



SPECIAL 510(k) SUBSTANTIAL EQUIVALENCE DETERMINATION DECISION SUMMARY

I Background Information:

A 510(k) Number

K223046

B Applicant

Cepheid®

C Proprietary and Established Names

Xpert® FII & FV

D Regulatory Information

Product Code(s)	Classification	Regulation Section	Panel
NPR	Class II	21 CFR 864.7280 - Factor V Leiden DNA Mutation Detection Systems	PA - Pathology
NPQ	Class II	21 CFR 864.7280 - Factor V Leiden DNA mutation detection systems	PA - Pathology
OOI	Class II	21 CFR 862.2570 - Instrumentation for clinical multiplex test systems	CH - Clinical Chemistry

II Review Summary:

This 510(k) submission contains information/data on modifications made to the submitter's own CLASS II device requiring 510(k). The following items are present and acceptable.

1. The name and 510(k) number of the SUBMITTER'S previously cleared device (K082118).
2. Submitter's statement that the **INDICATIONS FOR USE/INTENDED USE** of the modified device as described in its labeling **HAS NOT CHANGED** along with the proposed labeling which includes instructions for use, package labeling, and, if available,

advertisements or promotional materials (labeling changes are permitted as long as they do not affect the intended use).

3. A description of the device **MODIFICATION(S)**, including clearly labeled diagrams, engineering drawings, photographs, user's and/or service manuals in sufficient detail to demonstrate that the **FUNDAMENTAL SCIENTIFIC TECHNOLOGY** of the modified device **has not changed. This change was for modification to an existing device (Xpert FII & FV) to incorporate its intended use on an additional instrument, the GeneXpert Infinity Systems. The modified design of Xpert FII & FV test has the same intended use and the same technological characteristics as the original design (K082118, the predicate device). The difference between the modified design of Xpert FII & FV test and the original design is the inclusion of the GeneXpert Infinity Systems. No changes have been made to the Xpert FII & FV cartridge components, reagents, and design. Assay parameters as defined in the Assay Definition File (ADF) which includes, PCR parameters, assay Ct cutoff values, algorithm for determining assay results and reportable results also remain unchanged.**
4. Comparison Information (i.e., similarities and differences) to the submitter's legally marketed predicate device including, labeling, intended use, and physical characteristics.
5. A Design Control Activities Summary which includes:
 - a) Identification of Risk Analysis method(s) used to assess the impact of the modification on the device and its components, and the results of the analysis.
 - b) Based on the Risk Analysis, an identification of the verification and/or validation activities required, including methods or tests used and acceptance criteria to be applied.

The labeling for this modified subject device has been reviewed to verify that the indication/intended use for the device is unaffected by the modification. In addition, the submitter's description of the particular modification(s) and the comparative information between the modified and unmodified devices demonstrate that the fundamental scientific technology has not changed. The submitter has provided the design control information as specified in The New 510(k) Paradigm and on this basis, I recommend the device be determined substantially equivalent to the previously cleared (or their preamendment) device.