Urgent Field Safety Notice (FSN)
Aptima Combo 2® Assay
(for European Distribution)

Brussels, June x, 2019

For attention of:

Hologic FSCA Ref: FA-00095

Information on Affected Devices

The Aptima Combo 2® assay (AC2) is a target amplification nucleic acid probe test that utilizes target capture for the in vitro qualitative detection and differentiation of ribosomal RNA (rRNA) from *Chlamydia trachomatis* (CT) and/or *Neisseria gonorrhoeae* (GC) to aid in the diagnosis of chlamydial and/or gonococcal urogenital disease using the Tigris® DTS® System or Panther® System.

The affected catalog numbers are the following:

301130	Aptima Combo 2 assay on Tigris, 250 T
302923	Aptima Combo 2 assay on Panther, 100 T
303094	Aptima Combo 2 assay on Panther, 250 T

Reason for Field Safety Corrective Action (FSCA)

Genetic variants are a natural by-product of microbial evolution and a new *Chlamydia trachomatis* (CT) variant has been identified which affects detection by the AC2 assay on both Tigris and Panther instruments.

It is important to note that this CT variant does not affect the performance of the Aptima® Chlamydia trachomatis assay (ACT), a single analyte assay, nor the detection of *Neisseria gonorrhoeae* (GC) by the AC2 assay on either Tigris or Panther instruments.

This CT variant was identified based on information provided by five (5) clinical laboratories in southern Finland. These clinical laboratories reported to Hologic instances where CT cases tested negative by the AC2 assay but positive through reflex testing with the ACT assay. Following evaluation of samples provided by the Finnish laboratories, Hologic has confirmed the presence of this CT variant. Furthermore, Hologic has confirmed that this variant contains a mutation in the 23S rRNA region utilized by the AC2 assay, which is distinct from the 16S rRNA region targeted by the ACT assay. Therefore, the performance of the ACT assay is not affected by this mutation.

Recently published data[1] estimates prevalence of this CT variant in Finland to be in the range of 0.4% of all samples screened, and 6-10%% of all specimens reported as positive for CT. Prevalence outside of Finland is unknown at this time. This notice applies to European AC2 assay customers.

Recommendation for European Laboratories:

1. Customers can continue to use the AC2 assay to screen or test for CT and GC.
2. Hologic recommends changes in test result interpretation and reflex test procedure as described in **Table 1** (below).
3. Customers should use the Aptima® Chlamydia trachomatis assay (ACT) (for Panther, Part Number 302925; for Tigris, Part Number 303091) to perform any CT reflex/re-testing of samples.

Table 1: Recommended Reflex Testing for Aptima Combo 2 assay (AC2) Results

AC2 – CT Result	AC2 – GC Result	Reflex CT	Reflex GC	Comparison to Current Package Insert
CT neg RLU<15	GC neg	None	None	No change.
CT neg RLU≥15	GC neg	ACT	None	Reflex ACT testing is now recommended for CT negative samples when the AC2 RLU value is ≥15.
CT neg	GC EQUIV	ACT	AC2	Reflex ACT testing is now recommended for CT negative samples when GC is Equivocal. AC2 can continue to be used for retest of GC Equivocal samples.
CT neg	GC POS	ACT	None	Reflex ACT testing is now recommended for CT negative samples when GC is Positive.
CT EQUIV	GC neg	ACT	None	Reflex ACT testing is now recommended for retest of CT Equivocal samples.
CT EQUIV	GC EQUIV	ACT	AC2	Reflex ACT testing is now recommended for retest of CT Equivocal samples. AC2 can continue to be used for retest of GC Equivocal samples.
CT EQUIV	GC POS	ACT	None	Reflex ACT testing is now recommended for retest of CT Equivocal samples.
CT POS	GC neg	None	None	No change.
CT POS	GC EQUIV	None	AC2	No change.
CT POS	GC POS	None	None	No change.

AC2 – Aptima Combo 2 assay; ACT – Aptima Chlamydia trachomatis assay; AGC – Aptima Neisseria gonorrhoeae assay; RLU – Relative Light Units (x1000); neg – negative; EQUIV – equivocal; POS – positive

Hologic is working collaboratively with Health Authorities and all related industry partners to bring an approved and validated, long term IVD solution to the market in the coming months. Hologic will inform you when this long-term solution becomes available.

Any consideration for retesting historical archived samples or conducting patient recall for repeat testing would depend on multiple factors including clinical symptoms and variant prevalence, and should be undertaken in collaboration with local and regional public health officials for guidance pertaining to each specific geographic region.

If you have any questions about the content of this communication, please contact Hologic EU Technical Support:

- By email: EUTechnical.Support@hologic.com
- By phone: 00 800 800 29892 or refer to the following site for country-specific numbers: https://www.hologic.com/support/europe

Transmission of this Field Safety Notice:

This notice should be provided to all personnel who need to be made aware of this issue both within your organization or to any European organization where the Aptima Combo 2 assay has been transferred.

The Competent (Regulatory) Authority of your country has been informed about this communication to customers.

Please acknowledge the receipt of this Field Safety Notice by returning the Customer Reply Form to: [insert email address]

References

1. Rantakokko-Jalava, et. al. *Chlamydia trachomatis* samples testing falsely negative in the Aptima Combo 2 test in Finland, 2019. Eurosurveillance: Volume 24, Issue 22, 30 May 2019.