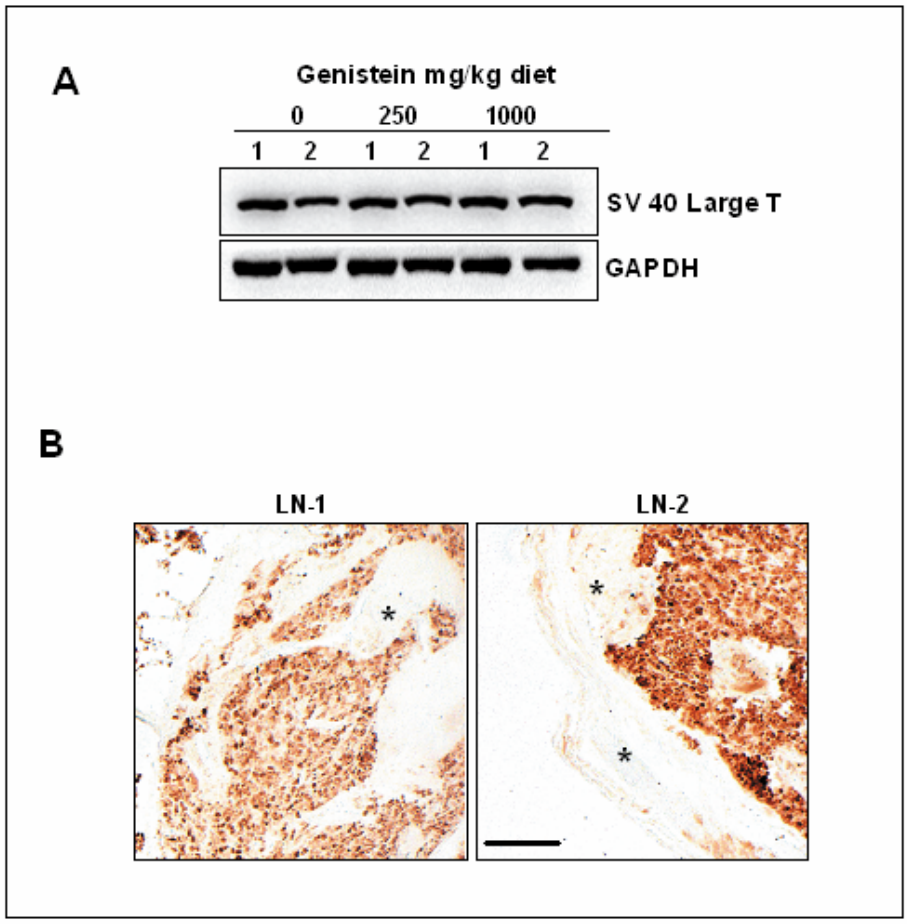
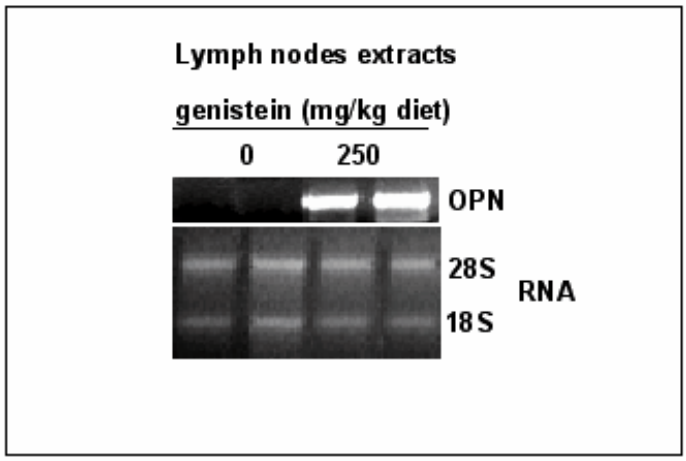
Supplementary Figure 1: **Genistein consumption from 12-20 weeks of age does not alter SV40-Tag expression in prostates of TRAMP-FVB mice**. A) Two representative samples of prostatic lysates from each treatment group (0, 250 and 1000 mg/kg diet) from 12-20 weeks of age were probed for SV40-Tag by Western blot analysis. Immunoblots were reprobed with GAPDH to ensure for equal loading. B) Average serum genistein levels in TRAMP/FVB mice divided into the 3 treatment groups (0, 250 and 1000 mg genistein per kg AIN-76A diet). Values are presented as means ± SEM from five unpooled serum samples from each treatment group. *** indicates $p<0.001$. C) Immunohistochemical staining of SV40-Tag in two samples of pelvic lymph nodes (labeled LN-1 and LN-2) from TRAMP-FVB mice consuming 250 mg genistein per kilogram diet from 12 to 20 weeks of age, * indicates lymphoid tissue devoid of Tag expression. Scale bar = 200μm.



