

# PANTHER: WASTE AND CONTAMINATION MANAGEMENT

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# HOLOGIC

Women's Health Company

Diagnostics

Cervical Health

Breast / Skeletal health

Global Access Initiative



# PANTHER SYSTEM AND HIV-1 ASSAY

## PANTHER SYSTEM



The Panther system provides the following advantages:

- **Random and Continuous** Access
- Consolidated menu that **combines Viral load, Women's Health and STI testing**
- Ability to run assays **simultaneously**
- Proven **Flexibility, Reliability and Performance**
- **Small footprint** saves space and costs; suited for **scalability and redundancy**
- Panther serves as a **foundation for future** capabilities and content

FULL AUTOMATION FROM  
SAMPLE-TO-RESULT

Sample  
Preparation

Extraction

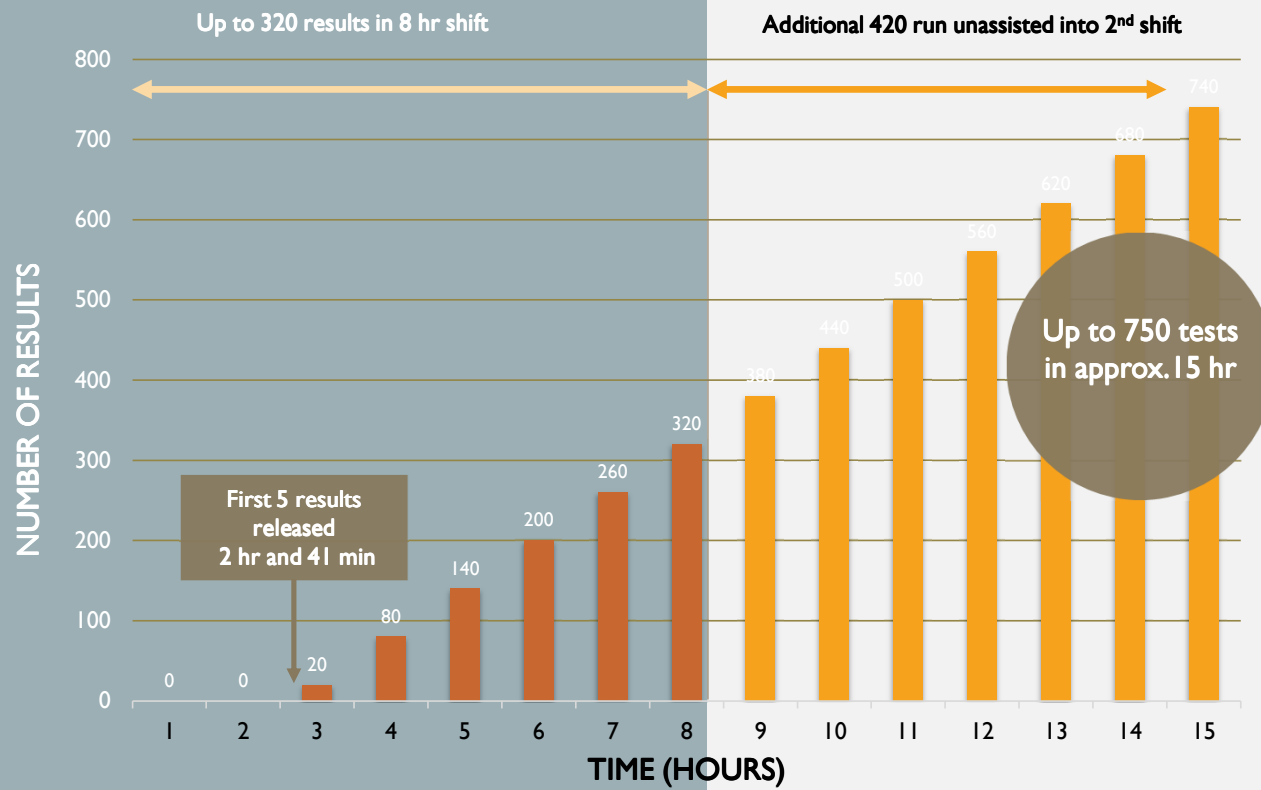
Amplification  
& Detection

Results  
Analysis

Total Automation on a Single Instrument



# REAL-TIME TMA THROUGHPUT AND CAPACITY

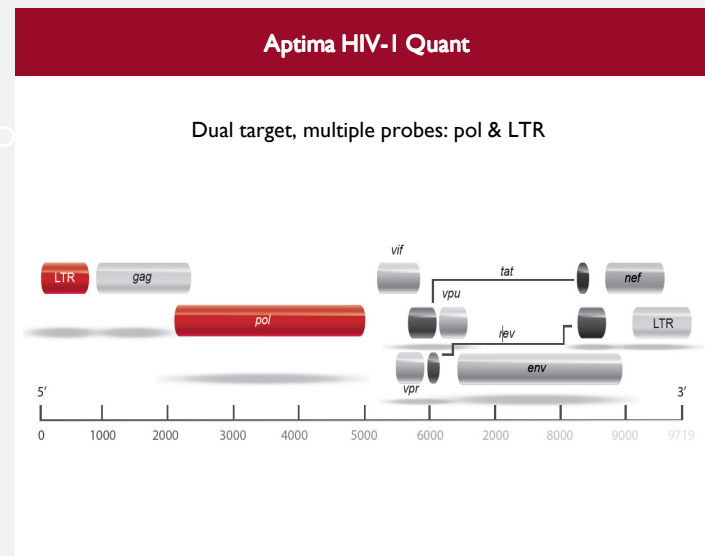


