



LABORATORY DATA REPORTING MANUAL

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OVERVIEW

Hospitals are required to submit laboratory data for inpatient discharges as described throughout this manual. Whether hospitals develop their own internal mechanisms/processes to submit the laboratory data to PHC4 or engage the services of a third-party vendor to do so, the hospitals are ultimately responsible to assure that the submission meets the file specifications and requirements in this manual.

Data File Format

- The data file format is a fixed-width delimited flat text file.
- Each line of the text file must contain a single record.
- Each record must be 94 characters long, with a carriage return-line feed after each record.
- Standard text characters with ASCII values between 32 and 126 are accepted.
- Characters not accepted:
 - ASCII values 31 or less (pagination characters such as but not limited to tabs or page breaks)
 - ASCII values 127 and higher (characters such as non-Latin characters such as Greek or Cyrillic letters - α , β , æ , Φ , etc., and letters with accent marks such as tildes, umlauts, graves, etc. - ä , ô , é , ñ , etc.)
- The text file may be compressed into a zip file prior to sending.

Where to Send the Data

- The laboratory data file must be submitted using PHC4's secure portal at <https://www.phc4submit.org>. The laboratory data file can be submitted at the same time as the billing (UB-04) data file, or it can be submitted after the billing data file has been submitted for the collection period.
- Data reporting schedules are located on PHC4's website at <http://www.phc4.org>.

Laboratory Data Collection Requirements

Discharges for which Laboratory Data is to be Submitted

Hospitals are required to submit laboratory data for particular discharges as identified by a list of 35 Diseases, Procedures, and Medical Conditions. This list is updated annually (effective with October 1 discharges) and can be downloaded from the PHC4 website at

<http://www.phc4.org/dept/dc/list35.htm>. It is recognized that laboratory data might not be available for all discharges on this list or for all 29 tests collected by PHC4 (see **Laboratory Tests below**). Laboratory test results from inpatient discharges that are not included on the list of 35 Diseases, Procedures, and Medical Conditions are not required but will be accepted.

Source Documents

Laboratory test results should be obtained from laboratory reports generated by each hospital's clinical laboratory system/laboratory information system. Results produced by Point-of-Care Testing (POCT) devices are acceptable when the test specimen used is blood, the point of care device is in compliance with laboratory regulations, and the test result is obtained from a laboratory report that is part of the permanent medical record. Test results from a glucometer, chemsticks, etc. that are not displayed on a laboratory report generated from the clinical laboratory system/laboratory information system should not be submitted. An O₂ saturation result taken from a pulse oximeter device should not be submitted for the arterial blood gas - O₂ saturation.

Laboratory Test Collection Timeframe

Laboratory test results should be submitted using the following timeframe (referred throughout this document as the "collection timeframe"):

For patients admitted prior to 6:00 p.m., submit the highest and/or lowest test result(s) for the select laboratory test(s) collected on that calendar day (Day 1, the day of admission) *only*.^{*} As an example, for a patient admitted at 2:00 p.m. on January 1, submit the following laboratory test results as available:

- The highest test result (one result) from specimens collected on Day 1 (January 1) for the 15 tests that require the highest test result.
- The lowest test result (one result) from specimens collected on Day 1 (January 1) for the 4 tests that require the lowest test result.
- Both the highest and the lowest test results (two results) from specimens collected on Day 1 (January 1) for the 10 tests that require both the highest and the lowest test results.

For patients admitted at or after 6:00 p.m., submit the highest and/or lowest test result(s) for the select laboratory test(s) collected on that calendar day (Day 1, the day of admission) *through* the next calendar day (Day 2). As an example, for a patient that is admitted at 7:00 p.m. on January 1, submit the following laboratory test results as available:

^{*} Laboratory tests collected on Day 1 prior to the time of admission are acceptable as long as the test result is generated by the hospitals' own clinical laboratory system/laboratory information system.

