VITAMIN D3 AND ANALOGS THEREOF FOR ALLEVIATING SIDE EFFECTS ASSOCIATED WITH CHEMOTHERAPY

The present disclosure relates to the use of vitamin D compounds, such as vitamin D3, or analogs and/or metabolites thereof, to modulate bone marrow progenitors and stromal cells prior to the administration of antineoplastic agents. The methods of the present disclosure may ameliorate myelosuppression by increasing the availability of pluripotent stem cell progenitors, and can be used in combination with standard therapy (e.g. granulocyte stimulating factor) to increase proliferation of myeloid cells and/or improve their mobilization from the bone marrow, thereby diminishing the dose and administration of colony- stimulating factors (CSFs) as well as the recuperation time following chemotherapy.

[Figure. 1a]
[Figure. 1b]
[Figure. 1c]