

Xpert[®] Xpress CoV-2/Flu/RSV *plus* Laboratory Information System Guidance

REF XP3COV2/FLU/RSV-10

ADF:	Xpress_SARS-CoV-2_Flu_RSV plus	Version 2
ADF:	Xpress_SARS-CoV-2_Flu plus	Version 2
ADF:	Xpress_SARS-CoV-2_plus	Version 2

Purpose: To provide information that is helpful when enabling a Laboratory Information System (LIS) interface for the Xpert[®] Xpress CoV-2/Flu/RSV *plus* test on GeneXpert[®] Systems.

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If you need further assistance, please contact Cepheid Technical Support at <https://www.cepheid.com/en/about/contact-us> or email techsupport@cepheid.com.

This test has not been FDA cleared or approved. This test has been authorized by FDA under an EUA for use by authorized laboratories. This test has been authorized only for the simultaneous qualitative detection and differentiation of nucleic acids from SARS-CoV-2, influenza A, influenza B, and respiratory syncytial virus (RSV), and not for any other viruses or pathogens. This test is only authorized for the duration of the declaration that circumstances exist justifying the authorization of emergency use of in vitro diagnostics for detection and/or diagnosis of COVID-19 under Section 564(b)(1) of the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. § 360bbb-3(b)(1), unless the authorization is terminated or revoked sooner.

1 Summary of Cepheid Products with a SARS-CoV-2 Assay

Xpert® Xpress CoV-2/Flu/RSV *plus* is the newest Cepheid assay for the GeneXpert® System that performs a SARS-CoV-2 test. The table below summarizes ALL of the tests that Cepheid has marketed with a SARS-CoV-2 assay to help clarify important differences related to LIS setup.

Product Name	Catalog Number	Version	ADF	Launch Date
Xpert® Xpress SARS-CoV-2	XPRSARS-COV2-10	1	Xpert Xpress SARS-CoV-2	March 2020
Xpert® Xpress SARS-CoV-2/Flu/RSV	XP3COV2/FLU/RSV-10	1	Xpert Xpress_SARS-CoV-2_Flu_RSV	October 2020
		1	Xpert Xpress_SARS-CoV-2_Flu	
		1	Xpert Xpress_SARS-CoV-2	
Xpert® Xpress CoV-2/Flu/RSV <i>plus</i>	XP3COV2/FLU/RSV-10	1	Xpress SARS-CoV-2_Flu_RSV plus	September 2021
		1	Xpress SARS-CoV-2_Flu plus	
		1	Xpress SARS-CoV-2 plus	
Xpert® Xpress CoV-2/Flu/RSV <i>plus</i>	XP3COV2/FLU/RSV-10	2	Xpress SARS-CoV-2_Flu_RSV plus	November 2023
		2	Xpress SARS-CoV-2_Flu plus	
		2	Xpress SARS-CoV-2_plus*	

*Please note that the only ADF file name that is changing is the “Xpress SARS-CoV-2_plus from version 1 to version 2.

2 Enabling the Assay and Host Communication in GeneXpert® System

2.1 Consult your LIS System Administrator:

Before making changes to your GeneXpert LIS interface settings, consult your LIS System Administrator.

2.2 Enable Host Communication:

If the GeneXpert System is not already configured for LIS host communication, follow the instructions in your GeneXpert System's User Guide: "Configuring Host Communications for an LIS."

2.3 Assay Host Test Code and Result Code Configuration:

Assay Host Test Code and Result Code must be defined in the GeneXpert System.

Note: When defining Host Test Codes and Result Codes, consider if your organization needs to use different Codes for different versions of Cepheid tests so that the test versions can be distinguished in your LIS.

Configure test codes:

1. Record or take screenshots of existing test codes
2. Delete EUA V1 ADFs
3. Install the V2 ADFs and reuse test codes

2.4 Suggested Assay Host Test Codes

ADF Name / Assay Name	ADF Version	Assay Host Test Code	Analyte Common Name	Result Code
Xpress SARS-CoV-2_Flu_RSV plus	2	SARSCOV2FLURSV	SARS-CoV-2	SARSCOV2
			FLU A	FLUA
			FLU B	FLUB
			RSV	RSV
Xpress SARS-CoV-2_Flu plus	2	SARSCOV2FLU	SARS-CoV-2	SARSCOV2
			FLU A	FLUA
			FLU B	FLUB
Xpress SARS-CoV-2_plus	2	¹ SARSCOV2	SARS-CoV-2	¹ N.A.

¹**Note:** As a Single-Result Assay, the Assay Host Test Code will be the same as the Upload and Download Code.

3 Suggested LOINC Codes

Assay	Specimen ¹	Result Description	LOINC Code	Reference	Component	Property	Time	System	Scale	Method
Xpress SARS-CoV-2_Flu_RSV plus	<ul style="list-style-type: none"> NP Swabs Nasal swabs Nasal Wash / Aspirates 	Binary - Positive, Negative	95941-1	https://loinc.org/95941-1/	Influenza virus A & Influenza virus B & SARS coronavirus 2 & Respiratory syncytial virus RNApanel	-	Pt	Respiratory	-	Probe.amp.tar
Xpress SARS-CoV-2_Flu plus	<ul style="list-style-type: none"> NP Swabs Nasal swabs Nasal Wash / Aspirates 	Binary - Positive, Negative	95422-2	https://loinc.org/95422-2/	Influenza virus A & Influenza virus B & SARS coronavirus2 RNA panel	-	Pt	Respiratory	-	Probe.amp.tar
Xpress SARS-CoV-2_plus	<ul style="list-style-type: none"> NP Swabs Nasal swabs Nasal Wash / Aspirates 	Binary - Positive, Negative	94500-6	https://loinc.org/94500-6/	SARS Coronavirus2 RNA	PrThr	Pt	Respiratory	Ord	Probe.amp.tar

¹**Note:** The available LOINC codes do not differentiate specific respiratory specimen types. Refer to the Xpert Xpress SARS-CoV-2/FLU/RSV *plus* Instructions for Use (IFU) for specific specimen type information.

4 LOINC Code Rationale

- Xpress SARS-CoV-2_Flu_RSV plus is a single NAA test with probe detection from a respiratory specimen for the detection of SARS- CoV-2 and/or FLU and/or RSV.
- Xpress SARS-CoV-2_Flu plus is a single NAA test with probe detection from a respiratory specimen for the detection of SARS-CoV-2 and/or Flu.
- Xpress SARS-CoV-2_plus is a single NAA test with probe detection from a respiratory specimen for the detection of SARS-CoV-2.
<https://loinc.org/sars-coronavirus-2>

Please contact ga@cepheid.com with any questions regarding the use of this LOINC code with Xpert Xpress SARS-CoV-2/FLU/RSV *plus*.

5 Example Result Messages Overview

The table below includes a representative set of test result combinations from the “Xpert Xpress COV-2/FLU/RSV *plus*” cartridge and includes links to example LIS messages.

Depending on GeneXpert System and LIS settings, three distinct panels of results are possible:

1. **SARS-CoV-2, Flu A, Flu B and RSV:** Xpress SARS-CoV-2_Flu_RSV plus
2. **SARS-CoV-2, Flu A, Flu B:** Xpress SARS-CoV-2_Flu plus
3. **SARS-CoV-2:** Xpress SARS-CoV-2_plus

Summary of Example Messages for Panel: Xpress SARS-CoV-2_Flu_RSV plus

#	Analyte				Link to Example Messages	
	SARS-CoV-2	FLU A	FLU B	RSV	ASTM	HL7
1	Negative	Negative	Negative	Negative	Link	Link
2	Positive	Negative	Negative	Negative	Link	Link
3	Negative	Positive	Negative	Negative	Link	Link
4	Negative	Negative	Positive	Negative	Link	Link
5	Negative	Negative	Negative	Positive	Link	Link
6	Positive	Positive	Positive	Positive	Link	Link
7	Error	Error	Error	Error	Link	Link
8	Invalid	Invalid	Invalid	Invalid	Link	Link
9	No Result	No Result	No Result	No Result	Link	Link

Summary of Example Messages for Panel: Xpress SARS-CoV-2_Flu plus

#	Analyte				Link to Example Messages	
	SARS-CoV-2	FLU A	FLU B	RSV	ASTM	HL7
1	Negative	Negative	Negative	N.A.	Link	Link
2	Positive	Negative	Negative		Link	Link
3	Negative	Positive	Negative		Link	Link
4	Negative	Negative	Positive		Link	Link
5	Positive	Positive	Positive		Link	Link
6	Error	Error	Error		Link	Link
7	Invalid	Invalid	Invalid		Link	Link

Summary of Example Messages for Panel: Xpress SARS-CoV-2_plus

#	Analyte				Link to Example Messages	
	SARS-CoV-2	FLU A	FLU B	RSV	ASTM	HL7
1	Negative	N.A.			Link	Link
2	Positive				Link	Link
3	Error				Link	Link
4	Invalid				Link	Link

6 Example Messages

These example messages can be used by an LIS interface analyst to understand the structure and content of Xpert Xpress CoV-2/Flu/RSV *plus* test results.

6.1 Example Messages for Panel: SARS-CoV-2, Flu A, Flu B and RSV

6.1.1 Example ASTM Messages

6.1.1.1 Example ASTM Message: “SARS-CoV-2: Negative, FLU A: Negative, FLU B: Negative, RSV: Negative”

SARS-CoV-2	FLU A	FLU B	RSV
Negative	Negative	Negative	Negative

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H|@^\\GXM-33725387435\\GeneXpert PC^GeneXpert^6.3||||LIS||P|1394-97|20210820144159
P|1||^*|||||||||||||||
O|1|99999||^*COVFLURSVPLUS|R|20210713160633|||||ORH|||||F
R|1|^COVFLURSVPLUS^SARSCO2^Xpress SARS-CoV-2_Flu_RSV plus^2^SARS-CoV-2^NEGATIVE^|||F|John Doe|20210713160633|20210713164224|CepheidVM-PC^804051^639127^472753131^00500^20211226|
R|2|^COVFLURSVPLUS^SARSCO2^SARS-CoV-2^NEG^|||
R|3|^COVFLURSVPLUS^SARSCO2^SARS-CoV-2^CI^0.0|||
R|4|^COVFLURSVPLUS^SARSCO2^SARS-CoV-2^EndPt|^1.0|||
R|5|^COVFLURSVPLUS^SARSCO2^SPC^PASS^|||
R|6|^COVFLURSVPLUS^SARSCO2^SPC^CI^29.3|||
R|7|^COVFLURSVPLUS^SARSCO2^SPC^EndPt|^180.0|||
R|8|^COVFLURSVPLUS^FLUA^Xpress SARS-CoV-2_Flu_RSV plus^2^Flu A^NEGATIVE^|||F|John Doe|20210713160633|20210713164224|CepheidVM-PC^804051^639127^472753131^00500^20211226|
R|9|^COVFLURSVPLUS^FLUA^Flu A 1^NEG^|||
R|10|^COVFLURSVPLUS^FLUA^Flu A 1^CI^0.0|||
R|11|^COVFLURSVPLUS^FLUA^Flu A 1^EndPt|^2.0|||
R|12|^COVFLURSVPLUS^FLUA^Flu A 2^NEG^|||
R|13|^COVFLURSVPLUS^FLUA^Flu A 2^CI^0.0|||
R|14|^COVFLURSVPLUS^FLUA^Flu A 2^EndPt|^1.0|||
R|15|^COVFLURSVPLUS^FLUA^SPC^PASS^|||
R|16|^COVFLURSVPLUS^FLUA^SPC^CI^29.3|||
R|17|^COVFLURSVPLUS^FLUA^SPC^EndPt|^180.0|||
R|18|^COVFLURSVPLUS^FLUB^Xpress SARS-CoV-2_Flu_RSV plus^2^Flu B^NEGATIVE^|||F|John Doe|20210713160633|20210713164224|CepheidVM-PC^804051^639127^472753131^00500^20211226|
R|19|^COVFLURSVPLUS^FLUB^Flu B^NEG^|||
R|20|^COVFLURSVPLUS^FLUB^Flu B^CI^0.0|||
R|21|^COVFLURSVPLUS^FLUB^Flu B^EndPt|^1.0|||
R|22|^COVFLURSVPLUS^FLUB^SPC^PASS^|||
R|23|^COVFLURSVPLUS^FLUB^SPC^CI^29.3|||
R|24|^COVFLURSVPLUS^FLUB^SPC^EndPt|^180.0|||
R|25|^COVFLURSVPLUS^RSV^Xpress SARS-CoV-2_Flu_RSV plus^2^RSV^NEGATIVE^|||F|John Doe|20210713160633|20210713164224|CepheidVM-PC^804051^639127^472753131^00500^20211226|
R|26|^COVFLURSVPLUS^RSV^RSV^NEG^|||
R|27|^COVFLURSVPLUS^RSV^RSV^CI^0.0|||
R|28|^COVFLURSVPLUS^RSV^RSV^EndPt|^0.0|||
R|29|^COVFLURSVPLUS^RSV^SPC^PASS^|||
R|30|^COVFLURSVPLUS^RSV^SPC^CI^29.3|||
R|31|^COVFLURSVPLUS^RSV^SPC^EndPt|^180.0|||
L|1|N
  
```


6.1.1.3 Example ASTM Message: "SARS-CoV-2: Negative, FLU A: Positive, FLU B: Negative, RSV: Negative"

SARS-CoV-2	FLU A	FLU B	RSV
Negative	Positive	Negative	Negative

```

H|@^\[GXM-55852815431\|GeneXpert PC^GeneXpert^6.3\|||||LIS\|P|1394-97|20210820142652
P|1|||||
O|1|2_FluA_c|\|^COVFLURSVPLUS|R|20210713122619\|||||ORH\|F
R|1|^COVFLURSVPLUS^SARSCO2^Xpress SARS-CoV-2_Flu_RSV plus^2^SARS-CoV-2^NEGATIVE^|F|John Doe|20210713122619|20210713130147|CepheidVM-PC^701866^613237^472753123^00500^20211226|
R|2|^COVFLURSVPLUS^SARSCO2^SARS-CoV-2^NEG^|
R|3|^COVFLURSVPLUS^SARSCO2^SARS-CoV-2^Ct^0.0|
R|4|^COVFLURSVPLUS^SARSCO2^SARS-CoV-2^EndPt^2.0|
R|5|^COVFLURSVPLUS^SARSCO2^SPC^NA^|
R|6|^COVFLURSVPLUS^SARSCO2^SPC^Ct^29.5|
R|7|^COVFLURSVPLUS^SARSCO2^SPC^EndPt^151.0|
R|8|^COVFLURSVPLUS^FLUA^Xpress SARS-CoV-2_Flu_RSV plus^2^Flu A^POSITIVE^|F|John Doe|20210713122619|20210713130147|CepheidVM-PC^701866^613237^472753123^00500^20211226|
R|9|^COVFLURSVPLUS^FLUA^Flu A 1^POS^|
R|10|^COVFLURSVPLUS^FLUA^Flu A 1^Ct^30.1|
R|11|^COVFLURSVPLUS^FLUA^Flu A 1^EndPt^725.0|
R|12|^COVFLURSVPLUS^FLUA^Flu A 2^POS^|
R|13|^COVFLURSVPLUS^FLUA^Flu A 2^Ct^34.0|
R|14|^COVFLURSVPLUS^FLUA^Flu A 2^EndPt^219.0|
R|15|^COVFLURSVPLUS^FLUA^SPC^NA^|
R|16|^COVFLURSVPLUS^FLUA^SPC^Ct^29.5|
R|17|^COVFLURSVPLUS^FLUA^SPC^EndPt^151.0|
R|18|^COVFLURSVPLUS^FLUB^Xpress SARS-CoV-2_Flu_RSV plus^2^Flu B^NEGATIVE^|F|John Doe|20210713122619|20210713130147|CepheidVM-PC^701866^613237^472753123^00500^20211226|
R|19|^COVFLURSVPLUS^FLUB^Flu B^NEG^|
R|20|^COVFLURSVPLUS^FLUB^Flu B^Ct^0.0|
R|21|^COVFLURSVPLUS^FLUB^Flu B^EndPt^4.0|
R|22|^COVFLURSVPLUS^FLUB^SPC^NA^|
R|23|^COVFLURSVPLUS^FLUB^SPC^Ct^29.5|
R|24|^COVFLURSVPLUS^FLUB^SPC^EndPt^151.0|
R|25|^COVFLURSVPLUS^RSV^Xpress SARS-CoV-2_Flu_RSV plus^2^RSV^NEGATIVE^|F|John Doe|20210713122619|20210713130147|CepheidVM-PC^701866^613237^472753123^00500^20211226|
R|26|^COVFLURSVPLUS^RSV^RSV^NEG^|
R|27|^COVFLURSVPLUS^RSV^RSV^Ct^0.0|
R|28|^COVFLURSVPLUS^RSV^RSV^EndPt^1.0|
R|29|^COVFLURSVPLUS^RSV^SPC^NA^|
R|30|^COVFLURSVPLUS^RSV^SPC^Ct^29.5|
R|31|^COVFLURSVPLUS^RSV^SPC^EndPt^151.0|
L|1|N
    
