CLAIMS

1. A method of preventing or mitigating chemotherapy-induced alopecia in a human subject comprising the steps of:

   (1) selecting a human subject having a cancer and who is scheduled to receive, or is receiving, a chemotherapy; and

   (2) topically administering a pharmaceutical composition comprising therapeutically effective amount of a vitamin D compound to the scalp of the subject,

   wherein step (2) is performed prior to and/or concurrently with the chemotherapy, thereby preventing or mitigating chemotherapy-induced alopecia in the subject, wherein the vitamin D compound is not 1,25-dihydroxyvitamin D3; 1,25-dihydroxy-16-ene-23-yne-cholecalciferol; 1,25-dihydroxy-16-ene-yne-cholecalciferol; 1α-hydroxyvitamin D3; 1α,24-dihydroxyvitamin D3, or MC 903.