- The highest test result (one result) from specimens collected on Day 1 (January 1) through Day 2 (January 2) for the 15 tests that require the highest test result.
- The lowest test result (one result) from specimens collected on Day 1 (January 1) through Day 2 (January 2) for the 4 tests that require the lowest test result.
- Both the highest and the lowest test results (two results) from specimens collected on Day 1 (January 1) through Day 2 (January 2) for the 10 tests that require both the highest and the lowest test results.

Note Regarding Laboratory Collection Timeframe for Cardiac Surgery Records

The intention for risk adjustment of cardiac surgery records* is to continue using the laboratory test results from specimens collected prior to the anesthesia start time and within the laboratory test collection timeframe specified above. The laboratory test results to be used in risk adjustment will be identified by comparing the “Anesthesia Start Date” and “Anesthesia Start Time” submitted in the cardiac surgery supplemental clinical data with the “Date Specimen Collected” and “Time Specimen Collected” submitted in the laboratory data.

As such, when laboratory test results within the collection timeframe are available for both prior to and after the anesthesia start date and time for the **first** CABG and/or valve surgery, hospitals may choose to only submit laboratory test results collected prior to the anesthesia start date and time following all other specifications and requirements in this manual.

For example:

- A patient is admitted at 4:00 p.m. and has a CABG procedure performed at 7:00 p.m. (start time of anesthesia). Laboratory test results from Day 1 up to 7:00 p.m. would be considered for submission.
- A patient is admitted at 9:00 p.m. and has a CABG procedure performed on Day 2 at 8:00 a.m. (start time of anesthesia). Laboratory test results from Day 1 and Day 2 up to 8:00 a.m. would be considered for submission.
- A patient is admitted at 4:00 p.m. and has a CABG procedure performed on Day 5. Laboratory test results from Day 1 would be considered for submission.

Hospitals will continue to have the option to review and update the laboratory test results for cardiac surgery records, if applicable, by using the Laboratory Data Administration tool.

* The ICD-10-PCS procedure codes that define the cardiac surgery study population are available in the *Cardiac Surgery Supplemental Clinical Data Reporting Manual* available at <http://www.phc4.org/dept/dc/dcmanuals.htm>.

Laboratory Tests

The laboratory tests and submission criteria are located in Table 1. PHC4 will only accept the 29 laboratory tests outlined in this manual. Other laboratory tests should not be submitted.

Maximum Number of Laboratory Records per Laboratory Test

Each laboratory record represents a laboratory test and its corresponding laboratory test result. The maximum number of laboratory records that should be submitted per laboratory test is as follows:

- Fifteen of the 29 laboratory tests require only the *highest* test result from the collection timeframe.
- Four laboratory tests require only the *lowest* test result from the collection timeframe.
- Ten laboratory tests require both the *highest and the lowest* test result from the collection timeframe. In those instances where a laboratory test was performed only once during the collection timeframe, only one test result needs to be submitted. Do not submit duplicate laboratory test records/results. When two separate blood specimens are collected for the same laboratory test on the same date, within the same minute, *and* the results are the same, submit only one test result.
- Additional test results that are not the highest or lowest (as specified) within the collection timeframe for a given inpatient discharge should not be submitted.

Specimen Source

Submit only laboratory test results obtained from blood (serum, plasma, etc.). Do not submit test results from other sources such as urine or cerebral spinal fluid.

Test Method

Methods of laboratory testing vary depending on the type of equipment used. The select laboratory tests to be submitted to PHC4 may be performed by any method unless otherwise noted. Using the laboratory test Albumin as an example, various laboratory testing methods may be used for performing this test including the serum albumin electrophoresis test or the serum albumin enzymatic reaction test. The test result derived from either of these methods may be submitted for the laboratory test Albumin.

Caution should be used to ensure a laboratory test submitted is equivalent to a test listed in Table 1. The Appendix provides an alphabetical list of laboratory test name synonyms. Using Albumin again as an example, a test result labeled pre-albumin is not considered a synonym to Albumin. Please consult with the clinical laboratory system/laboratory information system personnel at your hospital if you have questions regarding laboratory test names and their synonyms.