```


6.1.1.4 Example ASTM Message: “SARS-CoV-2: Negative, FLU A: Negative, FLU B: Positive, RSV: Negative”

SARS-CoV-2	FLU A	FLU B	RSV
Negative	Negative	Positive	Negative

```
H|@^\GXM-61388182688||GeneXpert PC^GeneXpert^6.3||||LIS||P|1394-97|20210820142739
P|1||||^|
O|1|3_FluB_c|^COVFLURSVPLUS|R|20210713122741||||ORH|||||F
R|1|^COVFLURSVPLUS^SARSCOV2^Xpress SARS-CoV-2_Flu_RSV plus^2^SARS-CoV-2^|NEGATIVE^||||F||John Doe|20210713122741|20210713130259|CepheidVM-PC^700475^657192^472753120^00500^20211226|
R|2|^COVFLURSVPLUS^SARSCOV2^SARS-CoV-2^|NEG^||
R|3|^COVFLURSVPLUS^SARSCOV2^SARS-CoV-2^Ct|^0.0||
R|4|^COVFLURSVPLUS^SARSCOV2^SARS-CoV-2^EndPt|^2.0||
R|5|^COVFLURSVPLUS^SARSCOV2^SPC^|NA^||
R|6|^COVFLURSVPLUS^SARSCOV2^SPC^Ct|^30.1||
R|7|^COVFLURSVPLUS^SARSCOV2^SPC^EndPt|^147.0||
R|8|^COVFLURSVPLUS^FLUA^Xpress SARS-CoV-2_Flu_RSV plus^2^Flu A^|NEGATIVE^||||F||John Doe|20210713122741|20210713130259|CepheidVM-PC^700475^657192^472753120^00500^20211226|
R|9|^COVFLURSVPLUS^FLUA^Flu A 1^|NEG^||
R|10|^COVFLURSVPLUS^FLUA^Flu A 1^Ct|^0.0||
R|11|^COVFLURSVPLUS^FLUA^Flu A 1^EndPt|^2.0||
R|12|^COVFLURSVPLUS^FLUA^Flu A 2^|NEG^||
R|13|^COVFLURSVPLUS^FLUA^Flu A 2^Ct|^0.0||
R|14|^COVFLURSVPLUS^FLUA^Flu A 2^EndPt|^1.0||
R|15|^COVFLURSVPLUS^FLUA^SPC^|NA^||
R|16|^COVFLURSVPLUS^FLUA^SPC^Ct|^30.1||
R|17|^COVFLURSVPLUS^FLUA^SPC^EndPt|^147.0||
R|18|^COVFLURSVPLUS^FLUB^Xpress SARS-CoV-2_Flu_RSV plus^2^Flu B^|POSITIVE^||||F||John Doe|20210713122741|20210713130259|CepheidVM-PC^700475^657192^472753120^00500^20211226|
R|19|^COVFLURSVPLUS^FLUB^Flu B^|POS^||
R|20|^COVFLURSVPLUS^FLUB^Flu B^Ct|^29.3||
R|21|^COVFLURSVPLUS^FLUB^Flu B^EndPt|^792.0||
R|22|^COVFLURSVPLUS^FLUB^SPC^|NA^||
R|23|^COVFLURSVPLUS^FLUB^SPC^Ct|^30.1||
R|24|^COVFLURSVPLUS^FLUB^SPC^EndPt|^147.0||
R|25|^COVFLURSVPLUS^RSV^Xpress SARS-CoV-2_Flu_RSV plus^2^RSV^|NEGATIVE^||||F||John Doe|20210713122741|20210713130259|CepheidVM-PC^700475^657192^472753120^00500^20211226|
R|26|^COVFLURSVPLUS^RSV^RSV^|NEG^||
R|27|^COVFLURSVPLUS^RSV^RSV^Ct|^0.0||
R|28|^COVFLURSVPLUS^RSV^RSV^EndPt|^1.0||
R|29|^COVFLURSVPLUS^RSV^SPC^|NA^||
R|30|^COVFLURSVPLUS^RSV^SPC^Ct|^30.1||
R|31|^COVFLURSVPLUS^RSV^SPC^EndPt|^147.0||
L|1|N
```


6.1.1.6 Example ASTM Message: “SARS-CoV-2: Positive, FLU A: Positive, FLU B: Positive, RSV: Positive”

SARS-CoV-2	FLU A	FLU B	RSV
Positive	Positive	Positive	Positive

H|@^\|GXM-33541343861\|GeneXpert PC^GeneXpert^6.3\|LIS\|P|1394-97|20210809121212
P|1\|115_CoV2_FluA_FluB_RSV_cj\|^COVFLURSVPLUS|R|20210713123523\|ORH\|F
R|1\|^COVFLURSVPLUS^SARSCOV2^Xpress SARS-CoV-2_Flu_RSV plus^2^SARS-CoV-2^POSITIVE^F\|John Doe|20210713123523|20210713131205|CepheidVM-PC^714106^610876^472753084^00500^20211226|
R|2\|^COVFLURSVPLUS^SARSCOV2^SARS-CoV-2^POSITIVE^F\|
R|3\|^COVFLURSVPLUS^SARSCOV2^SARS-CoV-2^Ct|30.6\|
R|4\|^COVFLURSVPLUS^SARSCOV2^SARS-CoV-2^EndPt|449.0\|
R|5\|^COVFLURSVPLUS^SARSCOV2^SPC^NA^F\|
R|6\|^COVFLURSVPLUS^SARSCOV2^SPC^Ct|28.9\|
R|7\|^COVFLURSVPLUS^SARSCOV2^SPC^EndPt|134.0\|
R|8\|^COVFLURSVPLUS^FLUA^Xpress SARS-CoV-2_Flu_RSV plus^2^Flu A^POSITIVE^F\|John Doe|20210713123523|20210713131205|CepheidVM-PC^714106^610876^472753084^00500^20211226|
R|9\|^COVFLURSVPLUS^FLUA^Flu A 1^POSITIVE^F\|
R|10\|^COVFLURSVPLUS^FLUA^Flu A 1^Ct|29.3\|
R|11\|^COVFLURSVPLUS^FLUA^Flu A 1^EndPt|601.0\|
R|12\|^COVFLURSVPLUS^FLUA^Flu A 2^POSITIVE^F\|
R|13\|^COVFLURSVPLUS^FLUA^Flu A 2^Ct|33.2\|
R|14\|^COVFLURSVPLUS^FLUA^Flu A 2^EndPt|200.0\|
R|15\|^COVFLURSVPLUS^FLUA^SPC^NA^F\|
R|16\|^COVFLURSVPLUS^FLUA^SPC^Ct|28.9\|
R|17\|^COVFLURSVPLUS^FLUA^SPC^EndPt|134.0\|
R|18\|^COVFLURSVPLUS^FLUB^Xpress SARS-CoV-2_Flu_RSV plus^2^Flu B^POSITIVE^F\|John Doe|20210713123523|20210713131205|CepheidVM-PC^714106^610876^472753084^00500^20211226|
R|19\|^COVFLURSVPLUS^FLUB^Flu B^POSITIVE^F\|
R|20\|^COVFLURSVPLUS^FLUB^Flu B^Ct|28.8\|
R|21\|^COVFLURSVPLUS^FLUB^Flu B^EndPt|658.0\|
R|22\|^COVFLURSVPLUS^FLUB^SPC^NA^F\|
R|23\|^COVFLURSVPLUS^FLUB^SPC^Ct|28.9\|
R|24\|^COVFLURSVPLUS^FLUB^SPC^EndPt|134.0\|
R|25\|^COVFLURSVPLUS^RSV^Xpress SARS-CoV-2_Flu_RSV plus^2^RSV^POSITIVE^F\| John Doe |20210713123523|20210713131205|CepheidVM-PC^714106^610876^472753084^00500^20211226|
R|26\|^COVFLURSVPLUS^RSV^RSV^POSITIVE^F\|
R|27\|^COVFLURSVPLUS^RSV^RSV^Ct|29.2\|
R|28\|^COVFLURSVPLUS^RSV^RSV^EndPt|373.0\|
R|29\|^COVFLURSVPLUS^RSV^SPC^NA^F\|
R|30\|^COVFLURSVPLUS^RSV^SPC^Ct|28.9\|
R|31\|^COVFLURSVPLUS^RSV^SPC^EndPt|134.0\|
L|1|N

6.1.1.7 Example ASTM Message: “SARS-CoV-2: Error”

SARS-CoV-2	FLU A	FLU B	RSV
Error	Error	Error	Error

```
H|@^\[GXM-30005312858|GeneXpert PC^GeneXpert^6.3|||||LIS|P|1394-97|20210809121209
P|1|||||
Q|1|Test|^^COVFLURSVPLUS|R|20210713174434|||||ORH|||||F
R|1|^COVFLURSVPLUS^^SARSCOV2^Xpress SARS-CoV-2_Flu_RSV plus^2^SARS-CoV-2^ERROR^||||F| John Doe|20210713174434|20210713174700|CepheidVM-PC^804051^634358^472753074^00500^20211226|
C|1||Error^2125^Operation terminated^Error 2125: Termination Error - Insufficient Volume: 16, 50, 0, 17^20210713174646|N
R|2|^COVFLURSVPLUS^^SARSCOV2^^SARS-CoV-2^NO RESULT^||
R|3|^COVFLURSVPLUS^^SARSCOV2^^SARS-CoV-2^Ct|^0.0||
R|4|^COVFLURSVPLUS^^SARSCOV2^^SARS-CoV-2^EndPt|^0.0||
R|5|^COVFLURSVPLUS^^SARSCOV2^^SPC^|NO RESULT^||
R|6|^COVFLURSVPLUS^^SARSCOV2^^SPC^Ct|^0.0||
R|7|^COVFLURSVPLUS^^SARSCOV2^^SPC^EndPt|^0.0||
R|8|^COVFLURSVPLUS^^FLUA^Xpress SARS-CoV-2_Flu_RSV plus^2^Flu A^ERROR^||||F| John Doe |20210713174434|20210713174700|CepheidVM-PC^804051^634358^472753074^00500^20211226|
C|1||Error^2125^Operation terminated^Error 2125: Termination Error - Insufficient Volume: 16, 50, 0, 17^20210713174646|N
R|9|^COVFLURSVPLUS^^FLUA^^Flu A 1^|NO RESULT^||
R|10|^COVFLURSVPLUS^^FLUA^^Flu A 1^Ct|^0.0||
R|11|^COVFLURSVPLUS^^FLUA^^Flu A 1^EndPt|^0.0||
R|12|^COVFLURSVPLUS^^FLUA^^Flu A 2^|NO RESULT^||
R|13|^COVFLURSVPLUS^^FLUA^^Flu A 2^Ct|^0.0||
R|14|^COVFLURSVPLUS^^FLUA^^Flu A 2^EndPt|^0.0||
R|15|^COVFLURSVPLUS^^FLUA^^SPC^|NO RESULT^||
R|16|^COVFLURSVPLUS^^FLUA^^SPC^Ct|^0.0||
R|17|^COVFLURSVPLUS^^FLUA^^SPC^EndPt|^0.0||
R|18|^COVFLURSVPLUS^^FLUB^Xpress SARS-CoV-2_Flu_RSV plus^2^Flu B^ERROR^||||F| John Doe |20210713174434|20210713174700|CepheidVM-PC^804051^634358^472753074^00500^20211226|
C|1||Error^2125^Operation terminated^Error 2125: Termination Error - Insufficient Volume: 16, 50, 0, 17^20210713174646|N
R|19|^COVFLURSVPLUS^^FLUB^^Flu B^|NO RESULT^||
R|20|^COVFLURSVPLUS^^FLUB^^Flu B^Ct|^0.0||
R|21|^COVFLURSVPLUS^^FLUB^^Flu B^EndPt|^0.0||
R|22|^COVFLURSVPLUS^^FLUB^^SPC^|NO RESULT^||
R|23|^COVFLURSVPLUS^^FLUB^^SPC^Ct|^0.0||
R|24|^COVFLURSVPLUS^^FLUB^^SPC^EndPt|^0.0||
R|25|^COVFLURSVPLUS^^RSV^Xpress SARS-CoV-2_Flu_RSV plus^2^RSV^ERROR^||||F| John Doe |20210713174434|20210713174700|CepheidVM-PC^804051^634358^472753074^00500^20211226|
C|1||Error^2125^Operation terminated^Error 2125: Termination Error - Insufficient Volume: 16, 50, 0, 17^20210713174646|N
R|26|^COVFLURSVPLUS^^RSV^^RSV^|NO RESULT^||
R|27|^COVFLURSVPLUS^^RSV^^RSV^Ct|^0.0||
R|28|^COVFLURSVPLUS^^RSV^^RSV^EndPt|^0.0||
R|29|^COVFLURSVPLUS^^RSV^^SPC^|NO RESULT^||
R|30|^COVFLURSVPLUS^^RSV^^SPC^Ct|^0.0||
R|31|^COVFLURSVPLUS^^RSV^^SPC^EndPt|^0.0||
L|1|N
```


6.1.1.8 Example ASTM Message: “SARS-CoV-2: Invalid”

SARS-CoV-2	FLU A	FLU B	RSV
Invalid	Invalid	Invalid	Invalid

```
H|@^\[GXM-74166045803\|GeneXpert PC^GeneXpert^Dx6.3_Demo\|astm3client\|P|1394-97|20210811172056
P|1|||^^^|
O|1|Test-1|^^^COVFLURSVPLUS|R|20210804145311|ORH|
R|1|^COVFLURSVPLUS^SARSCOV2^Xpress SARS-CoV-2_Flu_RSV plus^2^SARS-CoV-2^INVALID^|F|| John Doe |20210804145311|20210804152925|CEPSNYLPREM4562^714106^778691^472753074^00500^20211226|
R|2|^COVFLURSVPLUS^SARSCOV2^SARS-CoV-2^INVALID^|
R|3|^COVFLURSVPLUS^SARSCOV2^SARS-CoV-2^Ct|^0.0||
R|4|^COVFLURSVPLUS^SARSCOV2^SARS-CoV-2^EndPt|^2.0||
R|5|^COVFLURSVPLUS^SARSCOV2^SPC^FAIL^|
R|6|^COVFLURSVPLUS^SARSCOV2^SPC^Ct|^0.0||
R|7|^COVFLURSVPLUS^SARSCOV2^SPC^EndPt|^0.0||
R|8|^COVFLURSVPLUS^FLUA^Xpress SARS-CoV-2_Flu_RSV plus^2^Flu A^INVALID^|F|| John Doe |20210804145311|20210804152925|CEPSNYLPREM4562^714106^778691^472753074^00500^20211226|
R|9|^COVFLURSVPLUS^FLUA^Flu A 1^INVALID^|
R|10|^COVFLURSVPLUS^FLUA^Flu A 1^Ct|^0.0||
R|11|^COVFLURSVPLUS^FLUA^Flu A 1^EndPt|^2.0||
R|12|^COVFLURSVPLUS^FLUA^Flu A 2^INVALID^|
R|13|^COVFLURSVPLUS^FLUA^Flu A 2^Ct|^0.0||
R|14|^COVFLURSVPLUS^FLUA^Flu A 2^EndPt|^1.0||
R|15|^COVFLURSVPLUS^FLUA^SPC^FAIL^|
R|16|^COVFLURSVPLUS^FLUA^SPC^Ct|^0.0||
R|17|^COVFLURSVPLUS^FLUA^SPC^EndPt|^0.0||
R|18|^COVFLURSVPLUS^FLUB^Xpress SARS-CoV-2_Flu_RSV plus^2^Flu B^INVALID^|F|| John Doe |20210804145311|20210804152925|CEPSNYLPREM4562^714106^778691^472753074^00500^20211226|
R|19|^COVFLURSVPLUS^FLUB^Flu B^INVALID^|
R|20|^COVFLURSVPLUS^FLUB^Flu B^Ct|^0.0||
R|21|^COVFLURSVPLUS^FLUB^Flu B^EndPt|^1.0||
R|22|^COVFLURSVPLUS^FLUB^SPC^FAIL^|
R|23|^COVFLURSVPLUS^FLUB^SPC^Ct|^0.0||
R|24|^COVFLURSVPLUS^FLUB^SPC^EndPt|^0.0||
R|25|^COVFLURSVPLUS^RSV^Xpress SARS-CoV-2_Flu_RSV plus^2^RSV^INVALID^|F|| John Doe |20210804145311|20210804152925|CEPSNYLPREM4562^714106^778691^472753074^00500^20211226|
R|26|^COVFLURSVPLUS^RSV^RSV^INVALID^|
R|27|^COVFLURSVPLUS^RSV^RSV^Ct|^0.0||
R|28|^COVFLURSVPLUS^RSV^RSV^EndPt|^2.0||
R|29|^COVFLURSVPLUS^RSV^SPC^FAIL^|
R|30|^COVFLURSVPLUS^RSV^SPC^Ct|^0.0||
R|31|^COVFLURSVPLUS^RSV^SPC^EndPt|^0.0||
L|1|N
```

6.1.1.9 Example ASTM Message: “SARS-CoV-2: No Result”

SARS-CoV-2	FLU A	FLU B	RSV
No Result	No Result	No Result	No Result

