Electronic Supplementary Information

Nitric Oxide-Releasing Emulsion Enforced with Hyaluronic Acid and Vitamin E

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Figure S1. Nitric oxide release profiles of replicate experiments ($n = 3$).

Figure S2. Cumulative nitric oxide release profiles of replicate experiments ($n = 3$).
Figure S3. Measurement of emulsion pH with respect to GSNO concentration. The GSNO concentration at 1.72% was determined based on the pH of the emulsion.

Table S1. Summarized kinematic viscosity and density results. All samples were tested in replicate ($n \geq 3$) and the results are reported as the mean ± standard deviation.

|                      | Kinematic Viscosity<sup>a</sup> (cSt) | Density<sup>b</sup> (g mL<sup>-1</sup>) |
|----------------------|---------------------------------------|-----------------------------------------|
| S-nitrosated emulsion| 11330 ± 485                           | 0.75 ± 0.05                             |
| Non-nitrosated emulsion| 9501 ± 1203                         | 0.83 ± 0.06                             |

<sup>a</sup> Values obtained using a Fungilab rotational viscometer.

<sup>b</sup> Values determined experimentally by noting the mass of a specific volume of sample.
Table S2. pH analysis of the S-nitrosated emulsion. All samples were tested in replicate ($n \geq 3$) and the results are reported as the mean ± standard deviation.

| Week       | pH of S-nitrosated emulsion$^a$ |
|------------|---------------------------------|
| Week 0     | 5.5 ± 0.4                       |
| Week 1     | 5.3 ± 0.2                       |
| Week 2     | 4.0 ± 0.1                       |
| Week 3     | 4.0 ± 0.1                       |
| Week 4     | 3.9 ± 0.02                      |
| Week 8     | 3.9 ± 0.01                      |
| Week 10    | 3.9 ± 0.1                       |
| Week 12    | 3.8 ± 0.09                      |

$^a$ Values obtained using a Mettler Toledo Seven Easy pH meter equipped with a Mettler Toledo InLab® Routine Pro pH probe.