Units of Measure

Generally, each laboratory test has a unique laboratory test code that represents both the laboratory test and the unit of measure. For example, Laboratory Test Code 5052 represents the laboratory test Glucose with mg/dL as the unit of measurement, and 5054 represents the laboratory test Glucose with mmol/L as the unit of measurement. The laboratory test codes were designed to accommodate the submission of various units of measure used in a clinical laboratory system/laboratory information system. Please consult with the clinical laboratory system/laboratory information system personnel at your hospital if you have questions regarding the laboratory units of measures outlined in Table 1.

Decimals, Rounding and Leading Zeroes

Do not round the numeric Laboratory Test Result. Submit the result using the same precision (the same number of decimal places) used in your clinical laboratory system/laboratory information system. A leading zero should be used for laboratory test results less than 1.0.

For any laboratory test result displayed with either a (>) or (<) symbol in your clinical laboratory system/laboratory information system, submit the next nearest value. For example, if your laboratory typically reports PTT to one decimal place, then a PTT value displayed as >100 sec should be submitted with “3052” as the Laboratory Test Code and “100.1” as the Laboratory Test Result. If your laboratory typically reports PTT as a whole number, then a PTT value displayed as >100 sec should be submitted with “101” as the Laboratory Test Result.

Hemolyzed and Contaminated Specimens

A laboratory test result labeled “hemolyzed” or “contaminated” should not be submitted.

Corrected Values

When two results are available for the same date and time the laboratory specimen was collected and one is labeled “corrected,” submit the corrected test result rather than the original test result.

Table 1: Laboratory Tests and Submission Criteria

	Laboratory Test Name*	Laboratory Test Name Synonyms	Highest/Lowest Submission Criterion	PHC4 Laboratory Test Code	Unit of Measure
Hematology	White Blood Cell Count	WBC; WBC count; white blood count; leukocyte count	Highest and lowest	1012 1014	10 ⁹ /L /mm ³
	Hemoglobin	Hgb; total hemoglobin; THb <i>(Do not submit glycosylated, HbA1c, glycohemoglobin, or G-HB for Hemoglobin)</i>	Highest and lowest	1032	g/dL
				1034	mmol/L
	Platelet Count	Platelets; thrombocyte count	Lowest	1052 1054	10 ⁹ /L /mm ³
Neutrophils Band	Bands; stabs	Highest	1072	%	
Coagulation	Prothrombin Time	PT; protime	Highest	3012	sec
	International Normalized Ratio	INR	Highest	3032	ratio
	Partial Thromboplastin Time	PTT; APTT; activated PTT; APTT – LA; activated partial thromboplastin time; activated partial thromboplastin time – Lupus Anticoagulant; Activated PTT – Lupus Anticoagulant	Highest	3052	sec
Chemistry	Sodium	Na	Highest and lowest	5012	mEq/L
	Potassium	K	Highest and lowest	5032	mEq/L
	Glucose	Blood sugar; BS; fasting blood sugar; FBS	Highest and lowest	5052	mg/dL
				5054	mmol/L
	Urea Nitrogen Blood	Blood urea nitrogen; BUN	Highest	5072	mg/dL
				5074	mmol/L
	Creatinine	Serum creatinine; SCr	Highest	5092	mg/dL
				5094	μmol/L
	Albumin	Albumin <i>(Do not submit pre-albumin for Albumin)</i>	Lowest	5212	g/dL
				5214	g/L
Calcium	Ca <i>(Do not submit ionized calcium for Calcium)</i>	Highest and lowest	5232	mg/dL	
			5234	mEq/L	
			5236	mmol/L	
Bilirubin, Total	Total bilirubin; total bili; total microbilirubin; total microbili	Highest	5252	mg/dL	
			5254	μmol/L	
Aspartate Aminotransferase	AST; SGOT	Highest	5272	U/L	
Alkaline Phosphatase	Alk phos; AlkP; AKP; ALP <i>(Do not submit leukocyte alkaline phosphatase for Alkaline)</i>	Highest	5292	U/L	
			5294	U/dL	

* Please consult with the clinical laboratory system/laboratory information system personnel at your hospital if you have questions regarding laboratory test names, their synonyms, or the units of measure.

