In September 2009, Antimicrobial Test Laboratories conducted a study for Excel Dryer to evaluate bacteria levels on the hands of volunteers related to hand washing and drying. All study subjects washed their hands, then dried them with either paper towels or an Excel Dryer.

Volunteers were recruited and instructed to abstain from using antimicrobial hand soaps for the three days leading up to the study. The volunteers were divided into groups (2 participants per group). Each group was assigned a different method of hand drying (paper towels or Xlerator Dryer).

To determine the baseline levels of bacteria, four fingers from each volunteer were analyzed using ordinary microbiological techniques. Following this analysis, all volunteers washed their hands for 20 seconds with soap and water according to the CDC hand hygiene guidelines and then dried them using either paper towels or the Xlerator dryer. Then a final bacterial analysis was performed on the fingers of the other hand.

While the baseline contamination (pre-wash) of the hands showed some variance from one volunteer to another, the bacterial numbers for each volunteer did not change significantly after any of the washing or drying procedures.

The results of this study indicate that the method of drying (paper towels or Xlerator Dryer) does not significantly affect bacteria levels on hands.

The Graph shows the average number of bacteria (CFU=Colony Forming Units) present on a single finger before washing (left green and left blue column) and after drying with either paper towels (right green column) or the Xlerator dryer (right blue column). No significant changes are observed between pre-wash and post-dry or between drying with paper towels and drying with the Xlerator dryer.