

indicate that demand for clinical diagnostics will increase 9% a year to an estimated \$6 billion (U.S.) by 1992.

Fueled by the danger of AIDS and other infectious agents in blood supplies, almost 30 companies are working toward marketing blood substitutes such as polymerized hemoglobin and perfluoro chemicals. The total potential world market for blood substitutes is estimated at \$10 billion (U.S.). U.S. sales of blood substitutes should total \$200 million (U.S.) by 1992.

Product shipments of medicinals and botanicals, servicing primarily the animal and poultry industries, are estimated by the U.S. Department of Commerce to be \$3.5 billion (U.S.) for 1987. For the next five years, U.S. shipments are projected to rise by 2.5% a year in constant dollar terms because of the continued growth of imports. In 1987, imports are estimated to have increased to almost \$2.5 billion (U.S.) while exports are estimated at over \$2 billion (U.S.).

The largest sector of the pharmaceutical industry is the pharmaceutical preparations industry. Product shipments rose to an estimated \$27.1 billion (U.S.) in 1987, 8% above 1986 as reported by the U.S. Department of Commerce. Over the next five years, the value of pharmaceutical preparations shipments is projected to rise by 2% a year in constant dollars. The value of exports increased to \$660 million (U.S.) in 1987, while imports remained relatively steady at \$156 million (U.S.). Low export prices and the increased export of non-approved drugs have contributed to an increasing trade balance.

The prescription drug market continues to be one of the most profitable industries in the United States. Nearly 1.51 billion prescriptions were dispensed in 1986. However, the industry has experienced little recent growth; the availability of new prescription drugs tends to slow sales of older ones. Sales of generic drugs are estimated to be increasing by about \$500 million (U.S.) yearly, stimulated by growth in health maintenance organizations and mail order services. This market is forecast to increase to about \$8.5 billion (U.S.) in 1988. In the long term, the industry is working toward developing drugs to treat and prevent new diseases such as AIDS, as well as long-standing ones such as cancer.

The development of new drug delivery systems also will become important. These systems influence the way the active medicinal gets to where it is needed in the body. The most promising is the transdermal patch to deliver analgesics, antiarthritics, antibacterials, antidiabetics and