

new, improved drugs for the treatment of mental and emotional illnesses, diseases of the heart and blood vessels and arthritis. We are also investigating the drug treatment of diabetes, drugs to control weight by altering body chemistry, and drugs to relax muscles and reduce pain. We are looking for antibacterial agents with a spectrum of activity different from the antibiotics now available. We are also looking for compounds that are effective against viruses, particularly those associated with upper respiratory infections."

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Pharmaceutical research, like other medical research, must be international. Smith Kline & French has research and development laboratories in the United States, Great Britain and Canada, and an interest in a research establishment in Belgium, and conducts active programs of clinical investigation in several countries. We expect our research centre in Canada to develop as a partner in this international activity. Already, Canadian personnel have performed many valuable services for Canada and other countries through pharmaceutical development work and the organizations and assessment of clinical studies.

#### *The Medical Department*

The responsibilities of the Medical Department, part of the R&D Division, begin in the early stages of a product's history and continue throughout its existence.

The department is actively concerned with the testing and introduction of new products. Our physicians initiate and supervise clinical testing programs. They are also directly responsible for the research and medical sections of submissions to the Food and Drug Directorate, both the Preclinical Submissions and the final New Drug Submissions. They discuss with FDD any queries that may arise and arrange to obtain any additional information that is required.

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Our new diuretic, 'Dyazide', can be taken as an example. The FDD notice of compliance, permitting the marketing of this product, was based on a combination of Canadian and international evidence of safety and effectiveness. The Canadian evidence included a study by 71 M.D.'s relating to 598 patients. In addition, special studies were made in metabolic units of teaching hospitals in Montreal and Halifax.

Continuing studies on 'Dyazide' include the collation and analysis of reports from some 200 physicians relating to use of the preparation in patients suffering from hypertension. We expect this will cover about 1,000 patients.

With another new product used for the control of nausea, vomiting and vertigo, 'Vontrol', arrangements have been made with 16 physicians to carry out controlled studies with a statistical structure to determine efficacy and safety in various areas of use. Each doctor will report on 25 to 50 patients, and the study is expected to take at least a year to complete.

Repeated clinical studies are required if we are to keep up to date on the effectiveness as well as the incidence of side effects of even well established