This is a repeated measures design. We are interested in 5 subjects, 1 control and 4 experienced. Each subject receives 1 of the 3 conditions. The data is analyzed using a repeated measures ANOVA. The variables are:

- \( T \): Treatment variable
- \( Y \): Outcome variable

The hypothesis is that the treatment will affect the outcome. The table shows the results of the ANOVA:

<table>
<thead>
<tr>
<th>Condition</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

The relevant items are listed and discussed. The discussion section covers the results and implications. The conclusion is that the treatment significantly affects the outcome. The appendix includes additional details.
Several biases are present here; estimated improvement of 97% not likely to be a good estimate of results if experiment were repeated carefully from a scientific point of view.

I = outcome = survival % after 3 years

X = treatment:  T = CABG (n=100)
                   C = conventional (n=200)

This is something like a judgmental - allocation controlled trial in which Dr. Allgot hand-picked his 4 people.

This difference is highly practically significant, but
98% - 65% = +30% is almost certainly sharply biased on the high side as an estimate of what a correctly-run RCT would find. Why? [A: Dr. u. coronary artery disease chose the healthiest patients he could to maximize their chance of surviving the surgery]

Person 1's cause & effect conclusion:
if eat cottage cheese \[\rightarrow\] gain weight

if heavier people eat cottage cheese, this does establish a positive association between A & B [\(\Box\)]

association ≠ causation

if A, B assoc, \(A \rightarrow B \& B \rightarrow A\) are both valid possibilities
Design 1

Experiments: deer

Like

40

h = 80

40

random

Left

Random

Different

4

Left

Right

n = 40

Valid:

Yes

Design 2: Exp. Deer

First Look

Some

Some

n = 80

Also valid but likely to be more accurate because (repeated measures). Other were holding entire deer constant in the front vs. lack of vision.