# Worksheet #1: Identifying Patient Outcomes in Research

Study design A: Pisano et. al1 screened women using both digital and film mammography. They followed the women for a year to determine if any women were diagnosed with breast cancer.

1. What type of variable are the outcomes: breast cancer status at 1 year, diagnosis from digital mammography, diagnosis from film mammography, tumor stage, tumor size?
2. Are the measurements on film and digital mammography independent or correlated?

Study design B: Fadell et al. have an active study examining the effect of intra-articular platelet injections on osteochondritis dessicans (OD) in children. Children are randomized to receive either standard of care or platelet-rich plasma injections. The investigators are using dGEMRIC MRI to assess disease status before and after treatment.

1. If they rate OD as mild, moderate, or severe, what type of measurement scale is this? What other outcomes might they consider in this study?
2. Are measurements for children in the standard of care group independent of the measurements in the platelet group? What about the before/after measurements for an individual child?

References

1. Pisano ED, Gatsonis C, Hendrick E, et al. Diagnostic performance of digital versus film mammography for breast-cancer screening. *N. Engl. J. Med.* 2005;353(17):1773–1783.