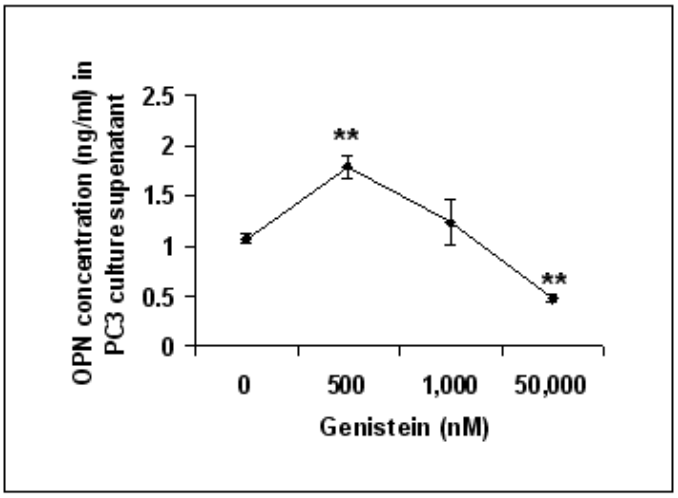
Supplementary Figure 1

Supplementary Figure 2: OPN expression in pelvic lymph node metastases. RNA extracts from two samples of lymphatic vessels and lymph nodes of control diet and 250 mg genistein per kilogram diet-fed TRAMP-FVB from 12-20 weeks of age, respectively, subjected for RT-PCR with primers for OPN. 28S and 18S RNA was used as a control for equal amounts of RNA used.



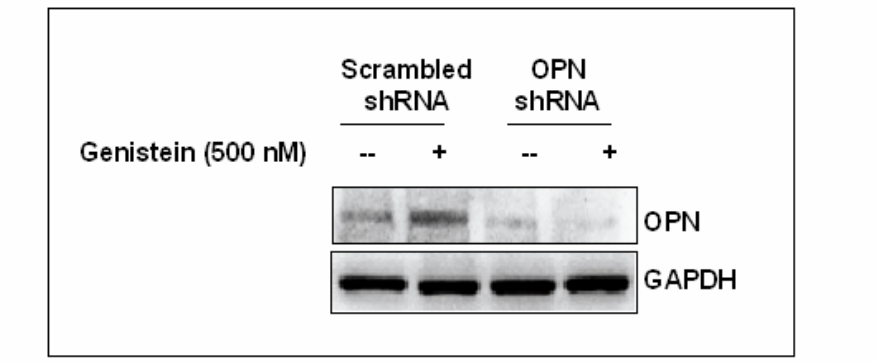
Supplementary Figure 2

Supplementary Figure 3: Secreted OPN levels in vehicle and genistein-treated PC3 cells. Representative graph of secreted OPN as detected by ELISA. Values are normalized to amount of protein in cell lysates of correspondent treated PC3 cells. **, indicates $p<0.01$ compared to vehicle-treated cells.



