



**Good Practice in Traditional Chinese Medicine Research in
the Post-genomic Era**

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**Report on agreed conclusions on the efficacy of CMH in
animal models**



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Abstract	.The efficacy in animal models of cancer has been used as a representative sample of the efficacy of CHM in animal models
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SUMMARY OF A REVIEW EXAMINING THE EFFICACY OF CHM IN ANIMAL MODELS OF DISEASE: CANCER

The literature review performed by the WP5 expert group has concluded the following on the efficacy of CHM in animal models of cancer which was the primary focus of this review:

- GI was the most commonly studied cancer in *in vivo* models with breast and prostate closely following and generally involved the use of murine models transplanted with xenogeneic, syngeneic or carcinogen-induced tumours. These were subjected to generally simple administration regimens involving either oral gavage of CHMs or dietary supplementation.
- There was general evidence of efficacy of the test CHMs in most reported papers-the level of which did vary but the CHMs reported were generally shown to be highly efficacious. However the clinical relevance of these studies was difficult to dissect out and compare to Western medicines as there was little report of toxicity and very little adherence to animal welfare guidelines and ethical committee compliance (only 14% of studies). Therefore some of the effects may have been attributable to non-specific toxicity. In addition there was very few cases where biomarkers of response linked to the mechanism of action of the test CHM were used.
- Experimental design was also compromised as standard of care comparisons were infrequently used (20% of cases). Furthermore the oncology models on the whole (66% of cases) did not evaluate metastatic spread or clinically-relevant transplantation sites (orthotopic). Also most of the studies were done with established cell lines rather than newly established early-passaged cells from patient tissue (97% of cases).

Overall the quality of research in terms of efficacy outputs was of high standard in 9% of cases and poor/insufficient in 41% of cases.