```
H|@^|GXM-04617177528|GeneXpert PC^GeneXpert^6.3||||LIS|P|1394-97|20210809121210
P|1|||||||||||||||||||||||||||||||||
O|1|test||^COVFLURSVPLUS|R|20210713164557|||||ORH|||||F
R|1|^COVFLURSVPLUS^SARSCOV2^Xpress SARS-CoV-2_Flu_RSV plus^2^SARS-CoV-2^NO RESULT - REPEAT TEST^||||F|| John Doe |20210713164557|20210713164741|CepheidVM-
PC^812422^647156^472753073^00500^20211226|
C|1||Error^2125^Operation terminated^Error 2125: Termination Error - Insufficient Volume: 15, 50, 0, 16^20210713164809|N
R|2|^COVFLURSVPLUS^SARSCOV2^SARS-CoV-2^NO RESULT^|||
R|3|^COVFLURSVPLUS^SARSCOV2^SARS-CoV-2^Ct|^0.0|||
R|4|^COVFLURSVPLUS^SARSCOV2^SARS-CoV-2^EndPt|^0.0|||
R|5|^COVFLURSVPLUS^SARSCOV2^SPC^NO RESULT^|||
R|6|^COVFLURSVPLUS^SARSCOV2^SPC^Ct|^0.0|||
R|7|^COVFLURSVPLUS^SARSCOV2^SPC^EndPt|^0.0|||
R|8|^COVFLURSVPLUS^FLUA^Xpress SARS-CoV-2_Flu_RSV plus^2^Flu A^NO RESULT - REPEAT TEST^||||F|| John Doe |20210713164557|20210713164741|CepheidVM-PC^812422^647156^472753073^00500^20211226|
C|1||Error^2125^Operation terminated^Error 2125: Termination Error - Insufficient Volume: 15, 50, 0, 16^20210713164809|N
R|9|^COVFLURSVPLUS^FLUA^Flu A 1^NO RESULT^|||
R|10|^COVFLURSVPLUS^FLUA^Flu A 1^Ct|^0.0|||
R|11|^COVFLURSVPLUS^FLUA^Flu A 1^EndPt|^0.0|||
R|12|^COVFLURSVPLUS^FLUA^Flu A 2^NO RESULT^|||
R|13|^COVFLURSVPLUS^FLUA^Flu A 2^Ct|^0.0|||
R|14|^COVFLURSVPLUS^FLUA^Flu A 2^EndPt|^0.0|||
R|15|^COVFLURSVPLUS^FLUA^SPC^NO RESULT^|||
R|16|^COVFLURSVPLUS^FLUA^SPC^Ct|^0.0|||
R|17|^COVFLURSVPLUS^FLUA^SPC^EndPt|^0.0|||
R|18|^COVFLURSVPLUS^FLUB^Xpress SARS-CoV-2_Flu_RSV plus^2^Flu B^NO RESULT - REPEAT TEST^||||F|| John Doe |20210713164557|20210713164741|CepheidVM-PC^812422^647156^472753073^00500^20211226|
C|1||Error^2125^Operation terminated^Error 2125: Termination Error - Insufficient Volume: 15, 50, 0, 16^20210713164809|N
R|19|^COVFLURSVPLUS^FLUB^Flu B^NO RESULT^|||
R|20|^COVFLURSVPLUS^FLUB^Flu B^Ct|^0.0|||
R|21|^COVFLURSVPLUS^FLUB^Flu B^EndPt|^0.0|||
R|22|^COVFLURSVPLUS^FLUB^SPC^NO RESULT^|||
R|23|^COVFLURSVPLUS^FLUB^SPC^Ct|^0.0|||
R|24|^COVFLURSVPLUS^FLUB^SPC^EndPt|^0.0|||
R|25|^COVFLURSVPLUS^RSV^Xpress SARS-CoV-2_Flu_RSV plus^2^RSV^NO RESULT - REPEAT TEST^||||F|| John Doe |20210713164557|20210713164741|CepheidVM-PC^812422^647156^472753073^00500^20211226|
C|1||Error^2125^Operation terminated^Error 2125: Termination Error - Insufficient Volume: 15, 50, 0, 16^20210713164809|N
R|26|^COVFLURSVPLUS^RSV^RSV^NO RESULT^|||
R|27|^COVFLURSVPLUS^RSV^RSV^Ct|^0.0|||
R|28|^COVFLURSVPLUS^RSV^RSV^EndPt|^0.0|||
R|29|^COVFLURSVPLUS^RSV^SPC^NO RESULT^|||
R|30|^COVFLURSVPLUS^RSV^SPC^Ct|^0.0|||
R|31|^COVFLURSVPLUS^RSV^SPC^EndPt|^0.0|||
L|1|N
```


6.1.2 Example HL7 Messages

6.1.2.1 Example HL7 Message: “SARS-CoV-2: Negative, FLU A: Negative, FLU B: Negative, RSV: Negative”

SARS-CoV-2	FLU A	FLU B	RSV
Negative	Negative	Negative	Negative

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210820144038||ORU^R32^ORU_R30|GXM-81778754647|P|2.5|||||
PID|1|||||||||
ORC|RE|1|||||20210713160633
OBR|1|||COVFLURSVPLUS|||||F
TQ1|||||20210713160633|20210713164224|R
OBX|1|ST|COVFLURSVPLUS&SARSCOV2&Xpress SARS-CoV-2_Flu_RSV plus&2|SARS-CoV-2&|NEGATIVE^|||||F|||||^John Doe|20211226-00500-472753131-639127-804051-CepheidVM-PC
OBX|2|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&|NEG^|
OBX|3|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&Ct|^0.0|
OBX|4|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&EndPt|^1.0|
OBX|5|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&|PASS^|
OBX|6|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&Ct|^29.3|
OBX|7|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&EndPt|^180.0|
OBX|8|ST|COVFLURSVPLUS&FLUA&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu A&|NEGATIVE^|||||F|||||^John Doe|20211226-00500-472753131-639127-804051-CepheidVM-PC
OBX|9|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&|NEG^|
OBX|10|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&Ct|^0.0|
OBX|11|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&EndPt|^2.0|
OBX|12|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&|NEG^|
OBX|13|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&Ct|^0.0|
OBX|14|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&EndPt|^1.0|
OBX|15|ST|COVFLURSVPLUS&FLUA&&|SPC&|PASS^|
OBX|16|ST|COVFLURSVPLUS&FLUA&&|SPC&Ct|^29.3|
OBX|17|ST|COVFLURSVPLUS&FLUA&&|SPC&EndPt|^180.0|
OBX|18|ST|COVFLURSVPLUS&FLUB&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu B&|NEGATIVE^|||||F|||||^John Doe|20211226-00500-472753131-639127-804051-CepheidVM-PC
OBX|19|ST|COVFLURSVPLUS&FLUB&&|Flu B&|NEG^|
OBX|20|ST|COVFLURSVPLUS&FLUB&&|Flu B&Ct|^0.0|
OBX|21|ST|COVFLURSVPLUS&FLUB&&|Flu B&EndPt|^1.0|
OBX|22|ST|COVFLURSVPLUS&FLUB&&|SPC&|PASS^|
OBX|23|ST|COVFLURSVPLUS&FLUB&&|SPC&Ct|^29.3|
OBX|24|ST|COVFLURSVPLUS&FLUB&&|SPC&EndPt|^180.0|
OBX|25|ST|COVFLURSVPLUS&RSV&Xpress SARS-CoV-2_Flu_RSV plus&2|RSV&|NEGATIVE^|||||F|||||^John Doe|20211226-00500-472753131-639127-804051-CepheidVM-PC
OBX|26|ST|COVFLURSVPLUS&RSV&&|RSV&|NEG^|
OBX|27|ST|COVFLURSVPLUS&RSV&&|RSV&Ct|^0.0|
OBX|28|ST|COVFLURSVPLUS&RSV&&|RSV&EndPt|^0.0|
OBX|29|ST|COVFLURSVPLUS&RSV&&|SPC&|PASS^|
OBX|30|ST|COVFLURSVPLUS&RSV&&|SPC&Ct|^29.3|
OBX|31|ST|COVFLURSVPLUS&RSV&&|SPC&EndPt|^180.0|
SPM|1|99999^|ORH|||||P
    
```

6.1.2.2 Example HL7 Message: “SARS-CoV-2: Positive, FLU A: Negative, FLU B: Negative, RSV: Negative”

SARS-CoV-2	FLU A	FLU B	RSV
Positive	Negative	Negative	Negative

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210820143209||ORU^R32^ORU_R30|GXM-16414051460|P|2.5|||||
PID|1|||||||||||||||||
ORC|RE|1|||||20210713122506
OBR|1|||COVFLURSVPLUS|||||||||F
TQ1|||||20210713122506|20210713130050|R
OBX|1|ST|COVFLURSVPLUS&SARSCOV2&Xpress SARS-CoV-2_Flu_RSV plus&2|SARS-CoV-2&|POSITIVE^|||||F|||||John Doe||20211226-00500-472753125-625015-702201-CepheidVM-PC
OBX|2|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&|POS^|
OBX|3|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&Ct|^31.2||
OBX|4|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&EndPt|^440.0||
OBX|5|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&|NA^|
OBX|6|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&Ct|^29.4||
OBX|7|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&EndPt|^149.0||
OBX|8|ST|COVFLURSVPLUS&FLUA&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu A&|NEGATIVE^|||||F|||||John Doe||20211226-00500-472753125-625015-702201-CepheidVM-PC
OBX|9|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&|NEG^|
OBX|10|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&Ct|^0.0||
OBX|11|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&EndPt|^1.0||
OBX|12|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&|NEG^|
OBX|13|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&Ct|^0.0||
OBX|14|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&EndPt|^0.0||
OBX|15|ST|COVFLURSVPLUS&FLUA&&|SPC&|NA^|
OBX|16|ST|COVFLURSVPLUS&FLUA&&|SPC&Ct|^29.4||
OBX|17|ST|COVFLURSVPLUS&FLUA&&|SPC&EndPt|^149.0||
OBX|18|ST|COVFLURSVPLUS&FLUB&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu B&|NEGATIVE^|||||F|||||John Doe||20211226-00500-472753125-625015-702201-CepheidVM-PC
OBX|19|ST|COVFLURSVPLUS&FLUB&&|Flu B&|NEG^|
OBX|20|ST|COVFLURSVPLUS&FLUB&&|Flu B&Ct|^0.0||
OBX|21|ST|COVFLURSVPLUS&FLUB&&|Flu B&EndPt|^2.0||
OBX|22|ST|COVFLURSVPLUS&FLUB&&|SPC&|NA^|
OBX|23|ST|COVFLURSVPLUS&FLUB&&|SPC&Ct|^29.4||
OBX|24|ST|COVFLURSVPLUS&FLUB&&|SPC&EndPt|^149.0||
OBX|25|ST|COVFLURSVPLUS&RSV&Xpress SARS-CoV-2_Flu_RSV plus&2|RSV&|NEGATIVE^|||||F|||||John Doe||20211226-00500-472753125-625015-702201-CepheidVM-PC
OBX|26|ST|COVFLURSVPLUS&RSV&&|RSV&|NEG^|
OBX|27|ST|COVFLURSVPLUS&RSV&&|RSV&Ct|^0.0||
OBX|28|ST|COVFLURSVPLUS&RSV&&|RSV&EndPt|^1.0||
OBX|29|ST|COVFLURSVPLUS&RSV&&|SPC&|NA^|
OBX|30|ST|COVFLURSVPLUS&RSV&&|SPC&Ct|^29.4||
OBX|31|ST|COVFLURSVPLUS&RSV&&|SPC&EndPt|^149.0||
SPM|1|1_CoV2_c^||ORH|||||P
    
```

6.1.2.3 Example HL7 Message: “SARS-CoV-2: Negative, FLU A: Positive, FLU B: Negative, RSV: Negative”

SARS-CoV-2	FLU A	FLU B	RSV
Negative	Positive	Negative	Negative

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210820143301||ORU^R32^ORU_R30|GXM-45606536080|P|2.5|||||
PID|1|||||||||||||||||
ORC|RE|1|||||20210713122619
OBR|1|||COVFLURSVPLUS|||||||||F
TQ1|||||20210713122619|20210713130147|R
OBX|1|ST|COVFLURSVPLUS&SARSCOV2&Xpress SARS-CoV-2_Flu_RSV plus&2|SARS-CoV-2&|NEGATIVE^|||||F|||||^John Doe||20211226-00500-472753123-613237-701866-CepheidVM-PC
OBX|2|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&|NEG^|
OBX|3|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&Ct|^0.0|
OBX|4|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&EndPt|^2.0|
OBX|5|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&|NA^|
OBX|6|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&Ct|^29.5|
OBX|7|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&EndPt|^151.0|
OBX|8|ST|COVFLURSVPLUS&FLUA&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu A&|POSITIVE^|||||F|||||^John Doe||20211226-00500-472753123-613237-701866-CepheidVM-PC
OBX|9|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&|POS^|
OBX|10|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&Ct|^30.1|
OBX|11|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&EndPt|^725.0|
OBX|12|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&|POS^|
OBX|13|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&Ct|^34.0|
OBX|14|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&EndPt|^219.0|
OBX|15|ST|COVFLURSVPLUS&FLUA&&|SPC&|NA^|
OBX|16|ST|COVFLURSVPLUS&FLUA&&|SPC&Ct|^29.5|
OBX|17|ST|COVFLURSVPLUS&FLUA&&|SPC&EndPt|^151.0|
OBX|18|ST|COVFLURSVPLUS&FLUB&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu B&|NEGATIVE^|||||F|||||^John Doe||20211226-00500-472753123-613237-701866-CepheidVM-PC
OBX|19|ST|COVFLURSVPLUS&FLUB&&|Flu B&|NEG^|
OBX|20|ST|COVFLURSVPLUS&FLUB&&|Flu B&Ct|^0.0|
OBX|21|ST|COVFLURSVPLUS&FLUB&&|Flu B&EndPt|^4.0|
OBX|22|ST|COVFLURSVPLUS&FLUB&&|SPC&|NA^|
OBX|23|ST|COVFLURSVPLUS&FLUB&&|SPC&Ct|^29.5|
OBX|24|ST|COVFLURSVPLUS&FLUB&&|SPC&EndPt|^151.0|
OBX|25|ST|COVFLURSVPLUS&RSV&Xpress SARS-CoV-2_Flu_RSV plus&2|RSV&|NEGATIVE^|||||F|||||^John Doe||20211226-00500-472753123-613237-701866-CepheidVM-PC
OBX|26|ST|COVFLURSVPLUS&RSV&&|RSV&|NEG^|
OBX|27|ST|COVFLURSVPLUS&RSV&&|RSV&Ct|^0.0|
OBX|28|ST|COVFLURSVPLUS&RSV&&|RSV&EndPt|^1.0|
OBX|29|ST|COVFLURSVPLUS&RSV&&|SPC&|NA^|
OBX|30|ST|COVFLURSVPLUS&RSV&&|SPC&Ct|^29.5|
OBX|31|ST|COVFLURSVPLUS&RSV&&|SPC&EndPt|^151.0|
SPM|1|2_FluA_c^|ORH|||||P
    
```

