

# Research Race



Along with the constant development of new pharmaceuticals, investment in production facilities is also active.

The production value of pharmaceuticals should grow an estimated 8% for 1989, after the nationwide total rose 4.8% and topped the ¥5 trillion mark in 1988. The high growth rate was achieved partly by the continuing high level of spending for medical services. The expenditures, supported by the treatment of the elderly, should have increased at a higher rate than the national income. Also, leading producers continued to commercialize and introduce new pharmaceuticals, while no reduction in official drug prices was made in 1989. Given this situation, major producers should have further improved their corporate performance. However, the 28 leading companies' average sales and ordinary profits are expected to rise by only a single digit in fiscal 1989. This is because distributors built up their inventories, especially in February and March, before the introduction of the consumption tax in April and, as a result, shipments in the first half were sluggish.

The Ministry of Health and Welfare revises official prices every two years. In fiscal 1990, producers will face a large percentage cut probably comparable to the average of 10.2% two years ago. The output value in fiscal 1990 is likely to record only a slight increase.

In the area of corporate performance, leading makers with the capability to develop new drugs are expected to maintain high levels of revenue and income. But

small and medium-sized makers with lower marketing power and product development capabilities are likely to face severe difficulties once again.

Leading producers have actively developed new drugs while internationalizing operations. Progress has been made in the development of drugs for degenerative and geriatric diseases in the light of Japan's aging society. The new drugs approved during fiscal 1989 included an anti-hyperlipidemia drug. In fiscal 1990 and thereafter, producers are expected to market new drugs for the treatment of high blood pressure and other heart-related diseases, senile dementia, diabetes and cancer.

Japanese leading companies are establishing tripolar networks connecting Japan, the U.S. and Europe to synchronize the development of new products. In addition, they have increased merger and acquisition activity overseas. Both developments are aimed at creating global production and marketing systems. On the other hand, foreign pharmaceutical producers are increasing their presence in Japan. They are making efforts to improve marketing capabilities by increasing the number of sales personnel and by acquiring controlling interests in smaller producers. Worldwide, drug development competition is becoming fierce and costly because of rising R&D expenditures and shorter product life.

The situation has led to an industrial restructuring by mergers of leading makers in the U.S.

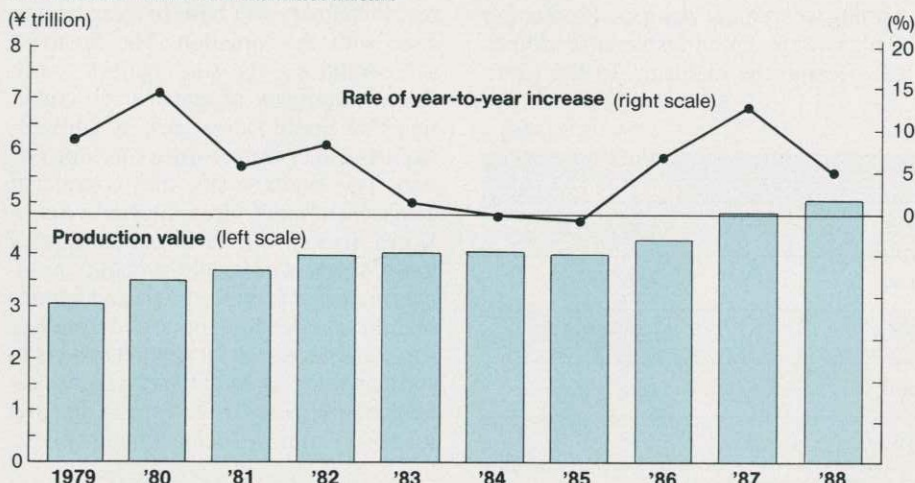
Biotechnology research and development is progressing steadily. It will be a few more years before full-fledged commercialization will take place. But the scope has widened with the launching of marine biotechnology projects. Joint development projects among companies are also increasing. Several government agencies produced guidelines regarding genetic engineering safety in 1989, while international efforts to ensure safety and protect commercial rights achieved progress.

The new products that are expected to make their debuts on the drug market in 1990 include EPO (erythropoietin, a hormone that produces blood) and G-CSF (granular colony stimulating factor, which helps increase white blood cells). Producers have also filed production applications for interleukin-2.

In the agricultural field, the year 1989 witnessed the development of new flower and vegetable varieties by means of cell fusion technology, as well as artificial seeds.

However, optimism for the future of biotechnology and the bioindustry must be guarded. The research race is intensifying, causing patent disputes to increase and forcing some companies to abandon research projects. In addition, researchers have begun to realize that the application of physiologically active substances to drug development is limited. As a result, product development tends to require more technical breakthroughs than before. It is expected that despite these problems, active R&D efforts, especially in leading companies, will bear fruit and accelerate product commercialization in the medium term.

## Production Value of Pharmaceuticals



Source: Pharmaceutical industrial production statistics

(Masao Mori, senior economist)