Supplementary Information

## Introduction of mercaptoethyl at sorafenib pyridine-2-amide motif as a potentially effective chain to further get Sorafenib-PEG-DGL

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Figure S3. <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>) and <sup>13</sup>C NMR (151 MHz, DMSO-*d*<sub>6</sub>) spectrum of 10c. Figure S4. <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>) and <sup>13</sup>C NMR (151 MHz, DMSO-*d*<sub>6</sub>) spectrum of 15a. Figure S5. <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>) and <sup>13</sup>C NMR (151 MHz, DMSO-*d*<sub>6</sub>) spectrum of 15b.



Figure S1. <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>) and <sup>13</sup>C NMR (151 MHz, DMSO-*d*<sub>6</sub>) spectrum of 10a.



Figure S2. <sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ) and <sup>13</sup>C NMR (151 MHz, DMSO- $d_6$ ) spectrum of 10b.



Figure S3. <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>) and <sup>13</sup>C NMR (151 MHz, DMSO-*d*<sub>6</sub>) spectrum of 10c.



Figure S4. <sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ) and <sup>13</sup>C NMR (151 MHz, DMSO- $d_6$ ) spectrum of 15a.



Figure S5. <sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ) and <sup>13</sup>C NMR (151 MHz, DMSO- $d_6$ ) spectrum of 15b.