# INTRODUCTION AND AIM OF WORK

# INTRODUCTION

Tumours of non endocrinal tissues, have the ability of production of many hormones, a phenomenon known as ectopic hormone production. The bronchogenic carcinoma is an example, and a wide variety of endocrinal syndromes were found to be associated with it (Gropp, et al., 1980). These syndromes resembling those caused by overactivity of the conventional endocrine glands.

Serum calcium may be elevated in patients with bronchogenic carcinoma for one or more of the following:

Metastatic destruction of bone, ectopic parathyroid hormone-like-substance production, (Betty, et al., 1971), and elaboration of an osteolytic substance other than parathyroid hormone as prostaglandin (Seyberth, et al., 1975).

Squamous-cell type of bronchogenic carcinoma is common tumour associated with hypercalcemia without bone metastasis (Norman, et al., 1975).

Sensitive and specific radioimmunoassays, are capable to measure normal values and the changes in plasma levels of calcitonin which are induced by physiological and pathological conditions (Tashjian, et al., 1970).

Elevated serum calcitonin levels in bronchogenic carcinoma were detected due to ectopic elaboration of the hormone by tumour tissues, and more commonly with small-cell type(Gropp, et al., 1980).

The aim of this work is to study the possible value of calcium and calcitonin in bronchogenic carcinoma as tumour markers.