

# Word for Word

## *Higher/lower or increased/decreased*

Scientific writing is filled with comparisons. Which group of patients had the highest response rate? Did upregulation of a particular molecule increase expression levels in a panel of genes? Did the surgical technique tested result in lower morbidity rates compared with the standard of care?

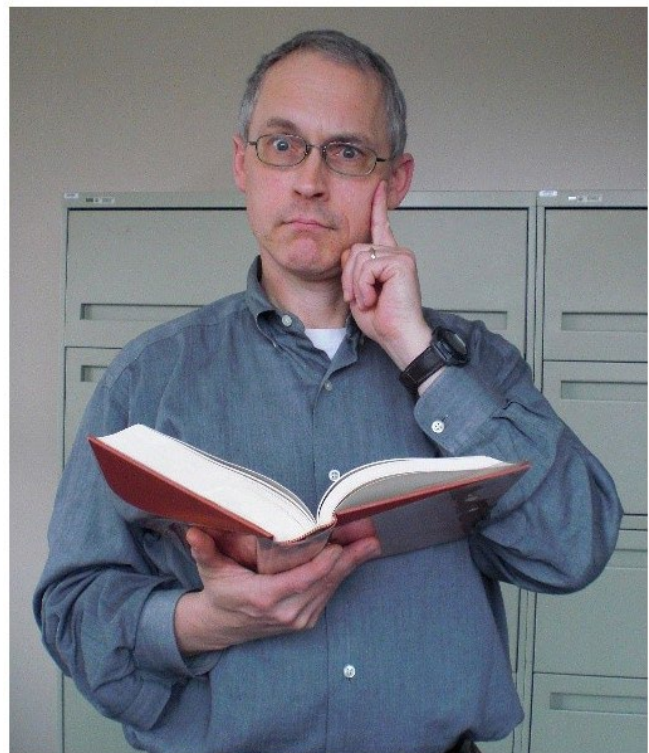
One thing to keep in mind when writing comparisons is that comparative terms (higher/lower, increased/decreased, etc.) have subtle differences in meaning. For example, if you are comparing values within a single entity (at different times or under different conditions), use *increase/decrease*. If more than one entity is being compared, use *higher/lower*. Thus, if you had 10 coins in group A and 5 coins in group B, you would say that the number of coins in group A was *higher* than the number of coins in group B. But if you had 10 coins in group A and removed 5 coins, you would say that the number of coins in group A *decreased* (from 10 to 5).

Consider the following examples:

### **Incorrect example:**

Overall, the rate of grade 3/4 adverse events significantly *decreased* in patients treated in the mXELIRI arm compared with patients in the FOLFIRI arm.

As written, this sentence means that the rate of grade 3/4 adverse events



was measured twice in each arm; in the mXELIRI arm, the rate was significantly lower at the second measurement, but in the FOLFIRI arm, the rate did not change between the two measurements. However, what the author actually meant was this:

**Revised example:** Overall, the rate of grade 3/4 adverse events was *lower* in patients treated in the mXELIRI arm than in patients treated in the FOLFIRI arm.

**Incorrect example:** Patients experienced an *increased* rate of complete remission after high-dose chemotherapy in combination with autologous stem cell transplantation than after standard chemotherapy.

**Revised example:** Patients experienced a *higher* rate of complete remission after high-dose chemotherapy in combination with autologous stem cell transplantation than after standard chemotherapy.

**Correct example:** As expected, expression of hREST *increased* in the D-hREST mice after treatment.

—Dawn Chalaire