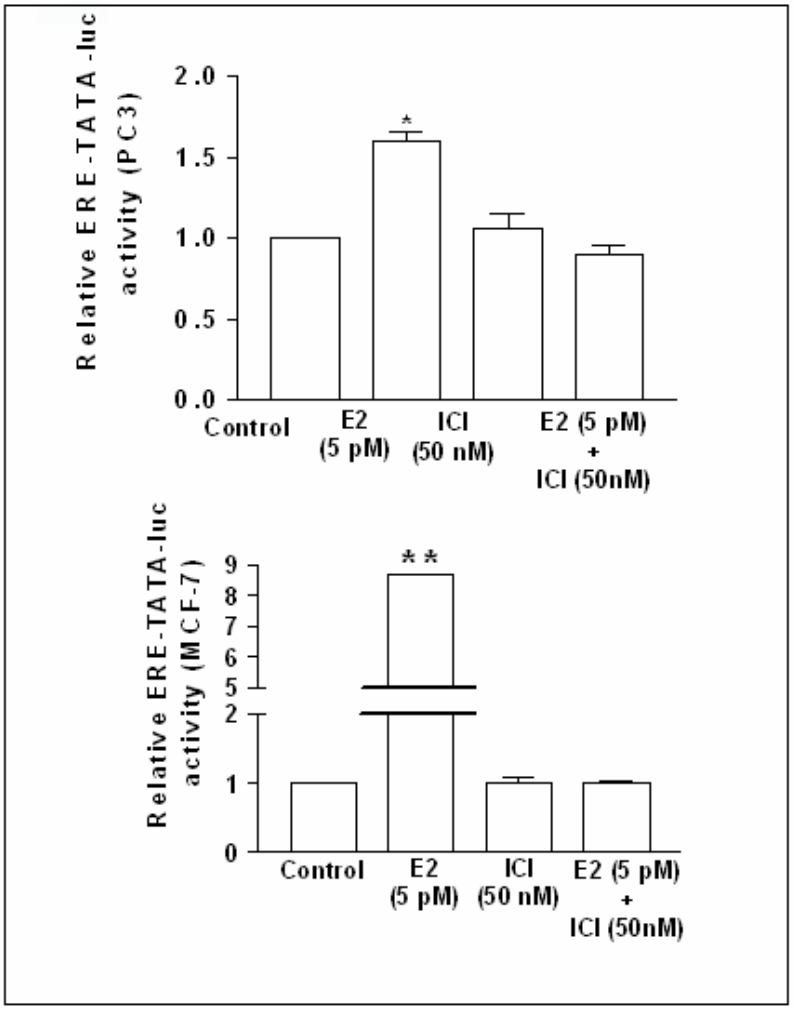
Supplementary Figure 3

Supplementary Figure 4: OPN levels in vehicle and genistein-treated scrambled and OPN shRNA cell lines. Representative Western Blot of OPN levels in scrambled plasmid and OPN shRNA stably transfected PC3 cells treated with or without genistein (500 nM) for 72 hrs. Immunoblots were reprobed with GAPDH to ensure for equal loading.



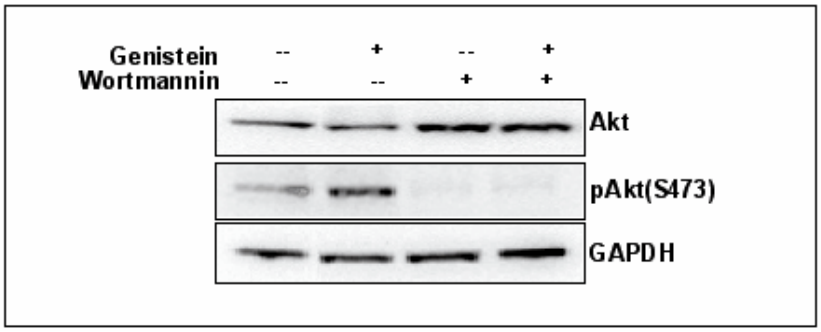
Supplementary Figure 4

Supplementary Figure 5: Estrogen responsiveness of PC3 cells. PC3 or MCF-7 cells were transfected with the ERE-TATA-luciferase plasmid. Forty-eight hrs after transfection, PC3 cells were treated with or without 5 pM estradiol with or without 50 nM ICI 182,780 for 5 hrs and assayed using the Dual Luciferase Assay kit, with values normalized to Renilla as well as to values obtained in transfected cells that were vehicle-treated. Results are representative of three independent experiments with * and **, indicating $p<0.05$ and 0.01, to control respectively.



Supplementary Figure 5

Supplementary Figure 6: Wortmannin abolishes Akt activation in genistein-treated cells. Protein lysates from PC3 cells treated with 0 or 500 nM genistein ± Wortmannin (50 nM) for 72 hours, analyzed for Akt, and p-Akt (Serine 473) levels by Western blot analysis. Immunoblots were reprobed with GAPDH to ensure for equal loading.



Supplementary Figure 6