# APTIMA HIV-1 QUANT DX ASSAY

Aptima <sup>®</sup> HIV-1 Quant Assay	
Intended Use	Monitoring / Diagnosis '21
Limit of Detection (LoD)	12 copies/mL
Dynamic Range	30 – 10 million copies/mL
Sample Requirement	Reaction volume 0.5 mL

## Primary Tube Sampling

- Minimum of 1200 µL plasma / serum
- Plasma: EDTA, ACD, PPT
- Serum: SST, serum tubes



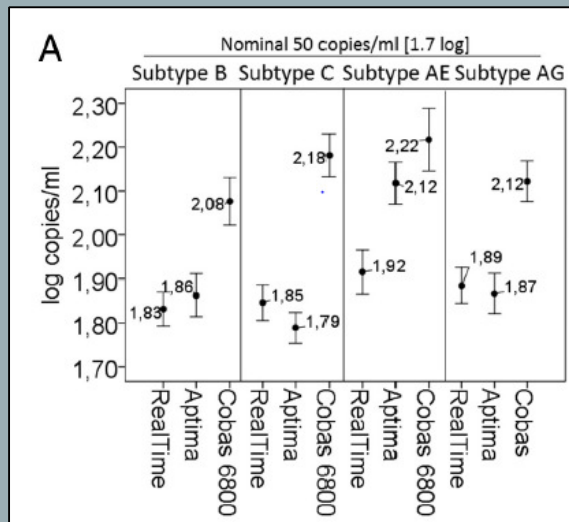
## Secondary Tube Sampling

- Minimum of 700 µL plasma / serum required with Hologic Specimen Aliquot Tube (SAT)
- Dilution for low volume samples with automated software calculation to neat concentration

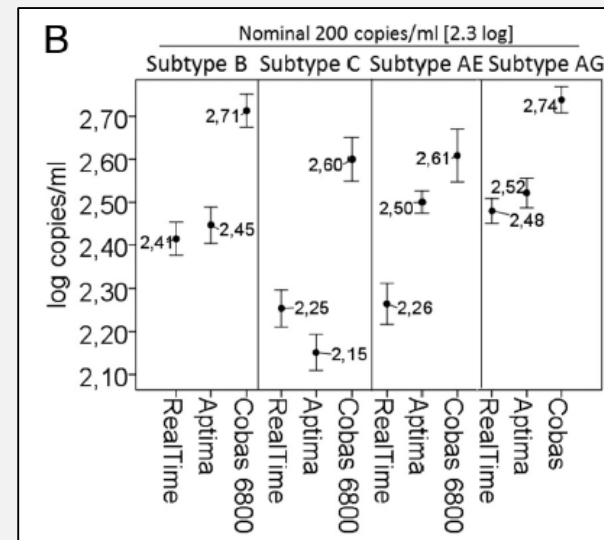
# CLINICAL PERFORMANCE FROM 3RD PARTY INVESTIGATORS

The Aptima HIV-1 assay provides consistent, trusted results for viral load monitoring with full subtype coverage

50 copies / mL



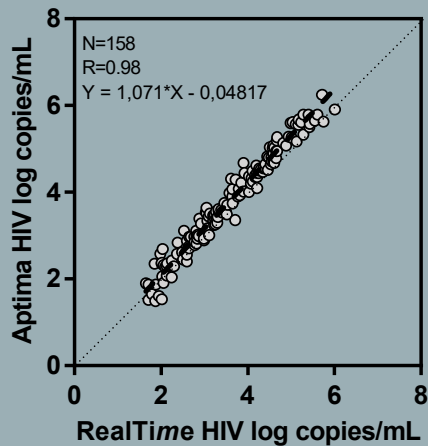
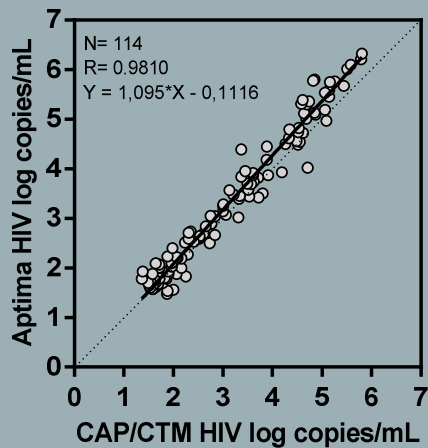
200 copies / mL





