## In the news

## DESPERATE PATIENTS TURN TO DCA

The emotive issue of whether terminally ill patients should have access to unapproved drugs has been brought to the fore, after reports that cancer patients are self medicating with a compound called dichloroacetate (DCA), which has yet to receive formal clinical approval.

DCA came to prominence in January this year, when Evangelos Michelakis and colleagues at the University of Alberta in Canada, writing in Cancer Cell, reported that DCA was able to shrink tumours in rats without any appreciable side effects.

The compound has already been in clinical trials as a treatment for mitochondrial diseases, and it is thought that the anticancer effect of DCA hinges on its ability to reactivate suppressed mitochondria in cancer cells, resulting in apoptosis. However, because DCA has been in the public domain for so long it cannot be patented, meaning there is little incentive for pharmaceutical companies to invest in the lengthy and costly process of trialling DCA as a cancer therapy.

Michelakis plans to raise enough money to begin a small trial in the near future. However, despite warnings and fears of potentially lethal interactions with other cancer therapies, some terminally ill patients are using the internet as a means of obtaining the drug, and this is "...destroying efforts to do this right," Michelakis says (http://www.nature.com/news, 28 March 2007).

Professor John Toy, medical director of Cancer Research UK, sympathized with the motives of cancer patients, saying: "It is understandable that people with cancer will want to try almost anything to treat their disease." But he also cautioned that "DCA might not be helpful and, indeed, might be harmful when given to cancer patients" (http://www.bbc.co.uk, 29 March 2007).

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