	Laboratory Test Name*	Laboratory Test Name Synonyms	Highest/Lowest Submission Criterion	PHC4 Laboratory Test Code	Unit of Measure
		<i>Phosphatase)</i>			
Chemistry (continued)	Creatine Kinase	CPK; total CPK; CK; total CK; creatine phosphokinase	Highest	5412	U/L
	Creatine Kinase MB	CPK MB; CK MB; CK2; CK fraction 2	Highest	5434	ng/mL
	Troponin I	Troponin I	Highest	5452	ng/mL
				5454	µg/L
	Troponin T	Troponin T	Highest	5472	µg/L or ng/mL
	Beta Natriuretic Peptide	BNP; brain natriuretic peptide; B-type natriuretic peptide <i>(Do not submit pro-BNP for Beta Natriuretic Peptide)</i>	Highest	5492	pg/mL
pro-BNP	pro-brain natriuretic peptide; NT-pro-BNP; N-terminal pro-brain natriuretic peptide	Highest	5612	pg/mL	
Arterial Blood Gases	Base Units	Base deficit; base excess; BE <i>(Include negative symbol when applicable)</i>	Highest and lowest	7012	mEq/L or mmol/L
	Bicarbonate	HCO ₃ ; HCO ₃ ac; HCO ₃ act	Highest and lowest	7032	mEq/L
				7034	mmol/L
	O ₂ Saturation	HbO ₂ ; SaO ₂ ; SO ₂	Lowest	7052	%
	pH	pH	Highest and lowest	7072	None
	pCO ₂	pCO ₂	Highest and lowest	7092	mmHg
pO ₂	pO ₂	Lowest	7212	mmHg	

* Please consult with the clinical laboratory system/laboratory information system personnel at your hospital if you have questions regarding laboratory test names, their synonyms, or the units of measure.

DATA FILE LAYOUT

Data Element Name	From	To	Data Type / Length	Format	Linking Element	Required
Patient Control Number	1	24	X(24)	Left-justify	YES	YES
Medical/Health Record Number	25	48	X(24)	Left-justify	YES	YES
Admission/Start of Care Date	49	54	9(6)	MMDDYY	YES	YES
Statement Covers Period - Through	55	60	9(6)	MMDDYY	YES	YES
Laboratory Test Code	61	70	X(10)	Left-justify	NO	YES
Date Specimen Collected	71	78	9(8)	MMDDYYYY	NO	YES
Time Specimen Collected	79	82	9(4)	HHMM (24 hour format)	NO	YES
Laboratory Test Result	83	94	X(12)	Left-justify	NO	YES

DATA ELEMENT DESCRIPTIONS

Patient Control Number	
Definition	Patient's unique number assigned by the provider to facilitate retrieval of the individual's account of services (accounts receivable) containing the financial billing records and any postings of payment.
Length and Type	24 character field; Alphanumeric; Left-justified
Record Location	1-24
Note	Links to the same data element submitted in the inpatient billing data. Please refer to PHC4's Inpatient UB-04 Data Reporting Manual for more information.

Medical/Health Record Number	
Definition	The number assigned to the patient's medical/health record by the provider.
Length and Type	24 character field; Alphanumeric; Left-justified
Record Location	25-48
Note	Links to the same data element submitted in the inpatient billing data. Please refer to PHC4's Inpatient UB-04 Data Reporting Manual for more information.

Admission/Start of Care Date	
Definition	For inpatient services, this is the date of admission.
Length and Type	6 character field; Numeric
Format	MMDDYY
Record Location	49-54
Note	Links to the same data element submitted in the inpatient billing data. Please refer to PHC4's Inpatient UB-04 Data Reporting Manual for more information.

Statement Covers Period - Through	
Definition	The ending service date of the period included on the bill.
Length and Type	6 character field; Numeric
Format	MMDDYY
Record Location	55-60
Note	Links to the same data element submitted in the inpatient billing data. Please refer to PHC4's Inpatient UB-04 Data Reporting Manual for more information.