6.1.2.4 Example HL7 Message: “SARS-CoV-2: Negative, FLU A: Negative, FLU B: Positive, RSV: Negative”

SARS-CoV-2	FLU A	FLU B	RSV
Negative	Negative	Positive	Negative

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210820143421||ORU^R32^ORU_R30|GXM-84114374184|P|2.5|||||
PID|1|||||||||||||||||
ORC|RE|1|||||20210713122741
OBR|1|||COVFLURSVPLUS|||||||||||||F
TQ1|||||20210713122741|20210713130259|R
OBX|1|ST|COVFLURSVPLUS&SARSCOV2&Xpress SARS-CoV-2_Flu_RSV plus&2|SARS-CoV-2&|NEGATIVE^|||||F||||^John Doe||20211226-00500-472753120-657192-700475-CepheidVM-PC
OBX|2|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&|NEG^|
OBX|3|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&Ct|^0.0||
OBX|4|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&EndPt|^2.0||
OBX|5|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&|NA^|
OBX|6|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&Ct|^30.1||
OBX|7|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&EndPt|^147.0||
OBX|8|ST|COVFLURSVPLUS&FLUA&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu A&|NEGATIVE^|||||F||||^John Doe||20211226-00500-472753120-657192-700475-CepheidVM-PC
OBX|9|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&|NEG^|
OBX|10|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&Ct|^0.0||
OBX|11|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&EndPt|^2.0||
OBX|12|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&|NEG^|
OBX|13|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&Ct|^0.0||
OBX|14|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&EndPt|^1.0||
OBX|15|ST|COVFLURSVPLUS&FLUA&&|SPC&|NA^|
OBX|16|ST|COVFLURSVPLUS&FLUA&&|SPC&Ct|^30.1||
OBX|17|ST|COVFLURSVPLUS&FLUA&&|SPC&EndPt|^147.0||
OBX|18|ST|COVFLURSVPLUS&FLUB&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu B&|POSITIVE^|||||F||||^John Doe||20211226-00500-472753120-657192-700475-CepheidVM-PC
OBX|19|ST|COVFLURSVPLUS&FLUB&&|Flu B&|POS^|
OBX|20|ST|COVFLURSVPLUS&FLUB&&|Flu B&Ct|^29.3||
OBX|21|ST|COVFLURSVPLUS&FLUB&&|Flu B&EndPt|^792.0||
OBX|22|ST|COVFLURSVPLUS&FLUB&&|SPC&|NA^|
OBX|23|ST|COVFLURSVPLUS&FLUB&&|SPC&Ct|^30.1||
OBX|24|ST|COVFLURSVPLUS&FLUB&&|SPC&EndPt|^147.0||
OBX|25|ST|COVFLURSVPLUS&RSV&Xpress SARS-CoV-2_Flu_RSV plus&2|RSV&|NEGATIVE^|||||F||||^John Doe||20211226-00500-472753120-657192-700475-CepheidVM-PC
OBX|26|ST|COVFLURSVPLUS&RSV&&|RSV&|NEG^|
OBX|27|ST|COVFLURSVPLUS&RSV&&|RSV&Ct|^0.0||
OBX|28|ST|COVFLURSVPLUS&RSV&&|RSV&EndPt|^1.0||
OBX|29|ST|COVFLURSVPLUS&RSV&&|SPC&|NA^|
OBX|30|ST|COVFLURSVPLUS&RSV&&|SPC&Ct|^30.1||
OBX|31|ST|COVFLURSVPLUS&RSV&&|SPC&EndPt|^147.0||
SPM|1|3_FluB_c^|ORH|||||P
    
```

6.1.2.5 Example HL7 Message: “SARS-CoV-2: Negative, FLU A: Negative, FLU B: Negative, RSV: Positive”

SARS-CoV-2	FLU A	FLU B	RSV
Negative	Negative	Negative	Positive

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210809123150||ORU^R32^ORU_R30|GXM-58025438050|P|2.5|||||
PID|1|||||||||||||||||
ORC|RE|1|||||20210713123523
OBR|1|||COVFLURSVPLUS|||||||||||||F
TQ1|||||20210713123523|20210713131205|R
OBX|1|ST|COVFLURSVPLUS&SARSCOV2&Xpress SARS-CoV-2_Flu_RSV plus&2|SARS-CoV-2&|POSITIVE^|||||F|||||^ John Doe ||20211226-00500-472753084-610876-714106-CepheidVM-PC
OBX|2|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&|POS^|
OBX|3|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&Ct|^30.6||
OBX|4|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&EndPt|^449.0||
OBX|5|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&|NA^|
OBX|6|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&Ct|^28.9||
OBX|7|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&EndPt|^134.0||
OBX|8|ST|COVFLURSVPLUS&FLUA&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu A&|POSITIVE^|||||F|||||^ John Doe ||20211226-00500-472753084-610876-714106-CepheidVM-PC
OBX|9|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&|POS^|
OBX|10|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&Ct|^29.3||
OBX|11|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&EndPt|^601.0||
OBX|12|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&|POS^|
OBX|13|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&Ct|^33.2||
OBX|14|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&EndPt|^200.0||
OBX|15|ST|COVFLURSVPLUS&FLUA&&|SPC&|NA^|
OBX|16|ST|COVFLURSVPLUS&FLUA&&|SPC&Ct|^28.9||
OBX|17|ST|COVFLURSVPLUS&FLUA&&|SPC&EndPt|^134.0||
OBX|18|ST|COVFLURSVPLUS&FLUB&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu B&|POSITIVE^|||||F|||||^ John Doe ||20211226-00500-472753084-610876-714106-CepheidVM-PC
OBX|19|ST|COVFLURSVPLUS&FLUB&&|Flu B&|POS^|
OBX|20|ST|COVFLURSVPLUS&FLUB&&|Flu B&Ct|^28.8||
OBX|21|ST|COVFLURSVPLUS&FLUB&&|Flu B&EndPt|^658.0||
OBX|22|ST|COVFLURSVPLUS&FLUB&&|SPC&|NA^|
OBX|23|ST|COVFLURSVPLUS&FLUB&&|SPC&Ct|^28.9||
OBX|24|ST|COVFLURSVPLUS&FLUB&&|SPC&EndPt|^134.0||
OBX|25|ST|COVFLURSVPLUS&RSV&Xpress SARS-CoV-2_Flu_RSV plus&2|RSV&|POSITIVE^|||||F|||||^ John Doe ||20211226-00500-472753084-610876-714106-CepheidVM-PC
OBX|26|ST|COVFLURSVPLUS&RSV&&|RSV&|POS^|
OBX|27|ST|COVFLURSVPLUS&RSV&&|RSV&Ct|^29.2||
OBX|28|ST|COVFLURSVPLUS&RSV&&|RSV&EndPt|^373.0||
OBX|29|ST|COVFLURSVPLUS&RSV&&|SPC&|NA^|
OBX|30|ST|COVFLURSVPLUS&RSV&&|SPC&Ct|^28.9||
OBX|31|ST|COVFLURSVPLUS&RSV&&|SPC&EndPt|^134.0||
SPM|1|15_CoV2_FluA_FluB_RSV_c^||ORH|||||P
    
```

6.1.2.6 Example HL7 Message: “SARS-CoV-2: Positive, FLU A: Positive, FLU B: Positive, RSV: Positive”

SARS-CoV-2	FLU A	FLU B	RSV
Positive	Positive	Positive	Positive

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210809123150||ORU^R32^ORU_R30|GXM-58025438050|P|2.5|||||
PID|1|||||||||||||||||||||
ORC|RE|1|||||20210713123523
OBR|1|||COVFLURSVPLUS|||||||||||||F
TQ1|||||20210713123523|20210713131205|R
OBX|1|ST|COVFLURSVPLUS&SARSCOV2&Xpress SARS-CoV-2_Flu_RSV plus&2|SARS-CoV-2&|POSITIVE^|||||F|||||^ John Doe ||20211226-00500-472753084-610876-714106-CepheidVM-PC
OBX|2|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&|POS^|
OBX|3|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&Ct|^30.6||
OBX|4|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&EndPt|^449.0||
OBX|5|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&|NA^|
OBX|6|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&Ct|^28.9||
OBX|7|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&EndPt|^134.0||
OBX|8|ST|COVFLURSVPLUS&FLUA&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu A&|POSITIVE^|||||F|||||^ John Doe ||20211226-00500-472753084-610876-714106-CepheidVM-PC
OBX|9|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&|POS^|
OBX|10|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&Ct|^29.3||
OBX|11|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&EndPt|^601.0||
OBX|12|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&|POS^|
OBX|13|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&Ct|^33.2||
OBX|14|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&EndPt|^200.0||
OBX|15|ST|COVFLURSVPLUS&FLUA&&|SPC&|NA^|
OBX|16|ST|COVFLURSVPLUS&FLUA&&|SPC&Ct|^28.9||
OBX|17|ST|COVFLURSVPLUS&FLUA&&|SPC&EndPt|^134.0||
OBX|18|ST|COVFLURSVPLUS&FLUB&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu B&|POSITIVE^|||||F|||||^ John Doe ||20211226-00500-472753084-610876-714106-CepheidVM-PC
OBX|19|ST|COVFLURSVPLUS&FLUB&&|Flu B&|POS^|
OBX|20|ST|COVFLURSVPLUS&FLUB&&|Flu B&Ct|^28.8||
OBX|21|ST|COVFLURSVPLUS&FLUB&&|Flu B&EndPt|^658.0||
OBX|22|ST|COVFLURSVPLUS&FLUB&&|SPC&|NA^|
OBX|23|ST|COVFLURSVPLUS&FLUB&&|SPC&Ct|^28.9||
OBX|24|ST|COVFLURSVPLUS&FLUB&&|SPC&EndPt|^134.0||
OBX|25|ST|COVFLURSVPLUS&RSV&Xpress SARS-CoV-2_Flu_RSV plus&2|RSV&|POSITIVE^|||||F|||||^ John Doe ||20211226-00500-472753084-610876-714106-CepheidVM-PC
OBX|26|ST|COVFLURSVPLUS&RSV&&|RSV&|POS^|
OBX|27|ST|COVFLURSVPLUS&RSV&&|RSV&Ct|^29.2||
OBX|28|ST|COVFLURSVPLUS&RSV&&|RSV&EndPt|^373.0||
OBX|29|ST|COVFLURSVPLUS&RSV&&|SPC&|NA^|
OBX|30|ST|COVFLURSVPLUS&RSV&&|SPC&Ct|^28.9||
OBX|31|ST|COVFLURSVPLUS&RSV&&|SPC&EndPt|^134.0||
SPM|1|15_CoV2_FluA_FluB_RSV_c^||ORH|||||P
    
```

6.1.2.7 Example HL7 Message: “SARS-CoV-2: Error”

SARS-CoV-2	FLU A	FLU B	RSV
Error	Error	Error	Error

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210809123808||ORU^R32^ORU_R30|GXM-54857253461|P|2.5|||||
PID|1||||||||||||||||||||
ORC|RE|1|||||20210713174434
OBR|1|||COVFLURSVPLUS|||||||||||||F
TQ1|||||20210713174434|20210713174700|R
OBX|1|ST|COVFLURSVPLUS&SARSCOV2&Xpress SARS-CoV-2_Flu_RSV plus&2|SARS-CoV-2&|ERROR^|||||F|||||^ John Doe ||20211226-00500-472753074-634358-804051-CepheidVM-PC
NTE|1||L|Error^2125^Operation terminated^Error 2125: Termination Error - Insufficient Volume: 16, 50, 0, 17^20210713174646
OBX|2|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&|NO RESULT^||
OBX|3|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&Ct|^0.0||
OBX|4|ST|COVFLURSVPLUS&SARSCOV2&&|SARS-CoV-2&EndPt|^0.0||
OBX|5|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&|NO RESULT^||
OBX|6|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&Ct|^0.0||
OBX|7|ST|COVFLURSVPLUS&SARSCOV2&&|SPC&EndPt|^0.0||
OBX|8|ST|COVFLURSVPLUS&FLUA&&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu A&|ERROR^|||||F|||||^ John Doe ||20211226-00500-472753074-634358-804051-CepheidVM-PC
NTE|1||L|Error^2125^Operation terminated^Error 2125: Termination Error - Insufficient Volume: 16, 50, 0, 17^20210713174646
OBX|9|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&|NO RESULT^||
OBX|10|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&Ct|^0.0||
OBX|11|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&EndPt|^0.0||
OBX|12|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&|NO RESULT^||
OBX|13|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&Ct|^0.0||
OBX|14|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&EndPt|^0.0||
OBX|15|ST|COVFLURSVPLUS&FLUA&&|SPC&|NO RESULT^||
OBX|16|ST|COVFLURSVPLUS&FLUA&&|SPC&Ct|^0.0||
OBX|17|ST|COVFLURSVPLUS&FLUA&&|SPC&EndPt|^0.0||
OBX|18|ST|COVFLURSVPLUS&FLUB&&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu B&|ERROR^|||||F|||||^ John Doe ||20211226-00500-472753074-634358-804051-CepheidVM-PC
NTE|1||L|Error^2125^Operation terminated^Error 2125: Termination Error - Insufficient Volume: 16, 50, 0, 17^20210713174646
OBX|19|ST|COVFLURSVPLUS&FLUB&&|Flu B&|NO RESULT^||
OBX|20|ST|COVFLURSVPLUS&FLUB&&|Flu B&Ct|^0.0||
OBX|21|ST|COVFLURSVPLUS&FLUB&&|Flu B&EndPt|^0.0||
OBX|22|ST|COVFLURSVPLUS&FLUB&&|SPC&|NO RESULT^||
OBX|23|ST|COVFLURSVPLUS&FLUB&&|SPC&Ct|^0.0||
OBX|24|ST|COVFLURSVPLUS&FLUB&&|SPC&EndPt|^0.0||
OBX|25|ST|COVFLURSVPLUS&RSV&&Xpress SARS-CoV-2_Flu_RSV plus&2|RSV&|ERROR^|||||F|||||^ John Doe ||20211226-00500-472753074-634358-804051-CepheidVM-PC
NTE|1||L|Error^2125^Operation terminated^Error 2125: Termination Error - Insufficient Volume: 16, 50, 0, 17^20210713174646
OBX|26|ST|COVFLURSVPLUS&RSV&&|RSV&|NO RESULT^||
OBX|27|ST|COVFLURSVPLUS&RSV&&|RSV&Ct|^0.0||
OBX|28|ST|COVFLURSVPLUS&RSV&&|RSV&EndPt|^0.0||
OBX|29|ST|COVFLURSVPLUS&RSV&&|SPC&|NO RESULT^||
OBX|30|ST|COVFLURSVPLUS&RSV&&|SPC&Ct|^0.0||
OBX|31|ST|COVFLURSVPLUS&RSV&&|SPC&EndPt|^0.0||
    
```

