

## COVID-19 - AstraZeneca BOX (#63876)

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### 1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

### 2) What's the main question being asked or hypothesis being tested in this study?

Research Question: Does presenting evidence-based information about the comparative risk of severe COVID-19 vs. the COVID-19 Astra-Zeneca vaccine increase intention to vaccinate with the Astra-Zeneca vaccine?

#### Hypotheses:

Compared to the control condition (no infographic), the intention to get vaccinated with AstraZeneca is greater in conditions presenting evidence-based information about the comparative risk of severe COVID-19 vs. AstraZeneca's risk of specific blood clots. (H1)

Individuals who have received information about the effect of vaccination at high-exposure have a higher vaccination intention than individuals who have received information about low-exposure. (H2)

### 3) Describe the key dependent variable(s) specifying how they will be measured.

Intention to get vaccinated:

How would you decide if you had the opportunity next week to be vaccinated against coronavirus with AstraZeneca's vaccine? on a seven-point scale (1 = No way vaccinate to 7 = Vaccinate in any case)

### 4) How many and which conditions will participants be assigned to?

Participants will be randomly assigned to one of three experimental conditions:

- (1) no Infographic (control)
- (2) Infographic given low infection risk
- (3) Infographic given high infection risk

The conditions will be balanced regarding age groups (20-29, 30-39, 40-49, 50-59, 60-69 yrs).

### 5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

One-factorial ANOVA with infographic (both Infographics (grouped) vs control) as independent variables and intention to get vaccinated as dependent variables (H1)

One-factorial ANOVA with infographic (high vs low) as independent variables and intention to get vaccinated as dependent variables (H2)

### 6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

We will exclude:

- Participants aged below 20 and above 69
- Participants who are already vaccinated twice
- Participants who are or were infected with the novel coronavirus

### 7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

Statistical a priori power analyses of the ANOVA were conducted using the WebPower-package in R under the following assumptions:

Input: number of groups = 2 | expected effect size  $f=0.15$  | alpha err prob=0.05 | power=0.95

Output:  $n=579$

Since this experiment will be part of the COVID-19 snapshot monitoring (COSMO), about 1000 participants will be recruited.

### 8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)