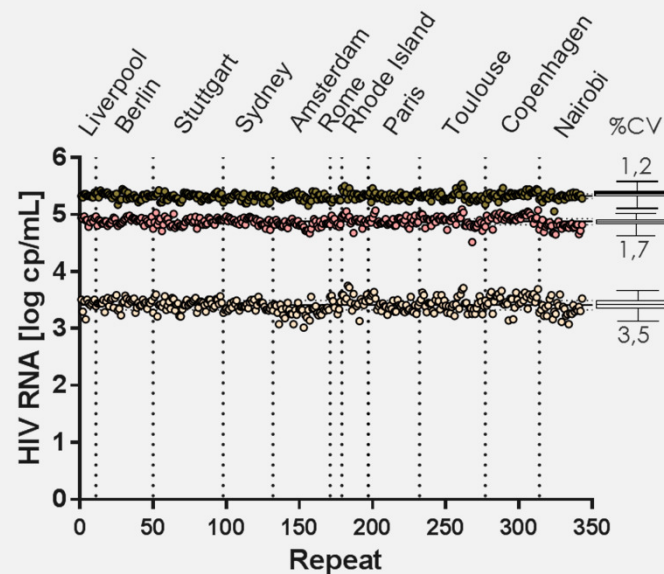
# CLINICAL PERFORMANCE FROM 3RD PARTY INVESTIGATORS

## Clinical Correlation



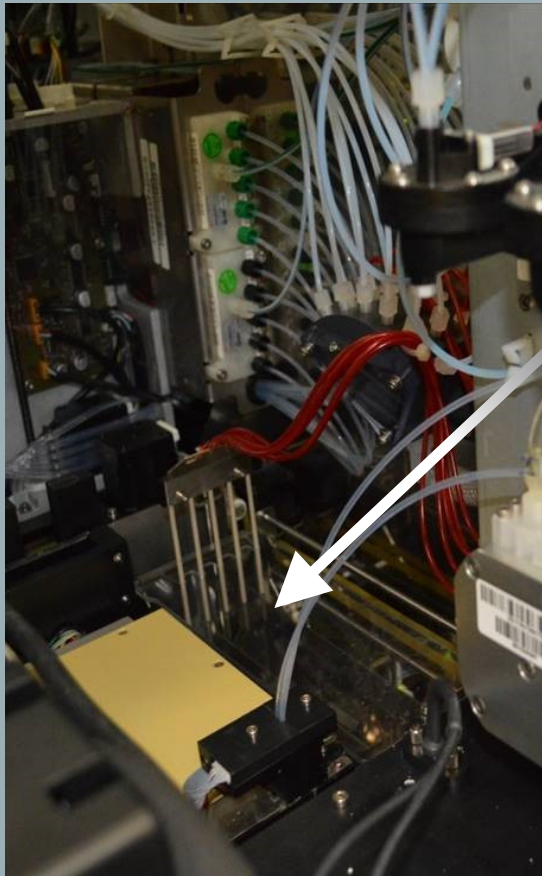
The Aptima HIV-1 assay provides consistent, trusted results for viral load monitoring with full subtype coverage

## Reproducibility



# WASTE AND CONTAMINATION MANAGEMENT

# WASTE MANAGEMENT AND CONTAMINATION CONTROL



Deactivation Queue

Waste Deflector

Solid Waste Container

Liquid Waste Bottle



# LIQUID WASTE COMPOSITION

Material	% by volume
TCR	12.20%
Sample	9.76%
Wash	24.39%
Oil	2.44%
Amp	1.22%
Enzyme	0.61%
Promotor	0.61%
Deactivation	48.78%
pH	9

**Reportable Component:**  
NaOH, Lauryl Sulfate  
Sodium, EDTA

**Reportable Component:**  
Polydimethylsiloxane

**Reportable Component:**  
MgCl, KCl, Trizma HCl,  
Trizma Base, Zinc Acetate,  
Glycerol

**Reportable Component:**  
Lithium Hydroxide, HEPES,  
Lauryl Sulfate, Succinic Acid

**Reportable Component:**  
Triton X, EDTA, Trelahose,  
HEPES, N-Acetyl-L-Cysteine,  
KCl, Glycerol

**Reportable Component:**  
NaOH, Sodium  
Hypochlorite, Sodium  
Bicarbonate

## DEACTIVATION OF REACTIONS

### Guanidinium thiocyanate (GTC)

Used as a general protein denaturant

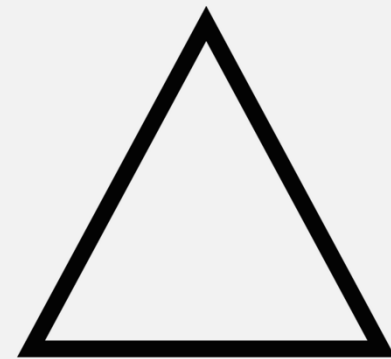
Toxic reagent; requires Hazardous Waste Management

Traditional method for reaction inactivation



### • Bleach

- Denatures nucleic acid
- Effective at low concentrations
- Universally employed as disinfectant



THANK YOU!

QUESTIONS?