Julie Dayton visited her doctor for a routine breast exam at the beginning of January. Her family physician discovered a lump in her breast and ordered a biopsy of the lump. The lab report indicated that the tumor was benign.

Six months later after a self-exam she discovered a second lump on her breast and returned to her family physician for another exam. A second biopsy indicated that this tumor was malignant. It was soon discovered that the breast cancer had metastasized. The cancer had spread to her brain, leaving her with only a 10 percent chance of survival. A reanalysis of the tissue sample from her first biopsy indicated that the laboratory had misdiagnosed the initial lump.

Subsequent treatment failed to stop the spread of the cancer. Julie Dayton died within a few months of the second diagnosis. Her family brought a wrongful death action against the laboratory and sued for compensatory damages.

The original misdiagnosis was not an issue at trial. The laboratory readily conceded that it had made a mistake. Defendant’s attorney argued that even if the laboratory had correctly diagnosed the lump after her first visit to the family physician, it was unlikely that she would have survived.

Dr. Gupta, a physician testifying for the plaintiff, stated that had she been correctly diagnosed at the time of her first biopsy she would have had a 60 percent chance of survival. Dr. Winthrop, a physician testifying for the defendant, argued that at the time of her first biopsy it was likely that the cancer has already spread to her lymph nodes. Thus, her chances of survival at the beginning of January were only 30 percent. Both physicians agree that at the time of her second biopsy her chance of survival was only 10 percent.

An economist retained by the family testified that compensatory damages were equal to $1 million. This consisted of lost market support for survivors and the lost value of homemaking services. The defendant did not present an estimate of compensatory damages.

Questions:

1. Contrast potential damages given Dr. Gupta’s testimony and potential damages given Dr. Winthrop’s testimony for:
   a. The all-or-nothing rule
   b. The proportional loss rule
   c. The incremental proportional loss rule
2. Given the alternative probabilities in this case do you think this would pass a substantial factor test? Why or why not?
3. Present an economic argument in favor of one of the above liability rules. You might consider whether any of these rules would cause physicians to diverge from an optimal due care standard or you might consider whether any of these rules might provide an incentive for less than optimal patient care.