



**Title** Vitamin C, EDTA, and Ultraviolet in Cancer Treatment

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**Reference** Technology Review Report, 027/09.  
[http://medicaldev.moh.gov.my/uploads/27.vit\\_c.pdf](http://medicaldev.moh.gov.my/uploads/27.vit_c.pdf)

## Aim

To assess the effectiveness, safety, and cost effectiveness of vitamin C, ethylenediaminetetraacetic acid (EDTA), and ultraviolet in treating cancer.

## Conclusions and results

Evidence was insufficient to support the effectiveness and safety of vitamin C in treating cancer, and we found no evidence on its cost effectiveness. Our findings were based on 5 studies (1 health technology assessment, 1 large randomized, controlled clinical trial, and 3 small nonrandomized, noncontrolled clinical trials). The possibility to infer findings to vitamin C specifically is limited because the studies used multicomponent interventions. They showed no significant decrease in risk of all-cause mortality, or changes in response rate and overall survival for (combined) vitamin C as a treatment for advanced cancer. In terms of safety, vitamin C was well-tolerated in high doses (oral and intravenous). No evidence was retrieved on the effectiveness, safety, and cost effectiveness of EDTA and ultraviolet in treating cancer.

## Recommendations

Vitamin C, EDTA, and ultraviolet are not recommended in cancer treatment until further scientific evidence is available to support their effectiveness, safety, and cost effectiveness.

## Methods

We searched electronic databases for scientific literature: PubMed/MEDLINE, Cochrane, INAHTA, and general search engines. The search strategy used the following terms, either alone or in combination: neoplasms [MeSH] AND therapeutics [MeSH]), cancer OR neoplasms; cancer treatment; ascorbic acid [MeSH]; vitamin C; edetic acid [MeSH]; ethylenediaminetetraacetic acid OR EDTA; ultraviolet therapy [Mesh]; ultraviolet treatment. In the PubMed/MEDLINE database, the following limitations applied: humans, clinical trial, meta-analysis, randomized controlled trial, review, and English.

## Further research/reviews required

Further evidence is needed on the effectiveness, safety, and cost effectiveness of vitamin C, ethylenediaminetetraacetic acid (EDTA), and ultraviolet in treating cancer.