



Wednesday, 10 September 2014 13:24 GMT

## **Trial probes whether generics can fight cancer, at fraction of price of branded drugs**

by Richard Staines

LONDON, Sept 10 (APM) - A London clinic has begun a trial investigating whether existing generic drugs focusing on metabolic pathways can be used to fight cancer, as a cost-effective alternative to very expensive branded cancer drugs that often have fearsome side effects.

The private Care Oncology Clinic has begun recruiting patients on the METRICS trial, Robin Bannister, a board member of the SEEK group that supports the study, told APM on Wednesday.

Bannister is a pharma industry veteran who co-founded Arakis pharma and developed what would later become Novartis' Seebri Breezhaler (glycopyrronium) for chronic obstructive pulmonary disease (COPD).

But he has now turned his attention to cancer and the potential of tailored combinations of generic drugs, such as metformin, statins, doxycycline, mebendazole and ibuprofen to interfere with cancer cells' metabolism.

### **BIG PHARMA NOT INTERESTED**

Bannister said in a telephone interview big pharma is not interested in developing these drugs as cancer treatments, despite a strong scientific rationale that they could produce benefits, because as generics they consider them unlikely to produce big profits.

Patients fund their own treatment on the METRICS trial as a result, although he said that if successful the drugs, or combinations of drugs, could provide highly cost-effective cancer drugs for the UK National Health Service (NHS).

Most of the patients are in palliative care after previous treatments have failed, said Bannister, who added that he would also like to use these drugs in early-stage cancer, or even in preventive uses.

Existing data show these drugs which lower cholesterol, lower glucose, impact on glycolysis, mitochondria and apoptosis, could slow cancer growth rates.

### **FOCUS ON CANCER METABOLISM**

Bannister, who is CEO of SEEK group member Biocopea, said the approach is based on work dating back to the work of Otto Warburg in the mid-20th century, which focused on abnormal anaerobic metabolism in cancer cells.

Although Warburg's ideas that anaerobic metabolism was itself a cause of cancer have been

superseded, Bannister said the abnormal metabolism seen in the cells is a good target for pharmacological intervention.

#### POTENTIALLY EFFECTIVE AND AFFORDABLE

Bannister told APM: "I think these drugs have the potential to be extremely effective in certain settings and extremely cheap and affordable from the NHS' perspective. These drugs would cost just a few pounds for a year's treatment."

This compares well with hefty price tags of up to 100,000 pounds (125,000 euros) per year for some cancer drugs, said Bannister. "If you can produce similar results in many cancers at the cost of 100 pounds per year you can treat many more patients."

He selected the drugs because of their favourable side-effect profiles in the hope that this will also bring quality of life benefits.

"From what we have seen the effect is likely to be quite significant and the side-effect burden is likely to be extremely low."

The study will be long-term, with five-year follow up periods, according to information on [clinicaltrials.gov](http://clinicaltrials.gov). Bannister will rely on subgroup analyses to look for significant clinical results, although these will not be based on tumour receptor types as in many other cancer trials.

He hopes this could end up producing patentable combinations, or reformulations of existing drugs, or at the very least, label changes allowing them to be used in cancer.

In the meantime, Bannister hopes the approach will catch on with the patient community and allow his company to open more clinics.

But in the long term, Bannister said the goal will be to produce cost-effective alternatives to the expensive cancer drugs on offer from big pharma, which have begun to cause serious dilemmas for cost-effectiveness body NICE (APMHE 39521).

"I don't think the NHS will have any problems accepting this, it is creaking under the cost of medicines."

Provided with the kind permission of APM Health Europe

[richard.staines@apmnews.com](mailto:richard.staines@apmnews.com)  
[39652] 10/09/2014 13:24 GMT

©2005-2014 APM Health Europe