**Hematocrit was not validated as a surrogate end point for survival among epoetin-treated hemodialysis patients**

Cotter, D. J., Stefanik, K., Zhang, Y., Thamer, M., Scharfstein, D., & Kaufman, J. (2004). Hematocrit was not validated as a surrogate end point for survival among epoetin-treated hemodialysis patients. *Journal of clinical epidemiology*, *57*(10), 1086-1095.

Chart, bar chart

Description automatically generated

**Figure 2A:** Unadjusted1-year mortality rates by hematocrit group disaggregated by epoetin dose quartile. Within each epoetin dose quartile, there is a trend toward increasing mortality as the observed study hematocrit de- creases, most notably in the fourth quartile (>21,692 units/wk). Similarly, there is a trend toward increasing mortality as the epoetin dose increases within each observed study hematocrit range, most notably in the lowest (<30%) hematocrit range.

**Attempted Improvement:**Chart, bar chart

Description automatically generated

This study (Cotter et al., 2004) was investigating the use of hematocrit as an indicator for epoetin effectiveness in comparison to mortality rates in end stage renal disease patients. It was inconclusive in that epoetin likely has effects other than just raising hematocrit levels, and other underlying conditions and factors may have influenced the patient outcomes. Figure 2A was unnecessarily three dimensional, as described in Wilke’s book, although not terrible – the 3D layers may be helpful in comparing the close values between dose quartiles. However, I worked with Cindy and Jess to attempt to make it better in a two-dimensional format. To create this, data from Table 3 was made into a csv file and code for a grouped bar chart was taken from Wilke’s figure 6.8. The color scheme was not ideal, and it is still difficult to compare values between the dose quartiles for each hematocrit group, so the figure could still be further improved.