

Reconsidering Low-Dose Aspirin Therapy for Primary Cardiovascular Disease Prevention

■ Clinic practice guidelines no longer recommend low-dose aspirin for the primary prevention of cardiovascular disease. Therefore, aspirin is no longer indicated for patients with CAD risk equivalents (i.e. diabetes, Chronic Kidney Disease, Peripheral Artery Disease) or other high risk groups.

■ Aspirin is still unquestionable indicated for patients with known CAD or thrombotic CVA/TIA and during acute attacks.

■ Aspirin has not been approved by the FDA for primary cardiovascular disease prevention. In fact, it has been denied twice due to lack of evidence supporting its efficacy.

■ Many studies suggest that the benefits of low-dose aspirin therapy for primary prevention may not appropriately outweigh the harms, even in high risk groups.

■ Primary endpoints have been negative in the following studies for primary prevention, including those with patients with CAD risk equivalents and other high risk groups:

- Dialysis Outcomes and Practice Patterns Study (2007) in patients with **CKD**
- Prevention of Progression of Arterial Disease and Diabetes (2008) in patients with **PAD and DM**
- Primary Prevention Project (2003), Japanese Primary Prevention of Atherosclerosis with Aspirin for Diabetes (2008) in patients with **DM**
- Hypertension Optimal Treatment Study (1998) in patients with **HTN**
- Henneken's, et. al Retrospective study (1978), British Doctor's Trial (1988), Physician's Health Study (1989), Thrombosis Prevention Trial (1998) in **men**
- Women's Health Study (2005) in **women**
- Hammond and Garfinkel Prospective study (1975) in **men and women**

■ Three separate meta-analyses have been done on six of the above studies, and the results have been inconsistent and conflicting.

■ None of the primary prevention studies or meta-analyses have demonstrated a significant decrease in total cardiovascular mortality.

■ Adverse bleeding events have been significantly increased in many of these studies, including GI bleeds, hemorrhagic ulcers, hemorrhagic strokes, and necessary transfusions.