## Cytozyme-Trachea

## The treatment of human cancer with agents prepared from bovine cartilage. Prudden JF

J Biol Response Mod 1985 Dec; 4(6):551-84

Oral and subcutaneous administration of specific preparations of bovine tracheal cartilage rings (Catrix), a nontoxic agent, has resulted in a high response rate in 31 cases of a variety of clinical malignancies (response rate 90%, 61% complete). The demonstrated responder include present therapeutic disasters such as glioblastoma multiforme and cancers of the pancreas and lung. Other types which were treated with success included cancers of the ovary, rectum, prostate, cervix, thyroid, and an inoperable squamous cancer of the nose. These responses were observed when full dose therapy was given over prolonged courses of treatment (years). This wide range of Catrix efficacy now invites investigation by others to confirm the effectiveness of the material and to isolate the molecular entities responsible for these unexpectedly favorable results.

## Treatment of metastatic renal cell carcinoma with Catrix (Meeting abstract). Puccio C Mittelman A Chun H Baskind P Ahmed T

Proc Annu Meet Am Soc Clin Oncol (1994) 13:A769 1994

Catrix is an acidic mucopolysaccharide complex derived from bovine tracheal cartilage which has demonstrated immuno-stimulatory and anti-mitotic activity in both in vitro and in vivo models. Formulations include an injectable 5% solution and oral capsule 375 mg. Fourdifferent schedules were evaluated in patients (pts) with metastatic renal cell carcinoma. Of the 35 pts enrolled, 22 were evaluable for response (completing greater than 3 mo of therapy). Results are shown in a table. Ten of the 22 evaluable pts were not previously treated with any systemic therapy; all 3 responders (and 1 SD) occurred in the subset of untreated pts. Lungs were the major site of response with disappearance of lesions (2) and greater than 50% shrinkage (1);minor responses noted in liver (1) and kidney (1). Duration of response is 30+ mo, 12+ mo and 6+ mo in the 3 PRs. Toxicity was mild (Grade I) and included dysphagia (8), fatigue (3), dyspepsia (2), nausea (2), fever (2), dizziness (1), and scrotal edema (1). Our results suggest that Catrix is very well tolerated and may be active in previously untreated pts with metastatic renal cell carcinoma. Further accrual of patients is warranted.

Dr. John F. Prudden and Bovine Tracheal Cartilage Research, H. Krsiegel, *Alternative and Complementary Therapies*: April/May 1995.

Since 1954, Dr. John Prudden' has used bovine tracheal cartilage to treat wound healing, herpes infection, allergies, rheumatism and arthritic diseases. It has been shown to be effective in treating a wide range of conditions from inflammatory diseases to cancer.

Bovine cartilage demonstrates factors that are primarily immunostimulatory and antimitotic capable of inhibitory cell division), playing a part in normalizing aberrant cells and has a substantial 20 year track record.