Table S1 Volume of tumors (cm$^3$)

| Time       | Hespintor | Hespintor+ Sorafenib | Sorafenib | Solvent control |
|------------|-----------|----------------------|-----------|-----------------|
| Aug 15, 2019 | 66.24     | 67.42                | 63.58     | 66.89           |
| Aug 17, 2019 | 76.30     | 47.84                | 39.69     | 106.22          |
| Aug 19, 2019 | 67.07     | 47.06                | 29.08     | 141.73          |
| Aug 21, 2019 | 127.72    | 76.90                | 33.65     | 239.76          |
| Aug 23, 2019 | 216.31    | 141.18               | 92.06     | 438.53          |
| Aug 25, 2019 | 459.02    | 294.73               | 128.67    | 637.43          |
| Aug 27, 2019 | 588.77    | 403.17               | 137.78    | 797.65          |
| Aug 29, 2019 | 693.08    | 490.00               | 193.12    | 1027.64         |
| Aug 31, 2019 | 846.09    | 644.27               | 219.71    | 1194.00         |
| Sept 2, 2019 | 995.53    | 757.79               | 303.55    | 1425.65         |
| Sept 4, 2019 | 1195.91   | 911.36               | 405.26    | 1584.25         |
| Sept 6, 2019 | 1366.66   | 1046.59              | 536.99    | 1746.27         |
| Sept 8, 2019 | 1483.09   | 1066.74              | 607.73    | 1807.98         |
| Sept 10, 2019 | 1536.51  | 1096.99              | 689.16    | 1931.09         |
| Sept 12, 2019 | 1649.80  | 1190.90              | 766.44    | 2020.28         |

Table S2 Weight of tumors (g)

| Group Number | Hespintor | Sorafenib | Hespintor+ Sorafenib | Solvent control |
|--------------|-----------|-----------|----------------------|-----------------|
| 1            | 2.4977    | 1.9859    | 1.0574               | 2.6531          |
| 2            | 2.5134    | 1.7541    | 1.2563               | 2.7273          |
| 3            | 2.4862    | 1.6853    | 1.4634               | 2.9251          |
| 4            | 2.6317    | 1.9154    | 1.0563               | 2.6243          |
| 5            | 2.6531    | 1.6425    | 1.2548               | 2.6421          |
| 6            | 2.5945    | 2.1557    | 0.9865               | 2.9024          |
| 7            | 2.3518    | 2.0548    | 1.2314               | 3.3561          |
| 8            | 2.3966    | 1.5819    | 1.1563               | 3.3124          |
| 9            | 2.2981    | 1.9547    | 1.3677               | 2.8496          |
| 10           | 2.6821    | 1.5972    | 1.3425               | 3.9842          |
| 11           | 2.4558    | 1.8923    | 1.2679               | 2.4961          |
| 12           | 2.3578    | 1.7982    | 1.1576               | 2.7421          |
|       | A1  | B1  | C1  | D1  | A2  | B2  | C2  | D2  |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|
| MMP2 | 37.19 | 23.96 | 16.94 | 69.86 | 48.01 | 25.99 | 15.31 | 65.87 |
| MMP9 | 66.99 | 40.06 | 16.53 | 107.62 | 72.63 | 39.12 | 15.66 | 104.46 |
| Bcl-2 | 98.79 | 74.35 | 36.44 | 133.31 | 108.58 | 72.64 | 38.95 | 130.98 |
| Bax  | 81.34 | 108.92 | 138.11 | 69.53 | 86.79 | 112.56 | 143.41 | 58.17 |
| caspase-3 | 13.22 | 41.32 | 75.67 | 7.56 | 13.06 | 40.65 | 71.98 | 8.25 |
| β-actin | 100.00 | 108.54 | 107.60 | 109.53 | 107.02 | 110.78 | 108.47 | 99.36 |

Internal gene correction

|       | A1  | B1  | C1  | D1  | A2  | B2  | C2  | D2  |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|
| MMP2 | 37.19 | 22.07 | 15.74 | 63.78 | 44.86 | 23.46 | 14.11 | 66.29 |
| MMP9 | 66.99 | 36.91 | 15.36 | 98.26 | 67.87 | 35.31 | 14.44 | 105.13 |
| Bcl-2 | 98.79 | 68.50 | 33.87 | 121.71 | 101.46 | 65.57 | 35.91 | 131.82 |
| Bax  | 81.34 | 100.35 | 128.36 | 63.48 | 81.10 | 101.61 | 132.21 | 58.54 |
| caspase-3 | 13.22 | 38.07 | 70.33 | 6.90 | 12.20 | 36.69 | 66.36 | 8.30 |
| β-actin | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Notes: A-1 and A-2, recombinant Hespintor treatment group; B-1 and B-2, Sorafenib treatment group; C-1 and C-2, combined administration group; D-1 and D-2, solvent control group.