

Date: October 18, 2007

Subject: DRC Recommendations to DCC and DHS

To: DHS, DCC, Dean's Office

From: Henry F. Simmons, Jr., MD, Ph.D.
Chairman DRC

At its 10/18/07 meeting, the Drug Review Committee considered the potential toxicity and therapeutic roles of the angiotensin converting enzyme inhibitor [ACEIs] class in the management of adult patients with hypertension, recent myocardial infarction, heart failure, diabetic nephropathy, non-diabetic nephropathy, and high cardiovascular risk. [For the purposes of the discussion, high cardiovascular risk was defined as CHD/CVD or a combination of other risk factors for CHD/CVD, such as diabetes, smoking, hyperlipidemia, or hypertension.]

The medications discussed included the following:

- Benazepril (Lotensin)
- Captopril (Capoten)
- Enalapril (Vasotec)
- Fosinopril (Monopril)
- Lisinopril (Prinivil, Zestril)
- Moexepiril (Univasc)
- Perindopril (Aceon)
- Quinapril (Accupril)
- Ramipril (Altace)
- Trandolapril (Mavik)

Based upon the bulk of the best available evidence pertaining to the aforementioned drugs the Committee concluded the following:

There is insufficient evidence to conclude in general that one agent is safer or has fewer adverse effects than another.

There is sufficient evidence to conclude that all of the listed ACEIs are efficacious for the treatment of hypertension. However, since captopril, enalapril and lisinopril have outcome data, at least one of these three should be available for this indication.

There is sufficient evidence to conclude that captopril, ramipril, trandolapril, lisinopril, and perindopril are efficacious for treatment of patients with recent myocardial infarction. However, since the first three have mortality outcome data, at least one of them should be available for this indication.

There is sufficient evidence to conclude that captopril, enalapril, fosinopril, ramipril and trandolapril are efficacious for the treatment of heart failure outside the setting of recent

myocardial infarction. Accordingly, at least one of the five should be available for this indication.

There is sufficient evidence to conclude that captopril is efficacious for the treatment of diabetic nephropathy in type I diabetics. It should be available for this indication.

There is sufficient evidence to conclude that benazepril, captopril, lisinopril, perindopril and ramipril are efficacious for the treatment of non-diabetic nephropathy. However, since the evidence is strongest for benazepril and ramipril, at least one of these two agents should be available.

There is sufficient evidence to conclude that enalapril, perindopril, quinapril and ramipril are efficacious for patients at high risk of cardiovascular disease as defined above. However, since the evidence is strongest for ramipril, it should be available for this indication.

There is insufficient evidence to conclude in general that one agent out of the group is either more efficacious or associated with more adverse effects based upon demographics, comorbidities or adverse drug interactions.

At least one ACEI with single daily dosing should be available for patients for whom multiple dosing poses special problems.