ten year period (i.e. in the non-narcotic analgesics, diuretics and psychostimulant classes) rapidly achieved significant market shares and then were displaced just as rapidly by still newer discoveries. Products offering new types of action such as analgesics, antibiotics, diuretics and corticoids soon met intense competition from products based on modifications by these newer approaches. New dosages and forms have offered major competitive advantages as seen in the coronary vasodilator and sulfonamides. Two classes, diabetic—other and rauwolfia-diuretic combinations, did not exist in 1956 and grew significantly to approximately 3% of all prescriptions written by 1965.

One of the most outstanding factors leading to the constantly changing competitive atmosphere has been the development of effective products with fewer and less severe side effects. Non-narcotic analgesics, non-steroidal anti-arthritics, ataraxics and diuretics are examples of product classes experiencing such changes. Life saving products such as some of the antibiotics require weighing the benefits of their use against possible serious side effects. Modifications of these products are often developed in an attempt to reduce or eliminate these side reactions. Highly potent analogs have been introduced to reduce the

total amount of medication needed by the patient.

Another factor affecting the competitive environment is the introduction of combination products in which the ingredients provide synergistic effects beneficial to many patients. Combination forms insure proper dosage as fixed in the product and also provide convenience to patients who otherwise might have to take several different medications at different times during the day and night. Some obvious economies are in manufacturing, packaging and distribution resulting in direct price benefits to the patient. Less time is required by the pharmacist also to prepare a prescription for a combination than for the several individual components. Similarly new products are introduced in unique forms such as sustained release capsules, repeat action tablets and long acting suspensions for the convenience of patients.

In some instances of extreme significance to the competitive situation, new products provide a completely new mode of action as seen among the diuretics and several of the ataraxics. Because of these new developments, new medical approaches have evolved and treatment has been made easier or more effective. Tranquilizers in mental health and sulfonylureas in diabetes have been impor-

tant in the latest medical techniques developed in these areas.

It is clear that where the products offer different modes of action or are specific for certain kinds of conditions there is intense competition and frequent change in market positions. The broad and medium spectrum antibiotics, muscle relaxants and psychostimulants illustrate these characteristics.

However, where new products do not offer any marked advantages, the established products retain their leadership as in the case of non-steroidal antiarthritics, antihistamines, coronary vasodilators and sulfonamides. In some instances, products that hold promise to be an improvement gain rapid acceptance initially, only to lose market share if they do not demonstrate superiority.

To illustrate the magnitude of changes that have occurred it should be pointed

out that:

During the ten year period 118 out of the 213 leading products studied or 55% were introduced after 1956.

Fourteen or 6.6% achieved the leading market share in ten product classes at some time during the ten years. Eight of these were in the first position in 1965.

The leading position changed 32 times in 12 product classes while the second position changed 59 times in 15 product classes.

Five products maintained first place in their respective classes for the

entire ten year period.

Sixteen products introduced during the ten years in nine classes grew rapidly gaining a 20% market share in two years. Conversely, eleven products declined in eight classes and lost more than 20% of the market in two years.

These major product shifts demonstrate the risk involved in introducing new products and the importance of providing continuing promotional support in the market. New products often are abruptly replaced by modifications, combination products or other still newer products. The strong positon of a product can be violently upset by one or two new products or slowly reversed by a steady flow of many new product entries over several years.