Laboratory Test Code	
Definition	Each laboratory test collected by PHC4 is assigned a unique code to identify the test name and the unit of measure associated with that code.
Length and Type	10 character field; Alphanumeric; Left-justified
Record Location	61-70
Note	Enter the code for the corresponding laboratory test and unit of measure listed in Table 1 . PHC4 will only accept codes for the 29 laboratory tests outlined in this manual. Other laboratory tests should not be submitted.

Date Specimen Collected	
Definition	This is the date the specimen is collected from the patient, not the date the laboratory test is performed. For patients admitted prior to 6:00 p.m., submit the highest and/or lowest test result(s) for the select laboratory test(s) collected on that calendar day (Day 1, the day of admission) <i>only</i> . [*] For patients admitted at or after 6:00 p.m., submit the highest and/or lowest test result(s) for the select laboratory test(s) collected on that calendar day (Day 1, the day of admission) through the next calendar day (Day 2).
Length and Type	8 character field; Numeric
Format	MMDDYYYY
Record Location	71-78
Note	The definition above provides details of the data collection timeframe.

Time Specimen Collected	
Definition	This is the time the specimen is collected from the patient, not the time the laboratory test is performed.
Length and Type	4 character field; Numeric
Format	HHMM (24 hour format)
Record Location	79-82
Note	Enter as military time (HHMM). For example, 1:23 p.m. should be submitted as 1323. Use leading zeros when the time is less than 1000. For example, enter 0730 for 7:30 a.m.

^{*} Laboratory tests collected on Day 1 prior to the time of admission are acceptable as long as the test result is generated by the hospitals' own clinical laboratory system/laboratory information system.

Laboratory Test Result	
Definition	This is the numeric result of the laboratory test.
Length and Type	12 character field; Alphanumeric; Left-justified
Record Location	83-94
Note	<p>Include decimal points to ensure accurate interpretation of the results. For example, without a decimal point, a pO₂ result of 15.2 might be misinterpreted as 152. Do not include commas.</p> <p>Some results such as Base Units may occasionally require a negative (-).</p> <p>Do not round values. Submit the result using the same precision (the same number of decimal places) used in your clinical laboratory system/laboratory information system. A leading zero should be used for laboratory test results less than 1.0.</p> <p>For any laboratory test result displayed with either a (>) or (<) symbol in your clinical laboratory system/laboratory information system, submit the next nearest value. For example, if your laboratory typically reports PTT to one decimal place, then a PTT value displayed as >100 sec should be submitted with “3052” as the Laboratory Test Code and “100.1” as the Laboratory Test Result. If your laboratory typically reports PTT as a whole number, then a PTT value displayed as >100 sec should be submitted with “101” as the Laboratory Test Result.</p> <p>Provide only the numeric test result. Do not include the qualitative test result (“High”, “Low”, etc.).</p>

VALIDATIONS AND EDITS

The data file will be validated upon receipt to ensure that the data meets the definitions provided in the data file format, the data file layout and the data element descriptions. This includes items such as the file type, line lengths and data types, such as date and numeric formats.

In addition, the following edits will be applied during or after receipt of the data file:

Failure to Link Laboratory Record with Discharge Record

- **Reason:** The laboratory record did not link to a unique inpatient discharge record. The fields used to perform this link are the Patient Control Number, Medical/Health Record Number, Admission/Start of Care Date, and Statement Covers Period – Through date.
- **Resolution:** Verify and correct the Patient Control Number, Medical/Health Record Number, Admission/Start of Care Date, Statement Covers Period – Through date in the laboratory data. In addition, these same fields in the inpatient discharge data may also need to be corrected.

Duplicate Laboratory Record

- **Reason:** Two or more laboratory records were submitted representing the same laboratory test result collected at the same date and time.
- **Resolution:** Remove duplicate laboratory records so only one valid laboratory record exists for a single laboratory test result collected at a specified date and time. When two blood specimens are collected for the same laboratory test on the same date, within the same minute, *and* the results are the same, submit only one test result.

