

Double the chances of conception in first cycle of use with new connected ovulation test system



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Introduction Methods

- Natural conception requires intercourse during the fertile period of the cycle, and home ovulation tests are a convenient method for identifying the fertile period
- Most tests only detect luteinising hormone to predict impending ovulation
- The new Clearblue Connected Ovulation Test System also detects estrone-3-glucuronide to identify the wider fertile phase
- The ovulation test synchronises via Bluetooth® with an app on the user's smartphone, which also provides guidance on testing
- Accurate timing of intercourse should maximise chances of pregnancy, but there have previously been no randomised, controlled studies examining efficacy of home ovulation tests
- The aim of this study was to demonstrate that using the Clearblue Connected Ovulation Test System increases chances of pregnancy

- UK women seeking to conceive, aged 18–40 years, were randomised into two groups:
 - The test group used the Clearblue Connected Ovulation Test System
 - The control group were asked not to use ovulation tests
- The study lasted for up to two cycles
- Volunteers were required to conduct digital home pregnancy tests and collect urine samples at the end of each cycle, and these were returned to the study site
- Urinary human chorionic gonadotrophin was measured in the urine samples using AutoDELFLIA®
- This information, combined with diary recording of menses, was used to determine pregnancy status at the end of each cycle

Results

- The volunteer flow is shown in Figure 1. The pregnancy rates are shown in Table 1.

Figure 1: Volunteer flow

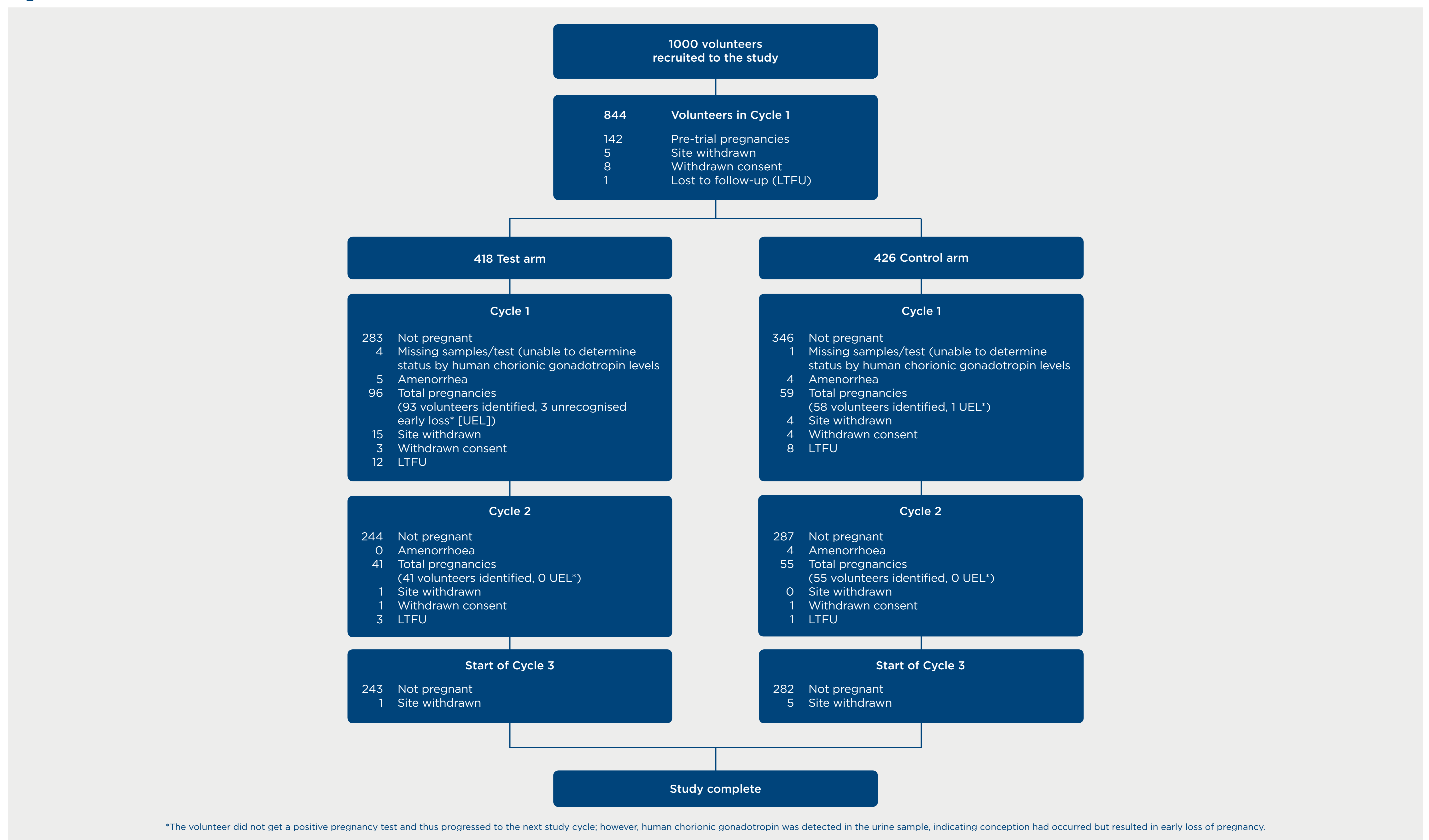


Table 1: Pregnancy rates

	Pregnancy rate (95% confidence interval)		Odds ratio (95% confidence interval)	Fisher's exact test p-value
	Test group	Control group		
Cycle 1 total pregnancies	25.4% (21.1–30.1%)	14.7% (11.4–18.5%)	2.0 (1.4–2.8)	<0.001
Cycle 1&2 total pregnancies	36.2% (31.3–41.3%)	28.6% (24.2–33.4%)	1.4 (1.0–1.9)	0.026

Conclusions

- Women using the Clearblue Connected Ovulation Test System had twice the odds of becoming pregnant in the first cycle compared with women not using ovulation tests
- This is the first randomised, controlled study to demonstrate the efficacy of a home ovulation test
- This means that providing accurate information on their wider fertile window, with connectivity to their smartphone, can provide real benefit to women seeking to become pregnant

Declaration of interest

SJ, SBC, SB and GW are employees of SPD Development Company Ltd, a wholly owned subsidiary of SPD Swiss Precision Diagnostics GmbH, the manufacturer of Clearblue pregnancy and fertility tests. The study was funded by SPD Development Company Ltd. This poster is intended for a UK audience.

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