

# Sample Analysis Presentation

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## **Poliovirus treatment helped patients with deadly brain tumors live longer**

from: **Science News** (June 26, 2018)

(<https://www.sciencenews.org/article/poliovirus-treatment-helped-patients-deadly-brain-tumors-live-longer>)

*"Few treatment options are available to people facing a second battle with a particularly fatal type of brain tumor called glioblastoma."*

*"Of 61 people with recurring glioblastoma who were treated with the modified [polio] virus, 21 percent were alive after three years. In a historical comparison group of 104 patients, who would have been eligible for the treatment but died before it was available, 4 percent lived as long,"*

- Sciencenews.org is website for *Science News* magazine, which is a reputable news source
- Original source is study published in *New England Journal of Medicine*, one of the most prestigious medical journals in the world
- Study authors are all researchers at Duke University which is a respected academic institution
- No reason to suspect bias

- Statistics are two proportions (% survival at 36 months)
- No information on statistical significance in news article (no p-value, no confidence intervals)
- Original study paper does report confidence intervals, difference is statistically significant
- Not a true controlled trial (used historical controls)
- Disease population, no information on how sample was created (probably not a random sample)
- Article title is a fair summary of content
- Article includes link to original source