Date Specimen Collected Not in Collection Timeframe

- **Reason:** The Date Specimen Collected is not within the collection timeframe. For patients admitted prior to 6:00 p.m., submit the highest and/or lowest test result(s) for the select laboratory test(s) collected on that calendar day (Day 1, the day of admission) only. For patients admitted at or after 6:00 p.m., submit the highest and/or lowest test result(s) for the select laboratory test(s) collected on that calendar day (Day 1, the day of admission) through the next calendar day (Day 2). The Date Specimen Collected must also be on or before the Statement Covers Period – Through date.
- **Resolution:** Only submit laboratory records for specimens collected within the collection timeframe. Correct the Date Specimen Collected, Admission/Start of Care

Date, or Statement Covers Period – Through date in the laboratory data. In addition, the Admission/Start of Care Date, Admission Hour, or Statement Covers Period – Through date in the inpatient discharge data may also need to be corrected.

Too Many Results per Laboratory Test (highest only)

- **Reason:** Two or more laboratory records were submitted for a given laboratory test for the same inpatient discharge, when only one was expected.
Fifteen laboratory tests that PHC4 collects require only the highest value to be submitted for a given inpatient discharge from the collection timeframe. Limit your data submission to only a single record (highest value) per test for this patient discharge.
- **Resolution:** Submit only one laboratory record with the highest value from the collection timeframe for the same laboratory test and the same inpatient discharge.

Too Many Results per Laboratory Test (lowest only)

- **Reason:** Two or more laboratory records were submitted for a given laboratory test for the same inpatient discharge, when only one was expected.
Four laboratory tests that PHC4 collects require only the lowest value to be submitted for a given inpatient discharge from the collection timeframe. Limit your data submission to only a single record (lowest value) per test for this patient discharge.
- **Resolution:** Submit only one laboratory record with the lowest value from the collection timeframe for the same laboratory test and the same inpatient discharge.

Too Many Results per Laboratory Test (highest & lowest only)

- **Reason:** Three or more laboratory records were submitted for a given laboratory test for the same inpatient discharge, when two at the most were expected.
Ten laboratory tests that PHC4 collects require at most two (the highest and the lowest) test results to be submitted for a given inpatient discharge from the collection timeframe. Limit your data submission to provide only these results.
- **Resolution:** Submit only one laboratory record with the highest value and one laboratory record with the lowest value from the collection timeframe for the same laboratory test and the same inpatient discharge.

APPENDIX

Table: Laboratory Test Name Synonyms

Laboratory Test Name Synonyms*	Laboratory Test Name	Laboratory Test Code
Activated partial thromboplastin time	Partial Thromboplastin Time	3052
Activated partial thromboplastin time – Lupus Anticoagulant	Partial Thromboplastin Time	3052
Activated PTT	Partial Thromboplastin Time	3052
Activated PTT – Lupus Anticoagulant	Partial Thromboplastin Time	3052
Albumin	Albumin	5212, 5214
Alkaline phosphatase	Alkaline Phosphatase	5292, 5294
AKP	Alkaline Phosphatase	5292, 5294
AlkP	Alkaline Phosphatase	5292, 5294
Alk phos	Alkaline Phosphatase	5292, 5294
ALP	Alkaline Phosphatase	5292, 5294
APTT	Partial Thromboplastin Time	3052
APTT – LA	Partial Thromboplastin Time	3052
Aspartate aminotransferase	Aspartate Aminotransferase	5272
AST	Aspartate Aminotransferase	5272
Bands	Neutrophils Band	1072
Base deficit	Base Units	7012
Base excess	Base Units	7012
Base units	Base Units	7012
BE	Base Units	7012
Beta natriuretic peptide	Beta Natriuretic Peptide	5492
Bicarbonate	Bicarbonate	7032, 7034
Bilirubin, total	Bilirubin, Total	5252, 5254
Blood sugar	Glucose	5052, 5054
Blood urea nitrogen	Urea Nitrogen Blood	5072, 5074
BNP	Beta Natriuretic Peptide	5492
Brain natriuretic peptide	Beta Natriuretic Peptide	5492
BS	Glucose	5052, 5054
B-type natriuretic peptide	Beta Natriuretic Peptide	5492
BUN	Urea Nitrogen Blood	5072, 5074
Ca	Calcium	5232, 5234, 5236
Calcium	Calcium	5232, 5234, 5236
CK	Creatine Kinase	5412
CK fraction 2	Creatine Kinase MB	5434
CK MB	Creatine Kinase MB	5434
CK2	Creatine Kinase MB	5434
CPK	Creatine Kinase	5412
CPK MB	Creatine Kinase MB	5434
Creatine kinase	Creatine Kinase	5412

