



Figure 17.1. Examples of enzyme inhibitors used clinically.

ade of a metabolic pathway may also have therapeutic benefits. The **statins**, a group of serum cholesterol-lowering drugs, are inhibitors of hydroxymethylglutaryl-CoA (HMG-CoA) reductase (29). HMG-CoA reductase catalyzes the irreversible conversion of HMG-CoA to mevalonic acid, the rate-determining step in cholesterol biosynthesis (30–32). Inhibitors such as simvastatin (9) have been

found to be effective in the treatment of **hyperlipidemia** and **familial hypercholesteremia** (33, 34) and have become some of the world's best-selling drugs.

Finally, enzyme inhibitors can also be used to induce an animal model of a genetic disease. Inactivation of γ -cystathionase by **propargylglycine**, for example, produces an experimental model of the disease state known as **cysta-**