Assignment Question:

You are on the editorial board of the National Oncology Journal. The Editorial Board considers that the following papers are worthy of publication on scientific and interest grounds. You have been asked to review them for statistical content.

Choose 5 of the 10 papers and provide a critique from a statistical point of view with a view to acceptance for publication or suggestions for modification.

Discuss and/or criticise the statistical methodology on which the following studies and conclusions are based:

1. Lumpectomy compared with lumpectomy and radiation therapy for the treatment of intraductal breast cancer.

Fisher B, Costantino J, Redmond C, Fisher E, Margolese R, Dimitrov N, Wolmark N, Wickerham DL, Deutsch M, Ore L, Mamounas E, Poller W, Kavanah M. New England Journal of Medicine 328(22):1581-1586, 1993

- Breast Cancer After Treatment of Hodgkin's Disease.
 Hancock SL, Tucker MA, Hoppe RT
 Journal of the National Cancer Institute 85(1):25-31, 1993
- 3. Reducing mortality from colorectal cancer by screening for fecal occult blood.

 Mandel JS, Bond JH, Church TR, Snover DC, Bradley GM, Schuman LM, Ederer F for the Minnesota Colon Cancer Control Study

 New England Journal of Medicine 328(19):1365-1371, 1993
- 4. A Prospective Study of the Intake of Vitamins C, E and A and the Risk of Breast Cancer. Hunter DJ, Manson JE, Colditz GA, Stampfer MJ, Rosner B, Hennekens CH, Speizer FE, Willett WC

New England Journal of Medicine 329:234-240, 1993

5. Adjuvant ovarian oblation versus CMF chemotherapy in premenopausal women with pathological Stage II breast carcinoma: the Scottish trial.

Scottish Cancer Trials Breast Group and ICRF Breast Unit, Guy's Hospital, London. The Lancet 341:1293-1298, 1993