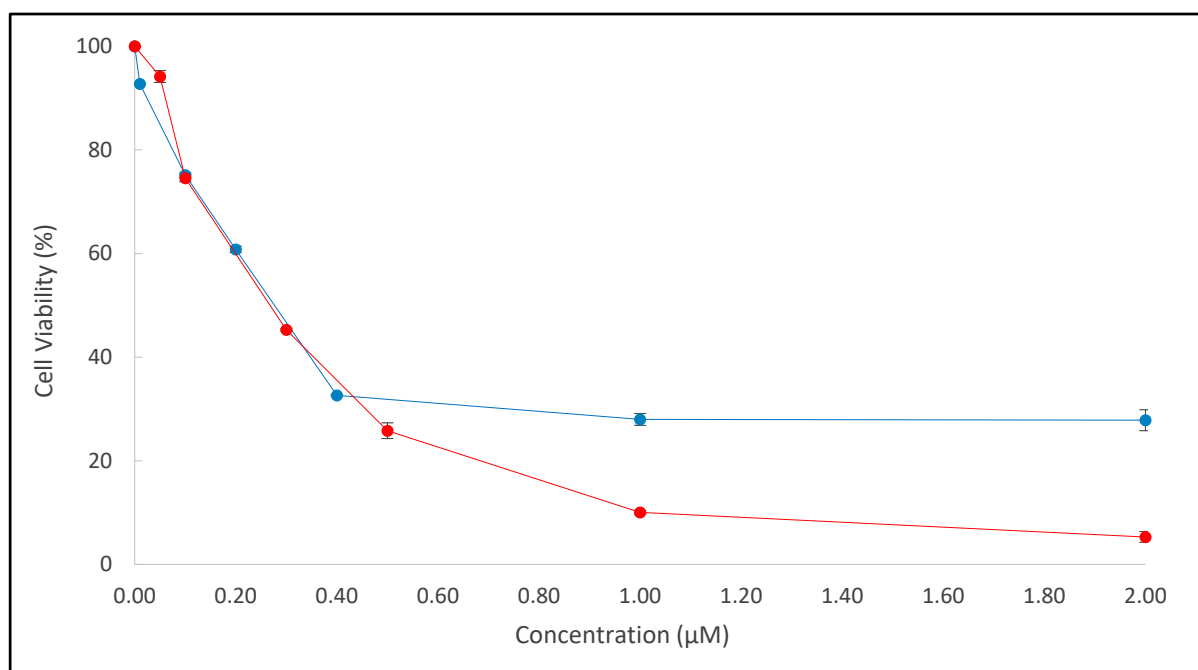
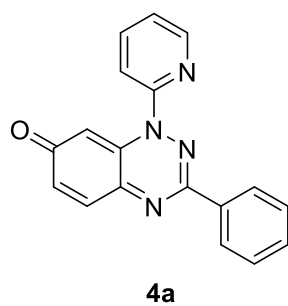
**Figure S9.** Viability of DU-145 (●) and MCF-7 (●) cell lines determined using MTT assay following treatment with TEMPO under aerobic conditions for 72 h at 37 °C. Each data point is the mean of at least two independent experiments. The lines shown are trend lines.



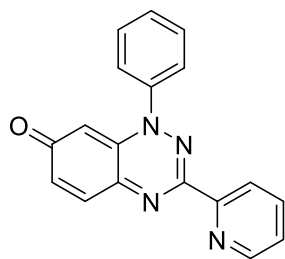
**Figure S10.** Viability of DU-145 (●) and MCF-7 (●) cell lines determined using MTT assay following treatment with 3-phenyl-1-(pyrid-2-yl)-1,4-dihydrobenzo[e][1,2,4]triazin-4-yl (**3a**) under aerobic conditions for 72 h at 37 °C. Each data point is the mean of at least two independent experiments. The lines shown are trend lines.



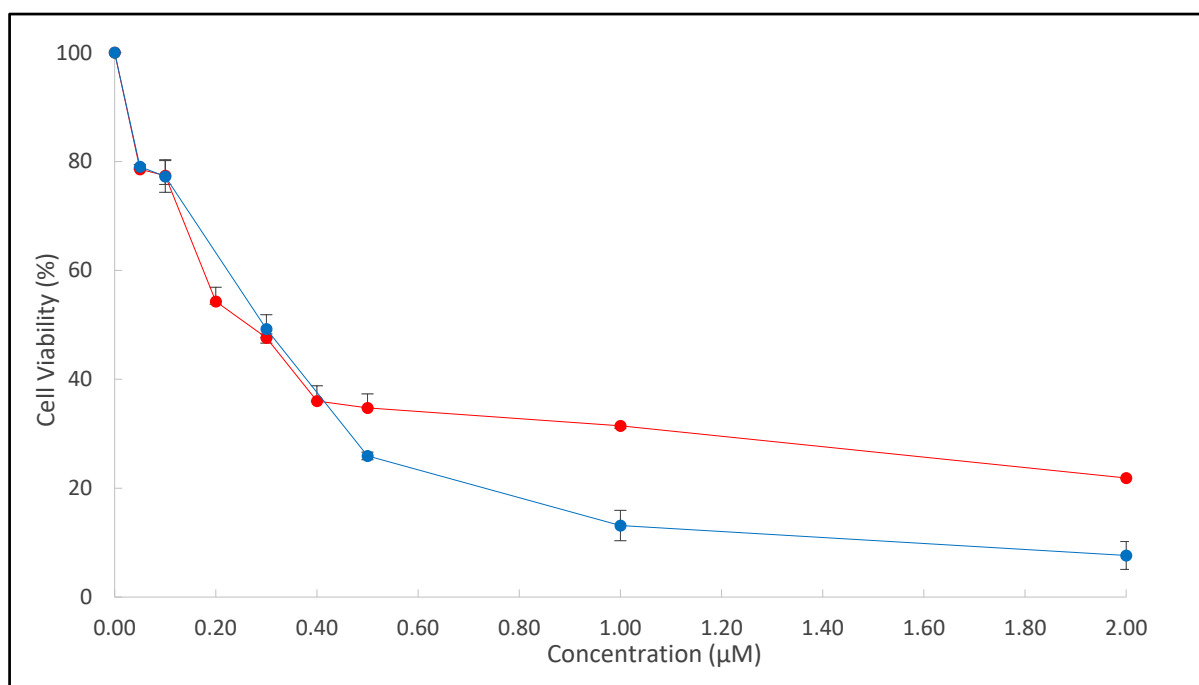
**Figure S11.** Viability of DU-145 (●) and MCF-7 (●) cell lines determined using MTT assay following treatment with 1-phenyl-3-(pyrid-2-yl)-1,4-dihydrobenzo[e][1,2,4]triazin-4-yl (**3b**) under aerobic conditions for 72 h at 37 °C. Each data point is the mean of at least two independent experiments. The lines shown are trend lines.



**Figure S12.** Viability of DU-145 (●) and MCF-7 (●) cell lines determined using MTT assay following treatment with for 3-phenyl-1-(pyrid-2-yl)benzo[*e*][1,2,4]triazin-7(1*H*)-one (**4a**) under aerobic conditions for 72 h at 37 °C. Each data point is the mean of at least two independent experiments. The lines shown are trend lines.



**4b**



**Figure S13.** Viability of DU-145 (●) and MCF-7 (●) cell lines determined using MTT assay following treatment with 1-phenyl-3-(pyrid-2-yl)benzo[*e*][1,2,4]triazin-7(1*H*)-one (**4b**) under aerobic conditions for 72 h at 37 °C. Each data point is the mean of at least two independent experiments. The lines shown are trend lines.