#### CHAPTER V

### CONCLUSION

## **SUMMARY OF FINDINGS**

The local pharmaceutical organizations' portfolios currently comprise of products in anti-infectives, central nervous system, respiratory, alimentary / metabolism, vitamins and dermatological categories in the descending order of importance. Only a few products are being marketed in cardiovascular, musculoskeletal, sensory organs and hormones. However in order to ensure sustainable growth and profitability and to have a competitive edge in the local as well as international pharmaceutical market, it is important that the product portfolios of the local manufacturers are ideal for the above objectives and comprehensive enough to cover vital disease categories.

Multinational pharmaceutical companies represent 70% of the Malayasian pharmaceutical market. Thus sales trends of their therapeutic categories are indicators of potential products that should constitute an ideal product portfolio. The products of the multinational organizations in Malaysia exhibited an identical trend in the different therapeutic categories namely anti-infectives, neuromuscular, respiratory, alimentary / metabolism, cardiovascular, vitamins and dermatological in that sequence of importance. The cardiovascular segment is one of the major categories that has a substantial market share. The local pharmaceutical companies have very few products in this category and should

give more emphasis to the cardiovascular products since they provide a potential market that could still be tapped.

Diseases that are major causes of morbidity and mortality in Malaysia, specially in the government hospitals are heart diseases, respiratory diseases, alimentary diseases, cerebrovascular diseases, cancer and infections. Major diseases prevalent in Malaysia provide an insight into the drugs that are being used to combat them. Hence an ideal product portfolio of a local pharmaceutical company should therefore include cardiovascular and cytostatic products. Heart disease is the number one cause of hospitalization and death in Malaysia while the number of cancer patients are growing at an alarming rate. Globally the products of the multinational pharmaceutical organizations that have a large market share and/or high growth rates are central nervous system. antiinfectives, respiratory, cardiovascular, alimentary/metabolism, musculo-skeletal, cytostatics and sensory organs categories. Diseases that have been identified by World Health Organization for governments to target their healthcare policies are infections and parasitic diseases, circulatory diseases, cancer, respiratory diseases and mental/neurologic disorders. Thus taking a global perspective, the ideal product portfolio of a local pharmaceutical company should also incorporate products in the sensory organs category in addition to the above.

In view of the above findings, an ideal product portfolio for a typical pharmaceutical organization in descending order of priority is as follows:

- 1. Anti-infectives
- 2. Neuromuscular
- 3. Respiratory
- 4. Alimentary
- 5. Cardiovascular
- 6. Vitamins and minerals
- 7. Dermatologicals
- 8. Metabolism
- 9. Sensory Organs
- 10. Cytostatics

#### IMPLICATIONS OF THE STUDY

The existing product portfolios of the local pharmaceutical companies comprise of anti-infectives neuromuscular, respiratory, alimentary/metabolism, vitamins and dermatologicals that represent cash cows, and cardiovascular, sensory organs and hormones that represent children or dogs. The ideal product portfolio developed for the local industry in this study provides a well defined direction of the overall pharmaceutical industry specially the product portfolio. This study reinforces that the local pharmaceutical companies should continue to strengthen existing products, develop and build new products in these categories that constitute cash cows. Two important therapeutic categories

namely cardiovascular and sensory organs, that are typical children or question marks have been neglected by the local manufacturers. They still provide tremendous market opportunity which is presently being capitalized by most multinationals and only a few local companies. Thus the local pharmaceutical companies should fully utilize these opportunities in order to meet present as well as future challenges and to establish a competitive edge over other organizations.

#### LIMITATIONS OF THE STUDY

The product portfolio based on the therapeutic class devised above is only a first step to an in-depth portfolio analysis, planning and management. It would be impossible to analyze all the medicinal products due to the limited scope of this study. The study uses market share of therapeutic categories as one of the major criteria for a company's strength/business position that represents the company's profitability. It also uses market growth of therapeutic categories to measure market opportunity/attractiveness. This is the main limitation that one encounters in the BCG growth/share matrix analysis and in any study of an industry.

# RECOMMENDATIONS FOR FUTURE RESEARCH

The portfolio proposed would help product managers/corporate planners to identify and select a product mix representing only therapeutic categories. In order to maximize benefits from the product portfolio, it is imperative that a

researcher designs an elaborate ideal portfolio of actual drugs that would help him in the decision making process, setting objectives for each product and adopting acquisition or internal product development for the organization's future growth strategy.

Research could be conducted based on further dividing products under the therapeutic categories of an ideal portfolio into subcategories using product's mode of action and determining ideal portfolio of subcategories of drugs. An ideal portfolio of actual medicinal compounds (generic products) could be developed by repeating the analysis of the actual products (medicinal products) under each subcategory (mode of action).