

Supplemental Figure 1. Standard curves for each pure milk thistle compound.

HPLC analyses were performed with a Star Chromatography Workstation (version 5.5.1; Varian, Inc., Walnut Creek, CA) at a flow rate of 1 mL/min using Varian ProStar 210 pumps with a YMC ODS-A column (S 5 μ m 120Å, 4.6 \times 150 mm; Waters Corporation, Milford, MA). Signals were monitored at UV 280 nm using a Varian ProStar 330 PDA detector, and all injections of reference standards were of 50 μ L by a Varian ProStar 410 autosampler. A quality control standard was used to monitor the consistency of the chromatographic analyses by preparing a solution of 0.100 mg/mL biochanin A (Aldrich; Lot 12517PS) in DMSO (DMSO-B). All standards were prepared in DMSO-B, and the measured concentration of biochanin A did not vary more than \pm 2% in all determinations. To prepare the standard curves, stock solutions of the reference standards were prepared in DMSO-B and serially diluted to concentrations of \sim 0.50 mg/mL, 0.20 mg/mL, 0.050 mg/mL, and 0.0125 mg/mL; the absolute concentration of each standard in DMSO-B was calculated based on the purity of each reference standard (ranging from >87% to >99% pure). The R^2 value for each standard curve was >0.99. To verify the presence and confirm the retention time of each of the reference standards in the SM and SB samples, one of the SM samples was spiked with each standard in turn, and the observed change in peak area for a distinct peak was observed by HPLC.

Supplemental Figure 2. Sample chromatogram from HPLC resolution of silymarin (Indena). A stock solution of SM (Indena SpA) was prepared at 12.0 mg/mL in DMSO-B and diluted with DMSO-B to a concentration of 1.2 mg/mL for analysis. Chromatography conditions were as described in Supplemental Figure 1 and the Materials and Methods section of the main manuscript.