* Please consult with the clinical laboratory system/laboratory information system personnel at your hospital if you have questions regarding laboratory test names, their synonyms, or the units of measure.

Laboratory Test Name Synonyms*	Laboratory Test Name	Laboratory Test Code
Creatine kinase MB	Creatine Kinase MB	5434
Creatine phosphokinase	Creatine Kinase	5412
Creatinine	Creatinine	5092, 5094
Fasting Blood Sugar	Glucose	5052, 5054
FBS	Glucose	5052, 5054
Glucose	Glucose	5052, 5054
HbO ₂	O ₂ Saturation	7052
HCO ₃	Bicarbonate	7032, 7034
HCO ₃ ac	Bicarbonate	7032, 7034
HCO ₃ act	Bicarbonate	7032, 7034
Hemoglobin	Hemoglobin	1032, 1034
Hgb	Hemoglobin	1032, 1034
INR	International Normalized Ratio	3032
International normalized ratio	International Normalized Ratio	3032
K	Potassium	5032
Leukocyte count	White Blood Cell Count	1012, 1014
Na	Sodium	5012
Neutrophils band	Neutrophils Band	1072
N-terminal pro-brain natriuretic peptide	pro-BNP	5612
NT-pro-BNP	pro-BNP	5612
O ₂ saturation	O ₂ Saturation	7052
Partial thromboplastin time	Partial Thromboplastin Time	3052
pCO ₂	pCO ₂	7092
pH	pH	7072
Platelet count	Platelet Count	1052, 1054
Platelets	Platelet Count	1052, 1054
pO ₂	pO ₂	7212
Potassium	Potassium	5032
pro-BNP	pro-BNP	5612
pro-brain natriuretic peptide	pro-BNP	5612
Prothrombin time	Prothrombin Time	3012
Protime	Prothrombin Time	3012
PT	Prothrombin Time	3012
PTT	Partial Thromboplastin Time	3052
SaO ₂	O ₂ Saturation	7052
SCr	Creatinine	5092, 5094
Serum creatinine	Creatinine	5092, 5094
SGOT	Aspartate Aminotransferase	5272
SO ₂	O ₂ Saturation	7052
Sodium	Sodium	5012
Stabs	Neutrophils Band	1072
THb	Hemoglobin	1032, 1034
Thrombocyte count	Platelet Count	1052, 1054
Total bili	Bilirubin, Total	5252, 5254

* Please consult with the clinical laboratory system/laboratory information system personnel at your hospital if you have questions regarding laboratory test names, their synonyms, or the units of measure.

Laboratory Test Name Synonyms*	Laboratory Test Name	Laboratory Test Code
Total bilirubin	Bilirubin, Total	5252, 5254
Total CK	Creatine Kinase	5412
Total CPK	Creatine Kinase	5412
Total hemoglobin	Hemoglobin	1032, 1034
Total microbili	Bilirubin, Total	5252, 5254
Total microbilirubin	Bilirubin, Total	5252, 5254
Troponin I	Troponin I	5452, 5454
Troponin T	Troponin T	5472
Urea nitrogen blood	Urea Nitrogen Blood	5072, 5074
WBC	White Blood Cell Count	1012, 1014
WBC count	White Blood Cell Count	1012, 1014
White blood count	White Blood Cell Count	1012, 1014
White blood cell count	White Blood Cell Count	1012, 1014

* Please consult with the clinical laboratory system/laboratory information system personnel at your hospital if you have questions regarding laboratory test names, their synonyms, or the units of measure.