



Expression of Interest : Licensing of CSIR-CFTRI Technologies / Patents

CSIR-CFTRI is one of the constituent laboratory of Council of Scientific & Industrial Research (CSIR), Ministry of Science & Technology and Earth Sciences, Govt. of India, New Delhi. The Institute has a large portfolio of Innovative Technologies / IP relevant to Industry in the area of Food Science & Technology.

The Institute is keen to commercialize one of its Indian patent entitled, “**A SUPPLEMENTARY FORMULATION FOR CANCER THERAPY AND METHOD FOR THE PREPARATION THEREOF**” (Indian Patent application no. 202111033310) to interested parties.

Potential of the Technology in the Market

Currently most of the commercial onco-food supplements are categorized to either prevent cancers or to increase immunity, proteins as a means of alleviating the side effects of treatments and therapies . This supplementary formulation opens up a new area in using food supplements to synergistically aid in current cancer treatments.

The Salient features of the patent

The patent is on a supplementary formulation, named **Encircle**, as a Ready-to-Eat or Ready-to-Drink supplement, to aid in cancer therapy. Encircle’s mode of action is adapted from The Battle of Isandlwana of the First Anglo-Zulu War of 1879, between the British Empire and the Zulu Kingdom, and focuses on four specific targets converging on decreasing GSH/GSSG ratio towards of the cancer (Fig.1). This, we believe, is the first time that a food supplement has been designed, inspired by a real military strategy, to assist in combating cancer cells.



Fig. 1 Mode of action of Encircle, a Supplementary Formulation to aid in cancer therapy

This formulation with FDA/FSSAI approved ingredients, has been optimized using genetic algorithms, in ovarian cancer cell lines, with a cut-off survival of less than 40% and ensuring normal cells lines' survival of more than 60%.

Co-treatment of Encircle with Cisplatin in Ehrlich ascites tumour (EAT) bearing mice showed a decrease in weight when compared with the group of mice treated with cisplatin alone (Fig 2). The secretion of ascites in drug treated mice dropped by 65% of tumour control while it decreased by 74% in cisplatin cotreated with food supplement. The cotreated mice had only 18 % live cells, whereas the drug treated animals had 24% live cells as compared to control. Cotreatment with Cisplatin and the supplement was able to normalize the abnormal features of spleen, liver and other biological functions. Also, Cotreatment enhanced the survival of the EAT tumour bearing mice for more days than the drug alone.

Development of a Supplementary Formulation to aid in cancer therapy

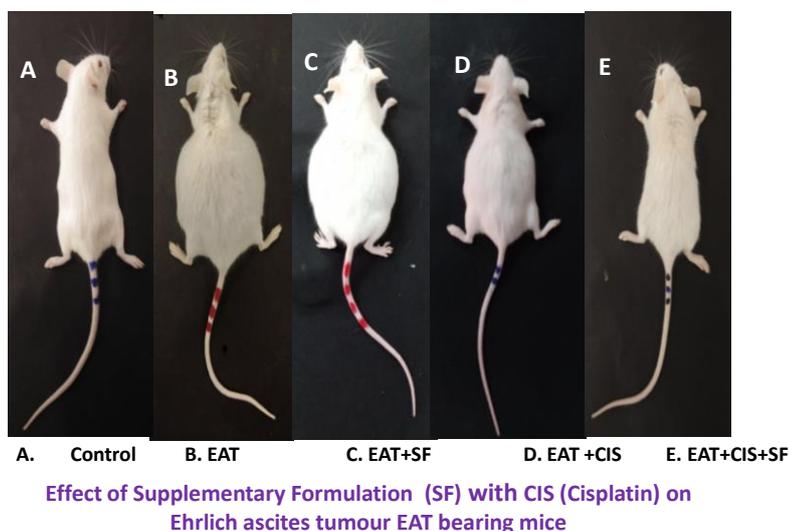


Fig.2 Effect of Supplementary Formulation with Cisplatin on Ehrlich ascites tumour mice

Expression of interest from Indian and Multi-nationals are invited for securing the license to manufacture and market the products in any countries of interest

The interested companies may furnish the Technical (Annexure I) bids in sealed covers. Only the parties who have proven expertise as evidenced in the technical bid will be considered for the first level of interaction. Costing for the Process will be decided after mutual discussion with competent parties as per CSIR guidelines.

Quotes superscribed as “**Technical Bids**” should be sent in an envelope to Head, PMC Dept, CSIR-CFTRI, Mysore 570020 with a covering letter addressed to Director, CSIR-CFTRI, Cheluvamba Mansion, Mysore 570 020. Last date for the submission of bid is by **16.8.2021**. However, the same may be intimated by email to pmc@cftri.res.in.

The sealed covers containing technical bid will be opened at PMC Department, CSIR-CFTRI in the presence of a committee constituted by Competent Authority.

Director, CSIR-CFTRI, reserves the right to revise, reject, re-seek the EoI, if necessary. The decision of the Director, CSIR-CFTRI will be final.

Technical Bid Details
(Company Letter Head)

1	Name of the Firm Address Contact details (Mobile and Email) Website :	
2	Details of Incorporation, Operational details including branches / subsidiaries	
3	Expertise of the Company	
4	Details of Manufacturing / Marketing details (GST, PAN, TAN and others) Legal document copy may be furnished	
5	Details of the Patent for which licence is sought	
6	The Mode of licencing sought	Non Exclusive Exclusive
7	Any other details, deemed important about the Company	
8	Details of Authorised person making the offer (including designation, Mobile, email etc.)	
9	Signature with seal	