SPM|1|Test*||ORH|||||P

6.1.2.8 Example HL7 Message: “SARS-CoV-2: Invalid”

SARS-CoV-2	FLU A	FLU B	RSV
Invalid	Invalid	Invalid	Invalid

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210809123146||ORU^R32^ORU_R30|GXM-21232263312|P|2.5|||||
PID|1|||||||||||||||||
ORC|RE|1|||||20210804145311
OBR|1|||COVFLURSVPLUS|||||||||||||F
TQ1|||||20210804145311|20210804152925|R
OBX|1|ST|COVFLURSVPLUS&SARSCO2&Xpress SARS-CoV-2_Flu_RSV plus&2|SARS-CoV-2&|INVALID^|||||F||||^ John Doe ||20211226-00500-472753074-778691-714106-CepheidVM-PC
OBX|2|ST|COVFLURSVPLUS&SARSCO2&&|SARS-CoV-2&|INVALID^||
OBX|3|ST|COVFLURSVPLUS&SARSCO2&&|SARS-CoV-2&Ct|^0.0||
OBX|4|ST|COVFLURSVPLUS&SARSCO2&&|SARS-CoV-2&EndPt|^2.0||
OBX|5|ST|COVFLURSVPLUS&SARSCO2&&|SPC&|FAIL^||
OBX|6|ST|COVFLURSVPLUS&SARSCO2&&|SPC&Ct|^0.0||
OBX|7|ST|COVFLURSVPLUS&SARSCO2&&|SPC&EndPt|^0.0||
OBX|8|ST|COVFLURSVPLUS&FLUA&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu A&|INVALID^|||||F||||^ John Doe ||20211226-00500-472753074-778691-714106-CepheidVM-PC
OBX|9|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&|INVALID^||
OBX|10|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&Ct|^0.0||
OBX|11|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&EndPt|^2.0||
OBX|12|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&|INVALID^||
OBX|13|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&Ct|^0.0||
OBX|14|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&EndPt|^1.0||
OBX|15|ST|COVFLURSVPLUS&FLUA&&|SPC&|FAIL^||
OBX|16|ST|COVFLURSVPLUS&FLUA&&|SPC&Ct|^0.0||
OBX|17|ST|COVFLURSVPLUS&FLUA&&|SPC&EndPt|^0.0||
OBX|18|ST|COVFLURSVPLUS&FLUB&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu B&|INVALID^|||||F||||^ John Doe ||20211226-00500-472753074-778691-714106-CepheidVM-PC
OBX|19|ST|COVFLURSVPLUS&FLUB&&|Flu B&|INVALID^||
OBX|20|ST|COVFLURSVPLUS&FLUB&&|Flu B&Ct|^0.0||
OBX|21|ST|COVFLURSVPLUS&FLUB&&|Flu B&EndPt|^1.0||
OBX|22|ST|COVFLURSVPLUS&FLUB&&|SPC&|FAIL^||
OBX|23|ST|COVFLURSVPLUS&FLUB&&|SPC&Ct|^0.0||
OBX|24|ST|COVFLURSVPLUS&FLUB&&|SPC&EndPt|^0.0||
OBX|25|ST|COVFLURSVPLUS&RSV&Xpress SARS-CoV-2_Flu_RSV plus&2|RSV&|INVALID^|||||F||||^ John Doe ||20211226-00500-472753074-778691-714106-CepheidVM-PC
OBX|26|ST|COVFLURSVPLUS&RSV&&|RSV&|INVALID^||
OBX|27|ST|COVFLURSVPLUS&RSV&&|RSV&Ct|^0.0||
OBX|28|ST|COVFLURSVPLUS&RSV&&|RSV&EndPt|^2.0||
OBX|29|ST|COVFLURSVPLUS&RSV&&|SPC&|FAIL^||
OBX|30|ST|COVFLURSVPLUS&RSV&&|SPC&Ct|^0.0||
OBX|31|ST|COVFLURSVPLUS&RSV&&|SPC&EndPt|^0.0||
SPM|1|Test-1^||ORH|||||P
    
```

6.1.2.9 Example HL7 Message: “SARS-CoV-2: No Result”

SARS-CoV-2	FLU A	FLU B	RSV
No Result	No Result	No Result	No result

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210809123149||ORU^R32^ORU_R30|GXM-35405703184|P|2.5|||||
PID|1||||||||||||||||||||||||||||||||
ORC|RE|1|||||20210713164557
OBR|1|||COVFLURSVPLUS|||||||||||||||||F
TQ1|||||20210713164557|20210713164741|R
OBX|1|ST|COVFLURSVPLUS&SARSCO2&Xpress SARS-CoV-2_Flu_RSV plus&2|SARS-CoV-2&|NO RESULT - REPEAT TEST^|||||F|||||^ John Doe ||20211226-00500-472753073-647156-812422-CepheidVM-PC
NTE|1||L|Error^2125^Operation terminated^Error 2125: Termination Error - Insufficient Volume: 15, 50, 0, 16^20210713164809
OBX|2|ST|COVFLURSVPLUS&SARSCO2&&|SARS-CoV-2&|NO RESULT^|
OBX|3|ST|COVFLURSVPLUS&SARSCO2&&|SARS-CoV-2&Ct|^0.0|
OBX|4|ST|COVFLURSVPLUS&SARSCO2&&|SARS-CoV-2&EndPt|^0.0|
OBX|5|ST|COVFLURSVPLUS&SARSCO2&&|SPC&|NO RESULT^|
OBX|6|ST|COVFLURSVPLUS&SARSCO2&&|SPC&Ct|^0.0|
OBX|7|ST|COVFLURSVPLUS&SARSCO2&&|SPC&EndPt|^0.0|
OBX|8|ST|COVFLURSVPLUS&FLUA&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu A&|NO RESULT - REPEAT TEST^|||||F|||||^ John Doe ||20211226-00500-472753073-647156-812422-CepheidVM-PC
NTE|1||L|Error^2125^Operation terminated^Error 2125: Termination Error - Insufficient Volume: 15, 50, 0, 16^20210713164809
OBX|9|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&|NO RESULT^|
OBX|10|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&Ct|^0.0|
OBX|11|ST|COVFLURSVPLUS&FLUA&&|Flu A 1&EndPt|^0.0|
OBX|12|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&|NO RESULT^|
OBX|13|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&Ct|^0.0|
OBX|14|ST|COVFLURSVPLUS&FLUA&&|Flu A 2&EndPt|^0.0|
OBX|15|ST|COVFLURSVPLUS&FLUA&&|SPC&|NO RESULT^|
OBX|16|ST|COVFLURSVPLUS&FLUA&&|SPC&Ct|^0.0|
OBX|17|ST|COVFLURSVPLUS&FLUA&&|SPC&EndPt|^0.0|
OBX|18|ST|COVFLURSVPLUS&FLUB&Xpress SARS-CoV-2_Flu_RSV plus&2|Flu B&|NO RESULT - REPEAT TEST^|||||F|||||^ John Doe ||20211226-00500-472753073-647156-812422-CepheidVM-PC
NTE|1||L|Error^2125^Operation terminated^Error 2125: Termination Error - Insufficient Volume: 15, 50, 0, 16^20210713164809
OBX|19|ST|COVFLURSVPLUS&FLUB&&|Flu B&|NO RESULT^|
OBX|20|ST|COVFLURSVPLUS&FLUB&&|Flu B&Ct|^0.0|
OBX|21|ST|COVFLURSVPLUS&FLUB&&|Flu B&EndPt|^0.0|
OBX|22|ST|COVFLURSVPLUS&FLUB&&|SPC&|NO RESULT^|
OBX|23|ST|COVFLURSVPLUS&FLUB&&|SPC&Ct|^0.0|
OBX|24|ST|COVFLURSVPLUS&FLUB&&|SPC&EndPt|^0.0|
OBX|25|ST|COVFLURSVPLUS&RSV&Xpress SARS-CoV-2_Flu_RSV plus&2|RSV&|NO RESULT - REPEAT TEST^|||||F|||||^ John Doe ||20211226-00500-472753073-647156-812422-CepheidVM-PC
NTE|1||L|Error^2125^Operation terminated^Error 2125: Termination Error - Insufficient Volume: 15, 50, 0, 16^20210713164809
OBX|26|ST|COVFLURSVPLUS&RSV&&|RSV&|NO RESULT^|
OBX|27|ST|COVFLURSVPLUS&RSV&&|RSV&Ct|^0.0|
OBX|28|ST|COVFLURSVPLUS&RSV&&|RSV&EndPt|^0.0|
OBX|29|ST|COVFLURSVPLUS&RSV&&|SPC&|NO RESULT^|
OBX|30|ST|COVFLURSVPLUS&RSV&&|SPC&Ct|^0.0|
OBX|31|ST|COVFLURSVPLUS&RSV&&|SPC&EndPt|^0.0|
SPM|1|test^||ORH|||||P
    
```


6.2 Example Messages for Panel: Xpress SARS-CoV-2_Flu plus

6.2.1 Example ASTM Messages

6.2.1.1 Example ASTM Message: “SARS-CoV-2: Negative, FLU A: Negative, FLU B: Negative, RSV: N.A.”

SARS-CoV-2	FLU A	FLU B	RSV
Negative	Negative	Negative	N.A.

```
H|@^\GXM-47724615717|GeneXpert PC^GeneXpert^6.3||||LIS|P|1394-97|20210809120241
P|1||||||||||||||||||||||||||||||||
O|1|4_RSV_b|^^COVFLUPLUS|R|20210713122825|||||ORH|||||F
R|1|^COVFLUPLUS^SARS COV2^Xpress SARS-CoV-2_Flu plus^2^SARS-CoV-2^NEGATIVE^||||F|| John Doe |20210713122825|20210713130451|CepheidVM-PC^703691^765011^472753118^00500^20211226|
R|2|^COVFLUPLUS^SARS COV2^SARS-CoV-2^NEG^||
R|3|^COVFLUPLUS^SARS COV2^SARS-CoV-2^Ct|^0.0||
R|4|^COVFLUPLUS^SARS COV2^SARS-CoV-2^EndPt|^1.0||
R|5|^COVFLUPLUS^SARS COV2^SPC^PASS^||
R|6|^COVFLUPLUS^SARS COV2^SPC^Ct|^29.4||
R|7|^COVFLUPLUS^SARS COV2^SPC^EndPt|^151.0||
R|8|^COVFLUPLUS^FLUA^Xpress SARS-CoV-2_Flu plus^2^Flu A^NEGATIVE^||||F|| John Doe |20210713122825|20210713130451|CepheidVM-PC^703691^765011^472753118^00500^20211226|
R|9|^COVFLUPLUS^FLUA^Flu A 1^NEG^||
R|10|^COVFLUPLUS^FLUA^Flu A 1^Ct|^0.0||
R|11|^COVFLUPLUS^FLUA^Flu A 1^EndPt|^0.0||
R|12|^COVFLUPLUS^FLUA^Flu A 2^NEG^||
R|13|^COVFLUPLUS^FLUA^Flu A 2^Ct|^0.0||
R|14|^COVFLUPLUS^FLUA^Flu A 2^EndPt|^6.0||
R|15|^COVFLUPLUS^FLUA^SPC^PASS^||
R|16|^COVFLUPLUS^FLUA^SPC^Ct|^29.4||
R|17|^COVFLUPLUS^FLUA^SPC^EndPt|^151.0||
R|18|^COVFLUPLUS^FLUB^Xpress SARS-CoV-2_Flu plus^2^Flu B^NEGATIVE^||||F|| John Doe |20210713122825|20210713130451|CepheidVM-PC^703691^765011^472753118^00500^20211226|
R|19|^COVFLUPLUS^FLUB^Flu B^NEG^||
R|20|^COVFLUPLUS^FLUB^Flu B^Ct|^0.0||
R|21|^COVFLUPLUS^FLUB^Flu B^EndPt|^5.0||
R|22|^COVFLUPLUS^FLUB^SPC^PASS^||
R|23|^COVFLUPLUS^FLUB^SPC^Ct|^29.4||
R|24|^COVFLUPLUS^FLUB^SPC^EndPt|^151.0||
L|1|N
```

6.2.1.2 Example ASTM Message: “SARS-CoV-2: Positive, FLU A: Negative, FLU B: Negative, RSV: N.A.”

SARS-CoV-2	FLU A	FLU B	RSV
Positive	Negative	Negative	N.A.

```
H|@^\[GXM-52002757702][GeneXpert PC^GeneXpert^6.3|||||LIS|P|1394-97|20210820145321
P|1|||||^|
O|1|1_CoV2_b|^^COVFLUPLUS|R|20210713122449|||||ORH|||||F
R|1|^COVFLUPLUS^SARSCOV2^Xpress SARS-CoV-2_Flu plus^2^SARS-CoV-2^POSITIVE^||||F|John Doe|20210713122449|20210713130112|CepheidVM-PC^702201^693225^472753127^00500^20211226|
R|2|^COVFLUPLUS^SARSCOV2^SARS-CoV-2^POS^||
R|3|^COVFLUPLUS^SARSCOV2^SARS-CoV-2^Ct|^31.0||
R|4|^COVFLUPLUS^SARSCOV2^SARS-CoV-2^EndPt|^431.0||
R|5|^COVFLUPLUS^SARSCOV2^SPC^|NA^||
R|6|^COVFLUPLUS^SARSCOV2^SPC^Ct|^29.7||
R|7|^COVFLUPLUS^SARSCOV2^SPC^EndPt|^133.0||
R|8|^COVFLUPLUS^FLUA^Xpress SARS-CoV-2_Flu plus^2^Flu A^|NEGATIVE^||||F|John Doe|20210713122449|20210713130112|CepheidVM-PC^702201^693225^472753127^00500^20211226|
R|9|^COVFLUPLUS^FLUA^Flu A 1^|NEG^||
R|10|^COVFLUPLUS^FLUA^Flu A 1^Ct|^0.0||
R|11|^COVFLUPLUS^FLUA^Flu A 1^EndPt|^2.0||
R|12|^COVFLUPLUS^FLUA^Flu A 2^|NEG^||
R|13|^COVFLUPLUS^FLUA^Flu A 2^Ct|^0.0||
R|14|^COVFLUPLUS^FLUA^Flu A 2^EndPt|^0.0||
R|15|^COVFLUPLUS^FLUA^SPC^|NA^||
R|16|^COVFLUPLUS^FLUA^SPC^Ct|^29.7||
R|17|^COVFLUPLUS^FLUA^SPC^EndPt|^133.0||
R|18|^COVFLUPLUS^FLUB^Xpress SARS-CoV-2_Flu plus^2^Flu B^|NEGATIVE^||||F|John Doe|20210713122449|20210713130112|CepheidVM-PC^702201^693225^472753127^00500^20211226|
R|19|^COVFLUPLUS^FLUB^Flu B^|NEG^||
R|20|^COVFLUPLUS^FLUB^Flu B^Ct|^0.0||
R|21|^COVFLUPLUS^FLUB^Flu B^EndPt|^2.0||
R|22|^COVFLUPLUS^FLUB^SPC^|NA^||
R|23|^COVFLUPLUS^FLUB^SPC^Ct|^29.7||
R|24|^COVFLUPLUS^FLUB^SPC^EndPt|^133.0||
L|1|N
```

6.2.1.3 Example ASTM Message: “SARS-CoV-2: Negative, FLU A: Positive, FLU B: Negative, RSV: N.A.”

SARS-CoV-2	FLU A	FLU B	RSV
Negative	Positive	Negative	N.A

```
H|@^\[GXM-12350662605][GeneXpert PC^GeneXpert^6.3|||||LIS|P|1394-97|20210820145320
P|1|||||^|
O|1|2_FluA_b|^^COVFLUPLUS|R|20210713122600|||||ORH|||||F
R|1|^COVFLUPLUS^SARSCOV2^Xpress SARS-CoV-2_Flu plus^2^SARS-CoV-2^NEGATIVE^||||F|John Doe|20210713122600|20210713130203|CepheidVM-PC^702201^719197^472753124^00500^20211226|
R|2|^COVFLUPLUS^SARSCOV2^SARS-CoV-2^NEG^||
R|3|^COVFLUPLUS^SARSCOV2^SARS-CoV-2^C|^0.0||
R|4|^COVFLUPLUS^SARSCOV2^SARS-CoV-2^EndPt|^1.0||
R|5|^COVFLUPLUS^SARSCOV2^SPC^|NA^||
R|6|^COVFLUPLUS^SARSCOV2^SPC^C|^29.0||
R|7|^COVFLUPLUS^SARSCOV2^SPC^EndPt|^167.0||
R|8|^COVFLUPLUS^FLUA^Xpress SARS-CoV-2_Flu plus^2^Flu A^POSITIVE^||||F|John Doe|20210713122600|20210713130203|CepheidVM-PC^702201^719197^472753124^00500^20211226|
R|9|^COVFLUPLUS^FLUA^Flu A 1^POS^||
R|10|^COVFLUPLUS^FLUA^Flu A 1^C|^30.0||
R|11|^COVFLUPLUS^FLUA^Flu A 1^EndPt|^752.0||
R|12|^COVFLUPLUS^FLUA^Flu A 2^POS^||
R|13|^COVFLUPLUS^FLUA^Flu A 2^C|^33.7||
R|14|^COVFLUPLUS^FLUA^Flu A 2^EndPt|^237.0||
R|15|^COVFLUPLUS^FLUA^SPC^|NA^||
R|16|^COVFLUPLUS^FLUA^SPC^C|^29.0||
R|17|^COVFLUPLUS^FLUA^SPC^EndPt|^167.0||
R|18|^COVFLUPLUS^FLUB^Xpress SARS-CoV-2_Flu plus^2^Flu B^NEGATIVE^||||F|John Doe|20210713122600|20210713130203|CepheidVM-PC^702201^719197^472753124^00500^20211226|
R|19|^COVFLUPLUS^FLUB^Flu B^NEG^||
R|20|^COVFLUPLUS^FLUB^Flu B^C|^0.0||
R|21|^COVFLUPLUS^FLUB^Flu B^EndPt|^3.0||
R|22|^COVFLUPLUS^FLUB^SPC^|NA^||
R|23|^COVFLUPLUS^FLUB^SPC^C|^29.0||
R|24|^COVFLUPLUS^FLUB^SPC^EndPt|^167.0||
L|1|N
```

