Assignment 1

This assignment is meant to provide some experience with looking at study designs.

Read the article by Peters et. al. You may skip the sections on cellular support and toxicity if you wish.

1. What is the purpose and conclusion of this paper (short answer – can base on abstract).

2. What is the study design? Is this better classified as an experiment/trial or an observational study? Was there randomization to treatment?

3. In figure 2, what (at least approximately) is the relationship between the curves in Figure 2a and the curves in Figure 2b? What does this say about the efficacy of the new treatment compared to the two standard treatments shown?

4. Consider table 4, where some characteristics of the different treatment groups are compared. Overall, do you consider the groups to be comparable (not just on the factors in Table 4)? On what factor(s) might they be non comparable (some might not be in the article or Table 4). Are there possible confounders and biases?

5. Suggest how you would carry out a possible reanalysis of the current data that might give a more fair assessment of the new treatment compared to the older treatments. You do not have to provide details, just the key idea(s). This is NOT a study redesign, but a new use of the existing raw data already collected. We assume you have access to the data for each patient.

Read the article by Stadtmauer et. al.

6. Are there important differences between the populations targeted in the two studies? Are there differences in the design of the two studies? Briefly, suggest why the conclusions in the two studies may differ or explain why they do not differ.

7. In an ideal situation (no barriers to cost, time, patients etc), what would be the ideal study design? What population would be re-studied? (Peter’s population, Stadtmauer population? Both?)