Coronary heart disease is the single largest killer of people living in the U.S. Some of the risk factors include hypertension, obesity, smoking, and dyslipidemia, an irregularity of a patient’s lipid profile. Dyslipidemia covers a variety of disorders relating to abnormal levels of total cholesterol, low-density lipoprotein-cholesterol (LDL-C), high-density lipoprotein-cholesterol (HDLC), and triglycerides. The incidence of lipid metabolism disorders in hospitalized patients has risen steadily since 1997 and has more than doubled over the past six years (Figure 1).

Dyslipidemia can be modified by diet, exercise, and drug therapy. The most commonly prescribed medications belong to a class of drugs called 3-hydroxyl-3-methylglutaryl–coenzyme A (HMG–CoA) reductase inhibitors, or “statins.” These products include atorvastatin calcium (Lipitor®, Pfizer), simvastatin (Zocor®, Merck), pravastatin sodium (Pravachol®, Bristol-Myers Squibb), lovastatin (Mevacor®, Merck), and fluvastatin sodium (Lescol®, Reliant).

To varying degrees, all of these agents lower total cholesterol, LDL-C, and triglyceride concentrations and slightly raise the HDL-C fraction. The market share for statins has increased in proportion to the rise in the number of patients receiving therapy for dyslipidemia (Figure 1). Simvastatin has remained the leading therapy within this class, followed by atorvastatin, pravastatin sodium, and fluvastatin, respectively.

Figure 2 shows that the trend toward more aggressive treatment patterns is consistent across all products, and the sizes of the doses have been steadily increasing. The statins have been so effective in controlling LDL-C levels that they are expected to continue to dominate this market. Future progress is likely to occur with add-on therapies, such as ezetimibe (Zetia™, Merck/Schering-Plough), and with products that target other lipid dysfunctions associated with HDL-C or triglycerides specifically.

The data cited in this article are available free of charge to hospitals participating in the PharmScope Insights program. This program specializes in helping hospital pharmacies target areas for performance improvement by providing benchmarks from a panel of 90 hospitals nationwide. For information about joining PharmScope Insights, a division of MediMedia USA, Inc., visit the Web site at www.mminfotech.com and click on Hospitals.

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