6.2.1.4 Example ASTM Message: “SARS-CoV-2: Negative, FLU A: Negative, FLU B: Positive, RSV: N.A.”

SARS-CoV-2	FLU A	FLU B	RSV
Negative	Negative	Positive	N.A.

```

H|@^GXM-71151736385|GeneXpert PC^GeneXpert^6.3||||LIS|P|1394-97|20210820145319
P|1|||||||
Q|1|3_FluB_b|^^COVFLUPLUS|R|20210713122726||||ORH|||||F
R|1|^COVFLUPLUS^MSARSCOV2^Xpress SARS-CoV-2_Flu plus^2^SARS-CoV-2^NEGATIVE^||||F|John Doe|20210713122726|20210713130313|CepheidVM-PC^700475^613245^472753121^00500^20211226|
R|2|^COVFLUPLUS^MSARSCOV2^SARS-CoV-2^NEG^||
R|3|^COVFLUPLUS^MSARSCOV2^SARS-CoV-2^Ct|^0.0||
R|4|^COVFLUPLUS^MSARSCOV2^SARS-CoV-2^EndPt|^0.0||
R|5|^COVFLUPLUS^MSARSCOV2^SPC^|NA^||
R|6|^COVFLUPLUS^MSARSCOV2^SPC^Ct|^29.8||
R|7|^COVFLUPLUS^MSARSCOV2^SPC^EndPt|^142.0||
R|8|^COVFLUPLUS^FLUA^Xpress SARS-CoV-2_Flu plus^2^Flu A^NEGATIVE^||||F|John Doe|20210713122726|20210713130313|CepheidVM-PC^700475^613245^472753121^00500^20211226|
R|9|^COVFLUPLUS^FLUA^Flu A 1^NEG^||
R|10|^COVFLUPLUS^FLUA^Flu A 1^Ct|^0.0||
R|11|^COVFLUPLUS^FLUA^Flu A 1^EndPt|^6.0||
R|12|^COVFLUPLUS^FLUA^Flu A 2^NEG^||
R|13|^COVFLUPLUS^FLUA^Flu A 2^Ct|^0.0||
R|14|^COVFLUPLUS^FLUA^Flu A 2^EndPt|^1.0||
R|15|^COVFLUPLUS^FLUA^SPC^|NA^||
R|16|^COVFLUPLUS^FLUA^SPC^Ct|^29.8||
R|17|^COVFLUPLUS^FLUA^SPC^EndPt|^142.0||
R|18|^COVFLUPLUS^FLUB^Xpress SARS-CoV-2_Flu plus^2^Flu B^POSITIVE^||||F|John Doe|20210713122726|20210713130313|CepheidVM-PC^700475^613245^472753121^00500^20211226|
R|19|^COVFLUPLUS^FLUB^Flu B^POS^||
R|20|^COVFLUPLUS^FLUB^Flu B^Ct|^29.1||
R|21|^COVFLUPLUS^FLUB^Flu B^EndPt|^742.0||
R|22|^COVFLUPLUS^FLUB^SPC^|NA^||
R|23|^COVFLUPLUS^FLUB^SPC^Ct|^29.8||
R|24|^COVFLUPLUS^FLUB^SPC^EndPt|^142.0||
L|1|N
    
```

6.2.1.5 Example ASTM Message: “SARS-CoV-2: Positive, FLU A: Positive, FLU B: Positive, RSV: N.A.”

SARS-CoV-2	FLU A	FLU B	RSV
Positive	Positive	Positive	N.A.

```
H|@^\[GXM-31413501148|GeneXpert PC^GeneXpert^6.3|||||LIS|P|1394-97|20210809120238
P|1|||||^|
Q|1|15_CoV2_FluA_FluB_RSV_b|^|COVFLUPLUS|R|20210713123507|ORH|F
R|1|^COVFLUPLUS^SARSCOV2^Xpress SARS-CoV-2_Flu plus^2^SARS-CoV-2^POSITIVE^|F| John Doe |20210713123507|20210713131125|CepheidVM-PC^714106^778691^472753085^00500^20211226|
R|2|^COVFLUPLUS^SARSCOV2^SARS-CoV-2^POS^|
R|3|^COVFLUPLUS^SARSCOV2^SARS-CoV-2^Ct|^30.9||
R|4|^COVFLUPLUS^SARSCOV2^SARS-CoV-2^EndPt|^398.0||
R|5|^COVFLUPLUS^SARSCOV2^SPC^|NA^|
R|6|^COVFLUPLUS^SARSCOV2^SPC^Ct|^30.4||
R|7|^COVFLUPLUS^SARSCOV2^SPC^EndPt|^95.0||
R|8|^COVFLUPLUS^FLUA^Xpress SARS-CoV-2_Flu plus^2^Flu A^POSITIVE^|F| John Doe |20210713123507|20210713131125|CepheidVM-PC^714106^778691^472753085^00500^20211226|
R|9|^COVFLUPLUS^FLUA^Flu A 1^POS^|
R|10|^COVFLUPLUS^FLUA^Flu A 1^Ct|^30.1||
R|11|^COVFLUPLUS^FLUA^Flu A 1^EndPt|^399.0||
R|12|^COVFLUPLUS^FLUA^Flu A 2^POS^|
R|13|^COVFLUPLUS^FLUA^Flu A 2^Ct|^35.9||
R|14|^COVFLUPLUS^FLUA^Flu A 2^EndPt|^159.0||
R|15|^COVFLUPLUS^FLUA^SPC^|NA^|
R|16|^COVFLUPLUS^FLUA^SPC^Ct|^30.4||
R|17|^COVFLUPLUS^FLUA^SPC^EndPt|^95.0||
R|18|^COVFLUPLUS^FLUB^Xpress SARS-CoV-2_Flu plus^2^Flu B^POSITIVE^|F| John Doe |20210713123507|20210713131125|CepheidVM-PC^714106^778691^472753085^00500^20211226|
R|19|^COVFLUPLUS^FLUB^Flu B^POS^|
R|20|^COVFLUPLUS^FLUB^Flu B^Ct|^29.0||
R|21|^COVFLUPLUS^FLUB^Flu B^EndPt|^479.0||
R|22|^COVFLUPLUS^FLUB^SPC^|NA^|
R|23|^COVFLUPLUS^FLUB^SPC^Ct|^30.4||
R|24|^COVFLUPLUS^FLUB^SPC^EndPt|^95.0||
L|1|N
```


6.2.1.6 Example ASTM Message: “SARS-CoV-2: Error”

SARS-CoV-2	FLU A	FLU B	RSV
Error	Error	Error	N.A.

```
H|@^\[GXM-52657545660][GeneXpert PC^GeneXpert^6.3|||||LIS|P|1394-97|20210809120239
P|1|||||
Q|1|14_FluA_FluB_RSV_b||^COVFLUPLUS|R|20210713123358|||||ORH|||||F
R|1|^COVFLUPLUS^SARSCOV2^Xpress SARS-CoV-2_Flu plus^2^SARS-CoV-2^|ERROR^||||F|| John Doe |20210713123358|20210713124719|CepheidVM-PC^714107^607591^472753088^00500^20211226|
C|1||Error^2008^Operation terminated^Error 2008: Syringe pressure reading of 100.0 PSI exceeds the protocol limit of 100.0 PSI^20210713124706|N
R|2|^COVFLUPLUS^SARSCOV2^SARS-CoV-2^|NO RESULT^||
R|3|^COVFLUPLUS^SARSCOV2^SARS-CoV-2^Ct|^0.0||
R|4|^COVFLUPLUS^SARSCOV2^SARS-CoV-2^EndPt|^0.0||
R|5|^COVFLUPLUS^SARSCOV2^SPC^|NO RESULT^||
R|6|^COVFLUPLUS^SARSCOV2^SPC^Ct|^0.0||
R|7|^COVFLUPLUS^SARSCOV2^SPC^EndPt|^0.0||
R|8|^COVFLUPLUS^FLUA^Xpress SARS-CoV-2_Flu plus^2^Flu A^|ERROR^||||F|| John Doe |20210713123358|20210713124719|CepheidVM-PC^714107^607591^472753088^00500^20211226|
C|1||Error^2008^Operation terminated^Error 2008: Syringe pressure reading of 100.0 PSI exceeds the protocol limit of 100.0 PSI^20210713124706|N
R|9|^COVFLUPLUS^FLUA^Flu A 1^|NO RESULT^||
R|10|^COVFLUPLUS^FLUA^Flu A 1^Ct|^0.0||
R|11|^COVFLUPLUS^FLUA^Flu A 1^EndPt|^0.0||
R|12|^COVFLUPLUS^FLUA^Flu A 2^|NO RESULT^||
R|13|^COVFLUPLUS^FLUA^Flu A 2^Ct|^0.0||
R|14|^COVFLUPLUS^FLUA^Flu A 2^EndPt|^0.0||
R|15|^COVFLUPLUS^FLUA^SPC^|NO RESULT^||
R|16|^COVFLUPLUS^FLUA^SPC^Ct|^0.0||
R|17|^COVFLUPLUS^FLUA^SPC^EndPt|^0.0||
R|18|^COVFLUPLUS^FLUB^Xpress SARS-CoV-2_Flu plus^2^Flu B^|ERROR^||||F|| John Doe |20210713123358|20210713124719|CepheidVM-PC^714107^607591^472753088^00500^20211226|
C|1||Error^2008^Operation terminated^Error 2008: Syringe pressure reading of 100.0 PSI exceeds the protocol limit of 100.0 PSI^20210713124706|N
R|19|^COVFLUPLUS^FLUB^Flu B^|NO RESULT^||
R|20|^COVFLUPLUS^FLUB^Flu B^Ct|^0.0||
R|21|^COVFLUPLUS^FLUB^Flu B^EndPt|^0.0||
R|22|^COVFLUPLUS^FLUB^SPC^|NO RESULT^||
R|23|^COVFLUPLUS^FLUB^SPC^Ct|^0.0||
R|24|^COVFLUPLUS^FLUB^SPC^EndPt|^0.0||
L|1|N
```

6.2.1.7 Example ASTM Message: “SARS-CoV-2: Invalid”

SARS-CoV-2	FLU A	FLU B	RSV
Invalid	Invalid	Invalid	N.A.

```
H|@^\[GXM-66263131232][GeneXpert PC^GeneXpert^6.3|||||LIS|P|1394-97|20210809120237
P|1|||||^\[|||||
O|1|Test-2|^\[COVFLUPLUS|R|20210804145359|||||ORH|||||F
R|1|^\[COVFLUPLUS^SARSCO2^Xpress SARS-CoV-2_Flu plus^2^SARS-CoV-2^|INVALID^||||F|| John Doe [20210804145359|20210804153036|CepheidVM-PC^714106^711453^472753073^00500^20211226]
R|2|^\[COVFLUPLUS^SARSCO2^SARS-CoV-2^|INVALID^||||
R|3|^\[COVFLUPLUS^SARSCO2^SARS-CoV-2^Ct|^0.0||
R|4|^\[COVFLUPLUS^SARSCO2^SARS-CoV-2^EndPt|^1.0||
R|5|^\[COVFLUPLUS^SARSCO2^SPC^|FAIL^||
R|6|^\[COVFLUPLUS^SARSCO2^SPC^Ct|^0.0||
R|7|^\[COVFLUPLUS^SARSCO2^SPC^EndPt|^0.0||
R|8|^\[COVFLUPLUS^FLUA^Xpress SARS-CoV-2_Flu plus^2^Flu A^|INVALID^||||F|| John Doe [20210804145359|20210804153036|CepheidVM-PC^714106^711453^472753073^00500^20211226]
R|9|^\[COVFLUPLUS^FLUA^Flu A 1^|INVALID^||
R|10|^\[COVFLUPLUS^FLUA^Flu A 1^Ct|^0.0||
R|11|^\[COVFLUPLUS^FLUA^Flu A 1^EndPt|^2.0||
R|12|^\[COVFLUPLUS^FLUA^Flu A 2^|INVALID^||
R|13|^\[COVFLUPLUS^FLUA^Flu A 2^Ct|^0.0||
R|14|^\[COVFLUPLUS^FLUA^Flu A 2^EndPt|^1.0||
R|15|^\[COVFLUPLUS^FLUA^SPC^|FAIL^||
R|16|^\[COVFLUPLUS^FLUA^SPC^Ct|^0.0||
R|17|^\[COVFLUPLUS^FLUA^SPC^EndPt|^0.0||
R|18|^\[COVFLUPLUS^FLUB^Xpress SARS-CoV-2_Flu plus^2^Flu B^|INVALID^||||F|| John Doe [20210804145359|20210804153036|CepheidVM-PC^714106^711453^472753073^00500^20211226]
R|19|^\[COVFLUPLUS^FLUB^Flu B^|INVALID^||
R|20|^\[COVFLUPLUS^FLUB^Flu B^Ct|^0.0||
R|21|^\[COVFLUPLUS^FLUB^Flu B^EndPt|^2.0||
R|22|^\[COVFLUPLUS^FLUB^SPC^|FAIL^||
R|23|^\[COVFLUPLUS^FLUB^SPC^Ct|^0.0||
R|24|^\[COVFLUPLUS^FLUB^SPC^EndPt|^0.0||
L|1|N
```

6.2.2 Example HL7 Messages

6.2.2.1 Example HL7 Message: “SARS-CoV-2: Negative, FLU A: Negative, FLU B: Negative, RSV: N.A.”

SARS-CoV-2	FLU A	FLU B	RSV
Negative	Negative	Negative	N.A.

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210809115943||ORU^R32^ORU_R30|GXM-37346235387|P|2.5|||||
PID|1|||||^|
ORC|RE|1|||||20210713122825
OBR|1|||COVFLUPLUS|||||
TQ1|||||20210713122825|20210713130451|R
OBX|1|ST|COVFLUPLUS&SARSCO2&Xpress SARS-CoV-2_Flu plus&2|SARS-CoV-2&|NEGATIVE^|||||F||||^ John Doe ||20211226-00500-472753118-765011-703691-CepheidVM-PC
OBX|2|ST|COVFLUPLUS&SARSCO2&|SARS-CoV-2&|NEG^|
OBX|3|ST|COVFLUPLUS&SARSCO2&|SARS-CoV-2&Ct|^0.0|
OBX|4|ST|COVFLUPLUS&SARSCO2&|SARS-CoV-2&EndPt|^1.0|
OBX|5|ST|COVFLUPLUS&SARSCO2&|SPC&|PASS^|
OBX|6|ST|COVFLUPLUS&SARSCO2&|SPC&Ct|^29.4|
OBX|7|ST|COVFLUPLUS&SARSCO2&|SPC&EndPt|^151.0|
OBX|8|ST|COVFLUPLUS&FLUA&Xpress SARS-CoV-2_Flu plus&2|Flu A&|NEGATIVE^|||||F||||^ John Doe ||20211226-00500-472753118-765011-703691-CepheidVM-PC
OBX|9|ST|COVFLUPLUS&FLUA&&|Flu A 1&|NEG^|
OBX|10|ST|COVFLUPLUS&FLUA&&|Flu A 1&Ct|^0.0|
OBX|11|ST|COVFLUPLUS&FLUA&&|Flu A 1&EndPt|^0.0|
OBX|12|ST|COVFLUPLUS&FLUA&&|Flu A 2&|NEG^|
OBX|13|ST|COVFLUPLUS&FLUA&&|Flu A 2&Ct|^0.0|
OBX|14|ST|COVFLUPLUS&FLUA&&|Flu A 2&EndPt|^6.0|
OBX|15|ST|COVFLUPLUS&FLUA&&|SPC&|PASS^|
OBX|16|ST|COVFLUPLUS&FLUA&&|SPC&Ct|^29.4|
OBX|17|ST|COVFLUPLUS&FLUA&&|SPC&EndPt|^151.0|
OBX|18|ST|COVFLUPLUS&FLUB&Xpress SARS-CoV-2_Flu plus&2|Flu B&|NEGATIVE^|||||F||||^ John Doe ||20211226-00500-472753118-765011-703691-CepheidVM-PC
OBX|19|ST|COVFLUPLUS&FLUB&&|Flu B&|NEG^|
OBX|20|ST|COVFLUPLUS&FLUB&&|Flu B&Ct|^0.0|
OBX|21|ST|COVFLUPLUS&FLUB&&|Flu B&EndPt|^5.0|
OBX|22|ST|COVFLUPLUS&FLUB&&|SPC&|PASS^|
OBX|23|ST|COVFLUPLUS&FLUB&&|SPC&Ct|^29.4|
OBX|24|ST|COVFLUPLUS&FLUB&&|SPC&EndPt|^151.0|
SPM|1|4_RSV_b^||ORH|||||P
    
