

Review of: "Ascorbic Acid Therapy in Hematological Malignancies - The Current Knowledge and Future Directions"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

Very interesting and useful review, showing both the benefits and the limitations of ascorbic acid administration in various malignancies.

Maybe more information would be useful on the allopathic use of AA, both oral and iv, where dosage is significantly smaller than in CAM - where adverse pro-oxidative effects are seen, and perhaps an opinion on wheather the pro-oxidative actions are really needed.

Two more suggestions: the effect of ascorbic acid on 2,3 IDO - and thus an important modulation on the immune system, which is more important in the context of PD1 ligands, and finally "the big picture" - integrating the AA effects which occur at sub-molar concentrations: demethylation of about 800 genes, actions on TET, JmJ, 2,3 IDO, HIF-1alpha, restoring mitochondrial energy and redox balance (which are studied separately but occur simultaneously).

Finally, there is the effect of AA on maturing leucocytes (CD8), very nicely explored by Manning J, et al: Vitamin C promotes maturation of T-cells. *Antioxid Redox Signal* 19: 2054-2067, 2013.

and synergy with NO - Scheit, Bauer in *ANTICANCER RESEARCH* 34: 5337-5350 (2014)

Overall: two thumbs up for this work!