

# What Makes Rare Disease Clinical Trials Successful?

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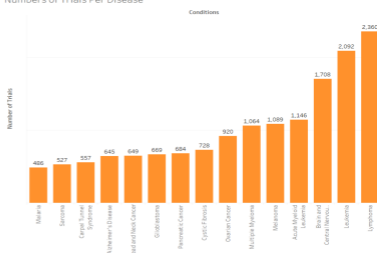


## Rare Disease Clinical Trials

Clinical Trials are investigations where people volunteer to test cutting edge treatments, tests or interventions. This is all in order to find means of prevention, detection and treatment of assorted potentially fatal diseases. Rare Disease Clinical Trials focus on an assortment of diseases that afflict only a small percentage of the worlds total population, yet are still extremely dangerous.



Numbers of Trials Per Disease



## What Rare Disease Had the Most Trials

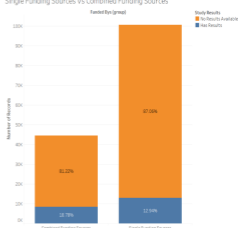
The data donated by Alexion drew the conclusion that the most commonly trialed disease was cancer. However the term cancer is extremely broad, and the data was omitted.



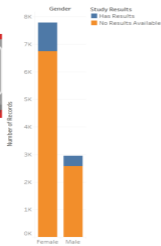
## Single Funds vs Multiple Funds

As seen with the graph, the difference between multiple funding sources and single funding sources is prevalent, only on the quantity of trials. The return of results however is not overtly hindered, yet still changes a little bit since combined funded sources return a higher value percent wise.

Single Funding Sources Vs Combined Funding Sources



Difference in Gender



## Sampling Variables

With the data some sampling variables procured a more prevalent impact on the results of the data. One of the most prevalent variable was gender, with males returning much less results. On the other hand variables like age were just so broad that discerning data from them was nearly impossible, since values had values that included broad terms like Ages 18 to Adult. Variables such as location are also important, as it helps locate values for things like income, demographics and even potential health hazards from the local area (such as poor water, smog levels, and general pollution)



## So What Makes A Clinical Trial Successful?

In the end the data does support the exact definition of a successful clinical trial. Most of the data never even returned a result, meaning that while they could've gained helpful data on the disease, it was not a fully success trial. Variables do play a significant role, since female volunteers tended to return more values. Things like funding sources make an impact on the number of trials the results returned does not get effected, however multiple funded sources return a higher percent making it a potentially better choice. So in the end the making of a successful trial requires returned results, with a better chance of getting results from specific variables like gender and multiple funded sources.



Source : <https://www.dropbox.com/s/qqlsad3ilnxuuyo/Clinical%20Trial%20Data%20Pull.xlsx?dl=0>