

## **1.4 Hypertension and dyslipidemia: Combination therapy**

Hypertension and dyslipidemia are two of the most commonly co-occurring cardiovascular risk factors. In a recent study utilizing data from the third National Health and Nutrition Examination Survey (NHANES), it was estimated that almost 15% of US adults (representing approximately 30 million persons) have both hypertension and dyslipidemia (National Center for Health Statistics, 2008). It has been shown that more than 64% of patients with hypertension also have dyslipidemia; conversely, approximately 47% of patients with dyslipidemia have hypertension (National Center for Health Statistics, 2008). These two risk factors together cause an increase in coronary heart disease-related events that is more than simply additive for anticipated event rates with each disease.

Antihypertensive and lipid-lowering medications substantially reduce the risk of coronary artery disease, stroke, and death in patients with cardiovascular risk factors (Heart Protection Study Collaborative Group, 2002 ; Sever et al. 2003). Data have highlighted the importance of prompt and ‘aggressive’ control of blood pressure (BP) and cholesterol for patients with hypertension alone and for patients with additional cardiovascular risk factors including dyslipidemia and diabetes (Sever et al. 2003; Colhoun et al. 2004; Julius et al. 2004). Recent trials indicate that patients with hypertension and concomitant multiple cardiovascular risk factors can benefit from lipid-lowering therapy regardless of their baseline lipid levels (Sever et al. 2003). Although the importance of treating hypertension and dyslipidemia is well established in treatment guidelines, the current rate of control is unsatisfactory. In a managed care population of 154,235 patients, 90% of patients in whom both hypertension and dyslipidemia had been diagnosed had not met treatment goals for both conditions (Pettit et al. 2003).