```

6.2.2.2 Example HL7 Message: “SARS-CoV-2: Positive, FLU A: Negative, FLU B: Negative, RSV: N.A.”

SARS-CoV-2	FLU A	FLU B	RSV
Positive	Negative	Negative	N.A.

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210820145525||ORU^R32^ORU_R30|GXM-25056773506|P|2.5|||||
PID|1|||||||||||||||||||||
ORC|RE|1|||||20210713122449
OBR|1|||COVFLUPLUS|||||||||||||F
TQ1|||||20210713122449|20210713130112|R
OBX|1|ST|COVFLUPLUS&SARSCO2&Xpress SARS-CoV-2_Flu plus&2|SARS-CoV-2&|POSITIVE^|||||F|||||John Doe||20211226-00500-472753127-693225-702201-CepheidVM-PC
OBX|2|ST|COVFLUPLUS&SARSCO2&&|SARS-CoV-2&|POS^|
OBX|3|ST|COVFLUPLUS&SARSCO2&&|SARS-CoV-2&Ct|^31.0||
OBX|4|ST|COVFLUPLUS&SARSCO2&&|SARS-CoV-2&EndPt|^431.0||
OBX|5|ST|COVFLUPLUS&SARSCO2&&|SPC&|NA^|
OBX|6|ST|COVFLUPLUS&SARSCO2&&|SPC&Ct|^29.7||
OBX|7|ST|COVFLUPLUS&SARSCO2&&|SPC&EndPt|^133.0||
OBX|8|ST|COVFLUPLUS&FLUA&Xpress SARS-CoV-2_Flu plus&2|Flu A&|NEGATIVE^|||||F|||||John Doe||20211226-00500-472753127-693225-702201-CepheidVM-PC
OBX|9|ST|COVFLUPLUS&FLUA&&|Flu A 1&|NEG^|
OBX|10|ST|COVFLUPLUS&FLUA&&|Flu A 1&Ct|^0.0||
OBX|11|ST|COVFLUPLUS&FLUA&&|Flu A 1&EndPt|^2.0||
OBX|12|ST|COVFLUPLUS&FLUA&&|Flu A 2&|NEG^|
OBX|13|ST|COVFLUPLUS&FLUA&&|Flu A 2&Ct|^0.0||
OBX|14|ST|COVFLUPLUS&FLUA&&|Flu A 2&EndPt|^0.0||
OBX|15|ST|COVFLUPLUS&FLUA&&|SPC&|NA^|
OBX|16|ST|COVFLUPLUS&FLUA&&|SPC&Ct|^29.7||
OBX|17|ST|COVFLUPLUS&FLUA&&|SPC&EndPt|^133.0||
OBX|18|ST|COVFLUPLUS&FLUB&Xpress SARS-CoV-2_Flu plus&2|Flu B&|NEGATIVE^|||||F|||||John Doe||20211226-00500-472753127-693225-702201-CepheidVM-PC
OBX|19|ST|COVFLUPLUS&FLUB&&|Flu B&|NEG^|
OBX|20|ST|COVFLUPLUS&FLUB&&|Flu B&Ct|^0.0||
OBX|21|ST|COVFLUPLUS&FLUB&&|Flu B&EndPt|^2.0||
OBX|22|ST|COVFLUPLUS&FLUB&&|SPC&|NA^|
OBX|23|ST|COVFLUPLUS&FLUB&&|SPC&Ct|^29.7||
OBX|24|ST|COVFLUPLUS&FLUB&&|SPC&EndPt|^133.0||
SPM|1|1_CoV2_b^||ORH|||||P
    
```

6.2.2.3 Example HL7 Message: “SARS-CoV-2: Negative, FLU A: Positive, FLU B: Negative, RSV: N.A.”

SARS-CoV-2	FLU A	FLU B	RSV
Negative	Positive	Negative	N.A.

```

MSH|^~&|GeneXpert PC^GeneXpert^6.3||LIS||20210820145524||ORU^R32^ORU_R30|GXM-73055560823|P|2.5|||||
PID|1|||||||||||||||||||||
ORC|RE|1|||||20210713122600
OBR|1|||COVFLUPLUS|||||||||||||F
TQ1|||||20210713122600|20210713130203|R
OBX|1|ST|COVFLUPLUS&SARSCO2&Xpress SARS-CoV-2_Flu plus&2|SARS-CoV-2&|NEGATIVE^|||||F||||^John Doe||20211226-00500-472753124-719197-702201-CepheidVM-PC
OBX|2|ST|COVFLUPLUS&SARSCO2&&|SARS-CoV-2&|NEG^|
OBX|3|ST|COVFLUPLUS&SARSCO2&&|SARS-CoV-2&Ct|^0.0||
OBX|4|ST|COVFLUPLUS&SARSCO2&&|SARS-CoV-2&EndPt|^1.0||
OBX|5|ST|COVFLUPLUS&SARSCO2&&|SPC&|NA^|
OBX|6|ST|COVFLUPLUS&SARSCO2&&|SPC&Ct|^29.0||
OBX|7|ST|COVFLUPLUS&SARSCO2&&|SPC&EndPt|^167.0||
OBX|8|ST|COVFLUPLUS&FLUA&Xpress SARS-CoV-2_Flu plus&2|Flu A&|POSITIVE^|||||F||||^John Doe||20211226-00500-472753124-719197-702201-CepheidVM-PC
OBX|9|ST|COVFLUPLUS&FLUA&&|Flu A 1&|POS^|
OBX|10|ST|COVFLUPLUS&FLUA&&|Flu A 1&Ct|^30.0||
OBX|11|ST|COVFLUPLUS&FLUA&&|Flu A 1&EndPt|^752.0||
OBX|12|ST|COVFLUPLUS&FLUA&&|Flu A 2&|POS^|
OBX|13|ST|COVFLUPLUS&FLUA&&|Flu A 2&Ct|^33.7||
OBX|14|ST|COVFLUPLUS&FLUA&&|Flu A 2&EndPt|^237.0||
OBX|15|ST|COVFLUPLUS&FLUA&&|SPC&|NA^|
OBX|16|ST|COVFLUPLUS&FLUA&&|SPC&Ct|^29.0||
OBX|17|ST|COVFLUPLUS&FLUA&&|SPC&EndPt|^167.0||
OBX|18|ST|COVFLUPLUS&FLUB&Xpress SARS-CoV-2_Flu plus&2|Flu B&|NEGATIVE^|||||F||||^John Doe||20211226-00500-472753124-719197-702201-CepheidVM-PC
OBX|19|ST|COVFLUPLUS&FLUB&&|Flu B&|NEG^|
OBX|20|ST|COVFLUPLUS&FLUB&&|Flu B&Ct|^0.0||
OBX|21|ST|COVFLUPLUS&FLUB&&|Flu B&EndPt|^3.0||
OBX|22|ST|COVFLUPLUS&FLUB&&|SPC&|NA^|
OBX|23|ST|COVFLUPLUS&FLUB&&|SPC&Ct|^29.0||
OBX|24|ST|COVFLUPLUS&FLUB&&|SPC&EndPt|^167.0||
SPM|1|2_Flu_a_b^|ORH|||||P
    
```

6.2.2.4 Example HL7 Message: “SARS-CoV-2: Negative, FLU A: Negative, FLU B: Positive, RSV: N.A.”

SARS-CoV-2	FLU A	FLU B	RSV
Negative	Negative	Positive	N.A.

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210820145522||ORU^R32^ORU_R30|GXM-14800552152|P|2.5|||||
PID|1|||||||||||||||||||||
ORC|RE|1|||||20210713122726
OBR|1|||COVFLUPLUS|||||||||||||F
TQ1|||||20210713122726|20210713130313|R
OBX|1|ST|COVFLUPLUS&SARSCO2&Xpress SARS-CoV-2_Flu plus&2|SARS-CoV-2&|NEGATIVE^|||||F||||^John Doe||20211226-00500-472753121-613245-700475-CepheidVM-PC
OBX|2|ST|COVFLUPLUS&SARSCO2&&|SARS-CoV-2&|NEG^|
OBX|3|ST|COVFLUPLUS&SARSCO2&&|SARS-CoV-2&Ct|^0.0||
OBX|4|ST|COVFLUPLUS&SARSCO2&&|SARS-CoV-2&EndPt|^0.0||
OBX|5|ST|COVFLUPLUS&SARSCO2&&|SPC&|NA^|
OBX|6|ST|COVFLUPLUS&SARSCO2&&|SPC&Ct|^29.8||
OBX|7|ST|COVFLUPLUS&SARSCO2&&|SPC&EndPt|^142.0||
OBX|8|ST|COVFLUPLUS&FLUA&Xpress SARS-CoV-2_Flu plus&2|Flu A&|NEGATIVE^|||||F||||^John Doe||20211226-00500-472753121-613245-700475-CepheidVM-PC
OBX|9|ST|COVFLUPLUS&FLUA&&|Flu A 1&|NEG^|
OBX|10|ST|COVFLUPLUS&FLUA&&|Flu A 1&Ct|^0.0||
OBX|11|ST|COVFLUPLUS&FLUA&&|Flu A 1&EndPt|^6.0||
OBX|12|ST|COVFLUPLUS&FLUA&&|Flu A 2&|NEG^|
OBX|13|ST|COVFLUPLUS&FLUA&&|Flu A 2&Ct|^0.0||
OBX|14|ST|COVFLUPLUS&FLUA&&|Flu A 2&EndPt|^1.0||
OBX|15|ST|COVFLUPLUS&FLUA&&|SPC&|NA^|
OBX|16|ST|COVFLUPLUS&FLUA&&|SPC&Ct|^29.8||
OBX|17|ST|COVFLUPLUS&FLUA&&|SPC&EndPt|^142.0||
OBX|18|ST|COVFLUPLUS&FLUB&Xpress SARS-CoV-2_Flu plus&2|Flu B&|POSITIVE^|||||F||||^John Doe||20211226-00500-472753121-613245-700475-CepheidVM-PC
OBX|19|ST|COVFLUPLUS&FLUB&&|Flu B&|POS^|
OBX|20|ST|COVFLUPLUS&FLUB&&|Flu B&Ct|^29.1||
OBX|21|ST|COVFLUPLUS&FLUB&&|Flu B&EndPt|^742.0||
OBX|22|ST|COVFLUPLUS&FLUB&&|SPC&|NA^|
OBX|23|ST|COVFLUPLUS&FLUB&&|SPC&Ct|^29.8||
OBX|24|ST|COVFLUPLUS&FLUB&&|SPC&EndPt|^142.0||
SPM|1|3_FluB_b^||ORH|||||P
    
```

6.2.2.5 Example HL7 Message: “SARS-CoV-2: Positive, FLU A: Positive, FLU B: Positive, RSV: N.A.”

SARS-CoV-2	FLU A	FLU B	RSV
Positive	Positive	Positive	N.A.

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210809115943||ORU^R32^ORU_R30|GXM-37346235387|P|2.5|||||
PID|1|||||||||||||||||||||
ORC|RE|1|||||20210713122825
OBR|1|||COVFLUPLUS|||||||||||||F
TQ1|||||20210713122825|20210713130451|R
OBX|1|ST|COVFLUPLUS&SARSCOV2&Xpress SARS-CoV-2_Flu plus&2|SARS-CoV-2&|NEGATIVE^|||||F||||^ John Doe ||20211226-00500-472753118-765011-703691-CepheidVM-PC
OBX|2|ST|COVFLUPLUS&SARSCOV2&&|SARS-CoV-2&|NEG^|
OBX|3|ST|COVFLUPLUS&SARSCOV2&&|SARS-CoV-2&Ct|^0.0|
OBX|4|ST|COVFLUPLUS&SARSCOV2&&|SARS-CoV-2&EndPt|^1.0|
OBX|5|ST|COVFLUPLUS&SARSCOV2&&|SPC&|PASS^|
OBX|6|ST|COVFLUPLUS&SARSCOV2&&|SPC&Ct|^29.4|
OBX|7|ST|COVFLUPLUS&SARSCOV2&&|SPC&EndPt|^151.0|
OBX|8|ST|COVFLUPLUS&FLUA&Xpress SARS-CoV-2_Flu plus&2|Flu A&|NEGATIVE^|||||F||||^ John Doe ||20211226-00500-472753118-765011-703691-CepheidVM-PC
OBX|9|ST|COVFLUPLUS&FLUA&&|Flu A 1&|NEG^|
OBX|10|ST|COVFLUPLUS&FLUA&&|Flu A 1&Ct|^0.0|
OBX|11|ST|COVFLUPLUS&FLUA&&|Flu A 1&EndPt|^0.0|
OBX|12|ST|COVFLUPLUS&FLUA&&|Flu A 2&|NEG^|
OBX|13|ST|COVFLUPLUS&FLUA&&|Flu A 2&Ct|^0.0|
OBX|14|ST|COVFLUPLUS&FLUA&&|Flu A 2&EndPt|^6.0|
OBX|15|ST|COVFLUPLUS&FLUA&&|SPC&|PASS^|
OBX|16|ST|COVFLUPLUS&FLUA&&|SPC&Ct|^29.4|
OBX|17|ST|COVFLUPLUS&FLUA&&|SPC&EndPt|^151.0|
OBX|18|ST|COVFLUPLUS&FLUB&Xpress SARS-CoV-2_Flu plus&2|Flu B&|NEGATIVE^|||||F||||^ John Doe ||20211226-00500-472753118-765011-703691-CepheidVM-PC
OBX|19|ST|COVFLUPLUS&FLUB&&|Flu B&|NEG^|
OBX|20|ST|COVFLUPLUS&FLUB&&|Flu B&Ct|^0.0|
OBX|21|ST|COVFLUPLUS&FLUB&&|Flu B&EndPt|^5.0|
OBX|22|ST|COVFLUPLUS&FLUB&&|SPC&|PASS^|
OBX|23|ST|COVFLUPLUS&FLUB&&|SPC&Ct|^29.4|
OBX|24|ST|COVFLUPLUS&FLUB&&|SPC&EndPt|^151.0|
SPM|1|4_RSV_b^||ORH|||||P
    
```

6.2.2.6 Example HL7 Message: “SARS-CoV-2: Error, FLU A: Error, FLU B: Error, RSV: N.A.”

SARS-CoV-2	FLU A	FLU B	RSV
Error	Error	Error	N.A.

```
MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210809115941||ORU^R32^ORU_R30|GXM-70488807826|P|2.5|||||
PID|1|||||||||||||||||||||
ORC|RE|1|||||20210713123358
OBR|1|||COVFLUPLUS|||||||||||||F
TQ1|||||20210713123358|20210713124719|R
OBX|1|ST|COVFLUPLUS&SARSCO2&Xpress SARS-CoV-2_Flu plus&2|SARS-CoV-2&|ERROR^|||||F|||||^ John Doe ||20211226-00500-472753088-607591-714107-CepheidVM-PC
NTE|1|||Error^2008^Operation terminated^Error 2008: Syringe pressure reading of 100.0 PSI exceeds the protocol limit of 100.0 PSI^20210713124706
OBX|2|ST|COVFLUPLUS&SARSCO2&&|SARS-CoV-2&|NO RESULT^||
OBX|3|ST|COVFLUPLUS&SARSCO2&&|SARS-CoV-2&Ct|^0.0||
OBX|4|ST|COVFLUPLUS&SARSCO2&&|SARS-CoV-2&EndPt|^0.0||
OBX|5|ST|COVFLUPLUS&SARSCO2&&|SPC&|NO RESULT^||
OBX|6|ST|COVFLUPLUS&SARSCO2&&|SPC&Ct|^0.0||
OBX|7|ST|COVFLUPLUS&SARSCO2&&|SPC&EndPt|^0.0||
OBX|8|ST|COVFLUPLUS&FLUA&Xpress SARS-CoV-2_Flu plus&2|Flu A&|ERROR^|||||F|||||^ John Doe ||20211226-00500-472753088-607591-714107-CepheidVM-PC
NTE|1|||Error^2008^Operation terminated^Error 2008: Syringe pressure reading of 100.0 PSI exceeds the protocol limit of 100.0 PSI^20210713124706
OBX|9|ST|COVFLUPLUS&FLUA&&|Flu A 1&|NO RESULT^||
OBX|10|ST|COVFLUPLUS&FLUA&&|Flu A 1&Ct|^0.0||
OBX|11|ST|COVFLUPLUS&FLUA&&|Flu A 1&EndPt|^0.0||
OBX|12|ST|COVFLUPLUS&FLUA&&|Flu A 2&|NO RESULT^||
OBX|13|ST|COVFLUPLUS&FLUA&&|Flu A 2&Ct|^0.0||
OBX|14|ST|COVFLUPLUS&FLUA&&|Flu A 2&EndPt|^0.0||
OBX|15|ST|COVFLUPLUS&FLUA&&|SPC&|NO RESULT^||
OBX|16|ST|COVFLUPLUS&FLUA&&|SPC&Ct|^0.0||
OBX|17|ST|COVFLUPLUS&FLUA&&|SPC&EndPt|^0.0||
OBX|18|ST|COVFLUPLUS&FLUB&Xpress SARS-CoV-2_Flu plus&2|Flu B&|ERROR^|||||F|||||^ John Doe ||20211226-00500-472753088-607591-714107-CepheidVM-PC
NTE|1|||Error^2008^Operation terminated^Error 2008: Syringe pressure reading of 100.0 PSI exceeds the protocol limit of 100.0 PSI^20210713124706
OBX|19|ST|COVFLUPLUS&FLUB&&|Flu B&|NO RESULT^||
OBX|20|ST|COVFLUPLUS&FLUB&&|Flu B&Ct|^0.0||
OBX|21|ST|COVFLUPLUS&FLUB&&|Flu B&EndPt|^0.0||
OBX|22|ST|COVFLUPLUS&FLUB&&|SPC&|NO RESULT^||
OBX|23|ST|COVFLUPLUS&FLUB&&|SPC&Ct|^0.0||
OBX|24|ST|COVFLUPLUS&FLUB&&|SPC&EndPt|^0.0||
SPM|1|14_FluA_FluB_RSV_b^||ORH|||||P
```


6.2.2.7 Example HL7 Message: “SARS-CoV-2: Invalid, FLU A: Invalid, FLU B: Invalid, RSV: N.A.”

SARS-CoV-2	FLU A	FLU B	RSV
Invalid	Invalid	Invalid	N.A.

