Table 1: Controlled clinical trials of curcumin

Source: Rombauts K, Dhooghe L. CAM-Cancer Consortium. Curcumin [online document]. April 2014.

	First author, year (ref)	Study design	Participants	Interventions (experimental treatments, control)	Main outcome measures	Main results	Comments
Treatment	Ryan 2013 (43)	Randomized, double-blind, placebo-controlled	30 breast cancer patients	Oral curcumin, 6g daily compared to placebo	Radiation dermatitis	Reduced radiation dermatitis severity and moist desquamation	Curcumin formulation without improved bioavailability which limits the possibility of a therapeutic effect.
	He 2011 (29)	Randomized controlled clinical trial	126 colorectal cancer patients	360 mg of curcumin or placebo 3 times a day between diagnosis and surgery (10 to 30 days). After surgery, patients received standard care.	Weight loss, serum levels of TNF-α and apoptosis and signaling in tumor tissue	Body weight gain, reduced serum levels of TNF-α, increase in cancer cell apoptosis, upregulation of p53 molecules and modulation of apoptosis-related Bax and Bcl-2 molecules in cancer cells	Short treatment period, no follow up
	Belcaro 2013 (44)	Controlled clinical trial	160 cancer patients undergoing radio- or chemotherapy	1,5 g Meriva (curcumin-phospholipid complex with improved bioavailability, 500mg of Meriva contains 200mg of curcumin) compared to placebo	Adverse effects of cancer treatment (chemotherapy and radiotherapy)	Consistent improvement of the side effect profile in both treatment groups (radio- or chemotherapy) compared to control group	Subjective reporting of symptoms, heterogeneity of the study group, and lack of randomization are major limitations of this study

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Table continued

	Ghalaut 2012 (46)	Controlled clinical trial	50 patients with chronic myeloid leukemia	Imatinib + turmeric powder 5g three times/day compared to imatinib alone	Nitric oxide levels	Significant decrease in NO levels after imatinib therapy	No placebo was given in the control group, small scale study with short follow up, no randomization (matched-control)
Prevention	Golombick 2012 (45)	Randomized, double-blind, placebo-controlled cross-over 4g study and an open label 8g extension study	36 smoldering Multiple Myeloma and Monoclonal gammopathy of undetermined significance patients	4g "C3" curcuminoid granule stick packs compared to placebo, cross over at 3 months. After 6 months patients could enter a 3 months open-label extension study with 8g of curcumin "C3"	Slow disease progression	Several markers (rFLC, dFLC, iFLC and uDPYD and serum creatinine) tended to decrease on curcumin treatment. This could suggest that curcumin might have the potential to slow disease progression in patients with MGUS and SMM	Major limitation is the small number of patients and short duration to measure long term decrease in disease progression
	Hanai 2006 (22)	Double-blind, multicenter randomized clinical trial	82 patients with ulcerative colitis	Standard treatment + 2g daily of curcumin or placebo	Prevention of relapse	Relapse was significantly lower in the treatment group compared to the placebo group	Confirmation of results is needed in a larger trial
	Biswas 2010 (27)	Randomized controlled clinical trial	286 healthy volunteers chronically exposed to arsenic	1g daily of curcumin or placebo	DNA damage and antioxidant activity	Reduced DNA damage, retarded ROS generation and lipid peroxidation and increased level of antioxidant activity	There is no mention of any participants dropping out what seems very unlikely in this population

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