Facile fabrication of a near-infrared responsive nanocarrier for spatiotemporally controlled chemo-photothermal synergistic cancer therapy

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Fig. S1 The images of NGO (left) and rNGO (right).
Fig. S2 TEM images of rNGO@mSiO$_2$ (a) and rNGO@mSiO$_2$@pNIPAM-co-pAAm (b, c)

Table S3 The LCST of rNGO@mSiO$_2$@pNIPAM-co-pAAm in different composition ratios.

<table>
<thead>
<tr>
<th>NIPAM (g)</th>
<th>AAm (g)</th>
<th>LCST (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.90</td>
<td>0.1</td>
<td>33</td>
</tr>
<tr>
<td>1.80</td>
<td>0.1</td>
<td>36</td>
</tr>
<tr>
<td>1.80</td>
<td>0.18</td>
<td>41</td>
</tr>
</tbody>
</table>

Fig. S4 The Raman spectrum of rNGO@mSiO$_2$@pNIPAM-co-pAAm.
Fig. S5 The small-angle XRD pattern (a), pore size distribution (b) and amplifying TEM image (c) of rNGO@mSiO$_2$. 

100 nm
Fig. S6 The TEM-EDS images of rNGO@mSiO$_2$@pNIPAM-co-pAAm

Fig. S7 The release of loaded DOX from rNGO@mSiO$_2$@pNIPAM-co-pAAm in 24 h at pH=7.4 and 50 °C (a) or 37 °C (b).
Fig. S8 The images of rNGO@mSiO$_2$@pNIPAM-co-pAAm dispersing in the PBS buffer without (a, left) and with (a, right) NIR irradiation; the stability of reversible transformation ability (b).
Fig. S9 The change of temperature of rNGO@mSiO$_2$@pNIPAM-co-pAAm solution encompassed by different thickness of fresh meat (a), the simulative in vivo drug release behavior (b) and photo of simulative in vivo application (c).
Fig. S10 The zeta potential of rNGO@mSiO$_2$ (a) and rNGO@mSiO$_2$@pNIPAM-co-pAAm (b).
Fig. S11 The viability of HeLa cells incubated with different amounts of rNGO@mSiO₂ in 24 h.