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210809115938||ORU^R32^ORU_R30|GXM-05115888235|P|2.5|||||
PID|1|||||||||||||||||
ORC|RE|1|||||20210804145359
OBR|1|||COVFLUPLUS|||||||||||||F
TQ1|||||20210804145359|20210804153036|R
OBX|1|ST|COVFLUPLUS&SARSCO2&Xpress SARS-CoV-2_Flu plus&2|SARS-CoV-2&|INVALID^|||||F||||| John Doe ||20211226-00500-472753073-711453-714106-CepheidVM-PC
OBX|2|ST|COVFLUPLUS&SARSCO2&&|SARS-CoV-2&|INVALID^|
OBX|3|ST|COVFLUPLUS&SARSCO2&&|SARS-CoV-2&Ct|^0.0|
OBX|4|ST|COVFLUPLUS&SARSCO2&&|SARS-CoV-2&EndPt|^1.0|
OBX|5|ST|COVFLUPLUS&SARSCO2&&|SPC&|FAIL^|
OBX|6|ST|COVFLUPLUS&SARSCO2&&|SPC&Ct|^0.0|
OBX|7|ST|COVFLUPLUS&SARSCO2&&|SPC&EndPt|^0.0|
OBX|8|ST|COVFLUPLUS&FLUA&Xpress SARS-CoV-2_Flu plus&2|Flu A&|INVALID^|||||F||||| John Doe ||20211226-00500-472753073-711453-714106-CepheidVM-PC
OBX|9|ST|COVFLUPLUS&FLUA&&|Flu A 1&|INVALID^|
OBX|10|ST|COVFLUPLUS&FLUA&&|Flu A 1&Ct|^0.0|
OBX|11|ST|COVFLUPLUS&FLUA&&|Flu A 1&EndPt|^2.0|
OBX|12|ST|COVFLUPLUS&FLUA&&|Flu A 2&|INVALID^|
OBX|13|ST|COVFLUPLUS&FLUA&&|Flu A 2&Ct|^0.0|
OBX|14|ST|COVFLUPLUS&FLUA&&|Flu A 2&EndPt|^1.0|
OBX|15|ST|COVFLUPLUS&FLUA&&|SPC&|FAIL^|
OBX|16|ST|COVFLUPLUS&FLUA&&|SPC&Ct|^0.0|
OBX|17|ST|COVFLUPLUS&FLUA&&|SPC&EndPt|^0.0|
OBX|18|ST|COVFLUPLUS&FLUB&Xpress SARS-CoV-2_Flu plus&2|Flu B&|INVALID^|||||F||||| John Doe ||20211226-00500-472753073-711453-714106-CepheidVM-PC
OBX|19|ST|COVFLUPLUS&FLUB&&|Flu B&|INVALID^|
OBX|20|ST|COVFLUPLUS&FLUB&&|Flu B&Ct|^0.0|
OBX|21|ST|COVFLUPLUS&FLUB&&|Flu B&EndPt|^2.0|
OBX|22|ST|COVFLUPLUS&FLUB&&|SPC&|FAIL^|
OBX|23|ST|COVFLUPLUS&FLUB&&|SPC&Ct|^0.0|
OBX|24|ST|COVFLUPLUS&FLUB&&|SPC&EndPt|^0.0|
SPM|1|Test-2^|ORH|||||P
    
```

6.3 Example Messages for Panel: Xpress SARS-CoV-2_plus

6.3.1 Example ASTM Messages

6.3.1.1 Example ASTM Message: “SARS-CoV-2: Negative, FLU A: N.A, FLU B: N.A, RSV: N.A.”

SARS-CoV-2	FLU A	FLU B	RSV
Negative	N.A.	N.A.	N.A.

```
H|@^\[GXM-48410782286]GeneXpert PC^GeneXpert^6.3|||||LIS||P|1394-97|20210809115039
P|1||||^|
O|1|9_FluA_RSV_a|^COVPLUS|R|20210713123701|||||ORH|||||F
R|1|^COVPLUS^Xpress SARS-CoV-2_plus^2^|NEGATIVE^||||F|| John Doe |20210713123701|20210713131312|CepheidVM-PC^723207^705204^472753104^00500^20211226|
R|2|^COVPLUS^SARS-CoV-2^|NEG^||
R|3|^COVPLUS^SARS-CoV-2^C|^0.0||
R|4|^COVPLUS^SARS-CoV-2^EndPt|^1.0||
R|5|^COVPLUS^SPC^|PASS^||
R|6|^COVPLUS^SPC^C|^29.9||
R|7|^COVPLUS^SPC^EndPt|^129.0||
L|1|N
```


6.3.1.3 Example ASTM Message: “SARS-CoV-2: Error”

SARS-CoV-2	FLU A	FLU B	RSV
Error	N.A.	N.A.	N.A.

```
H|@^\[GXM-52657545660||GeneXpert PC^GeneXpert^6.3|||||LIS||P|1394-97|20210809120239
P|1|||^\^^\|||||||||||||||||||||||||||||||||
O|1|14_FluA_FluB_RSV_b||^COVPLUS|R|20210713123358|||||ORH|||||F
R|1|^COVPLUS^SARSCOV2^Xpress SARS-CoV-2_plus^2^SARS-CoV-2^|ERROR^||||F|| John Doe |20210713123358|20210713124719|CepheidVM-PC^714107^607591^472753088^00500^20211226|
C|1||Error^2008^Operation terminated^Error 2008: Syringe pressure reading of 100.0 PSI exceeds the protocol limit of 100.0 PSI^20210713124706|N
R|2|^COVPLUS^SARSCOV2^^SARS-CoV-2^|NO RESULT^|||
R|3|^COVPLUS^SARSCOV2^^SARS-CoV-2^Ct|^0.0|||
R|4|^COVPLUS^SARSCOV2^^SARS-CoV-2^EndPt|^0.0|||
R|5|^COVPLUS^SARSCOV2^^SPC^|NO RESULT^|||
R|6|^COVPLUS^SARSCOV2^^SPC^Ct|^0.0|||
R|7|^COVPLUS^SARSCOV2^^SPC^EndPt|^0.0|||
L|1|N
```

6.3.1.4 Example ASTM Message: “SARS-CoV-2: Invalid”

SARS-CoV-2	FLU A	FLU B	RSV
Invalid	N.A.	N.A.	N.A.

```
H|@^\[GXM-66263131232][GeneXpert PC^GeneXpert^6.3|||||LIS|P|1394-97|20210809120237
P|1||||^^^||||||||||||||||||||||||||||||||
O|1|Test-2|^^COVPLUS|R|20210804145359||||||ORH|||||||F
R|1|^COVPLUS^SARSCO2^Xpress SARS-CoV-2_plus^2^SARS-CoV-2^|INVALID^|||||F|| John Doe |20210804145359|20210804153036|CepheidVM-PC^714106^711453^472753073^00500^20211226|
R|2|^COVPLUS^SARSCO2^^SARS-CoV-2^|INVALID^|||
R|3|^COVPLUS^SARSCO2^^SARS-CoV-2^Ct|^0.0|||
R|4|^COVPLUS^SARSCO2^^SARS-CoV-2^EndPt|^1.0|||
R|5|^COVPLUS^SARSCO2^^SPC^|FAIL^|||
R|6|^COVPLUS^SARSCO2^^SPC^Ct|^0.0|||
R|7|^COVPLUS^SARSCO2^^SPC^EndPt|^0.0|||
L|1|N
```

6.3.2 Example HL7 Messages

6.3.2.1 Example HL7 Message: “SARS-CoV-2: Negative, FLU A: N.A, FLU B: N.A, RSV: N.A.”

SARS-CoV-2	FLU A	FLU B	RSV
Negative	N.A.	N.A.	N.A.

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210809115429||ORU^R32^ORU_R30|GXM-3735666355|P|2.5|||||
PID|1|||||||||||||||||||||
ORC|RE|1|||||20210713123814
OBR|1|||COVPLUS|||||||||||||F
TQ1|||||20210713123814|20210713131445|R
OBX|1|ST|&COVPLUS&Xpress SARS-CoV-2_plus&2|&|NEGATIVE^|||||F||||| John Doe ||20211226-00500-472753101-687904-723206--CepheidVM-PC
OBX|2|ST|&COVPLUS&|SARS-CoV-2&|NEG^|
OBX|3|ST|&COVPLUS&|SARS-CoV-2&Ct|^0.0|
OBX|4|ST|&COVPLUS&|SARS-CoV-2&EndPt|^1.0|
OBX|5|ST|&COVPLUS&|SPC&|PASS^|
OBX|6|ST|&COVPLUS&|SPC&Ct|^29.2|
OBX|7|ST|&COVPLUS&|SPC&EndPt|^156.0|
SPM|1|10_FluB_RSV_a^|ORH|||||P
    
```

6.3.2.2 Example HL7 Message: “SARS-CoV-2: Positive, FLU A: N.A, FLU B: N.A, RSV: N.A.”

SARS-CoV-2	FLU A	FLU B	RSV
Positive	N.A.	N.A.	N.A.

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210809115430||ORU^R32^ORU_R30|GXM-80160114843|P|2.5|||||
PID|1|||||||||||||||||||||
ORC|RE|1|||||20210713123455
OBR|1|||COVPLUS|||||||||||||F
TQ1|||||20210713123455|20210713130751|R
OBX|1|ST|&COVPLUS&Xpress SARS-CoV-2_plus&2|&POSITIVE^|||||F|||||^ John Doe ||20211226-00500-472753086-626767-714106--CepheidVM-PC
OBX|2|ST|&COVPLUS&&|SARS-CoV-2&|POS^|
OBX|3|ST|&COVPLUS&&|SARS-CoV-2&Ct|^30.9|
OBX|4|ST|&COVPLUS&&|SARS-CoV-2&EndPt|^269.0|
OBX|5|ST|&COVPLUS&&|SPC&|NA^|
OBX|6|ST|&COVPLUS&&|SPC&Ct|^29.4|
OBX|7|ST|&COVPLUS&&|SPC&EndPt|^108.0|
SPM|1|15_CoV2_FluA_FluB_RSV_a^|ORH|||||P
    
```

6.3.2.3 Example HL7 Message: “SARS-CoV-2: Error”

SARS-CoV-2	FLU A	FLU B	RSV
Error	N.A.	N.A.	N.A.

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210809115941||ORU^R32^ORU_R30|GXM-70488807826|P|2.5|||||
PID|1|||||||||||||||||||||
ORC|RE|1|||||20210713123358
OBR|1|||COVPLUS|||||||||||||F
TQ1|||||20210713123358|20210713124719|R
OBX|1|ST|COVPLUS&SARSCOV2&Xpress SARS-CoV-2_plus&2|SARS-CoV-2&|ERROR^|||||F|||||^ John Doe ||20211226-00500-472753088-607591-714107-CepheidVM-PC
NTE|1|L|Error^2008^Operation terminated^Error 2008: Syringe pressure reading of 100.0 PSI exceeds the protocol limit of 100.0 PSI^20210713124706
OBX|2|ST|COVPLUS&SARSCOV2&&|SARS-CoV-2&|NO RESULT^|
OBX|3|ST|COVPLUS&SARSCOV2&&|SARS-CoV-2&Ct|^0.0|
OBX|4|ST|COVPLUS&SARSCOV2&&|SARS-CoV-2&EndPt|^0.0|
OBX|5|ST|COVPLUS&SARSCOV2&&|SPC&|NO RESULT^|
OBX|6|ST|COVPLUS&SARSCOV2&&|SPC&Ct|^0.0|
OBX|7|ST|COVPLUS&SARSCOV2&&|SPC&EndPt|^0.0|
SPM|1|14_FluA_FluB_RSV_b^|ORH|||||P
    
```


6.3.2.4 Example HL7 Message: “SARS-CoV-2: Invalid”

SARS-CoV-2	FLU A	FLU B	RSV
Invalid	N.A.	N.A.	N.A.

```

MSH|^~\&|GeneXpert PC^GeneXpert^6.3||LIS||20210809115938||ORU^R32^ORU_R30|GXM-05115888235|P|2.5|||||
PID|1|||||
ORC|RE|1|||||20210804145359
OBR|1|||COVPLUS|||||F
TQ1|||||20210804145359|20210804153036|R
OBX|1|ST|COVPLUS&SARSCOV2&Xpress SARS-CoV-2_plus&2|SARS-CoV-2&|INVALID^|||||^ John Doe ||20211226-00500-472753073-711453-714106-CepheidVM-PC
OBX|2|ST|COVPLUS&SARSCOV2&&|SARS-CoV-2&|INVALID^|
OBX|3|ST|COVPLUS&SARSCOV2&&|SARS-CoV-2&Ct|^0.0|
OBX|4|ST|COVPLUS&SARSCOV2&&|SARS-CoV-2&EndPt|^1.0|
OBX|5|ST|COVPLUS&SARSCOV2&&|SPC&|FAIL^|
OBX|6|ST|COVPLUS&SARSCOV2&&|SPC&Ct|^0.0|
OBX|7|ST|COVPLUS&SARSCOV2&&|SPC&EndPt|^0.0|
SPM|1|Test-2^|ORH|||||P
    
```

7 Observation Language Translations Table

The table below provides a consolidated translation of the analyte value strings for all the languages supported by the GeneXpert System.

#	Language	Positive	Negative	Error	Invalid	No Result
1	English	POSITIVE	NEGATIVE	ERROR	INVALID	NO RESULT
2	French	POSITIF	NÉGATIF	ERREUR	NON VALIDE	PAS DE RÉSULTAT
3	German	POSITIV	NEGATIV	FEHLER	UNGÜLTIG	KEIN ERGEBNIS
4	Spanish	POSITIVO	NEGATIVO	INCERTO	INDETERMINADA	SIN RESULTADO
5	Italian	POSITIVO	NEGATIVO	ERRORE	NON VALIDO	NESSUN RISULTATO
6	Portuguese	POSITIVO	NEGATIVO	NON VALIDO	INVÁLIDO	SEM RESULTADO
7	Russian	ПОЛОЖИТЕЛЬНЫЙ	ОТРИЦАТЕЛЬНЫЙ	ОШИБКА	НЕДЕЙСТВИТЕЛЬНЫЙ	НЕТ РЕЗУЛЬТАТА
8	Ukrainian	ВІЯВЛЕНО	НЕ ВІЯВЛЕНО	НЕДІЙСНИЙ	НЕДІЙСНИЙ	НЕМАЄ РЕЗУЛЬТАТУ
9	Japanese	POSITIVE	NEGATIVE	ERROR	INVALID	NO RESULT