

Supplement 1

Comparison of different storage and transportation conditions

At the initial phase of the study and in order to determine the optimal and easiest way to transport and store the collected samples, we compared two different temperature conditions on the first 1,113 samples. These were divided into two groups (one comprising of samples stored and transported at ambient temperature and the other at 0-4°C). The goal was to investigate possible differences in invalid result rates as well as in HPV positivity rates between the two groups.

The cobas[®] HPV test, used in GRECOSELF, yields four binary variables, namely HPV16, HPV18, 12 hrHPV (non-16/18) and invalid. Differences in proportions, for these four variables were tested between the two study groups of the pilot phase of the study using the chi-squared test. The level of significance was set at a p-value <0.05.

Table 1, below, presents invalid HPV DNA result rates, as well as the proportions of women positive for any hrHPV, for other hrHPVs (non 16/18), for HPV16, and for HPV18 (not taking co-infections under consideration) for the two distinct sample groups of the pilot period of the study. Invalid rates were 0.5% vs 0.5% (p=0.998), and hrHPV (any), other hrHPV (non 16/18), HPV16, and HPV18 positivity rates were 6.9% vs 7.2% (p=0.821), 5.8% vs 6.7% (p=0.539), 1.3% vs 1.3% (p=0.997), and 0.2% vs 0.2% (p=0.999), respectively. Summarizing, since there was no statistically significant difference in any of these rates, the storage and transportation conditions used for the remainder of the study were the simplest ones, namely ambient temperature.

Table 1. Comparison of HPV DNA testing results using two different temperature conditions for the storage and transportation of the self-collected samples.

	(Room temperature) n/N (%)	(Refrigerator) n/N (%)	Chi-square	P-value
Invalid result (invalid/total)	3/556 (0.5%)	3/557 (0.5%)	0.000	0.998
hr HPVs (positive/total)	38/553 (6.9%)	40/554 (7.2%)	0.051	0.821
12 other hrHPVs (positive/total)	32/553 (5.8%)	37/554 (6.7%)	0.377	0.539
HPV16 (positive/total)	7/553 (1.3%)	7/554 (1.3%)	0.000	0.997
HPV18 (positive/total)	1/553 (0.2%)	1/554 (0.2%)	0.000	0.999