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Practical guide to sample size calculations: installation of the App SampSize

Laura Flight and Steven A. Julious

Abstract

In 2016 we published three articles in *Pharmaceutical Statistics* that gave a practical guide to sample size calculations. In each of the articles there were instructions on how to obtain the App SampSize. This short communication updates these instructions and highlights the updates and added functionality to the App.

In 2016 we wrote three articles in *Pharmaceutical Statistics* to give a practical guide to sample size calculations [1-3]. In each of these articles there were instructions on how to obtain the App SampSize which this short communication is now updating.

The SampSize App is available at the web site: https://sampsize.org.uk/ (accessed 30 March 2022). From the site you can use the App on a desktop computer or other device such as a phone or a tablet. The App is available to use for free for teaching and research purposes at the risk of the user.

If you access the SampSize through an Android device, on accessing the web site you will be asked if you wish to install the App. By agreeing SampSize will be installed as an App on your device. The App can now be run without being on a network. If you do not get the prompt, then if you click on the three dots next to the share icon an option here is to install the App.

For an iOS device, tap the Safari icon and then navigate to the website for SampSize given above. After the website has loaded tap on the share icon. The icon is an arrow coming out of a box. Select "Add to Home Screen" to open the Add to Home Screen dialog box and then select Add. SampSize will look and work like an App on your device. Again, you do not need to have access to a network to run it. This procedure for installing the App only works with Safari.

There are a number of changes between the version of the App in the three papers and that being described in this update. The main update was to facilitate SampSize to continue working on iOS devices as the App stopped working after an operating system upgrade. The App was also added the functionality to estimate the number of events for trials with a survival outcome for trials designed to demonstrate superiority, non-inferiority and equivalence as well as precision-based trials. Previously the App only did sample size calculations for trials with a binary or Normal outcome. The final update was that a methods document was written, accessible from the App, that gives the sample size methods used in the App with links to published papers - including the original three *Pharmaceutical Statistics* articles.

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Data Availability

Data sharing not applicable to this article as no datasets were generated or analysed during the current study

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