<u>Therapy</u>: To Dig or not to Dig- *that* is the question.

<u>Overall goal:</u> to define a strategy for finding and using an article that relates to therapy.

<u>Article to be reviewed:</u> The Digitalis Study Group. The effect of digoxin on mortality and morbidity in patients with heart failure. *NEJM 1997;336:525-33* 

Skills to be acquired:

- 1. Ask: Create a pertinent, answerable question from a clinical case scenario
- 2. *Acquire:* Perform a search in order to identify original research that will address your question
- 3. *Appraise*: Determine whether the article gives us valid information
- 4. *Apply*: Determine whether the results are applicable to the patient in your case

<u>Specific Vocabulary and Tasks for this lesson.</u> In addition to completing the critical appraisal sheet for reading a therapy article, please consider the following:

- 1. Randomization (including issues of concealment and stratification)
- 2. Blinding vs. Open Label
- 3. Intention to treat (methods page 526)
- 4. Sensitivity Analysis (see paragraph in methods on page 527)
- 5. Kaplan Meier Analysis (Figures 1 and 2)
- 6. Please describe the results in terms of Relative Risk Reduction, Absolute Risk Reduction and Number Needed to Treat (NNT).

## Clinical Case Scenario:

You are a second year resident picking up a ward service at the VA. On rounds your first morning, your medical student presents the following patient to you:

The patient is a 73-year-old white man who was admitted with an exacerbation of CHF. He has a history of past MI and an EF by Echo of 25%. He is very compliant and seldom, if ever, misses his medications. On admission, his medications were furosemide 40 mg po qd, enalapril 20 mg po bid, simvastatin 10 mg po qd and aspirin 325 mg po qd. He usually functions at a NYHA class II level, but he now has had two admissions for CHF in the past 4 months. On this admission, he has already been ruled out for MI and remains in sinus rhythm. He has a normal renal function with a creatinine of 0.7. The patient is particularly concerned about staying out of the hospital because he lives alone and has no one to care for his pets or plants. He is very active in his community and is eager to get out and stay out of the hospital.

The medical student asks whether Digoxin would help this man with his heart failure. The student was told by one of his prior residents that Digoxin was a

good choice for a patient with CHF. Your intern states that she feels that Digoxin does not improve mortality in patients with heart failure and that we must consider potential toxicities, especially in a 73-year-old man. They look to you for guidance.